


DRAFT BOARD MEETING MINUTES	Mon. Sep 23, 2024 9:00am-12:00pm Si'em Lelum Gymnasium	
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Meeting Chair: Chief Cindy Daniels. **Members Present:** CVRD Chair Aaron Stone (outgoing Co-Chair), Acting CVRD Chair Kate Segall (incoming Co-Chair), Christopher Alphonse, Alison Nicholson, Shannon Waters, David Slade, David Froese, Michelle Staples, Kristine Sandhu, Arlette Malcolm, Director, Resource Stewardship Operations, Coast Area – West Region (WLRS).

Regrets: Calvin Swustus Senior, Tim Kulchyski, David Anderson, Jenna Sutherst, Section Head, Salmonid Enhancement Program, Restoration Centre of Expertise - South Coast Area (DFO), Oliver Brandes, Advisor.

Staff/Project Leaders: Danielle Paydli, Heather Pritchard, Tom Rutherford (until 9:30) Jill Thompson

Guest Speakers: Jas Sandhu, Superintendent, Public Works and Engineering Services, Town of Lake Cowichan, Clay Reitsma, Director of Engineering, Municipality of North Cowichan.

1. Welcome	Chief Daniels opened the meeting.	
2. Agenda Review / Revisions	Aaron moved to adopt agenda. 2nd by Chris. No changes. Agenda adopted as presented.	Agenda adopted.
3. Review May 27th, 2024 Draft Minutes and Summer Events Slideshow	Alison moved to adopt the minutes. 2nd by Chris. No changes. Minutes adopted as presented. Danni shared a brief slideshow of events from the summer, including the bus tour to the river and weir, the Celebrating Water Festival at Lake Cowichan, and River Cleanup.	Minutes adopted.
4. Board Membership - welcoming new Board members/ nominees: <ul style="list-style-type: none"> ● CVRD Co-Chair ● Federal nominee ● Provincial nominee 	The CoChairs and Danni outlined the intention of the CWB since its inception to include representatives from the Federal and Provincial Governments, and welcomed the nominees, Arlette Malcolm (BC) and Jenna Sutherst (Canada). Arlette was nominated and introduced to the Board several months ago and was invited to sit at the table as a pending member at that time.	Decision: David Slade is re-appointed Member at Large. Decision: David Froese is re-appointed Member at Large. Decision: Jenna Sutherst is appointed a CWB member,

	<p>Jenna was nominated over the summer and met the Board members on the July river tour.</p> <p>The CoChairs began by re-appointing the two members who were previously nominated by the Province as Members at Large.</p> <ul style="list-style-type: none"> ● Motion to re-appoint CWB members David Slade and David Froese from Provincial representatives to Members at Large. Moved by Chris, 2nd by Aaron. No opposition. Carried. ● Motion to appoint Jenna Sutherst, Section Head, Salmonid Enhancement Program, Restoration Centre of Expertise - South Coast Area (DFO) as the Federal Government representative on the CWB. Moved by Michelle, 2nd by Chris. No opposition. Carried. ● Motion to appoint Arlette Malcolm, Director, Resource Stewardship Operations, Coast Area – West Region (WLRS) as the Provincial Government representative on the CWB. Moved by Alison, 2nd by Michelle. No opposition. Carried. <p>Welcome Arlette and Jenna!</p> <p>Aaron was presented with a Cowichan knit toque to thank him for his service as CWB CoChair.</p> <ul style="list-style-type: none"> ● Aaron spoke about his departure from the CVRD Chair position, and the honour of serving as the CWB Co-Chair. He called the CWB model the best future opportunity for the province, and spoke of the value of having access to Quw’utsun teachings and Elders and Cowichan community members to guide through difficult times, and how his worldview has changed because of that. ● Aaron introduced Kate Segall, CVRD Vice Chair who will take over as Chair, and CWB 	<p>serving as a Federal representative.</p> <p>Decision: Arlette Malcolm is appointed a CWB member, serving as a Provincial representative.</p> <p>Action: Staff to update website to reflect that Kate Segall, CVRD Vice-Chair is the current CWB Co-Chair.</p>
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	<p>CoChair. Kate introduced herself as the elected CVRD Director of Mill Bay Malahat. She commented that collaboration is at the heart of how she operates, and she is looking forward to being part of the CWB.</p> <ul style="list-style-type: none"> ● Chief Daniels wished Aaron well and gave her heart-felt thanks for how we work in the valley, reflecting on her recent conversations at UBCM that indicated we do that better here than other places. 	
<p>5. Announcements & Correspondence (see below)</p>	<p>Danni referenced the materials in the Board meeting package.</p> <p>Danni highlighted the letter from Ts'uubaa-asatx FN requesting a seat on the CWB, and sought guidance from the CoChairs on how to proceed.</p> <ul style="list-style-type: none"> ● Aaron noted that this has been discussed over the past year. There have also been requests from MNC, and others, but this request should be considered in a G2G context so he defers to Chief Daniels. ● Chief Daniels directed that this request should go to her council. <p>Motion for staff to respond to Ts'uubaa-asatx with a request to direct this correspondence to Cowichan Tribes on a Nation to Nation basis.</p> <ul style="list-style-type: none"> ● Moved by Alison, 2nd by Kristine. Carried. <p>Other Announcements:</p> <ul style="list-style-type: none"> ● Aaron spoke about his recent meetings and conversations at the Union of BC Municipalities, and that it was good to hear that people think we are doing things better here. He made a short presentation which was warmly received, and many communities reached out for advice. He reflected that many are still in a place of fear, and don't understand the opportunity to create something better for everyone. 	<p>Action: Staff to respond to Ts'uubaa-asatx with a request to direct this correspondence to Cowichan Tribes on a Nation to Nation basis.</p> <p>Action: Staff to update Shannon Waters' role on website to Deputy Provincial Water Officer for Planetary and Water Health.</p>

