



2022

A year in Review

A project of the **Greater Victoria Greenbelt Society** in partnership with **Coast Salish Wisdom Keepers**

Acknowledgement: W̱SÁNEĆ Coast Salish territory



W̱MÍYEFEN (Land of the Deer)

We are grateful to work to protect these lands in allyship with W̱SÁNEĆ Knowledge Keepers whose nations include: Pauquachin, Tsartlip, Tsawout, Tseycum, Esquimalt and Whyomilth (Songhees) peoples



2022

Assessing Infrastructure &
starting First Nations programming

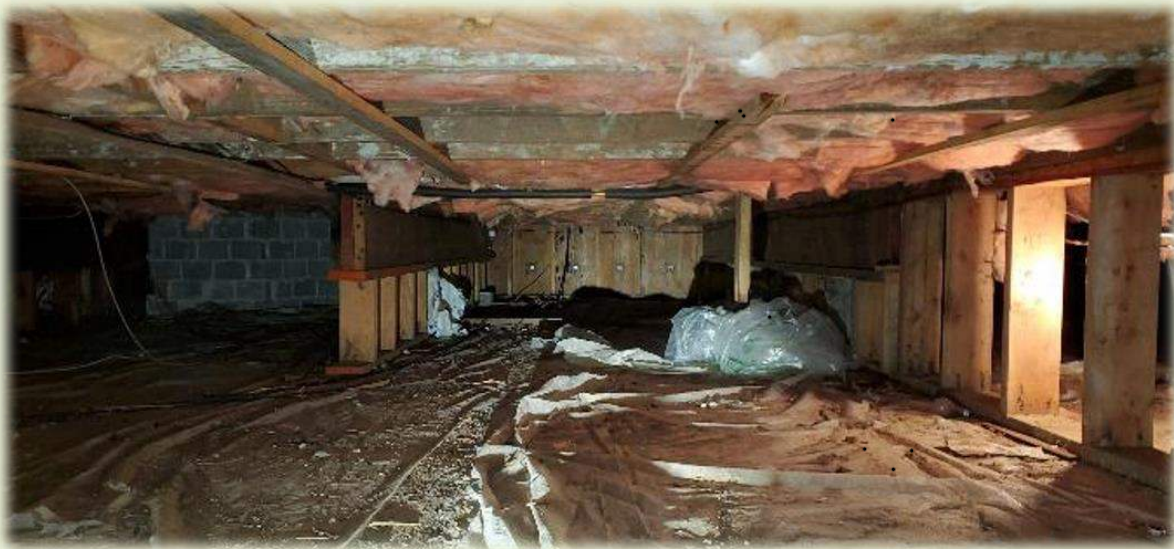
Our Response to
Nov. 2021
Atmospheric River



Infrastructure Consultants for culverts and bridges replacement and repairs



Nature House: Cleanup of flooded crawlspace



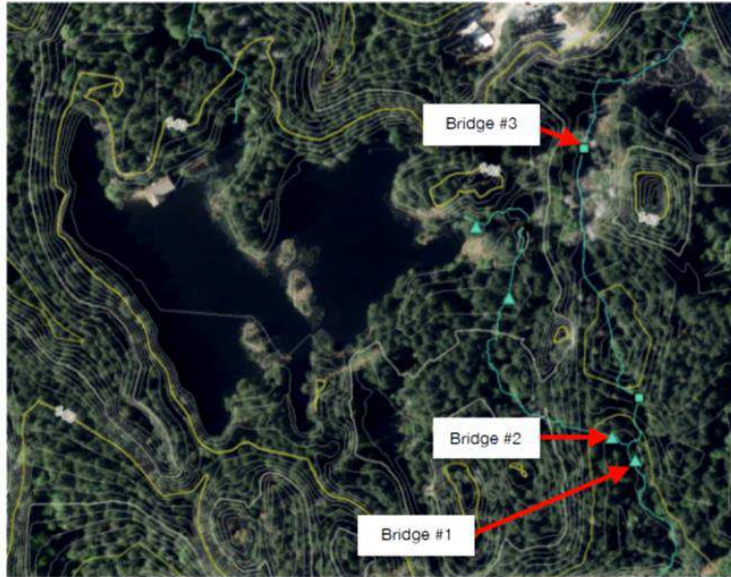
- Damaged insulation removed
- Electrical upgrades for new sump pump, dehumidifier, and venting fan installed .

