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CWB photos courtesy of Barry Hetschko

Executive Summary

This business plan was developed to provide direction and guidance to Cowichan Watershed Board (CWB) members and staff in terms of identifying priorities, providing strategic direction over the short and long term, identifying the resources required to do the work and evaluating progress. It includes a five year strategic plan clearly identifying priorities, an annual workplan and communications plan, five year budget forecast and an evaluation of progress to date towards meeting CWB goals and objectives.

Over the next five years the CWB plans to continue to engage in four major areas of work in the Cowichan and Koksilah watersheds: water supply; water quality; impacts to habitats and ecosystems and ensuring organizational health. In order to do so, the Board will continue to support work directed at implementing its seven broadly scoped "watershed targets" which include environmental flows, water quality, estuarine and riparian health, sustainable fish stocks, water conservation, and watershed knowledge.

Rebuilding the Cowichan Lake weir to maintain adequate environmental flows in spring, summer and fall has been identified as the first priority of the CWB over the next five years, with implementation of the seven targets and continuing to build and strengthen partnerships also being identified as priorities.

These priorities are reflected in the annual workplan which identifies timeframes and funding sources required to implement the work outlined. This workplan is formatted in three sections: Target implementation (including the priority "flow" target), organizational development and general operations.

The corresponding five year budget clearly indicates the need for new funding sources to replace the restricted funding from grants expiring in 2019. These resources could come from application-based granting processes but reaching an agreement with the Province of BC for some level of funding support associated with local water/shed management and governance activities as outlined in the *Water Sustainability Act* would be the optimal scenario.

Finally, this plan provides an analysis of performance to date, highlighting significant accomplishments, including completion of a Cowichan Water Use Plan, implementation of an extensive water quality monitoring and analysis program, and significant organizational development achievements resulting in a strengthened partnership between Cowichan Tribes and the CVRD.

An interest and commitment to water sustainability has provided the critical catalyst to support this foundational partnership and the opportunity to learn from each other respectfully while working towards improving the health of the watershed. The Board has an enviable track record of planning and implementing technical work, creating a culture of water conservation, promoting science-based advocacy and implementing respectful

community-based solutions. This business plan provides a blueprint for continuing and enhancing these successes in the years to come.



Members of Cowichan Watershed Board gather with Nicola Frist Nation Chiefs and their staff, provincial government staff, and academic advisors, for a watershed governance Learning Exchange, hosted by Cowichan Tribes. Spring 2019.



Cowichan Valley Regional District elected representatives and staff take part in a Cultural Workshop hosted at the Cowichan Tribes Elders Hall to deepen mutual understanding and respect for the new Cowichan Watershed Board principle, "Nutsamat kws yaay'us tth qa': We come together as a whole to work together to be stronger as partners for the watershed."

Strategic Direction 2019-2024

Introduction

The Cowichan Watershed Board (CWB) is a local governance entity created in 2010 to promote water and watershed sustainability in the Cowichan/Koksilah watersheds, ancestral home of the Quw'utsun First Nation. Co-chaired by Cowichan Tribes and the Cowichan Valley Regional District, the CWB represents a unique partnership between First Nations and local government. Through this model, Cowichan Tribes and the CVRD work together to advance whole-of-watershed health, demonstrating a commitment to moving down the path of reconciliation.

Since its inception, the CWB has played a critical and collaborative leadership role in watershed sustainability in the region. In today's context—with increasingly urgent water challenges at hand, and a growing recognition of the role of Indigenous authority and stewardship in sustainable watershed governance—the CWB's leadership is more important than ever.



CWB Executive Director, Tom Rutherford and Catalyst Paper's Environmental Manager, Brian Houle, demonstrate the impacts of climate change on Cowichan River water flows to tour participants atop the weir at Cowichan Lake.

STRATEGIC PRIORITIES



- Support and facilitate all partners and stakeholders to prioritize and contribute towards; a) identifying a license holder and securing a water license, b) completing engineering and impact studies, c) rebuilding the weir.
- Facilitate government relations in support of this project, working closely with local MLAS and MP.
- Maintain public support and understanding of the regional and provincial benefits of this project, and the risks of not doing it.
- Support functioning Technical Advisory Committee and Working Groups to pursue identified watershed targets.
- ConductTarget Review and update targets as needed. Create work
 plans for each Target and coordinate with CVRD Watershed service
 work plan and Cowichan Tribes priorities.
- · Write State of Environment Report building on Target Review.
- Work with BC Government to create a legally binding Water Sustainability Planfor Cowichan and Koksilah Watershed.
- Honour and promote the principal of Nutsamat kws yaay'us tth qa' and respect for indigenous authority in the watersheds.
- Actively involve the best knowledge and resources available to support the Cowichan and Koksilah watersheds, guided by the targets.
- Engage local communities in understanding their watershed ecosystems, and inspiring sustainability through positive, participation-oriented public outreach projects.
- Establish funding paths for sustainable partnerships and projects.

Five Year Plan

The above graphic and following table provide an overview of key priorities as well as a 5 year outline of proposed actions of the CWB including principle area of focus, targets, specific milestones and a projected timeline. Addressing climate change/water supply in the Cowichan River by increasing positive storage in Cowichan Lake continues to be the main priority of the board. Implementation of the CWB "Targets" and work dedicated to building and maintaining partnerships, cross jurisdictional collaboration, and public engagement are also identified as priorities.

