

Cultus Lake Aquatic Stewardship Strategy

Minutes – Wednesday, January 27, 2021

Time: 9:30 a.m.

Location: via zoom

Present: Dave C, Ernie V, Ross Candow, Joe Lamb, Darcy Bauer (CLPB), John Axford, Coralea Towler, Lori Klassen, Myles Lamont, Kathie V., Brian Sims, Karen Barnett, Taryn Dixon (FVRD), Christina Toth (FBC), Owen Skonberg.

Special Guests: Marge Sidney, director, BC Lake Stewardship Society; Suzanne Adrain-Vincent, ED, Christina Lake Stewardship Society

Welcome: *CLASS respectfully acknowledges that we are on the traditional, ancestral and unceded territory of the Ts'elxwéyeqw Tribe, a Tribe of Stó:lō-Coast Salish, Halq'eméylem-speaking Peoples.*

1) **Accept minutes** from November 25, 2020

Accept agenda: changes, additions

- Welcome newcomers!

2) **Special Guests and roundtable chat**

- Welcome guest speakers: Suzanne Adrain-Vincent, ED, Christina Lake Stewardship Society (CLSS); Marge Sidney, director, BC Lake Stewardship Society (BCLSS).
 - Christina Lake SS: Suzanne Adrain-Vincent gave background of group. Primarily relays environmental education to the community; goal is to have more monitoring in the field in future.
 - Marge retired BC Min of Environment & Climate Change (MECC), also teaches (limnology at BCIT); range of experience, lakes are her whole career in Thompson-Shushwap, Interior, some in Cultus, etc. Originally a liaison between community and MECC. Often retired people would call to report, volunteer, & so was BCLSS was formed from BC Enviro office. She joined BCLSS in early 2000s, lives in Armstrong.
- **Roundtable questions and discussion:**
 - **Invasive fish:** Marge has worked with lake treatment w Rotenone since 1980s, to kill native coarse fish. Ended killing native fish in 1987, realized they are critical to ecosystem. Then small, large mouth bass, yellow perch, goldfish, pumpkin seed sunfish, were small feeder waterways. Used Rotenone in a modified way since; Rotenone kills everything with gills by inhibiting cellular respiration and the ability to use dissolved oxygen, so fish suffocate. It kills most fish, also ½ of all invertebrates. She and a team treated 12 lakes, numerous wetlands, 2007-2017; cost was \$2.7M, mostly for product and drinking water for people and livestock. (Yes, native fish also die.) Lakes are restocked a year later to allow invertebrates to recover. Bass (and perch) in particular have large throats, really outcompete trout & salmon, reproduce at a very high rate; ie bass & perch cleared out Gardom Lake, eating tadpoles, ducklings, songbirds, trout were starving. Also pumpkin seed, goldfish were here. When invasive fish were culled, waterfowl, birds, frogs returned. Selective harvest of pikeminnow is a good idea to reduce numbers. Gov'ts no