	<p>The relationships we have started to build here are key – knowing people as people.</p> <ul style="list-style-type: none"> • Kristine reflected that Nathan Cullen pointed to the work of the CWB as an example for local governments • Genevieve Singleton (audience), Stewardship Roundtable CoChair, reflected on a very successful Quw’utsun Sta’lo’ Skweyul at Black Bridge and thanked the CWB for providing funds from Bonneville Environmental Fund to support it. • Cammy Lockwood (audience), Green Party candidate, thanked the Board for their work and the example they create, and added that the BC Greens have put forward a policy platform to create watershed boards modelled after this one. • Shannon noted that she joined the CWB when she was Medical Health Officer and is now in a new role: Deputy Provincial Water Officer for Planetary and Water Health. 	
6. Call for Public Input	See above.	For Information.
7. Hul'qumi'num Watershed Lesson	Chris provided a lesson in pronunciation of common greetings.	Learning.
8. Presentations: a) Jas Sandhu, Superintendent, Public Works and Engineering Services at the Town of Lake Cowichan b) Clay Reitsma, Director of Engineering at North Cowichan	See below for presentation notes and discussion details. Also see Clay Reitsma’s presentation file here .	For Information.
9. Updates & Discussion on CWB Projects and Initiatives: a) Review Staff Report. Staff available for Q&A	Danni reviewed the staff report. See Details and discussion notes below.	For Information.

10. Other Business	<p>Website updates are ongoing and working on Board bio section this month. Jill will circulate what we have for the input/ edits/additions of CWB members.</p> <p>Our Governance Manual will be presented to the CVRD Board by CVRD staff this month for their adoption. Danni hopes to also present it to Cowichan Tribes soon.</p>	<p>Action: All Board members please review and/or provide your bio and photo to Jill for our website. (Jill will circulate current content).</p>
Adjourn.	Chief Daniels adjourned the meeting at noon.	Next CWB meeting - Oct 28 via Zoom

All meeting materials are available at: <https://cowichanwatershedboard.ca/meetings/>

Discussion Details

Agenda Item 8) Presentations RE Sewage Systems:

- a) Jas Sandhu, Town of Lake Cowichan (TOLC), provided a brief overview and took questions
- 2015 – TOLC received a grant, with limited funds for a sewage system upgrade to build Cell 3 (additional settling pond). However, it was never hydrologically connected. After the fish kill, TOLC received further funds to connect Cell 3, so that is an improvement.
 - TOLC has also added an alum injection system which improves nitrate levels before water leaves the cell.
 - Greatly reduced ammonia.
 - Dissolved Oxygen levels are in check
 - Phosphorous is better.
 - Were able to hold all effluent for 3 weeks until all cells were full, and this helped get through a low flow period.
 - Would like to de-sludge the lagoons – getting 3 quotes to do that.
 - Engineers are designing upgrades to lagoon. BNR plant is the desire, but we don't have the funding for it. These are temporary measures until the new system is built.
 - Dr. Ken Ashley has been helping TOLC. Jas sends him data and he advises. Staff also went to Okanagan Falls to tour their plant this summer. It is more work and money to operate, \$18-\$20 million for capital funding.
 - Everything we have done has worked. No mortality detected.

Discussion

- Dave F asked about Ammonia levels.
 - Ammonia level was 34 g/L and now 17 g/L.
- Chris asked about the model in Alert Bay where First Nations did a joint venture for the treatment plant.
 - TOLC is working with Ts'uubaa-asatx to process their waste; Ts'uubaa-asatx also provided a letter.

- Chris reiterated that the Alert Bay is more of a partnership.
- Chief asked how much more funding they need.
 - \$18-\$20 million
- Kristine commented that Cowichan River is a heritage river. Should we be aiming higher and going to the Federal government with this? Should we be forming a committee to look at what is important for the future?
 - Would like to be proactive and meet the standards for the future. It's all money.
- Alison – would effluent from a plant go into the river
 - Yes but the nutrients are removed.
- Alison – are there any systems that don't go in the river
 - Yes but you need a very high quality and then the land to release the sludge. Ken showed us a system where they microwave the sludge that is reduced and you can make fertilizer out of it. But in the US, fields sprayed with sludge can't be planted now due to all the toxins.
- Dave – where does the sludge go now?
 - That's a problem – no one wants to take it now. Timberwest was spraying it and stopped. He prefers to leave it in the pond until we know where we can send it.

b) Clay Reitsma, Municipality of North Cowichan, provided a presentation followed by questions.

See slidedeck [here](#).

- Cowichan is a phosphorous limited river. This can starve fish of oxygen as algae degrades. Alum removes phosphorus and reduces PH which makes ammonia less toxic.
- Flexible aeration tubes make oxidation way more efficient – not restricted to one spot.
- Clearing gravel and log jam from the outfall after one big winter storm could cost \$3-4Million
- Mechanical treatment plant would cost \$200-\$250million+ to replace the settling pond model.
- “We believe removing the pipe is the right thing to do and that's what we're trying to do. “
- Some contaminants are transformed with oxygenation. Some settle and get dealt with in sludge treatment. One solution is to stop creating these contaminants. The other is to increase dilution by moving the pipe to the ocean.
- 11 First Nations were asked and 6 Nations sought consultation to seek consensus on the outfall location.

Discussion

Chief – earlier outfall was farther out, then closer to Kilpilas Point. Looks like it's gone back out. Has a letter been sent to Council?

- working closely with Cowichan Tribes staff on the current location; working to get anchorage out of the way.

Audience question - is that Alistair's bill to create a conservation area and remove the anchorage?

- yes, ongoing process.

David F – what happens to the sludge; does aeration use air or oxygen

- air - fine bubbles makes it work better so oxygen isn't necessary.
- sludge storage – have to deal with it whether its mechanical (weekly) or longer term. Facultative biodegradation means that sludge at bottom of lagoons continues to break it down.

Shannon- how much has climate change been taken into account? This results in pumping water out of the watershed. We have to balance risks – contaminants vs water shortage.

- need to address water shortage with water conservation. Cutting down lawn watering. Consumption is 3-4 times higher in summer.

- lagoon water released is miniscule compared to water consumption.

Clay

- Every outfall needs dilution.
- Another issue is flood – river water can back up into the JUB. Raised all the berms around JUB but still a risk.
- JUB would include pump station that hydrologically disconnects the JUB from the river.

Michelle – what would happen in an earthquake?

- pipe will be made of a high-density poly pipe that would withstand earthquake. Pump station would be built for post disaster. But, berms could fail.

Michelle – is it possible to throw out this plan given how much things have changed?