Table 1: Water Supply

Target/Focus	5 Year Goal		Annual Milestones				
		2019	2020	2021	2022	2023	
We want to ensure that Cowichan and Koksilah River summer flows are at levels that support the needs of people & fish.	Cowichan - Construction of new Weir at Lake Cowichan underway	Conservation license holder determined. Liability issue resolved. Impact/ benefit materials developed and presented.	Tripartite limited liability legal partnership in place License application process begun. Feasibility / design study underway	License application process complete Feasibility and design work complete Capital fundraising	Capital funds secured. Water licenses secured. Governance agreements /	Construction begins	
	Upda	ated June 20	19 See Add	dendum, pa	ge 29.		
	Koksilah - Critical summer flows maintained; agricultural community	Support FLNRORD and farming community to define and meet critical flows. Review data monitoring shortfalls	Agricultural water conservation projects funded through EFP Enhanced water monitoring	Agricultural water conservation projects funded through EFP Inclusion of Koksilah Ag. Rep on Fish Flows?	Water Conservation projects funded through EFP Critical flow intervention as	Critical summer flows are maintained in Koksilah river while maintaining sustainable	

	supported to transition.	Explore new Group EFP	Tech. work to confirm	working group	necessary	agricultural community
	Upo	Infrastructure lated June 20 Coordinate with Koksilah	0-19e-forSeeuAd	dendum, pa	ge 29.	
_		Working Group on watershed-based planning.				
We want healthy fish populations in the watershed.	Steelhead pre- smolt abundance in the Cowichan watershed meets or exceeds target population densities set by FLNRORD Chinook salmon target has been created and met Koksilah?	FNLRORD - BCCF carry out steelhead juvenile density surveys revealing target population densities Fish/Flows working group reviews current target and engages in process to create "SMART" Chinook Target for Cowichan River	FNLRORD - BCCF carry out steelhead juvenile density surveys revealing target population densities Fish/Flows working group creates Chinook Target	FNLRORD - BCCF carry out steelhead juvenile density surveys revealing target population densities Resources and strategies in place to evaluate Chinook Target		steelhead juvenile density surveys by FNLRORD - BCCF define target population densities Chinook target assessment reveals target has been met
We want Cowichan watershed residents to use water wisely.	Industrial, agricultural and/or Domestic users have reduced water use from 2019 by measureable amount	Cowichan Water Conservation Challenge concluded with report. Explore shifting this goal to region via CVRD watershed service.				

Table 2: Water Quality

Target/Focus	5 Year Goal		Ann	ual Milestones		
		2019	2020	2021	2022	2023
We want clean water in our watershed.	E. coli levels meet or beat recreational standards in all Cowichan Watercourses Reductions in P levels from 2019 levels in all our watercourses	Targeted water samples taken in Quamichan and Somenos watersheds Outreach with Koksilah agricultural community on nutrient management issues Explore coordination of water quality data and collection via CVRD water service	Outreach to E.coli sources identified in sub-watersheds sampled in 2019	Outreach campaign on limiting Phosphorus introduction to watershed Partnership projects with identified e. coli sources to address issues	Repeat 2017- 2018 water sampling in Lower Cowichan, Koksilah and Cowichan Bay	Repeat 2017- 2018 water sampling in Cowichan Lake and tributaries and Cowichan mainstem
We want to be able to eat shellfish from Cowichan Bay.	Sewage outfall removed from Lower Cowichan River Areas suitable for depuration harvest identified Traditional clam garden created	VORR buoys installed in Cowichan Bay Clam garden project outline completed with CT approval (Kim) Clam garden feasibility/ scoping funding obtained	Clam garden feasibility study completed, including long-term garden maintenance plan. Existing shellfish tissue sampling data collated	Workshop with agencies & local partners re current status of bivalves & aspirations to create depuration opportunity for FSC harvest Funding and initial work for clam garden project	Clam garden project implementation with partners Bivalve tissue sampling program JUB partners begin sewage outfall re- location project	Clam garden completed. Ongoing maintenance /monitoring in place via CT and/or SD79 Sewage outfall moved Identification of FSC depuration harvest opportunity

Table 3: Impacts to habitats and Ecosystems

Target/Focus	5 Year Goal		Anr	ual Milestones		
		2019	2020	2021	2022	2023
We want to protect and enjoy the benefits of healthy stream, lakefront, and estuary habitats.	10,000 sq. M of riparian habitat restored between 2019 and 2024 Invasive species mapping and management programs implemented for Cowichan/ Koksilah Riparian	Identify paid partner co- Chair of Riparian working group 2,000 M sq. riparian habitat restored Funding obtained for riparian invasive mapping exercise	2,000 M sq. riparian habitat restored Mapping of Cowichan/ Koksilah Riparian invasive	2,000 M sq. riparian habitat restored Invasive mapping project completed Pilot riparian invasive intervention implemented	2,000 M sq. riparian habitat restored Pilot riparian invasive intervention implemented	2,000 M sq. riparian habitat restored Pilot evaluation and design of ongoing riparian invasive maintenance program
We want Cowichan watershed residents to increasingly know and value their watershed.	All Grade 2/3 & 8/9 students are offered a handson watershed experience. Cowichan residents of all ages increasingly know and value their watershed.	"Watershed IQ" working group and target renamed "Watershed Connection" working group. Clarify "hands 'on" goal. Develop school survey to monitor progress on target. Develop educator profiles on CWB website. Improve WG communication mechanisms (FB) Speaker series events x 6 Develop seasonal media articles with partners.	Work with Watershed Connection partners to ensure coordinated Watershed education experiences for grades 2/3 and 8/9 Begin year-end teacher surveys to monitor progress. Coordinate with CVRD and SD79 RE regional education resources and goals. Speaker series Media articles	Ongoing Watershed Connection work with grades 2/3 and 8/9 Annual monitoring of success to address gaps. Speaker series event monthly Media articles	Ongoing Watershed Connection work with grades 2/3 and 8/9 Annual monitoring of success to address gaps Speaker series event monthly Media articles	Surveys show that grades 2/3 and 8/9 students in Cowichan Watershed consistently get hands-on watershed experiences. Speaker series Media articles