- longer permit to kill native fish, other strategies used. Fish live in different areas of the lake. (Note: ECCC has a SMB mitigation program at Cultus Lake.)
- Suzanne: northern pike is coming to Christina Lake, in the Kettle River, which also has a lot of pikeminnow. Reg'l District of Kootenay Boundary (RDKB) reviewing river barrier method; other invasive species not as problematic.
 - **Milfoil:** Suzanne: plan by RDKB, landowners – up to 6 divers, pull plants a few times a year; looking at mats to see if feasible; also fragrant waterlily and yellow flag iris. Invasive group/students pull YFI. (Note: Cultus has YFI mat program.) Education program, but a very high volume of boats, large boats that spread invasive plants; looking at restoring shoreline native plants to filter (al Peat southern interior land trust, re Ontario Love Your Lake program. Marge: Some lake groups have their own harvesters. Also note, there is a native milfoil. Cultus is too rocky for harvester, DFO won't permit cutting. Darcy: suction harvester? Marge: weed-eater type. Divers, pulling & sucking. Expert contacts:
 - Hamish Kasa **Columbia Shuswap Reg Dist** 250-833-7911 (c) hkassa@csrd.bc.ca Marge: Some lake groups have their own harvesters. Also note, there is a native milfoil. Cultus is too rocky for harvester, DFO won't permit cutting. Darcy: suction harvester? Marge: weed-eater type. Divers, pulling & sucking.
 - Janine Dougall, GM Environmental Service, jdougall@rdkb.com | T: 250.368.0232 **RD Kootenay Boundary**, Main: 250-368-9148 rdkb.com
 - **Shoreline erosion control:** Suzanne: a huge challenge, tourism is vital, but big boats throw huge wakes, contribute significantly to shoreline erosion: it's early days in potentially developing policy; will lean heavily on public education.
 - **Birds:** re eutrophication/ phosphorus. Marg: fencing used to manage resident geese;
 - Myles: glaucous-winged gulls are native, overwintering likely part of long-term natural pattern; they now feed from local landfill; hopes to get FV named as bird capital of Canada. Wants to monitor plastic transfer from landfill to lake via gulls. ECCC may be interested in monitoring this transfer. (This would be a significant impact on environment and tourism/economy at Cultus Lake.)
 - **Climate Change & Air Quality:** Suzanne: In Interior MECC supports wetlands restoration/enhancement to sequester CO₂, N, P, & filters as well. AQ an issue really. Septic fields are an issue. CLSS tests drinking water from the lake, monitors water clarity; will monitor water volume in contributing creeks to build hydrology database. Marg: protect your shoreline, have a healthy septic system. In BC north, enclosed tanks used that need to be pumped.
 - **Myles:** there is another air quality monitoring project undertaken by SFU with ECCC. Includes reviewing data from AQ monitoring stations around the valley and the region, to see if AQ components impact Chinook and then ultimately orcas. Myles will monitor eagles next to AQ monitoring stations.
 - **Taryn** notes **additional AQ monitoring is being considered in FVRD**, including Cultus Lake. FVRD recently drafted an air quality strategy: https://www.fvrd.ca/assets/Services/Documents/Air~Quality/AQMP%20Draft_Discussion%20Paper%20Sept%202020.pdf

- **Education:** Suzanne: CLSS employs lots of public education re invasive mussels, kids programs in the summer, Wildsafe Program, Safe Quiet Lakes, Decibel program. Look at Kalamalka/Wood Lake boat impact study, destruction of shoreline, sediments churned up. Impact of wake board 6 metres in depth; recommendation is not to operate in waters shallower than that. Link: <http://okcp.ca/index.php/projects/current-projects/648-kalamalka-and-wood-lake-boat-impact-study>
 - See also <https://siltrust.ca/silt-project/love-your-lakes/>
 - Taryn: committee looking at boat safety; possibly a lake-wide enforcement of boat speed within shore areas
 - Marge: BCLSS promotes EcoEducation re boat use.
- **Registration as a non-profit:** Experiences, suggestions.
 - Marge is with 3-4 non-profit groups; with non-profit status, you can have your own bank account; it's a much longer process to get tax refundable status. BCLSS has 10-12 board members, gets funds from grants, such as Lush Cosmetics, environment grants, province, etc.
 - Suzanne: BCLSS has tax status. Treasurer and accountant manage accounts, and required annual year end review. Nine board members, can have 12. Funds from BC Gaming grant, credit union. Habitat Conservation Trust Fund. Reg'l district is very supportive; private sector donations (Cabela's).

