

TOP 10 of 2022



Welcome to our 2022 Retrospective!

Dive in for a 5-minute peek at some impressive progress made this year to safeguard and restore the Cowichan-Koksilah watershed.

This list is far from complete, and in random order. It provides 10 highlights from where we sit (when we're lucky) around the Cowichan Watershed Board (CWB) table.

Our partners deserve ALL the credit for these advances! The CWB achieves nothing without our foundational partners, Cowichan Tribes and Cowichan Valley Regional, and more than 30 other government agencies, non-profits, universities, policy advisors, businesses and others who contribute to these and other advances in the ecological well-being of this watershed. We work hard to help them succeed at that.



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Above: Aerial view of Cowichan Lake Weir. New design will to increase weir height by 70 cms. Photo by Catalyst Paper.



Left: Chief Lydia Hwitsum and Chair Lori Ianninardo sign the MOU on behalf of Cowichan Tribes and CVRD. Paper Excellence is the 3rd signatory. Photo by Cowichan Valley Citizen.

Weir Ready!

- CVRD completed the design and shoreline assessment for the Cowichan Lake weir replacement project on behalf of its partners
- Cowichan Tribes lead discussions into how the new weir could be governed and managed using a partnership approach.
- Cowichan Tribes, the CVRD and Paper Excellence signed a memorandum of understanding articulating a commitment to work as partners to pursue a water conservation license for the additional water storage.
- This partnership has now jointly applied for a conservation water license, which is needed before construction can begin.

[Learn more here.](#)



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Above: Xwulqw'selu Watershed Planning Steering Committee and Project Team members receive cultural teaching with elder Luschiim Arvid Charlie.

2



Left: WSP Project Team members take a workshop break, overlooking Cowichan Bay where the Koksilah River joins the Cowichan River and the ocean.

Xwulqw'selu Co-Governance

- Cowichan Tribes and the Province of BC continue to work as partners towards BC's first Watershed Sustainability Planning process under the Water Sustainability Act.
- BC Ministerial Order signed in January to designate the entire Xwulqw'selu (Koksilah) watershed for the purpose of developing a WSP, recognizing Quw'utsun values, water users, fish species, etc.
- An interim Steering Committee is now finalizing its Terms of Reference and a Workplan for the next 3 years to develop the plan including more research and input from the community.

[Learn more here.](#)



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Above: Biologists monitor habitat conditions at various flow rates in the Koksilah River. 2021 CWB photo.

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Left: Khowutsun Forest Services crew plant native shrubs along creeks in partnership with participating Koksilah area farmers and Farmland Advantage. Photo by Elodie Rogers

Twinned Watersheds Study

- Completed an extensive and scientifically ground breaking field research project in the lower Koksilah and Chemainus Rivers on behalf of Cowichan Tribes and Halalt First Nation.
- Elements included aerial imagery, detailed flow data, meso-habitat inventory, & a peer reviewed Environmental Flow analysis as well as integrating preliminary indigenous flow knowledge.
- Months of Aquatic & Riparian fieldwork employed local people.
- Restored riparian riverbanks and farm habitats.
- Salmon stock assessment now underway.

[Learn more here.](#)



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Lower
Cowichan River
Cleanup 2022
Thank you all!

And thanks to
photographers!

River Cleanup

- 111 volunteers participated in Lower River Cleanup this August.
- 1700kg of trash was removed from 15 km of Cowichan River and riverbanks from Sandy Pools down to Black Creek (+ some).
- Co-hosted by Cowichan Tribes, sponsored by Catalyst, supported in kind by CVRD-Bings Creek, Garage Café, Duncan Rotary, Adams TarpNTool, True Grain Bakery, Real Canadian Superstore, Island Tractor, Drillwell, and more.
- Thanks also to all the other organizations and individuals who clean litter throughout the year!

[Learn more here.](#)



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Above: The UVic Xwulqw'selu Connections Team earns a happy dance from the Big Dancing Fish!



Left: Tsoulim guides planting of X'pey (cedar) by Quw'utsun Cultural Connections

Below: Filming Why Fish Need Trees, by Arcas Media.



Learning & Sharing Knowledge

- 10 insightful presentations with Twinned Watershed research team to share their [Koksilah EFlow](#), and [Riparian](#) analysis, and other findings & recommendations RE the [Twinned Watersheds Project](#).
- [Why Fish Need Trees](#) video; sequel to [Why Fish Need Water](#)
- Our [Big Dancing Fish](#) celebrated watershed helpers.
- Joined ecological & cultural [workshops](#) to learn from elders.
- [Check out our YouTube channel](#) for more.