Table 4: Organizational Health

Target/Focus	5 Year Goal			Annual Milestones	5	
		2019	2020	2021	2022	2023
We want strong partnerships that enable collaborative watershed governance and better local influence over decisions that affect our watershed.	Continued strong and effective working relationship between Cowichan Tribes and CVRD as foundation of CWB Partnership with Province of BC enabling implementation of 1 or more WSA tools in Cowichan Watershed	Support creation of water license partnership (see Water Supply) Cultural workshop for CWB members, CVRD and CT elected officials Publish "Pathways and Partnerships" report TAC conducts Target Review. Quarterly meetings with FLNRORD staff Exchange of perspectives and ideas on local water/shed governance with Nicola Chiefs Government engagement strategy development	Quarterly meetings with FLNRORD staff Government engagement strategy implementation Fundraise for Collaboratively written State of the Watershed Report, building on TAC Target Review. Continue to move towards CWB role in WSA implementation for Cowichan-Koksilah.	State of the watershed report provides baseline for assessing changes in watershed (governance) moving forward Quarterly meetings with FLNRORD staff to implement WSA and other improvements.	Quarterly meetings with FLNRORD/MOE staff Province working with local partners to implement WSA tool(s) here e.g. Water Sustainability Plan, Advisory Body, EFlows.	Quarterly meetings with FLNRORD/MOE staff WSA tool(s) implemented in Cowichan Valley
We need systems in	CWB has stable and	Secure interim	Work Collaboratively	Multi-year core	Agreements	CWB has stable and

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place to ensure sufficient and stable financial resources to support this work.	assured "core funding to enable operations moving forward. Other funding secure relative to any change in governance authority.	funding agreement with CVRD thru new "watershed service" Establish sources ofcore funding for Cowichan Tribes water Governance via SFWGI Secure grant funding for initiatives described above.	with CVRD staff and Board to establish secure partnership funding for CWB operations Get core funding for Cowichan Tribes water Governance via SFWGI	funding agreements with Cowichan Tribes and CVRD of \$100,000 annually Explore water governance funding partnership between Province of BC and Cowichan Tribes	between Cowichan Tribes and Province of BC regarding water/shed governance funding	assured "core funding" to enable operations moving forward, including consideration of any change in governance authority.
Communications- Build Organizational Profile and Community Engagement	CWB is known and supported throughout Cowichan Region and Cowichan Tribes for its leadership on issues relevant to quality of life for residents.	Update CWB Communications plan including better profile nationally and in FN publications locally. Publish "Pathways and partnerships" Report Improve website. Publish 4 articles in Cowichan Tribes newsletter.	Implement Communications Plan	Implement Communications Plan	Implement Communications Plan	CWB is known and supported throughout Cowichan Region and Cowichan Tribes for its leadership on issues relevant to quality of life for residents.

Annual Plan - 2019

The following charts details the work plan for this fiscal year, pending available funds, in the three main areas of our work:

- a) Targets CWB's seven aspiration targets for watershed health derived from the Cowichan Basin Water Management Plan and implemented through collaborative Working Groups of partner organizations.
- b) Organizational Development work to improve the impact of the Cowichan Watershed Board through strengthening partnerships, pursuing higher levels of decision making authority, expanding the reach of our work through outreach and communications, and ensuring scientific and financial accountability in all we do.
- c) General Operations core tasks required to support the organization to do the above.

Colour Key	Key to Funding Sources
Green = highest immediate priority; funding secured	OPS - core operational funding
	REFBC - Real Estate Foundation of BC
Orange = medium priority or funding not secured	Eco - Environment Canada - EcoAction
	BCFLI - BC Freshwater Legacy Initiative
	SFWGI - Sustainable Funding for Watershed Governance Initiative

a) Make Progress on CWB's Seven Targets for Watershed Health (Click here for Targets Primer)

