



MEETING MINUTES

Solid Waste Resource & Management Plan Monitoring Advisory Committee

Tuesday, January 19, 2022
9:00 AM – 12:30 PM
Location: Zoom

FINAL Minutes of the SWRMP Monitoring Advisory Committee of the Squamish-Lillooet Regional District held via Zoom on January 19, 2021 at 9:00 AM.

In Attendance:

Marie-Lou Leblanc (ML) – Squamish-Lillooet Regional District (SLRD), Resource Recovery Coordinator

Vanessa Lafontaine - SLRD, Communications & Projects Coordinator

Lauren Harrison - Resort Municipality of Whistler (RMOW), Solid Waste Technician

Claire Ruddy - Association of Whistler Area Residents for the Environment (AWARE), Executive Director

Scott Kerr – Operations Manager, Sea to Sky Soils

Lisa Pedrini - Village of Pemberton (VOP), OCP Policy Planner

Shannon White - District of Squamish (DOS), Integrated Solid Waste Specialist

Lucinda Philips - Indigenous Zero Waste Technical Advisory Group (IZWTAG), Executive Director

Lori Pyne – Whistler Community Services Society, Operations Manager

Tom Laviolette – Lil'wat Nation, Director of Infrastructure

Regrets:

Denise Imbeau - Green For Life Environmental Inc. (GFL), General Manager

Jaye-Jay Berggren – Director and Operator, Sea to Sky Soils

Sue Senger – Lillooet Resident

Margaret Lampman - Lillooet Resident

Representative from District of Lillooet

Representative from Squamish Nation

Representative from Nquat'qua Nation

1. Call to Order

ML called the meeting to order.

2. Adoption of Agenda and Meeting Notes

2.1 Opening

Welcome and overview of meeting Agenda/Objectives

ML reviewed meeting objectives and agenda.

3. Squamish Landfill Focus Amendment – Speaker Shannon White

ML provided an overview of the processes and differences between a Focus Amendment and the Solid Waste & Resource Management Plan Update.

Shannon White (SW) Presented DOS Lateral Landfill Expansion

[January 19, 2022 DOS Lateral Landfill Expansion Presentation](#) (Attachment 1)

- SLRD Focused Amendment & Full Update
- Landfill overview and current state
- Expansion
 - Background
 - Process
 - Support Received from DOS and Squamish Nation (SN) Staff.
 - 2022 : Concept Design
 - 2021 - 2024 : Land Acquisition
 - 2022 : Archaeological Impact Assessment
 - 2023 – 2024 : MOECCS Approval of Amendment
 - 2025 – 2026 : Detailed Design
 - 2026 – 2027 : Construction
 - 2028 : Waste Acceptance
 - Role of Committee
 - Focused Amendment
 - Amending: Strengthen the wording around the District moving forward with the lateral landfill expansion.
 - Include waste-export as an option, in case the lateral landfill expansion runs into an obstacle it cannot overcome.
 - Suggested wording will be provided to Committee for their feedback, before it goes for public for engagement.
 - Timeline
 - March – April : Engagement Plan Design
 - April: Advisory Committee to review Engagement Plan and suggested Amendment Wording and provide feedback
 - May – June: Engagement/ Consultation with the entire region.
 - August: Consolidate Engagement/ Feedback, Come back to Committee and public with “What we Heard”
 - September – December: Engagement Report & Amendment finalized. Committee to review Amendment, provide feedback and final approval.
 - December – January 2023 : SLRD board approves the Amendment and submits to MOE.
 - Next Steps
 - Question Period

4. Regional Roundtable Discussion

Notes provided by members and outlined as received.

Lori Pyne - *Whistler Community Services Society, Operations Manager*

- Receiving 1 metric tonne per day at the Reuse-it Centre. The Centre is no longer receiving funds for unsold textile. There is concern around the loss of revenue. Looking for alternatives.
- Food Recovery initiative is doing well. Upwards of 5000 kgs per month are being diverted (Compost 115kg, pig feed 400 kgs).

Claire Ruddy - *Association of Whistler Area Residents for the Environment (AWARE), Executive Director*

- Zero Waste Workshops will be running until Earth Day.
- Developing a School District wide waste management strategy.
- Community-scale reusable program pilot being developed.
- Other outreach actions are ongoing.

