

November 2024 Newsletter

CLRSS acknowledges that our virtual newsletter is being shared on the unceded territories of the Quw'utsun, Malahat, Pauquachin, Ts'uubaa-asatx, Halalt, Penelakut, Stz'uminus, Lyackson, Ditidaht & Pacheedaht Peoples who have stewarded this land since time immemorial.

CLRSS will be emailing member newsletters every six weeks. Thanks to contributions from members: Judy Brayden (editor), Jacqueline Sherk, Dianne Flood, Jean Atkinson, Maureen Quested and many others. Any questions, comments or feedback please see Home | Cowichan Lake & River Stewardship Society British Columbia (cowichan-lake-stewards.ca)

Our next regular Board meeting is Thursday, November 7, 2024 at 6:30 – VIA ZOOM

Watch for Zoom link announcement Everyone welcome!

We need your support!

What is the Thrifty Smile Card fundraiser all about?

Thrifty Foods has a program for non-profit organizations that generates funds for those groups. CLRSS sells "Smile Cards" that you can use to buy your groceries in Thrifty Foods stores. The charity gets a discount on the purchase price of the cards and the difference becomes a donation to that group.

Smile cards can be purchased in any amounts, but cards are usually ordered in denominations of 1,000, 500, 200, 100, or 50 dollars.



On behalf of CLRSS, Maureen Quested always purchases at least \$4,000 worth of cards to receive the maximum discount of 6%. She then pays that amount, \$240 to CLRSS. It is an easy to administer with no cost to CLRSS.

Please consider ordering one or more cards. Contact Maureen Quested at mquested@shaw.ca or 250 478-7595 for info.



Your bottle and can return money can also go to CLRSS at Duncan *Island Return It...*

Just say code 484. With thanks!

In this Edition:

- CWB Speakers' Night begins for 2024 a must for everyone!
- River's Day Review Quw'utsun Sta'lo' Skweyul a super success!
- Project 84,000 culminating event on at the CVAC Gallery Annex until October 18th
- What is Stewardship Through the Lens of Art?
- Why Fish need trees CWB video
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- Weir Touring
- A Beary Bad Story

Cowichan Watershed Board Speakers' Series Back by Popular Demand

Speaker Night is happening October 21!



Dr. Ken Ashley Reflects on the 2023 Cowichan River Fish Kill and Where We Go from Here

Mon. Oct 21 | VIU Cowichan Campus - Lecture Hall 140 | Free

7:00 – 8:30 p.m.

In July 2023, a local family swimming in the Cowichan River witnessed a terrible scene: hundreds of fish floating dead in the river. In the days that followed, biologists documented a devastating loss of aquatic life stretching for 10 km, estimated at over 100,000 fish. Months of collaborative research among many partners ensued to unravel what happened.

Join the Cowichan Watershed Board for the opening talk of our Fall Speaker Series. Biologist and engineer Dr. Ken Ashley will explore the factors behind the 2023 fish kill, the role of both natural and built environments, and strategies for building a sustainable, eco-friendly community.

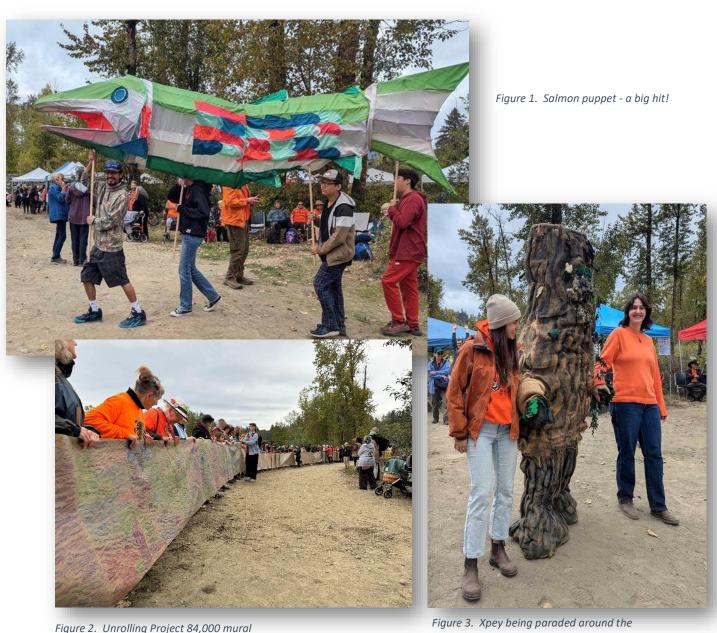


Meet the Speaker: Dr. Ken Ashley

Dr. Ken Ashley holds a BSc and MSc in Zoology, and MASc and PhD in Engineering. He has spent his entire career and education trying to reconcile these opposing camps, and offer insights from this unique merger.