Target/Project	Activities	Lead	Timeframe (2018)	Source of Funds
FLOW TARGET				
Obtain agreement on Conservation license holder for additional storage in Lake Cowichan. Access funding for feasibility and	Encourage, Facilitate and support discussions with First Nations, all levels of government and industry to identify Conservation license holder for Cowichan river	Tom, Jill	Jan Dec.	OPS/ REFBC

design work				
	Support license application Work with partners towards accessing Sr. Govt. Funding for weir Feasibility and design	Tom /Partners/ fish-flows WG	Sept Dec.	OPS
Cowichan and Koksilah River summer flows	Outreach/ Education developed and delivered	Tom/EGNO partners	Feb June	REFBC /OPS
are at levels that support the needs of people & fish.	Work to ensure critical summer flow levels are maintained in Koksilah River FNRORD/ Agriculture info meetings re critical flows Review of Koksilah flow monitoring Creation of Group EFP focused on Irrigation Infrastructure	Tom, Jill/ Fish-Flows WG	Jan Dec.	REFBC/ OPS
Ad Hoc flows committee	Represent CWB perspective on weekly Catalyst Ad Hoc Flow calls	Tom	April-Nov.	OPS/ REFBC
Project - Building Knowledge re implications of climate change and land use management on health of lake and river	Support Cowichan Watershed forest hydrology research	Tom/ Riparian WG Industry Prov. Of BC		Unfunded
WATER QUALITY /PUBLIC HEALTH/SHELL	FISH TARGETS			
Ourface Western Ourslite Manifestine	Ongoing collaboration with Partners (CVRD, CT, MOE, Somenos Marsh WS, CCLT, Quamichan) regarding coordination of standard monitoring of key sites, data management and reporting	Water Quality WG CVRD	June - Dec.	OPS
Surface Water Quality Monitoring	Reporting out on 2017/18 monitoring programs Outreach to farming community - Opportunistic sampling One on one communication	CT MOE CCLT SMWS	Feb - March 201p	REFBC
Coastal Restoration Fund	Participate in Cowichan CRF steering committee Support Cowichan CRF OPS	Tom	Jan Dec.	OPS
Clam Garden	Initial project research and scoping by Kim Lagimodiere	Water Quality Est. Health WG	Jan-March	REFBC

Clam Garden	Obtain funding for clam garden feasibility including coordinator, creation of SC, community outreach/engagement, site selection and cultural guidance	Water Quality Est. Health WG	Ongoing	
Cowichan Bay Vessel Operators Restriction Implementation	Ongoing collaboration to fully implement VORR in Cowichan Bay to protect sensitive habitats Fund raise, purchase and install buoys Outreach education initiative Compliance program (CT, DFO, RCMP)	Water Quality/ Est. Health WG	April -Dec.	OPS/ Partner Funding
RIPARIAN HABITAT TARGETS				
Restore 10% of impacted shoreline habitat by 2021	Support Cowichan Tribes, BCCF and Cowichan Lake and River Stewardship Society: Coastal Restoration Fund Riparian planting programs	Riparian WG	Ongoing	CRF
	Organize Knotweed workshop focused on increasing knowledge and developing management strategy	Riparian WG	Jan	Heritage River grant?
	Development of Cowichan/Koksilah Watershed knotweed management strategy	Riparian WG	Jan Dec.	Funding Required
Formal protection of 50% of remaining shoreline	Monitor Shaw creek property rezoning and work towards a partnership to acquire funds to purchase, if available	Riparian WG	Ongoing	OPS / Unfunded
FISH SUSTAINABILITY TARGET				
Chinook	Support Chinook restoration initiatives and development of Chinook target utilizing the Flows and Fish Working Group as a forum.	Fish-flows WG	January - Ongoing	OPS
Steelhead	Encourage MOE/BCCF to monitor and report status to Board. Prepare letters of support for BCCF as required.	Fish-flows WG	Ongoing	OPS
WATER CONSERVATION TARGET				
Maintain critical flows in Koksilah R.	Initiate an Irrigation Environmental Farm Plan with focus on		Jan - Dec.	

	reducing surface water extraction from Koksilah R.	Tom, Jill, David		REFBC until March/ OPS
Residential Water Conservation Challenge 2014-2018	Water Conservation Challenge reporting and analysis and final	Jill, David S., Water Suppliers	January - April	OPS,
Catalyst Water Conservation Challenge	Partnership with Paper Excellence to establish 5 year conservation Challenge	Tom, Jill, David	May - Dec.	OPS
WATERSHED EDUCATION/ CONNECTION	I TARGET			
Enhance target working group capacity	Review WG target and workplan Create internal communication mechanisms	Jill/Kim/WG Chair	Jan June	OPS
Speaker Series	Organize/promote Watershed Speaker Series With VIU	Jill, Tom		REFBC, Sponsors OPS
Watershed Field Trip	Carry out 1 strategic watershed field trip	Tom, Rodger		

b) Organizational Development

Target/Project	Activities	Lead	Timeframes (2018)	Source of Funds
We want strong partnerships that enable collaborative watershed governance and better local influence over decisions that affect our watershed.	Cultural workshop for CWB members, and CVRD and CT elected officials Publish "Pathways and Partnerships" report Quarterly meetings with FLNRORD staff Exchange of perspectives and ideas on local water/shed governance with Nicola Chiefs CWB Co-governance Steering Committee planning and engagement	L. Hwitsum, B. Carruthers, D. Slade, Tom, Jill	Ongoing	BCFLI
We need systems in place to ensure sufficient and stable financial resources to	Secure interim funding agreements with CVRD thru new "watershed service"	Tom, Jill	Jan Oct.	SFWGI (Pending)/OPS