Andrew Tucker - *Resort Municipality of Whistler (RMOW), Engineering Technologist*

- We are working to bring a new C&D disposal policy before council this year.
- I would also like to bring a new Clear Bag bylaw to Council too. This may be an amendment to the current solid waste bylaw.
- We also will be bringing sector working groups online to start completing the actions identified in the ZW Action Plan.
- We will continue to reach out to the community to help them to align their waste programs with the zero waste plan and to help with some of the challenges they are facing.
- Operationally we're going to be assessing the performance of the transfer station and identify improvements we can make.
- Content development where we can respond to changing best practices or to respond to new program implementations.

Lisa Pedrini - *Village of Pemberton (VOP), OCP Policy Planner*

- Climate Action Plan with waste reduction goals going to council in February.
- Currently engaging with stakeholders.

Scott Kerr – *Operations Manager, Sea to Sky Soils*

- School tours reinitiated in fall of 2021.
- Plastic problematic – installing infrastructure that will assist staff in the removal of contaminants by reducing physical strain.
- Ministry of Agriculture asked for assistance with livestock from the Fraser Valley floods. Facility accepted poultry.

Tom Laviolette – Lil’wat Nation, Director of Infrastructure

- Some staff received training from IZWTAG.
- Planning a community clean-up in April.
- Planning to reinvigorate composting program.

Shannon White – *District of Squamish (DOS), Integrated Solid Waste Specialist*

- Circular economy, with a focus on the three thematic areas: the built environment, circular textiles, and food/ organics waste www.squamish.ca/squamish-circular-economy
- Squamish Landfill Lateral Expansion
- Zero Waste Strategy Update (engagement to occur in 2022)
- Events (Repair Café/Re-Use It Fair) – depending on COVID
- Waste Room Technical Guidelines Update & Sharing lessons learned with RMOW & SLRD
- Corporate waste management
- Single-Use Item bylaw update & outreach

Marie-Lou Leblanc - *Squamish-Lillooet Regional District (SLRD), Resource Recovery Coordinator*

- Pemberton Transfer Station Project back on track after experiencing delays.
- Continuing to work with AWARE on in school waste education program.
- Multi-family waste room guidelines are being developed and incorporated into permit approval process.

Roundtable closed at 11 am.

5. Presentation by IZWTAG – Speaker Lucinda Philips

Lucinda Philips presented a review of IZWTAG work with First Nations communities in 2021.

[IZWTAG updates 2021](#) (Attachment 2)

6. Open Discussion

Action items:

- Big Brothers of Great Vancouver contact to be shared with committee.

SLRD action items:

- Share marketing information and material from Encorp for milk products when available.
- Review how feedback can be provided to BC TireStewardship and other Extended Producer Programs (EPR) programs.
- Provide member municipalities schedule of EPRs being reviewed in 2022.

- Share request from MoE for ICI waste composition data.

7. Next Meeting / Adjournment

Next meeting date to be confirmed.

Date: May 2022

Location: Online

Adjournment: Meeting adjourned at 11:40 pm.

Squamish Landfill Expansion Update

SLRD SWRMP Committee



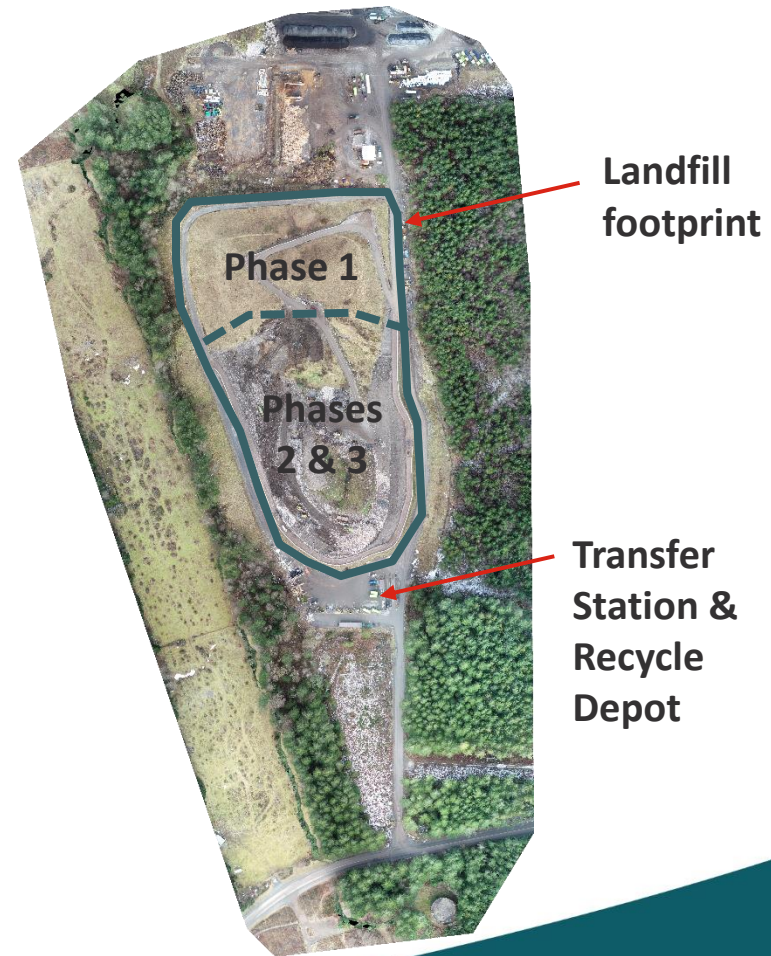
Shannon White
Integrated Solid Waste Specialist, District of Squamish
SLRD SWRMP Advisory Committee, Jan 19, 2022