Bridge Replacement Assessment

Daniel Scott
Provincial Trails Specialist



Recreation Sites
and Trails BC



Bridge 1 - existing bridge to be relocated

Bridge 2 - existing bridge to be either rebuilt or to be relocated

Bridge 3 - removal of culvert and fill (old road bed) and installation of new bridge

Figure 1. Map of Mary Lake Sanctuary

Bridge Replacement Assessment

Daniel Scott
Provincial Trails Specialist



Recreation Sites
and Trails BC

Total Project Construction Cost Estimates

Bridge	Cost Estimates
Bridge 1	\$21,846.00
Bridge 2 - Option A	\$25,950.00
Bridge 2 - Option B	\$34,404.00
Bridge 3	\$16,326.00
TOTAL with Bridge 2 - Option A	\$64,122.00
TOTAL with Bridge 2 - Option B	\$72,576.00

Please Note - these figure include 20% contingency for fluctuating material costs, inflation and other variables which can change during construction.

\$7,000 donations of Cedar Lumber from JS Richardson & Associates Ltd.

Research

HYDROGEOLOGY OF MARY LAKE

In Jan 2022 our board members Eric Bonham (retired civil engineer) and Bob McMinn took on the task of researching the impacts of 2021 atmospheric river on the property's waterways, floodplains and dams.

A hydrogeological engineer's preliminary analysis has indicated that the winter lake level could be lowered by 30 cm below the concrete dam spillway by increasing the capacity of the "fish ladder" outflow channel.

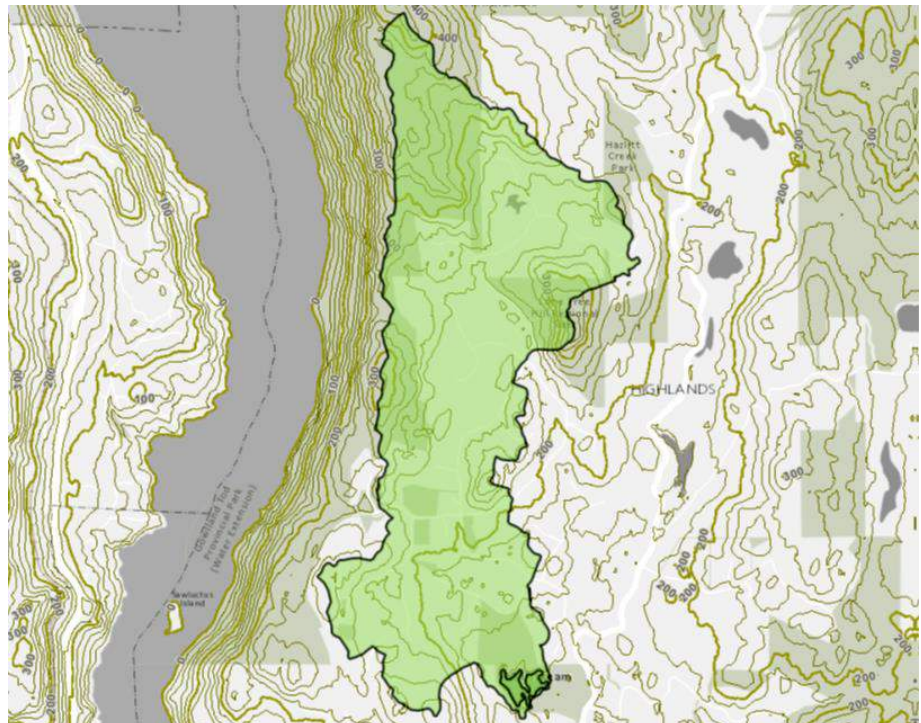
Lowering the winter lake level would mean that less water is impounded. Increase in the volume and rate of outflow should balance increased rate of inflow from atmospheric rivers".