3) FBC update (Christina)

- a. **Administration**, bank balance is \$12,448 as of Jan. 14, 2021. Ernie: If we register as a charity we can have our own bank account.
 - a. Annual administration fee (5% of account balance at year end) to FV Watersheds Coalition, who manages CLASS funds; \$622.14, paid; Go Daddy web host expense, \$323.64, paid (Ernie V. was reimbursed. FVWC made the name change to Cultus Lake Stewardship Society on the CLASS Canada Helps page.
- b. **Actions from November**
 - a. **Action:** Christina get costs for goose brochures & eutrophication sheet. January 2021: Order sent to Speedy Printing for about 300 colour (\$220), 200 black & white goose brochures, 500 eutrophication info sheets (305), taxes not included. Waiting get B&W costs to complete order. Will advise goose committee when ready for pick up.
 - b. **Action:** Alert Bailey landfill of 22 dead glaucous-winged gulls found at Lindell Beach about Nov. 23/20. Graham F reported to CO, who collected all birds and took to Abbotsford lab, who sent samples to Guelph, Ont., lab. Report from CO, Jan. 5/12: Died of bacterial septicemia (blood infection). *Follow up Jan. 27/21: Bacteria not specified, CT made further inquiry; and alerted Tara Friesen at City of Chilliwack.*
 - c. **Action:** Christina sent invites to Soowahlie Chief Brenda Wallace, Keri Ardell at Ts'elxwéyeqw Tribal Group; Dave talked to Larry Commodore yesterday. Continue invitation, potentially discuss what does Cultus Lake mean to Soowahlie, and share stewardship concerns. Will continue invites.
 - d. **Action:** CT, Wendy Margetts, SMB project was invited; repeat for February.
 - e. **Action:** Consider CLSS like virtual workshops. CLASS members should consider what topics, presenters they would like to offer the wider community in 2021.

Perhaps Marge Sidney, Kathy Ma, Peter from Christina Lake workshop yesterday (Ernie), on Love Your Lake, protect the foreshore.

- Taryn: water safety education is an important component, speed limit close to shore; enforcement. FN police are on committee, RCMP was in water last year. Cost of enforcement is an issue, and who pays for it.
- f. **Action:** All members: Send Ernie photos of CLASS activities. CT send Ernie eutrophication reports from summer 2020 for web posting.
- g. **Action:** Dave C: get clear info from DFO regarding leachate into Sweltzer Creek concerns. Dan S. isn't aware of any leachate. Old dump is 60 metres from Creek. Joe said old salt storage shed was removed from the area.
- h. **Research grant:** Get more information. Joe L: we don't think there is any leaching. CLPB raised issue and sewer with MLA Kelli Paddon, was very receptive. (She lives in Lindell.)

4) Ongoing business/Reports:

a. Cultus Lake Park updates:

- **Milfoil** work (Darcy): Divers are booked for early April, volunteers also needed to repair 3-4 mats damaged in wind storm with stronger reinforcing, rebar, grommets, floating lines. Check with DFO to see if they need permission to put rocks or rebar on mats in Sweltzer Creek.
- **CLPB Environmental Committee:** (Kathie v) Meets next week Feb. 5/21; beds at Main Beach nearly finished. Brenda Cosgrove, Sneft, Kathy v, others work on removing ivy at Sunnyside Campground area. She & Brenda C. looking at tree possibilities. Joe: Enviro committee has tree budget; committee will choose tree plan etc. Parking lot plan is online. Dave: natural plantings at Main Beach look good. Chilliwack city has a done a good job 100 trees along Spadina. CLPB Foreshore committee met first time this week, will address foreshore repair.
 - Ernie: yesterday's CLSS workshop, re replacing docks, riparian/foreshore repair.
 - **Action:** Christina: Update on dead gulls at Lindell: see above notes. Get email from Coralea.

b. Invasive species

- **FVRD goose program** – Taryn D. Committee met last night, will continue to work to manage population, 51 eggs added in 8 nests last year. Will reapply 'damage & danger' permit to find nests, addle eggs; haze geese off beach. Taryn is waiting for response from property owners to be included, including CLPB. Education: garbage can messages, stickers, pamphlets helpful; plan to have media release in late spring to not feed the geese. **Do not hit geese with rocks.** CT will have pamphlets printed for volunteers to distribute. Volunteers will continue to search for nests on north end of lake. First count is planned for March 20.
- Smallmouth Bass mitigation project – no report.