Lateral Landfill Expansion

- SLRD Focused Amendment & Full Update
- Landfill:
 - Overview
 - Current State
- Expansion
 - Background
 - Process
 - Role of Committee
 - Focused Amendment
 - Timeline
 - Next Steps
- Questions

Squamish Landfill: Overview

- Opened in 1978
- Serves DOS, Squamish Nation & small part of SLRD
- Property leased & operations contracted
- Permitted by Province
- Authorized at regional level



Squamish Landfill: Current State

- In compliance with provincial permit
- Gas collection system installed and exceeds regulatory requirements
- Capacity available in vertical expansion until 2027-2029



Squamish Landfill: Lifespan Dependencies

1. Disposal rates

- Outreach, education & enforcement underway, along with policy & bylaw development
- Some factors outside DOS control

2. Landfill airspace utilization

- Strong \$ incentives & penalties in O&M contract
- Biannual surveys & management support from Engineering consultant

Lateral Landfill Expansion: Background

Year	Disposal Options
2009	Long-term disposal options evaluated. Lateral expansion favoured. Decided to do enviro upgrades instead.
2011-2013	Environmental upgrades completed
2016	Options re-evaluated. Vertical expansion with gas capture selected.
2019	Vertical expansion complete
2020	Options re-evaluated. Lateral expansion supported by DOS Council & Squamish Nation staff.



Options for Assessment

1. Lateral expansion of current Landfill
2. Waste export (transfer station)
3. Waste-to-Energy (WTE) facility with small Landfill (LF) expansion *new*



Transfer Station Designs



Metro Vancouver WTE Facility

Assessment Summary

Data from 2016 Assessment

Option	GHGs	Cost per Tonne	In SWRMP	Years to Realize	Viable (Note 2)	Outcome
1. Lateral expansion	> 2. & 3. (Note 1)	\$83 - 108	✓	4 - 5	✓	✓
2. Waste export		\$134 - 210	✓	2 - 4	✓	✓
3. Waste-to-Energy + LF		\$200 - 300 +	✗	6+	✗	✗