Preliminary **Hydrotechnical Assessment and Proposed Upgrades Report version 1**



Mary Lake Catchment

The primary contributing watercourse to Mary Lake is Earsman Creek and total catchment area to the lake is 406 ha, as illustrated.



Disaster Financial Assistance Program

- Began application for funds Feb 2022
- All extra research, insurance response and contractor quotes completed in Nov 2022 indicated \$76,763 needed for repairs.
- Total grant received \$ 6,835.22- Jan. 2023



Big shout out to Luke Booth a Field Support Manager for Telus who arranged a **free installation of fibre cable** for the .75 km run to the Nature House. Previous conversations with numerous Telus installation teams indicated that it would cost approx. \$ 5000 because of the long distance to the roadway.

The extra bandwidth make it possible for groups to do video conferencing and live streaming.

Kinship to the Land: Programs



Programs supporting W̱SÁNEĆ youth, elders and families to reconnect to the land after 135 years of separation due to colonial settlement.



W̱SÁNEĆ Youth visit the Land



50 First Nations children learning and walking the land with their teachers and listening to elders.



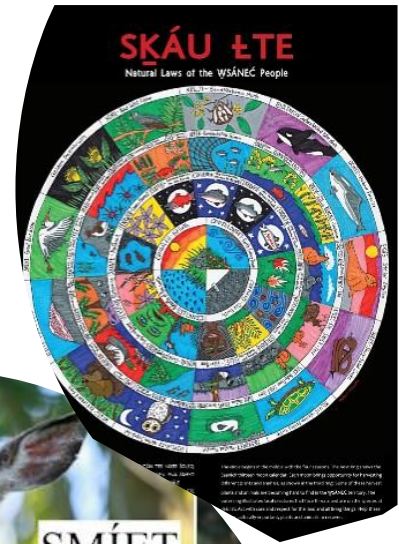
Youth's Species at Risk Tour



Learning Resources

13 Moon W̱SÁNEĆ calendar, SKÁU ŁTE, by artist MENEȚIYE

Images of plants and animals with SENĆOȚEN names designed by Tiffany Joseph



W̱MÍȚEN - Mary Lake: Kinship Mapping

May the 4th/Force (of Nature) be with you:

Ecological Mapping Day at W̱MÍȚEN Mary Lake Nature Sanctuary

Utilized the Trailmark App (Indigenous Knowledge & Data Management, Land Use Mapping & Monitoring) to capture data of the various species within the Nature Sanctuary.

Training for Community -mapping with Trailmark, GVGS, and HAT staff to share ecological knowledge.



WMÍETEN SĚNSĚĀNI Gathering

Indigenous People's Day



By approaching this conversation on the land — centered in a deeply-rooted Indigenous sense of place — the lands and waters, and creatures of the land inform the sharing.



MARY LAKE NATURE SANCTUARY

WMÍETEN SĚNSĚĀNI GATHERING

Women of the South Island Nations gathering to discuss cultural importance of WMÍETEN

06.21.2022 / 10AM-2PM
MARY LAKE NATURE SANCTUARY
NATURE HOUSE

Listening to the Land: Elder walks and plant teachings

WSÁNEĆ Elders share place-based Oral Histories, teaching about (w)holistic interrelationality of plants, animals, humans, and ecosystems.

As WSÁNEĆ Elders do not always have opportunities to engage together on the land (many lands in their territories have been degraded by development), this work supports healthy aging by bringing Elders/Seniors together out onto the land, increasing cultural knowledge transmission and boosting Seniors' mental and physical well-being.

Sessions were video taped for a private cultural archive.



Funded by



Cultivating Kinship in the HIGHLANDS/ŪMÍYEFEN (Place of the Deer)

We began relationship building with a smaller core gathering(15) of local protectors of the land from the settler community with some W̱SÁNEĆ elders in Sept. 2022.

Topic : "**Conservation - Cultivating a true relationship to the land**".

Question from the Knowledge Keepers/Elders :

*"Who is going to listen to us?
Who is going to help us?"*

Funded by



Be a caregiver of the land!

So many people and groups who visit the sanctuary speak about the peaceful beauty of this unique wetland property.