Target/Project	Activities	Lead	Timeframes (2018)	Source of Funds
support this work.	Partner with SFWGI towards securing core funding for Cowichan Tribes water Governance Secure grant funding for various initiatives			
Communications- Build Organizational Profile and Community Engagement	Upgrade CWB website Increase support/ coordination for Working groups Periodic articles, E-Newsletter, radio interviews Facebook presence - CWB, Superheroes, partner sites River Cleanup- Participation in Upper River cleanup and participation, support organization and promotion in the Lower River Clean Up with CLRSS and Cowichan Tribes	Tom, Jill	Ongoing	OPS/ More funding Required

c) General Operations

Target/ Project	Activities	Lead	Timeframes (2018)	Source of Funds
Board Coordination and Support	Organize and/or serve as a resource for Board/Society/Technical Advisory Committee, selected Working Groups and related meetings			
	Liaise with Board/TAC members, Special Advisors/Government staff/ and stakeholders in the interests of the CWB			
	Review policy documents relevant to the watershed and prepare briefings materials, position papers, letters of support, speaking notes etc.		Ongoing	OPS
	Support Co-chairs/Ministers Meetings			
Strategic Planning	Update CWB Business Plan			
	Develop Work plans, hire and supervise contract/student support as needed			
Financial Mgmt.	Monitor/manage budget			
	Pursue funding for ops and projects			

Target/ Project	Activities	Lead	Timeframes (2018)	Source of Funds
TAC and Working	Retain funding for TAC/WG coordinator.			
Group Coordination	Continue 5-year review of targets.	Tom /		
Build and Support	Maintain relationships with stakeholders	Jill		
Partnerships	-particularly stewardship groups within the watershed			
	Attend Agricultural Commission, Stewardship Roundtable, Cowichan Lake and River			
	Stewardship etc. meetings as time permits.			



The CWB's popular monthly Speaker Series, co-hosted by Vancouver Island University Cowichan Campus, hears from local watershed stewards across the region at the "Voices of our Watersheds" event, November 2018.

Communications Plan - 2019

a) Communication Objectives

- 1. Build public and political support for replacing the weir at Lake Cowichan, consistent with the Cowichan Water Use Planning final report.
- Build public and political understanding of the urgency for the weir replacement initiative due to increasing severity and frequency of drought, and the impacts on our salmon driven ecosystem, culture, and economy.
- 3. Support community partners in their public engagement efforts relating to achieving the seven targets via the Target Working Groups
- 4. Build confidence and trust in CWB leadership. Continue to be known as a leading source of information, knowledge and expertise regarding the Cowichan watershed. Communicate more frequently with the full CVRD and Cowichan Tribes councils and committees, and with other local organizations. Represent the partners and working group members well in meetings with Senior Government, academia, and through media and speaking engagements across the country.
- Promote a culture of wise water use. Engage residents in embracing a proud and positive culture of conservation. Use fun encouraging outreach methods to help people notice and take action on water waste at home, work and play.
- 6. Foster watershed understanding and connections. Undertake specific projects and communications to improve public knowledge about and care for the Cowichan and Koksilah watersheds.









b) Target Audiences and Key Messages

Weir - Public - BC/Canada/Washington State. Emphasize that the Cowichan (and Koksilah) water supply problem is a provincial and national example of climate change impacts to freshwater ecosystems, with implications for provincial/state economies, endangered orca whales, constitutionally protected indigenous rights, fishing/farming, health, and more. Help us protect this important watershed so it can continue to benefit you.

Weir - Public - local. Key message - climate change is here and now. What we do, or don't do, will determine whether Cowichan Region youth alive today will continue to enjoy the benefits of salmon, and everything they support, throughout their lifetimes. Use WUP materials as basis for local stories and presentations.

Weir - Political - all levels. This is a highly achievable project with multi-jurisdictional support. It will be either a great cooperative success story that leaves a positive legacy for generations, or a disaster resulting in the decimation of Cowichan River salmon. Keeping the Cowichan salmon stocks healthy will also support adjacent communities and watersheds that won't have this option, and could provide brood stock to supplement other rivers that don't have a feeder lake opportunity.

Targets - These will appeal to various audiences. Staff should consult with each Working Group to define key messages and the CWB's role in supporting those messages.

Water Wise Culture - Residents and especially children/youth. Focus key messages and activities on summer irrigation which is a high water use during the dry season, making change an easy sell. Communications should inspire residents notice water waste, easily correct it, feel good about that, and repeat. Focus on habits that have ongoing benefits (e.g. fix leaking toilets and hoses) and can be repeated every year. Cowichan Hosers - "Don't waste water eh." "It's Hip to Fix a Drip!" "Capture the Rain."

Watershed Connections - Public - local. Engage citizens in an annual River Cleanup event and the Speakers Series of educational lectures by experts in topics relevant to the health and sustainability of the Cowichan and Koksilah watersheds. Support Cowichan Tribes efforts to elevate indigenous ways of knowing, using language, stories and experience.

c) Key Communications / Education Activities 2019

Activity	Description	Timing	Supporting Materials
Upgrade CWB website	 Address issues with restricted access by CWB staff to our website by transitioning to a more user-friendly hosting environment. Transition from Drupal to Wordpress. 	March-June 2019	Existing website.
Increase support/ coordination for Working groups	 Better support the five working groups to work towards and communicate the CWB Targets. Dedicate adequate staff/contractor time to this need. Undertake a Review of the Targets with the Technical Advisory Committee. 	Year round	Staff time
Periodic articles, E-Newsletter, radio interviews	 Minimum 10 published articles about the CWB priorities, including professional journals, Cowichan Tribes newsletter, and local news. Pursue more opportunities for Tom or Co-Chairs to do radio interviews Produce quarterly E-Newsletter Distribute agendas and event notices monthly as needed. Produce short easy to understand video on the weir-salmon-climate story 	Year round	-Media spokespeople (co-Chairs) -Staff time -Good media relations. -Mailchimp account.(free)
Social Media	 Share news from CWB and our partners on Facebook. Promote all events Link Facebook feed to website. Explore Instagram options to reach youth better 	Year round	-Photos, text. -Staff time
River Clean-up	- Participation in Upper River cleanup and participation,	July-August	-breakfast and