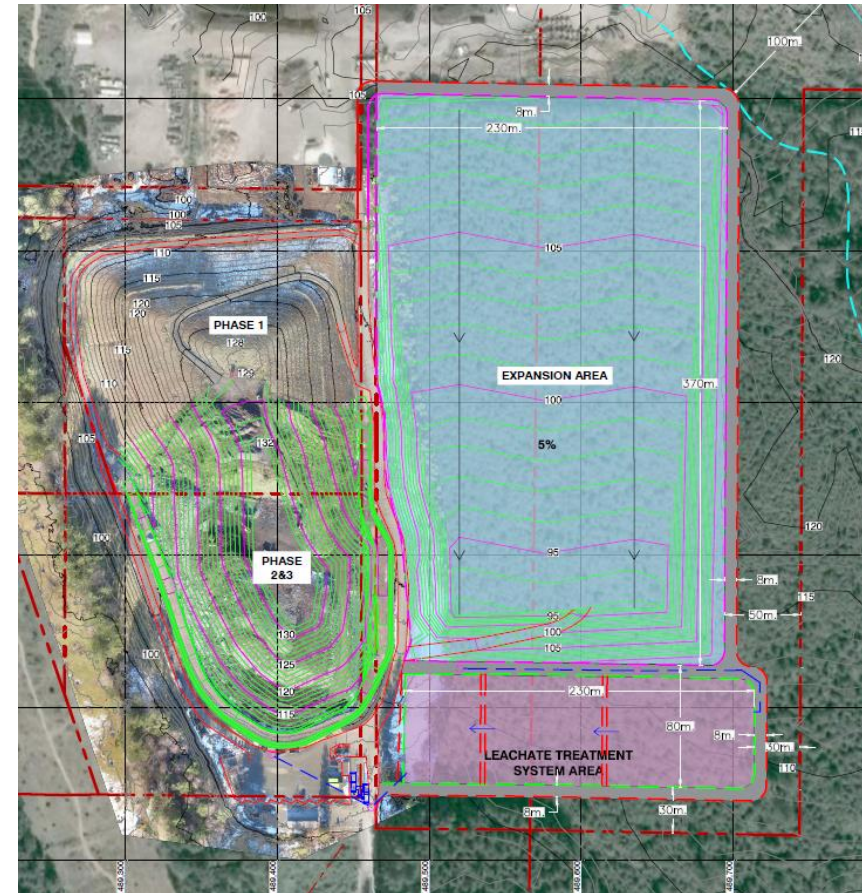
Notes

1 - comparisons did not consider beneficial uses of landfill gas at Squamish Landfill

2 - Viable → proven and economically viable at DOS / SLRD scale

Lateral Expansion Considerations

- Concept design in 2019
- ~35 - 47 years of capacity (incl. RMOW vs DOS-only)
- Leachate treatment & landfill gas collection
- Additional infrastructure possible



2019 Concept Design (to be updated)

Basis for Lateral Expansion Option

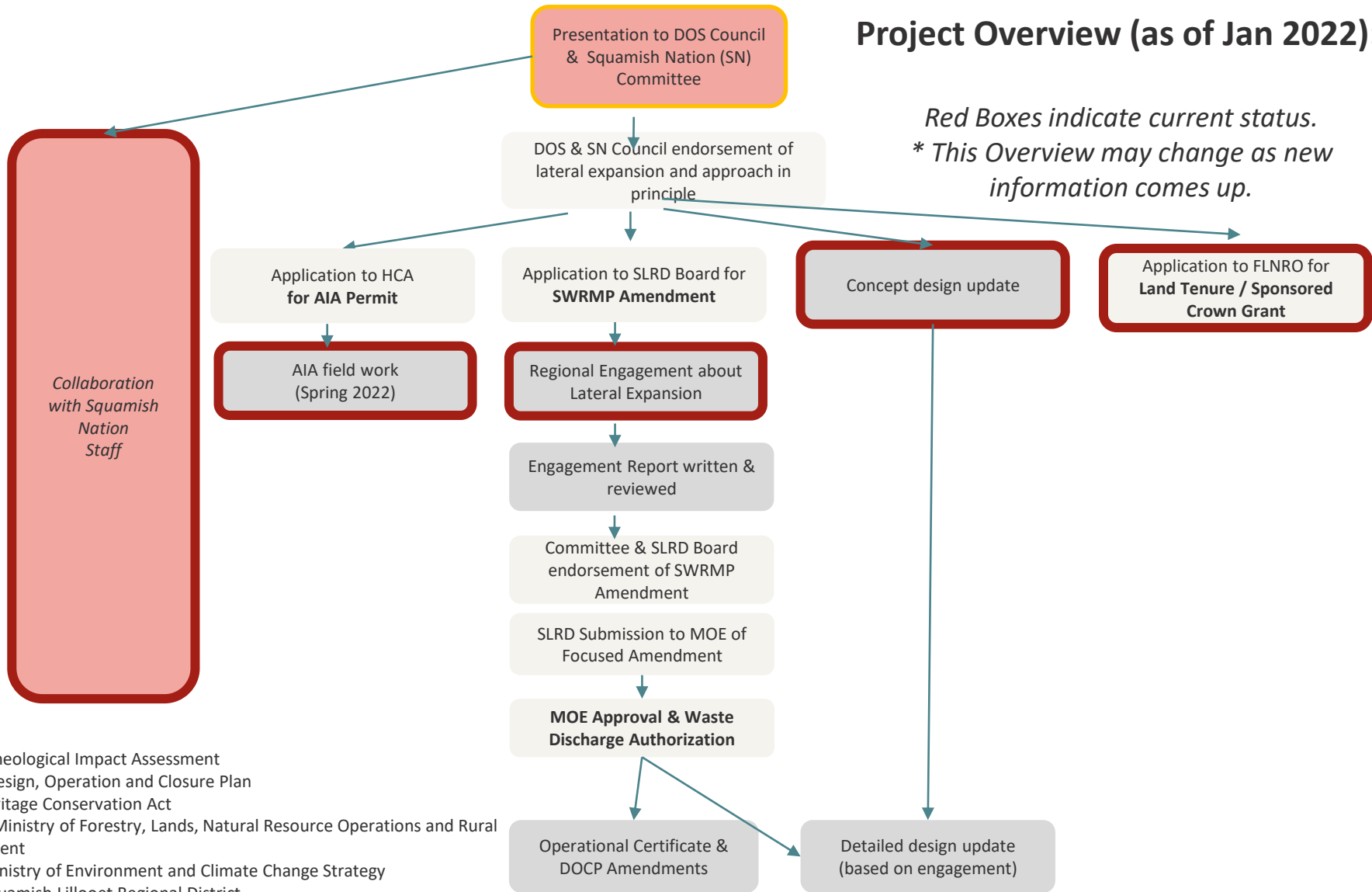
- ✓ Recommended by Qualified Professionals since 2009 & favoured in regional SWRMP
- ✓ Most economical, resilient and flexible option
- ✓ Likely to ↑ viability of beneficial use of gas, thereby ↓ GHG emissions
- ✓ A local option for a local challenge