Donations not only ensure continued protection of the property's ten ecosystems and endangered species but also help to cover the overhead costs making it possible to keep this conservation property available as an inspiring place for community groups and nonprofits who are doing good work.



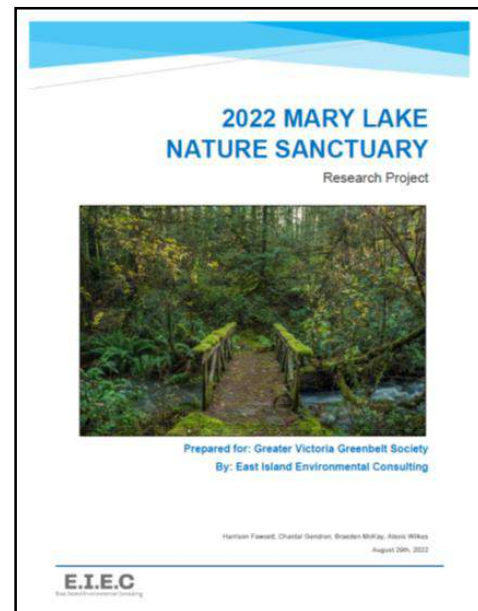


Environmental Studies Program

- The 2022 report researched two specific aspects, firstly to survey the terrestrial broadleaf vegetation on the property and secondly, the continuation of long-term water quality monitoring of Mary Lake, building upon the monitoring plan in 2019.
- Establishing sampling points in representative ecosystems enables the monitoring of the long-term impacts resulting from human activity and climate change.
- [LINK to report](#)



Royal Roads
UNIVERSITY



A weeklong 2022 NABat monitoring done lakeside.

It indicates that there are 8 different bats that hangout in the sanctuary.

Probably enjoying all those insects that fly above the water at night.

Thanks to
Jeanine Bond, MSc
Protected Areas Applied Ecologist,
Provincial Services Branch
BC Parks | Ministry of Environment and
Climate Change Strategy



(PAHE and TABR) have recently been detected acoustically at specific locations in the province. Occasionally displaced migrants of *Nyctinomops macrotis* (Big Free-tailed Bat) show up in BC and therefore this species is considered in analyses, but none have been detected through NABat monitoring to date.

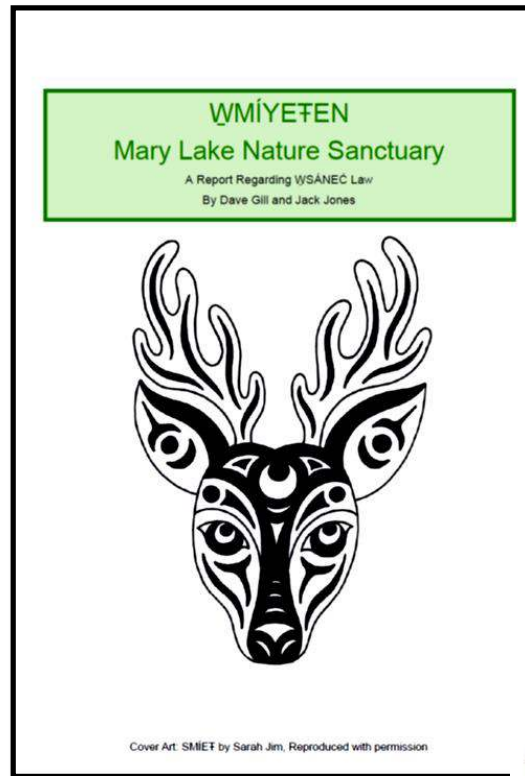
* 2022 WNS Lake Site Species highlighted with yellow