	support organization and promotion in the Lower River Clean Up with CLRSS and Cowichan Tribes		lunch, cleanup supplies, prizes, media, poster. -staff time
Speakers Series	 Free monthly public lecture in partnership with VIU Cowichan. Criteria: Engaging/entertaining speakers on topics of interest to the public, by people with strong expertise on the topic, and relevant to the Cowichan watershed. 	6-7 per year as per VIU availability (Sep Oct, Nov, Jan, Feb, Mar, April)	-VIU lecture hall sponsorship. -Staff time -Quality guest speakers - Gifts for speakers
Cowichan Hosers	- Time and people permitting, attend public events during spring and summer to build the culture of wise water use.	May - Aug	-Staff time / contractors/ volunteers
Support Watershed Connections Working Group communications.	Create internal communication mechanisms (Facebook and website) between working group members - Improve public access to information about WG member programs and educators. (e.g. educator profiles on our new website)	Jan-June	-Website revisions -Facebook group (internal) -staff time.

Five Year Budget

COWICHAN WATERSHED	2023		2022		2021		2020		2019*	
INCOME	2023		2022		2021		2020		2019	
Core Income										
CVRD	\$ 50,000	\$	50,000	\$	50,000	\$	50,000	¢	50,000	
Cowichan Tribes	\$ 20,000	\$	20,000	\$	20,000	\$	20,000	\$		
Other Govt partnerships	\$ 50,000	\$	50,000	\$	50,000	\$	50,000	\$	20,000	
Other income / sponsors	\$ 4,000	\$	4,000	\$	3,000	\$	3,000	\$	3,000	
SubTotal - Core Income	\$ 124,000	_	124,000	\$	123,000	_	123,000	_	73,000	
Project Grant Income	ψ 12 1,000	_	12 1,000	7	123,000		123,000	7	75,000	
Real Estate Fdn BC								Ś	20,000	
BC Freshwater Legacy Fund	\$ 20,000	\$	20,000	\$	20,000	\$	20,000		23,250	
Sustainable Funding for WGI	\$ -	\$	-	\$	-	\$	-		17,250	
Other Grants - EcoAction, RBC	\$ 10,000	\$	10,000	\$	10,000	\$	10,000	\$		
RBC Environment grant	,	Ė	-,	•	-,	Ė	-,	-	10,000	
BCFLI Fall intake										
Carry Forward*								_	20,000	
Cash Total	\$154,000	\$	154,000	\$	153,000	Ś	153,000		187,515	
IN KIND	\$ 60,000		60,000	\$	60,000	\$	60,000		60,000	
EXPENSES	1,	Ė	,		,	Ċ	,		,	
Core Staffing Expenses										
Executive Director	\$ 30,000	\$	30,000	\$	30,000	\$	30,000	Ś	40,000	
Project Coordinator / Comms	\$ 23,000	\$	23,000	\$	23,000	\$	23,000		23,100	
Financial Mgr	\$ 12,000	\$	12,000	\$	12,000	\$	12,000	\$	5,200	
Other / Outreach	\$ 12,000	۶	12,000	ڔ	12,000	ڔ	12,000	\$		
									5,000 10,000	
Other / TAC target review								Ş	10,000	
Core Administrative Expenses										
General Administration (Legal, Insurance,										
Supplies, Travel, Office Space, Phone,										
Banking)	\$ 15,000	\$	15,000	\$	15,000	\$	15,000	\$	2,000	
Meeting Expenses (Board, Working Groups)	\$ 6,000	\$	6,000	\$	5,000	\$	5,000	\$	1,500	
Communications, website, advertising	\$ 12,000	\$	12,000	\$	12,000	\$	12,000	\$	5,000	
Core Project Expenses										
Speaker Series	\$ 500	\$	500	\$	500	\$	500	\$	500	
Volunteer appreciation	\$ 500	\$	500	\$	500	\$	500	\$	500	
Working Group budgets	\$ 7,000	\$	7,000	\$	7,000	\$	7,000	\$	-	
River Cleanup	\$ 3,000	\$	3,000	\$	3,000	\$	3,000	\$	2,000	
Outreach / education	\$ 5,000	\$	5,000	\$	5,000	\$	5,000	_	_,000	
Sub-Total Core Expenses		_	114,000		113,000	_	113,000	\$	94,800	
Grant funded Project Expenses	γ11 -1 ,000	7	114,000	Y	113,000	,	113,000	7	34,000	Grant Sources
Water supply - Cowichan								Ś	21.000	REFBC to June 2019
Website transfer								\$		REFBC to June 2019
Speaker nights								\$		REFBC to June 2019
Water Quality/Estuary projects								\$,	REFBC to June 2019
Governance Project								\$	10,000	
Water supply - Cowichan	\$ 10,000	\$	10,000	\$	10,000	\$	10,000			BCFLI/partners
Water supply - Koksilah	\$ 10,000	\$	10,000	\$	10,000	\$	10,000			BCFLI/partners
Engagement / Outreach Projects	\$ 10,000	\$	10,000	\$	10,000	\$	10,000	\$		EcoAction
Other target priority projects - TBD	\$ 10,000	\$	10,000	\$	10,000	\$	10,000	-	-,3	Other
Sub-Total Grant Expenses		\$	40,000	\$	40,000	\$	40,000	S	90,350	
Total Expenses	\$ 154,000		154,000	\$	153,000	\$	153,000		185,150	
	\$ 60,000	\$	60,000	\$	60,000	\$	60,000		60,000	
IN KIND		7	00,000	7	00,000	7	00,000	7	30,000	
IN KIND NET	\$ -	\$	_	\$	_	\$	_	\$	2,365	