He is internationally recognized for his expertise in the design, operation and effects of lake destratification and hypolimnetic aeration/oxygenation systems, lake and reservoir fertilization, and stream/river enrichment. Ken has expertise in monitoring the environmental effects of wastewater discharges from Vancouver's wastewater treatment plants and municipal water withdrawals from several rivers. Ken has been generously volunteering his time and invaluable expertise to help community partners understand and respond to the dire water quality situation that caused a massive fish die-off in the Quw'utsun River in 2023, and another in the S'amunu (Somenos) sub-basin in 2024.

Quw'utsun Sta'lo' Skweyul 2024 co-hosted by Cowichan Tribes and the Cowichan Stewardship Roundtable on the shores of the Quw'utsun Sta'lo' was a roaring success. So many lovely comments, so many smiling people, more booths than we have ever had and more attendees too. Very deep thanks to Parker Jefferson, our Quw'utsun elders, Philomena Williams and John George, Cowichan Tribes staff, Peter Moses, Robert Martin, Tim Kulchyski and Natalie Antoine and the many volunteers and agencies' staff who put in a lot of work in advance to bring this day of stewardship and reconciliation into being.



grounds





Figure 7. Hyamicié Della Rice Sylvester, medicine plants

Figure 8. Muriel Peter dreamcatchers

Project 84,000 culminating event on at the CVAC Gallery Annex



For the Love of Water & Fish

Project 84,000 Community Art Exhibit

Visit a memorial to honour over 84,000 fish that died in the Quw'utsun Sta'lo' under stressful conditions in July 2023.

Cowichan Valley Arts Council Gallery Cowichan Community Centre 2687 James Street, Duncan

September 30 - October 19, 2024

11:00 - 4:00 Monday - Friday 12:00 - 4:00 Saturday



Presented by Xwulqw'selu Connections and Cowichan Lake and River Stewardship Society https://oac.uvic.ca/xwulqwselu/2024/03/84000/

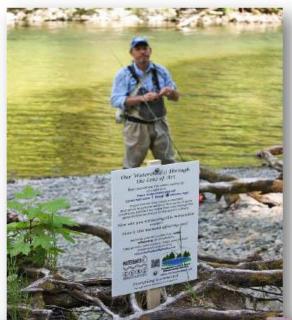
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Presented by Xwulqw'selu Connections and Cowichan Lake and River Stewardship Society

12:00 - 4:00 Saturday



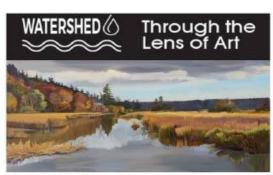
What is Stewardship Through the Lens of Art?



Our Story of Stewardship Through the Lens of Art – Judy Brayden CLRSS President

The Cowichan Lake and River Stewardship Society (CLRSS) has undertaken three, large, community-wide projects called Stewardship, Through the Lens of Art;..The first in 2021 was called Witnessing the Water - a community art initiative, in which we posted signage at 12 public access points down the Heritage Quw'utsun Sta'lo', solicited public input and produced a 70-foot mural reinforcing the notion that the lifesustaining water cycle is a closed loop. Everything on this planet is dependent upon this cycle.

The mural became part of a community-wide art show in the fall of 2021.