- new treatment plant is \$250million. But we are designing this so it could incorporate that in the future if investment was there. Recommendation is to do both, but get the pipe out of the river first.

David S – CWB has worked at culture of conservation. Moved from unmetered to almost fully metered now. Driving across the province – so much variation in standard for water conservation. E.g. 4-5 tiers of water use billing to reward low-water users. High water users pay more for the pumping, treatment, monitoring, new facilities, etc. Urges all elected reps to invest in water conservation programs and incentives.

- main issue is lawn watering. MNC updated OCP recently. Constrain growth – density means apartment buildings which house people without lawns so per capita water consumption goes down.
- link between aquifer and river. Aquifer is recovering since 1972 data, but Province isn't issuing more water licenses so MNC needs to think about how to provide water into the future using current license.

Danni – we have a goal to be able to eat the shellfish from Cowichan Bay. Will shellfish be harvestable?

- can't answer that. Right now the effluent comes down the river and over the shellfish beds. There is still a Cow Bay treatment plant too though. Cowichan Lake effluent is disinfected. The new pipe might trigger a DFO study of the bay to see what could be permitted. So... not guaranteed but increases the chances.

Clay

- Notice will go up at Hecate Park about the pipe location. Hoping to begin in 2025.

Audience question RE sludge removal

- Currently JUB is dredged and there is a cell for sludge storage. Would need to deal with sludge when JUB is decommissioned.

Audience question RE cost of this project.

- estimate in 2015 \$28 mil. But there has been inflation so we don't know the current estimate. Will look for 2/3 Fed/BC cost sharing.

Agenda Item 9) Staff reports

Jill gave an overview of the Celebrating Water Festival:

- good opportunity, hosted by Cowichan Lake and River Stewards, to educate people about the weir, including all the exhibitors.
- Excellent comments by dignitaries present, which we will capture for our weirready.ca page.
- hard to get people to events in the summer and attendance wasn't as much as we hoped.
- through a letter to residents and other efforts, Tom and Brian (Catalyst) were able to give a weir tour to 100 people, many of who were local lake residents who had never seen it before. Excellent educational value.

Heather provided a brief update on some Targets projects –

- CWB is supporting further WQ monitoring for the Province using a 5 in 30 water sampling protocol. Dave DePapp is leading and it was very well organized and great process. There will be more sampling in the fall.
- We had a UVic Sustainability Scholar, Liam Janke, this summer who analyzed MoE WQ work over the years to tell the story of what is happening. Excellent work. Report to follow. We learned that the MoE data collection isn't rigorous enough to answer some of our questions so Liam did his own analysis where possible. It indicated that Nitrogen and Phosphorous have always been a problem, and that a fish kill was foretold in 1990s. Our water is also relatively clean in terms of biological components (EColi) but EColi is increasing over time, possibly from septic failures and/or agriculture.
- Fish Kill project – a summary presentation will be provided in the fall. We have been very busy with weekly meetings to decide what to do about the weekly data. Right from May 1 – pH and Dissolved Oxygen and water temperature were measured, and we saw problems emerging from the beginning, and worked on collaborative solutions. We know that our water is not suitable for healthy fish habitat.
- Cold water refuge. 13 sites were monitored with temperature sensors to learn where the fish can go when water is too warm. We will be looking at land use around those cold water refugia to protect those places.
- Somenos Marsh fish kill – CWB is supporting the Somenos Marsh Wildlife Society in their work to find out what happened and what to do.

Danni gave a shout out to almost 100 volunteers who helped with River Cleanup. 1300kg removed.

Discussion:

David F –many fish died due to our action on the weir this spring. We just don't see them.

- Danni acknowledged that the tradeoff is never good – when we hold back water in the spring, there are unseen long-term impacts.

Alison asked who is responsible for failing septic fields.

- Shannon- if there is a question around failing septic – call Island Health.
- David S – there is a professional association of septic installers. If they are called out, they are required to report a failing system to Island Health. This can be a deterrent to people doing the right thing because it is so expensive.
- Aaron – there are thousands of failing septic fields, many would not be approved today so people are stuck. Grandfathered properties don't have enough space.
- Michelle – we haven't caught up to new techniques that could be used; not legally approved in BC/Canada.