Progress Evaluation

Stewardship of the Cowichan River is one of the success stories in British Columbia, with a well-documented history of community-based collaboration. From its creation in 2010, the Cowichan Watershed Board (CWB) has been a co-governed entity based on a partnership between Cowichan Tribes and the Cowichan Valley Regional District (CVRD)), committed to working with partners to support a thriving Cowichan watershed now and into the future.

The Board currently consists of thirteen members, representing a range of locally elected representatives and topic experts, appointed by the partners, and co-chaired by the Chief of Cowichan Tribes and the Chair of CVRD. Monthly Board meetings bring these members together to respectfully discuss and learn from each other and from guest speakers.

In addition, through five active Working Groups and a Technical Advisory Committee, the Board engages over fifty other volunteers and/or organizations in pursuit of a range of projects and programs that help move the watershed in the direction envisioned in the Cowichan Basin Water Management Plan. Specifically these groups collaborate on seven aspirational targets derived from that plan and developed by TAC members. The CWB is a unique and leading example of local watershed governance in B.C.

In 2018 the Cowichan Watershed Board was able to make significant progress in several key areas of focus, leveraging resources and support from many watershed partners. By utilizing a "whole of watershed" approach, in recognition that *Mukw' stem 'o' slhilhukw'tul –* (everything is inter-connected), - achievements in specific elements of the 2018 workplan contribute cumulatively to overall water sustainability and watershed health in the Cowichan Valley. Some of the significant accomplishments of the Cowichan Watershed Board are documented below.

Two new reports published by the CWB help to describe the overall progress of the organization since 2010:

- <u>Pathways and Partnerships: A Framework for Collaboration and Reconciliation in the Cowichan</u>
 Watershed
- On Target A Guide to the Cowichan Watershed Board's Aspirational Targets for Watershed Health

2018 Highlights

(For a more detailed summary, please refer to the CWB 2018 Annual Report.)

Water Supply

As a member of the 2018 Cowichan Water Use Plan steering committee, and participant in both the Aquatic Resource Technical Steering Group and the Public Advisory Group (PAG), the CWB dedicated significant time and effort to water use planning in 2018. The resulting Cowichan Water Use Plan (2018) provides the Cowichan Valley's first science based strategy and rationale for increasing storage in Cowichan Lake. The Plan was endorsed by all stakeholder groups in the community and provides a clear blueprint for moving forward with raising the weir.

With technical support from *Kerr Wood Leidel* consulting engineers and *Eco-Fish Research*, PAG members were provided with a detailed analysis of alternate flow regimes that would be provided with different storage volumes and release strategies. It should be noted that the PAG chose not to use historic data for this process but rather forecast data sets for 2050 precipitation patterns provided by the Pacific Climate Impact Consortium

at University of Victoria. Using 2050 data re-enforced the dire circumstances that the Cowichan River will be experiencing in 30 years and resulted in unanimous agreement that the status quo was totally unacceptable. Now that a consensus has been reached regarding increased storage, the CWB will be working with partners to secure a conservation license holder and funding for engineering feasibility and design work in 2019.

In 2018, Forests, Lands, Natural Resources Operations and Rural Development (FLNRORD) staff from Nanaimo continued their "critical flows" work in the Koksilah watershed. Under the Water Sustainability Act, critical flows refer to flow levels in a river below which significant or irreversible harm to the stream's aquatic ecosystem is likely to occur. Under the Act, license holders can be directed to reduce or stop water withdrawals if in stream flow levels reach the critical point. FLNRORD staff have been undertaking detailed field work to determine what this critical level is in the Koksilah and approaching license holders to seek reduction in water extraction as water levels reach the critical point. The CWB has been working closely with the agricultural community and FLNRORD staff to facilitate communication and understanding of this process and hopes to assist farmers in upgrading their irrigation infrastructure in 2019 through the implementation of a group Environmental Farm plan. It is important to realize that the Koksilah watershed is the first in British Columbia where the new "critical flows" methodology is being piloted.

Water Quality

With funding from the Real Estate Foundation of BC and 'on the ground" partnerships with the Cowichan Lake and River Stewardship Society (CLRSS), the Somenos Marsh Wildlife Society (SMWS) and the Cowichan Community Land Trust (CCLT), the CWB successfully carried out 2 series of "5 in 30" water quality sampling programs in Cowichan Lake and tributaries as well as the main stem Cowichan River and select sites in the Somenos and Quamichan sub-basins. This sampling regime was designed by Ministry of Environment water quality experts and entailed taking samples on a weekly basis for 5 weeks both in summer low water conditions (to capture point source contaminants) and during fall freshets (to capture non-point source contaminants). Approximately 50 sites were sampled for E. coli., Phosphorus and turbidity — for a total number of well over 1000 samples taken. Hundreds of volunteer hours, many in tough conditions, were dedicated to carrying out this program. The results and report will be available to the CWB and the general public early in 2019 but early indications are that there are negligible concerns with respect to E coli. but that high phosphorus levels are evident in many of the areas sampled.