You are invited to the opening event
Thursday, Sept. 9, 2021 from 4 to 6 pm

Cowichan Valley Arts Council Gallery (main floor, Cowichan Community Centre)

The Watershed: Through the Lens of Art show features fine art and community art projects inspired by our own precious ecosystem

The show runs from Aug. 27 to Sept. 25, 2021 Gallery Hours: Mon-Fri 11 am – 4 pm, Sat. 12-4 pm



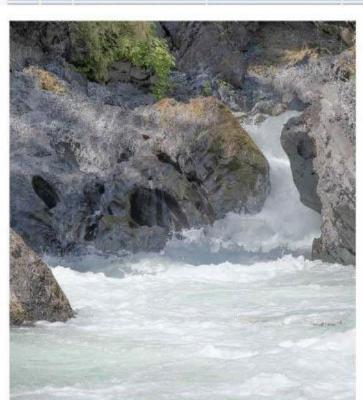


In this project we devised a scheme in which we imagined that water traveled from lake to sea at a consistent, summertime, low flow rate of 4km/h. Using that concept and arbitrary rate, we calculated how long a molecule of water leaving the Lake Cowichan weir would take to flow to each of the 12 locations. Then we encouraged families and visitors to follow the water downstream, keeping.up.to.or.waiting.to.greet.and.honour.the.passing. water.at.the.set.locations;

In 2022 that concept was further expanded to 14 locations and a coffee table book, *Witnessing.the.Water.-An. Authentic.Relationship.*was produced. Local professional photographer, Cim MacDonald from Chemainus, BC traveled the river with CLRSS members recording the locations at their summertime low. Insightful comments from 14, well-respected, river stewards were included in the book as well. It is on sale through our members and the CVAC Gallery this month.

Overview WITNESSING POINTS and DRIVING DIRECTIONS

Page.	Point	Description	Street Address	Distance (km) From Welr to Witnessing Point	Time dibumo) from Weir to Witnessing Point at summer river speed of 6km/hr.	Wheelchair Accessibility	Washroom
8	1	Quw'utsun Xatsu (Cowichan Lake) Also referred to as Sti'eluqum Xatsu (Monster Lake)	Saywell Park Opposite 205 North Shore Road, Lake Cowichan	0.25	0:03	1	1
10	2	Greendale Trestle	River's Edge Memorial Garden Opposite 105 Greendale Road, Lake Cowichan	1.2	0:18	1	
16	3	Little Beach	Directly East of 7940 Greendale Road, Lake Cowichan	2.7	0:42		
18	4	Fishermen's Trail Spring Pool	Just East of 7510 Lake Cowichan Road, Lake Cowichan	5.5	1:18		
24	5	Skwuts (Skutz Falls)	Intersection Mayo Road & West Riverbottom Road, Duncan	15.9	3;54	1	
28	6	Mile 66 Trestle	West Riverbottom Road 1.6 km East of Skwuts (Skutz Falls), Duncan	19.2	4:42	1	1
30	7	Stoltz Pool Provincial Park	West Riverbottom Road 1.5 km East of junction with Stoltz Road, Duncan	23.6	5:48	/	1
34	8	The Washout	West of junction with Jenny Place, Duncan	26.1	6:24	1	



"I invite people to realize that their physical composition is mostly water — 60%. The same H₂O molecule we imagine floating by was in fact in a cloud, in a lake, in a plant. Before that it was a part of a glacier and part of our ancestors. The hydrogen or oxygen atom might have been part of the body of Jesus or Buddha or my grandfather, or myself. Water is a perfect example of the absolute interconnectedness of all things in the universe."

Chris Steeger

Now, in the fall of 2024 CLRSS and community stewardship partner, Xwulqw'selu Connections, have completed *Project 84,000*. It is an art installation commemorating the at least 84,000 juvenile steelhead who lost their lives in a severe, climate-related, river disaster in the summer of 2023. More than 1300 children and adults, some visitors to our valley and other locals of many generations, contributed to this art. Students, seniors, not-for-profit society members, festival participants, and arts council and stewardship group members worked together to create this testament to the magnitude of this loss to the local biosphere. The 84,000 images are recorded on both sides of a 700 ft by 3 ft mural, divided into 14, 50-foot-long scrolls. Using wax crayons, hundreds of individuals rubbed across a blank sheet of brown, craft paper, exposing collagraph images of fish less than 9 inches in length. Simple, profound and cathartic, this action was surprisingly meaningful and helpful to those who feel the constant loss of planetary species at this precarious and uncertain time in our world.





Ecological Grief Circle

Wednesday, October 16, 2024 6:00 - 8:00 PM Cowichan Valley Arts Council Gallery 2687 James Street, Duncan

Are you feeling fear, sorrow, anger, guilt, anxiety, confusion or numbness about changes in nature?