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Getting Back on Target

- Reviewing our 7 Targets for Watershed Health (2019-2022). These targets honour the direction and intent of the Cowichan Basin Water Management Plan while guiding and inspiring collaborative, locally-relevant, and achievable progress towards its goals. Updates and revisions for all targets have now been presented to the Board for feedback, and are in final review.
- Began work to refresh and revive 4 Target Working Groups. Over the past decade, > 40 organizations have collaborated in Working Groups, bringing local subject experts together around mutual goals.

[Learn more here.](#)

CWB'S TARGETS FOR WATERSHED HEALTH:

Flows:	We want to ensure that Cowichan and Koksilah River summer flows are at levels that support the needs of people & fish.	
Fish:	We want healthy fish populations in the watershed.	
Water Conservation:	We want Cowichan watershed residents to use water wisely.	
Water Quality:	We want clean water in our watershed.	
Estuary Health:	We want to be able to eat shellfish from Cowichan Bay.	
Riparian:	We want to protect and enjoy the benefits of healthy stream, lakefront, and estuary habitats.	
Watershed Connections (IQ):	We want Cowichan watershed residents to increasingly know and value their watershed.	



Above: Original Targets (2019)

Left: 2 watershed educators who are examples of the collaborative and locally connected knowledge base that make Working Group's "work".

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Above: Former Chief and CWB Co-Chair Chip Seymour presenting to the 2021 BC Budget hearings (online) seeking stable funding for local watershed governance entities like the CWB.



Left: Photo by Genevieve Singleton.

Sustainable Funding is Coming!

- This one might sound “dry” but it’s foundational to healthy watersheds across BC, and something the CWB has helped advocate for with the BC Watershed Security Coalition.
- Early in 2022, the Province began development of a Watershed Security Strategy and Fund. This is anticipated to be a multi-million dollar endowment with annual funding.
- Federal commitments have also been made to a \$1 billion Freshwater Action Plan and Canada Water Agency.

[Learn more here.](#) [And here.](#) [And here.](#)



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Above: Xwulqw'selu Connections Graduate Student trains volunteers in the sampling methodology. 2021



Left: Xwulqw'selu Connections Graduate Student demonstrates groundwater connections on River Day in the Koksilah watershed. Photo by Jennifer Shepherd.

Xwulqw'selu Connections

- Partnering in 5-year research project in the Koksilah watershed, led by hydrogeologist Prof. Tom Gleeson and a team of U Vic graduate students and community coordinators.
- 25 local “citizen scientist” volunteers monitoring tributaries.
- Making connections between groundwater and surface water in the Koksilah watershed, connecting that science to decision-making (e.g. WSP), and helping residents better understand the waters where they live.
- 1555 stream observations uploaded so far!

Learn more: [The Discourse](#) [2022 Results](#)



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Above: Freshwater sampling crew in a Cowichan bay tributary.



Left: Cowichan Tribes Marine crew out in Cowichan Bay, taking marine samples.

Synchronized Sampling!

- A hearty crew of volunteers and Cowichan Tribes staff, lead by a committed “choreographer” (project lead) completed round 3 of a Provincially recommended sampling regime, required every 5 years to monitor trends in the Cowichan-Koksilah watershed.
- 10 days of sampling in 22 freshwater sites and simultaneously by the Cowichan Tribes marine team in the estuary at 9 marine sites.
- Testing included (site/season dependent) E.Coli, turbidity, pH, Nitrogen, Phosphorus, Carbon, Enterococci, Fecal coliform, metals, temperature, oxygen and conductivity.

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Above: Lisa Maria Fox joined the CWB staff team in August.



Left: Former E.D. Tom Rutherford with his hul'qumi'num language teacher and respected elder, Philomena Williams.

Hello Lisa! Huy ch q'u Tom!

- In August we welcomed a new Managing Director to the CWB staff team. Say hello to [Lisa Maria Fox](#).
- Tom Rutherford retired from his role as the CWB's Executive Director, but we are thrilled that he is still hard at work (when he's not hiking) pursuing salmon sustainability and indigenous co-governance as the CWB Strategic Watershed Priorities Director.
- We also said hello and 'till next time' to several valued Board members and project staff, who we will recognize in the Annual Report (since we're already at 10!)



CoChairs Chief Lydia Hwitsum and former CVRD Chair Lori Iannidinardo. River Cleanup. Photo Barry Hetschko



CoChair CVRD Chair Mayor Aaron Stone with Water Woman (2014). Photo Gord Iverson

Huy ch q'u / Thank you
See you in 2023!