Lateral Landfill Expansion: **Process**

- Overview: Whole Project
- Role of Committee

Project Overview (as of Jan 2022):

*Red Boxes indicate current status.
* This Overview may change as new information comes up.*



- AIA** – Archeological Impact Assessment
- DOCP** – Design, Operation and Closure Plan
- HCA** – Heritage Conservation Act
- FLNRO** – Ministry of Forestry, Lands, Natural Resource Operations and Rural Development
- MOE** – Ministry of Environment and Climate Change Strategy
- SLRD** – Squamish Lillooet Regional District
- SN** – Squamish Nation
- SWRMP** – Solid Waste and Resource Management Plan

Critical Milestones of Expansion

Process Overview of the Lateral Landfill Expansion Project

2020	2021	2022	2023	2024	2025	2026	2027	2028
Support Received* (DOS, SN Staff)								
		Concept Design Update						
	Land Acquisition (FLNRORD)							
		Archaeological Impact Assessment						
		SWRMP Amendment (SLRD, MOECCS)						
			MOECCS Approval of Amendment (Waste Discharge Authorization)					
					Detailed Design**			
						Construction		
								Waste Acceptance

Updated Jan. 18/2022

Acronyms

DOS	District of Squamish
SN	Squamish Nation
FLNRORD	Ministry of Forest, Land, Natural Resource Operations & Rural Development
SWRMP	Regional Solid Waste and Resource Management Plan (2016)
SLRD	Squamish Lillooet Regional District
MOECCS	Ministry of Environment & Climate Change Strategy

Notes

- * Conditional support received from Squamish Nation Staff by letter dated Oct 1
Approval to proceed in principle obtained from DOS Council in Oct 13 Committee Meeting
- ** Contingent on Approval of SWRMP Amendment & Land Acquisition

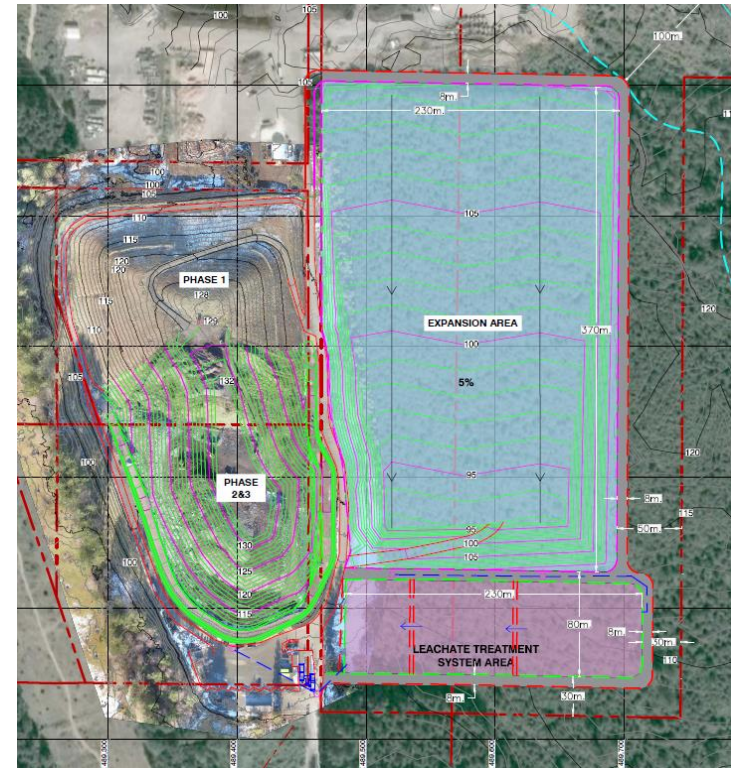
Concept Design vs. Detailed Design

CD will be:

- Basic information
- May not include all of the opportunities, may have blank “future use” space

DD will:

- Robust and detailed
- Accurate costing



2019 Concept Design: possibly already out of date.

Landfill Expansion: **Role of Committee**

The Focused Amendment of the SWRMP

The Committee will need:

- **Approve the Amendment** (and associated Engagement Report) and,
- **Recommend to SLRD staff** to bring it to their Board for final approval and submission to the Province (for their approval).

– *From the Terms of Reference of this Committee*

Focused Amendment

Amending:

- Strengthen the wording around the District moving forward with the lateral landfill expansion.
- Include waste-export as an option, in case the lateral landfill expansion runs into an obstacle it cannot overcome.

NOT Amending (for full Update 2024):

- References to becoming a regional landfill
- Anything else in the Plan that doesn't pertain to the Squamish Landfill lateral expansion

Landfill Expansion:

SWRMP Amendment Wording

1. Expand the Squamish Landfill to increase the capacity of the landfill. Within the current disposal management operations, the DOS landfill will reach capacity in 2018. An expansion can include a number of steps:
 - a) Expand the landfill laterally to the east. **This expansion would provide Squamish with up to 46 years of additional landfill life. However, it may be several years before it is determined whether the lateral expansion is a viable option. For example Squamish needs to consult with Squamish First Nation. This option is also dependent on other expansion options, as described below. → *Lateral Expansion***
 - b) Expand the landfill vertically on their existing site by constructing retaining walls at the base of the existing landfill that allow the landfill to be built higher (i.e. a vertical expansion). This option has received approval-in-principle by Squamish Council. This could gain 13-14 years of additional capacity and would only accommodate the needs of current users (i.e. primarily Squamish). Whistler would continue to export their solid waste out of the region. → ***Vertical Expansion (completed)***
 - c) If the Squamish Landfill receives approval to expand laterally, Squamish, with support from Whistler, Pemberton, and the SLRD should review the opportunity to designate the Squamish Landfill as a regional landfill. Whistler has indicated their intent to send their waste to the Squamish Landfill on the condition that the site meets BC Landfill Criteria guidelines and that the cost of using the disposal facility is cost competitive with out-of-region options. (p.39) → ***Accepting waste North of Squamish***

→ Need to amend the red, and there may be a few more clauses to amend along the same lines.

Tentative Focused Amendment Wording

OLD: However, it may be several years before it is determined whether the lateral expansion is a viable option. For example Squamish needs to consult with Squamish First Nation. This option is also dependent on other expansion options, as described below.

NEW REVISION (tentative): The District of Squamish has evaluated medium-term disposal options, and will move forward with expanding the Squamish Landfill laterally, to the East. This option has received approval-in-principle by Squamish Council and Squamish Nation Staff.

New CONTENT (tentative): The District of Squamish will expand the current Transfer Station and export waste out of the region, if they are unable to move forward with the lateral landfill expansion.

→ Suggested Wording will be provided to Committee for their feedback, before it goes to the public for engagement.

Landfill Expansion: Amendment Timeline

Timing (Tentative)	SLRD SWRMP Advisory Committee Role
Jan 19 2022	Meeting with Advisory Committee
March – (early) April	Engagement Plan Design (ex. pop-up booths, survey, etc.)
April	Advisory Committee to review the Engagement Plan and suggested Amendment Wording and provide feedback (min. 2 weeks)
May-June (or July)	Engagement/Consultation with the entire region. - Participation can be individual or by organization.
Aug	Consolidate Engagement/Feedback Come back to Committee and public with “What We Heard”
Sep - Dec	Engagement Report & Amendment finalized Advisory Committee review Amendment and provide feedback. Advisory Committee to provide final approval.
Dec-Jan 2023	SLRD BOD approves the Amendment (and Report) and submits to MOE

Landfill Expansion: Next Steps

- Develop Amendment Wording
(and Advisory Committee to review)
- Develop engagement plan
(and Advisory Committee to review)
- Archaeological Impact Assessment
(Spring 2022)
- Draft RFP for Concept Design & Site Plan

- Role of Zero Waste Strategy Update
- Role of SLRD SWRMP Full Update

Questions?