You're invited to a community sharing and listening circle to transform these feelings into healing medicine. Come as you are.



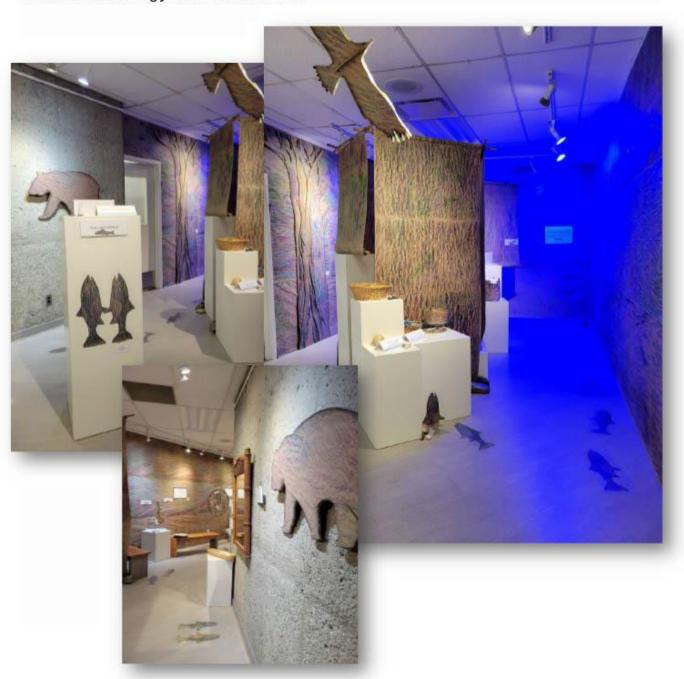
Hosted by Xwulqw'selu Connections and Cowichan Lake and River Stewardship Society On September 22, 2024, the Project 84,000 mural was unrolled at the Quw'utsun Sta'lo' Skweyul. More than 70 people stepped up to "hold the fish" in a ceremony of honour and gratitude.

On October 16th the community is invited to a free Ecological Grief Circle, a community sharing and listening circle, transforming grief into healing medicine.

From October 1st to 19th the community is welcome to visit the Cowichan Valley Arts Council's Annex Gallery, 2687 James Street, Duncan to see the final Project 84,000 installation. Thanks to Joanna Macy's *The.Work.That.Reconnects* - a framework for designing this exhibit. Macy, J., & Brown, M. (2014). *Coming.Back.to.Life*. New Society Publishers.

Show hours are 11:00 - 4:00 weekdays and 12:00 - 4:00 on Saturday.

Thanks to all who felt the crayon's pull or who cheered others on throughout this project. We look forward to welcoming you to this installation.



Why Fish need trees – thanks to the Cowichan Watershed Board Video: Why Fish Need Trees - Cowichan Watershed Board

More about 6-PPDQ



Once again CLRSS is helping the BC Conservation Foundation to sample local waters for *toxic 6-PPDQ*, a tire preservative used since the 60s to prevent cracking and degradation of rubber. The compound is deposited on roadways and enters streams and waterways during heavy rainfall events. The problem is that it has been linked to 'urban run off mortality syndrome' in coho salmon. Multiple trout and salmon species can be impacted but both returning adult and juvenile (age 1+ yrs) are particularly vulnerable at extremely low levels! Concentrations as low as 40-100 ng/L (nanograms per litre) are lethal in fish and even if relocated to toxin-free waters, impacted fish will not recover.

What is the 'ask' for this upcoming season? The study will be continued this year, testing streams from last year that had concentrations of 6-PDDQ and include any new streams not previously sampled but that have historically contained salmon spawning runs and that are traversed by busy roadways.

That means during major rain events from September through January, Stanley, Hatchery and Exeter Creeks plus others suggested by the team, will be tested for 6-PPDQ.