Ecosystems and habitat

Fisheries and Oceans Canada "Coastal Restoration" funding allocated to Cowichan Tribes and partners provided the resources for major habitat initiatives in the Cowichan watershed in 2018 including riparian mapping and planting from the lower river up to the lake shore — including the Koksilah watershed. As well, physical and biological sampling in the estuary was carried out to enable the modelling necessary to plan for a breach in the causeway to be implemented in 2019 This work will promote tidal exchange and improve inshore marine habitats in the Cowichan Estuary. Significant works were also carried out at the Stoltz slide site in order to control sediment inputs into the river above significant salmon spawning habitat. Through participation in the Cowichan CRF steering committee the CWB supports this "whole of watershed" approach to restoration from the headwaters to tidal waters. It is significant to note the strong watershed partnerships — and the leadership demonstrated by Cowichan Tribes — that enable this work.

Organizational Development

With funding and support from the BC Freshwater Legacy Initiative, a series of three internal workshops were hosted in the Cowichan valley over two and a half days between October 2017 and May 2018. These

workshops involved CWB members and staff, senior staff from Cowichan Tribes and CVRD, and water policy advisors. The main outcomes of the workshop series were:

- i. Reviewing and updating the CWB Governance Manual. The workshops allowed time for the two core partners, CVRD and Cowichan Tribes, and other Board members to identify and discuss any areas of concern about how the CWB is governed, and to address these by strengthening the CWB Governance Manual, originally written in 2010. Improvements included clarifying and recognize the various forms of authority represented at the CWB through its partners, strengthening the consensus decision-making process, and adding mechanisms to improve accountability, such as annual reporting documents and presentations to partner councils.
- ii. Re-confirming and adding to the Principles that guide the Board's work. Through the workshop series, an additional principle has been added to the previously endorsed principles of Representation, Transparency, Partnerships and "Whole of watershed thinking". The Cowichan Tribes' principle of "Nutsamat kws yaay'us tth qa': We come together as a whole to work together to be stronger as partners for the watershed" has been adopted and included in the CWB's Governance Manual.
- iii. <u>Identifying three "Core Strategies" to inform how the CWB can evolve to be more effective in addressing watershed challenges:</u>
 - 1) Improving the CWB governance model and strengthening its partnerships
 - 2) Using Watershed Management tools more effectively
 - 3) Increasing the CWB's role in watershed decision making
- iv. Defining three "Pathways to Watershed Health" that outline directions for future growth:
 - 1) Recognizing and supporting Indigenous Authority;
 - 2) Strengthening Partnerships to implement programs and processes under the current governance framework
 - 3) Building readiness to act on opportunities in the Water Sustainability Act.
- v. As well, with support from the Sustainable Funding for Watershed Governance Initiative, CWB pursued avenues to ensure stable long term funding to support the partnership. This included an active role in supporting the CVRD's work to create a Water/shed protection service in the Cowichan Valley which was deemed necessary for the CVRD to continue funding the CWB. It also included initial research into potential sources of sustainable funding for Cowichan Tribes to support its participation in the CWB, and scoping out other potential long term funding arrangements.

Summary

The Cowichan and Koksilah watersheds continue to face a number of challenges to water sustainability, including threats to water quality, water supply and cumulative impacts to habitat. In 2019 and beyond, the CWB will continue its work to address these challenges through meeting its holistic watershed targets and promoting reconciliation through watershed partnerships.

Addendum: June 2019 Update to Five Year Plan Table 1 - Water Supply

Target/Focus	5 Year Goal		An	nual Milestones	5		
		2019	2020	2021	2022	2023	
We want to ensure that Cowichan and Koksilah River summer flows are at levels that support the needs of people & fish.	ensure that Cowichan and Koksilah River summer flows are at levels that support the needs of people	Cowichan - Construction of new Weir at Lake Cowichan underway	Impact/ benefit outreach and Communications materials developed and deployed. Funding for feasibility, design and natural boundary survey secured. (\$4 mil)	Feasibility / design /survey work underway Tripartite limited liability legal partnership in place Capital fundraising. Conservation license holder determined.	Feasibility and design work complete Capital fundraising ongoing. Liability issues resolved. License application process begun.	Capital funds secured. Governance agreements / structures in place. License application process complete	Water licenses secured. Construction begins
	Koksilah - Critical summer flows maintained;	Coordinate with FLRORD, Cowichan Tribes, CSAA, stakeholders and other partners regarding Koksilah WSP Support FLNRORD and farming community to define and meet critical flows. Review data monitoring shortfalls	Support and engage in Koksilah WSP process Agricultural water conservation projects funded through EFP or other sources Enhanced water monitoring	Support and engage in Koksilah WSP process Agricultural water conservation projects funded through EFP or other sources Inclusion of Koksilah Ag. Rep on Fish Flows working group	Completion of draft Koksilah WSP Outreach by all partners	Adoption of Koksilah WSP Critical summer flows are maintained in Koksilah river Agricultural, forestry communities supported to transition.	