5) Other business

- a. Proposed gull monitoring study/project – Myles, Christina gave brief backgrounder.
- b. Proposed meeting with MLA Kelli Paddon, MLA Dan Coulter, FVRD Chair Jason Lum, Area H Director Taryn Dixon, CLPBoard (Darcy); DFO limnologist Dan Selbie; BC Parks (Dawn, via Rob Wilson). Add Fin Donnelly, parliamentary secretary to DFO. Provide Cultus Lake backgrounders to these folks. Purpose of meeting: get MLAs, others up to date on issues affecting Cultus Lake. **Committee: Ernie, Dave, Graham, Christina**
- c. Mailchimp /website; volunteer to respond to incoming emails? Ernie created email program Mail Chimp: info@cultusstewards.ca Christina will monitor this for now.
- d. Online workshops – topic ideas and who would present; dates, stipend. **Action: everyone** bring your ideas for next month or two.
- e. Meeting times: no enthusiasm for changing time. Keep at 9:30 a.m. for now.
- f. Vedder Mountain ditches – Dave was up in December, and was impressed at new and clean roadside ditches. One new culverts was installed to capture and direct water; also a water block to control flow. Ministry of Forests contracted the repairs. Coralea: Planting still to be done, likely in spring.
 - a. **Action:** Dave C. will write a letter to thank the appropriate Ministry of Forests contact for the quality of work. It's been noticed.

Next CLASS meeting

Date: 9:30 a.m. to 11:30 a .m., Wednesday February 24, 2021 via Zoom.

Action items:

Action: Goose brochures: Christina will confirm costs and verify approval before printing.

Action: Vedder Mountain ditches: Dave C. will write a letter to thank the appropriate Ministry of Forests contact for the quality of work. It's been noticed.

Action: Everyone: Please consider topics for online workshops – topic ideas and who would present; dates, should we provide a stipend. Also taking suggestions for guests to the regular CLASS meetings.

Action: Christina repeat invite to Soowahlie Chief Brenda Wallace, Keri Ardell at Ts'elxwéyeqw Tribal Group; Larry Commodore, potentially discuss what does Cultus Lake mean to Soowahlie, and share stewardship concerns.

Action: CT, Wendy Margetts, SMB project was invited, repeat for February.

Action: Check in with Kathy Ma, FV Invasive Species for 2021 projects.

Links, contacts from meeting discussions:

- **Milfoil mitigation:**
 - **Hamish Kasa, Columbia Shuswap Reg District** 250-833-7911 (c) hkassa@csrd.bc.ca
 - **Janine Dougall, GM of Environmental Service**, jdougall@rdkb.com | T: 250.368.0232 Regional District of Kootenay Boundary 1.800.355.7352 Main: 250.368.9148 rdkb.com

- **Barb Stewart, mgr., Boundary Invasive Species Society** 250-446-2232 PO Box 57, Rock Creek, BC, V0H 1Y0 www.boundaryinvasives.com (later addition)
- **Kalamalka & Woods Lake motorboat impact study:**
<http://okcp.ca/index.php/projects/current-projects/648-kalamalka-and-wood-lake-boat-impact-study>
- Ontario's **Love Your Lakes** program: <https://siltrust.ca/silt-project/love-your-lakes/>
- Taryn D: **FVRD Air Quality monitoring plan:**
https://www.fvrd.ca/assets/Services/Documents/Air~Quality/AQMP%20Draft_Discussion%20Paper%20Sept%202020.pdf
 - *Note: Agricultural emissions are addressed on page 23; Putt's Cultus Lake nutrient/eutrophication study is referenced.*