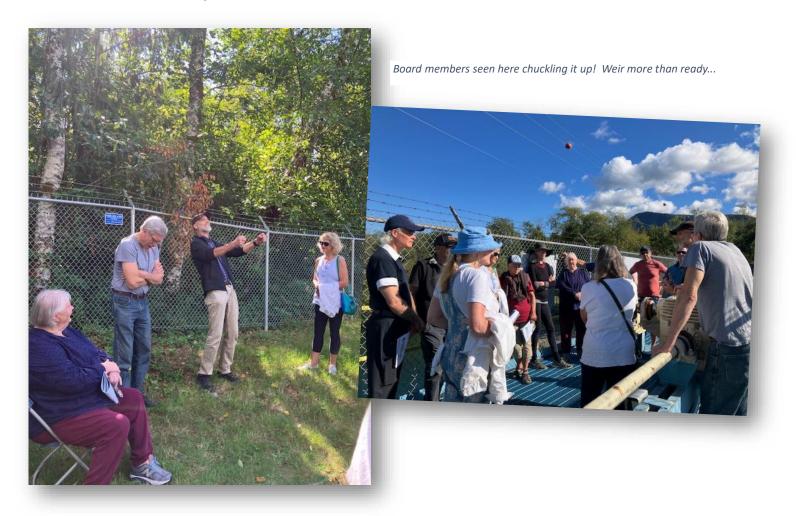
CLRSS currently has four team members, but we need three or four more, so we can form three crews, including alternates for scheduling flexibility. The BCCF staffer will identify upcoming rain events and Cam McCauley and Hugh Sutherland of CLRSS will coordinate the crew, taking turns sampling before, during and after the rain events.

You can find the results of last year's study by Googling Interactive Database – Mitigating Input from Tire Wear Toxins to Protect Salmonid Habitat on Vancouver Island.

For more information or to make this stewardship commitment, please contact Cam McCauley ay 343 543-0067 or mccauleyc62@gmail.com

Weir Touring - by Dianne Flood

On a beautiful sunny September day, CWB's Tom Rutherford and Catalyst's Brian Houle were terrific guides as new and old Board members alike joined them on the weir to hear a deeper dive into its mechanics and history. Even the longtime CLRSS Board members expressed how much they enjoyed the opportunity and how much they learned. We are hopeful we can make the opportunity available for a wider scope of folks. Watch for updates and invites to similar weir tours.



A Beary Bad Story – by CLRSS Board member, Jacqueline Sherk Growing Concerns of Habitat Loss Affecting Black Bears

Concerns regarding impacts of habitat loss on black bear, including on Vancouver Island, have been growing for decades. In a 2022 report commissioned by *The Sierra Club of BC ('Protecting Bear Dens in British Columbia'*) the loss of critical bear habitat due to logging and development is now considered to be a serious threat affecting a bear's ability to survive winter. Hollow stumps and trees in old-growth forests that black bears require for winter denning, and the forests where these trees exist are dwindling into extinction by relentless logging and development.

These activities not only affect the availability of dens, but they also affect food supplies. Bears experience 'hyperphagia' in late summer and fall as nature's way of preparing them for hibernation when food sources are drastically reduced. The effect of hyperphagia is described as an overdrive need to consume calories. This increased desire for food encourages bears to build fat reserves that will sustain them through winter.

Ripened berries, nuts and especially salmon are all ideal, late summer food for bears, however, forest practices and ever-increasing summer droughts have resulted in a decreased supply of these important foods. Riparian areas where young fish find safety while they mature are also impacted by logging, changing stream flows and water quality, and the decline in the availability of fish is a loss to the bears as they prepare to hibernate.

Even a bear needs a safe and dry place from winter weather! Female bears give birth during hibernation, and as she sleeps, her growing cubs will require the constant nourishment of her milk. There may also be predators at large: wolves, cougars, and even other bears, and old growth trees and hollow logs are becoming increasingly hard to find.

Currently in BC, only bear dens on Haida Gwaii and in the Great Bear Rainforest have any legal protection, and although the forest industry has its 'Best Management Practices', these are only guidelines and are not enforceable under law.

The Sierra Club concluded its report by calling on the Province to amend the BC Wildlife Act to 'bar the destruction of critically important denning habitat province-wide', and also to implement the specific recommendations contained in their report. Other groups, like BC Nature have written letters of support for protection of bear dens to government, yet all to no avail.

Sources: The Sierra Club of BC 'Protecting Bear Dens in BC Forests' https://sierraclub.bc.ca/wp-content/uploads/ELC-Report-on-Protecting-Bear-Dens-2022.pdf

Also: Learn more and view videos of bear dens at: https://artemiswildlife.com/bear-dens



https://youtu.be/MsQ5wPjIEjI?si=CyNo_n-17lwpVWuM