Common Name	4-letter code	Scientific Name
Big Brown Bat	EPFU	<i>Eptesicus fuscus</i>
Mexican Free-tailed Bat	TABR	<i>Tadarida brasiliensis</i>
California Myotis	MYCA	<i>Myotis californicus</i>
Canyon Bat	PAHE	<i>Parastrellus hesperus</i>
Eastern Red Bat	LABO	<i>Lasiurus borealis</i>
Fringed Myotis	MYTH	<i>Myotis thysanodes</i>
Hoary Bat	LACI	<i>Lasiurus cinereus</i>
Little Brown Myotis	MYLU	<i>Myotis lucifugus</i>
Long-eared Myotis	MYEV	<i>Myotis evotis</i>
Long-legged Myotis	MYVO	<i>Myotis volans</i>
Northern Myotis	MYSE	<i>Myotis septentrionalis</i>
Silver-haired Bat	LANO	<i>Lasionycteris noctivagans</i>
Spotted Bat	EUMA	<i>Euderma maculatum</i>
Pallid Bat	ANPA	<i>Antrozous pallidus</i>
Townsend's Big-eared Bat	COTO	<i>Corynorhinus townsendii</i>
Western Small-footed Myotis	MYCI	<i>Myotis ciliolabrum</i>
Yuma Myotis	MYYU	<i>Myotis yumanensis</i>
Eastern red bat, little brown bat	LABOMYLU	<i>Lasiurus borealis, Myotis lucifugus</i>

Incorporating W̱SÁNEĆ Law into Land Care

In Feb 2022 two students from UVic Indigenous Law completed their report with these recommendations for covenanting:

- Explicit Recognition of Indigenous rights
- Respecting Cultural Use Within Covenants
- Respecting Confidentiality
- Dispute Resolution
- Cultural Conservation



Conservation Covenant: Completed Nov. 2022

Nov. 2022 GVGS completed three years and eight months of negotiations over the terms of a Registered Conservation Covenant with the Province of BC that includes First Nations cultural use thus protecting the property from development in perpetuity.



Ministry of Environment and Climate Change Strategy

Section 219 Conservation Covenant, and Section 218 Statutory Right of Way

1. *The parties agree that the intent of this Agreement is:*
 - (a) *to protect, conserve, maintain, enhance and, if applicable from time to time, restore the Natural State of the Lands and the Amenities,*
 - (b) **to facilitate the exercise of traditional indigenous land uses, culture and education,** and
 - (c) *to prevent any occupation or use of the Lands that will impair or interfere with the Natural State of the Lands or the Amenities.*

[LINK TO COVENANT](#)

Monthly Guided Nature Walks

144 attendees
throughout the year.

Plus, various private
group walks.



Victoria Camera Club



Poetry on the trails of Mary Lake Nature Sanctuary featuring Joseph Dandurand, Justene Dion-Glowa, Tolu Oloruntoba and Anne-Marie Turza.



Victoria Festival
of Authors

2022

Take a walk through the trails of Mary Lake Nature Sanctuary with Jane. Learn surprising facts and scientific discoveries she has gleaned from her research while attuning yourself to the wonders of this dynamic ecosystem.

Date:
Sat. Oct. 1, 10:00am

**Forest to Poet/
Tree Walk**

with:
Joseph Dandurand
Justene Dion-Glowa
Tolu Oloruntoba
Anne-Marie Turza

Hosted by:
Yvonne Blomer
and Beth Kope

poets.ca

Date:
Sun. Oct. 2, 10:00am

Forest Walk

with:
Jane Billinghurst

Hosted by:
Philip Kevin Paul

THRIVING ROOTS
Wilderness School



The WOLF Kids Gathering (Nov.)

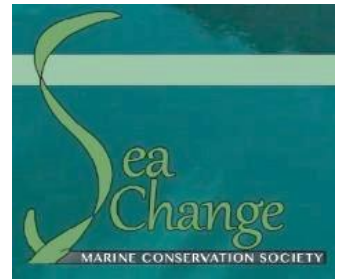
The November Wild Within Teen weekend



2022
Visiting
Organizations



Vancouver Island
Quakers



2022
Visiting
Organizations



Thank you to all of the

WSÁNEC Knowledge keepers and community members: The WSÁNEĆ First Nations: WJOLELP (Tsartlip), WSIKEM (Tseycum), SÁAUTW (Tsawout), and BOKÉĆEN (Pauquachin).

Researchers, Schools, Teachers, Organizers, Board members, Funding Foundations, Community Organizations, Partners, Project Managers, Professional Consultants, Staff and Donors who made 2022 such a momentous year.

Thank you for your support!