SQUAMISH



IZWTAG
INDIGENOUS ZERO WASTE
TECHNICAL ADVISORY GROUP

PROGRAMS AND SERVICES Update



IZWTAG

INDIGENOUS ZERO WASTE
TECHNICAL ADVISORY GROUP

izwtag.com

Established in 2019

An indigenous led non-profit society for First Nations

- Dedicated to environmentally-responsible waste management
- Providing technical support, resources, training and services
- Advancing zero waste education and best practices

“We have to clean up our land, so our children will have clean water”

Meet the board



Calvin Jameson - President



Roger Vickers - Vice President



Ernie French-Downey - Treasurer



Isaiah Robinson - Secretary



Leo Lawson - Director



Vince Davis - Director



Tania Solonas



Highlights

- High demand for IZWTAG's expertise and programs
(from BC First Nations, other govt. and non-govt. agencies in BC and other provinces)
- Delivering programs despite pandemic
Training, Zero Waste Circuit Rider, etc.
- Building capacity
Full-time Executive Director, recruiting assistant
Training indigenous instructors and circuit riders
Expanding programs/resources with partners
Preparing Strategic Plan



IZWTAG Strategic Plan

- **Vision:**

To live in an environment where Mother Earth's water, land, and air are restored and preserved respectfully now and for future generations.



IZWTAG Strategic Plan

- **Strategic Priorities:**

- Training and Education
- Partnerships
- Raise Awareness
- Build Capacity
- Financial Sustainability

- **Mission:**

IZWTAG is an indigenous-led organization that supports BC First Nations communities to achieve zero waste through programs, training, expertise, research, and advocacy.

Programs & Services

Training and Education

Highlights:

- Trainees from 40+ communities
- Launched new Recycling Champion training
- Launched joint certification SWANA/IZWTAG
- Additional indigenous instructor



Next:

- Launch **“Connect”** – new indigenous Zero Waste Learning Portal, linked to izwtag.com
- Launch 1st Technical Training Module (partner with BCUOMA)
- Launch upgraded Level 2 Zero Waste Operations course

Programs & Services

Zero Waste Circuit Rider Program

To ensure proper operations and maintenance activities and to support technical/operational employees of the solid waste management systems in First Nation communities.

(Modelled on the Water & Waste Water Circuit Rider program for BC First Nations)



Zero Waste Circuit Rider

Pilot Program

- Objective to refine on-the-ground procedures
- Included communities from a variety of locations and sizes
- Site visits to:
 - Kwadacha (Fort Ware)
 - Xa'xtsa (Douglas)
 - Samahquam
 - Gwa'sala-Nakwaxda'xw
 - Heiltsuk
 - Metlakatla
 - ?Esdilagh



Zero Waste Circuit Rider Program Demand

- By request, additional visits (so far) to:
 - Gitga'at (Hartley Bay)
 - Tahltan (Telegraph Creek)
 - Coldwater
 - N'Quatqua
 - Stswecem'c Xgat'tem (Canoe Creek)
 - Esk'etemc
 - Tl'etinqox



Zero Waste Circuit Rider

On-site Services

Set up operations, on-site training for crew, equipment repairs and stockpile clean-ups

- Assistance from BCUOMA, MARR, TSBC, ABC Recycling, Pacific Metals, FNRI (at N'Quatqua)



Tahltan (Telegraph Creek)

- Set-up equipment and trained crew on BCUOMA collection procedures, removed stockpiles, completed registration and set up reliable transfer
- Removal of metal stockpiles

Zero Waste Circuit Rider **On-site Services**

- Stockpile clean-ups (Cont'd)
 - Heiltsuk major appliances
 - Tires at Samahquam (pop'n 70)
 - Appliances and electronics at N'Quatqua



Zero Waste Circuit Rider **On-site Services**

Coldwater Transfer Station Decommissioning



Zero Waste Circuit Rider

On-site Services



Set up residential recycling drop-off
(Heiltsuk)



Equipment operation training (Tahltan)

Programs & Services

Technical Advisory Services

IZWTAG input (letters) on:

- EPR Plan Update Documents
- B.C. Ministry of Environment (MOE) Recycling Regulations

IZWTAG outreach and co-ordination services:

- Assist BC First Nations with MOE's OICP grant process

IZWTAG technical review:

- ISC's BC First Nations Zero Waste Program community system concepts, plans and specifications

IZWTAG Programs and Services

Opportunities

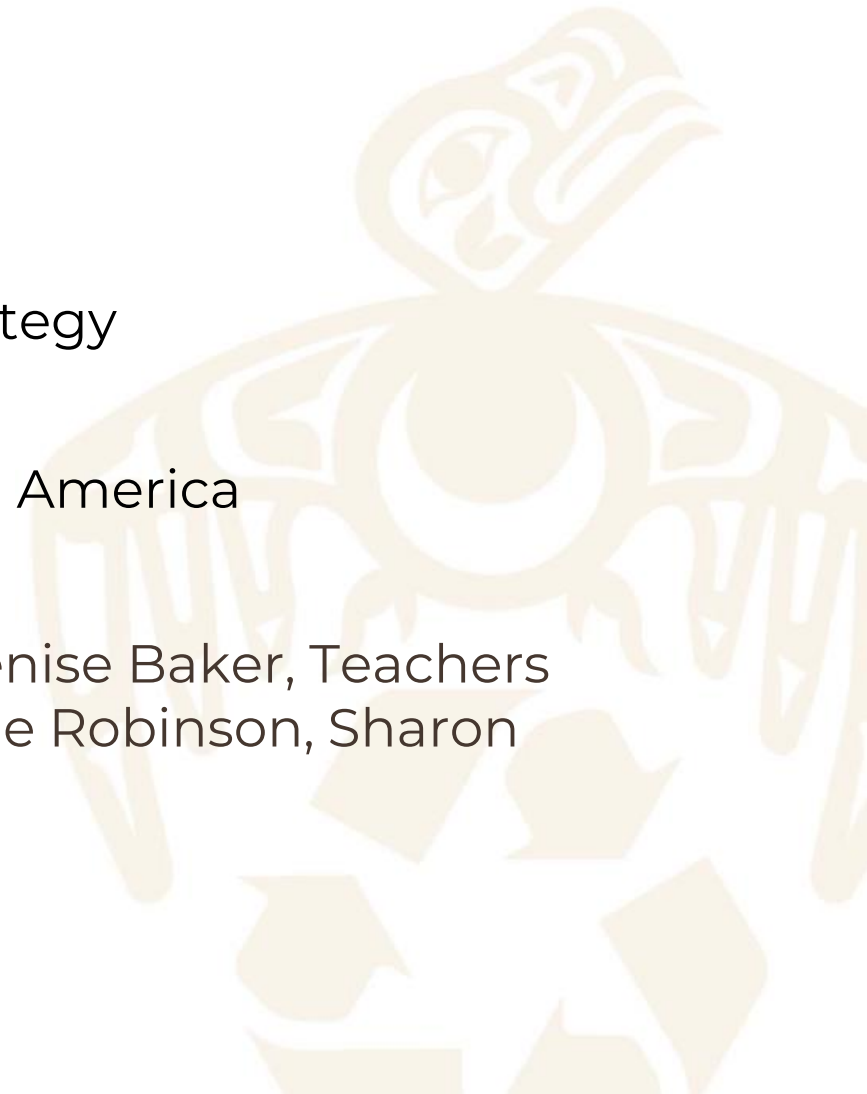
- There are abundant practical and meaningful opportunities to support First Nations to achieve zero waste.
- IZWTAG's work is only just beginning.
- We invite you to keep partnering with us to deliver on-time, real, on-the-ground services.

We need everyone's participation.

Together, we can speed up access to services and resources and make sure that no First Nation is left behind in B.C.

Acknowledgements/Thanks!

- First Nations
- Indigenous Services Canada
- B.C. Ministry of Environment and Climate Change Strategy
- Local Governments
- Coast Waste Mgmt. Assoc./Solid Waste Assoc. of North America
- Product Stewards/Industry partners
- Volunteers - Mark Kurschner, Reinhard Trautmann, Denise Baker, Teachers (Laverne Paul, Paul Lemmings, Myra Connaty, Adrienne Robinson, Sharon Wilson, Dianne Harris)





IZWTAG

INDIGENOUS ZERO WASTE
TECHNICAL ADVISORY GROUP

**Implementing zero
waste systems in
every First Nation
community across
BC and Canada.**