



April 21, 2016

MINUTES

The meeting was called to order by Genevieve Singleton at 9 am.

In attendance

Meg Loop (CLT), Bob Crandall (CLSES), Keith Lawrence, Ian Morrison, Alison Nicholson & Kerry Davis (CVRD), Bruce Fraser (SBS), Paul Rickard (BCWF), Don Closson (BC Parks), Parker Jefferson (One Cowichan), Eric Marshall (CVNS), Genevieve Singleton (Nature interpreter), Jennifer Hermary (Cow-Malahat-Langford MP), Jean Atkinson (CLRSS), Barry Hetschko (SMWS), Dave Lindsay (Timberwest), Ken Clements & Claude Theirault (Sidney Anglers), Tim Kulchyski and Tracy Fleming (Cowichan Tribes), Shawn Kerr (DFO), Tiffany Hopper (PPWC Local 2), Martha Lescher, Loren Duncan, Morgan Davies (GOERT), Swarn Leung (CSAA)

Regrets: Tom Rutherford, Shaun Chadburn, Cheri Ayers, Joe Saysell, Ted Brookman,

Approval of Minutes

The minutes from the March meeting were circulated and approved.

Roundtable updates

Bob Crandall – 3rd DNA sample confirmed for chinook in the upper Cowichan tributaries.

Morgan Davies – 22 adult birds found so far. Found an unbanded female, so not sure where she came from, and so far at least 3 eggs.

Bruce Fraser – Two court cases running towards the SIA dumping site. The appeal for Shawnigan Resident Association has been heard for the resumption of dumping during the judicial review. Another few thousand tons of soil will be brought in, equating to a several million dollar "gift" for the organization to continue for a period of time. Initiating a 1 year review around the foreshore, hydrological divide process on a community process to understand the local information on the area and also local knowledge.

Ian Morrison – CVRD endorsed and adopted the corporate strategic plan, which includes pursuing increased storage at the lake. The Vancouver Island Area Association has elected Ian. Ashburnum dam: trying to do a dual purpose restructuring.

Swarn Leung – CSAA worked with Silva to obtain more ecological data on the watershed, current condition, historical. Ecosystem based plan. Koksilah project was reviewed by Cowichan Tribes, CVRD, and Cowichan Watershed Board. Build a picture of watershed character and condition. The report will include interpretive maps, GIS database, outline of protective areas, and recommendation for restoration.

Jennifer Hermary – Currently looking through the tabled federal budget to identify potential funding sources. The minister would not intervene in the Shawnigan Lake issue while the case is before the court, however some of the soil being dumped may be from federal lands.

Jean Atkinson – Easter Weekend did some staking along 3 properties with willow and red osier dogwood. More staking on Stanley creek and another property on River Bottom Rod. AGM on May 29th. Christine Brophy has written a manual to help property owners maintain their restorations.

Paul Rickard – Avid angler Program continuing; consists of 40 anglers who fish around Georgia Strait who have been doing citizen science documenting for DFO. Helping to build a stock composition model with over 1000 DNA and 800 logbook pages submitted last year.

Claude Theirault – May 6-7th, 6th Annual Salmon Fishing Derby in Sidney, main event and fundraiser for funding salmon enhancement, \$85,000 over the past 5 years. DNA samples taken from all fish for the past few years show 98.5% of fish caught are from Puget Sound.

Shaun Kerr – Tagging ongoing right now with coded wire tags and adipose fin marking, about 720,000 marked this year. Hoping to run for the whole cycle 4 year cycle. Release lower in the river 30.8% estimated survival, goal with new project is to hold fish in tubs with river water to imprint fish on the river. G trapping, finding wide diversity in the Somenos system right now. Coho were able to make it through the parrot feather to spawn, but that barrier is still a challenge. Shawnigan Lake School and Dwight International will be doing some g trapping to determine fish presence and health.

Dave Lindsey – Successful osprey nesting at Catalyst. Gearing up for Vancouver Island crew to go monitor, as well as Goshawk. Research Pilot project for knotweed manual removal last summer, knotweed is returning a big year and will see if manual treatment can make a difference and viable method.

Kerry Davis – Huge patch of knotweed from Sunny Daze campground. Orcas spotted in Saanich Inlet.

Barry Hetschko – Concert tonight. Wildwings Festival this November. Parrot Feather in Somenos creek is already up. Drone video didn't show extent or full impact of parrot feather as it was taken during the flooding in the winter. Concerned with the environmental footprint around the York St footbridge.

Eric Marshall – Pesticide treated fields at Dinsdale Farm. The whole area has been fertilized and ploughed. Ospreys are back, big nest in the bay. Purple martins are back as well. Cormorant orange leg band in front of the Nature Centre, Barry spotted another one with white. Both tagged in Great Sand Island at the mouth of the Columbia river. 7 years of swan and goose counts. First years finding 1000 trumpeter swan adults, recent years only getting half that number. Juveniles have stayed fairly constant at 170-200 years, a few years dipped quite low.

Dave Preikshot – Beach seining in Cow Bay, river seining in lower river, and sampling within the hatchery to track the growth across this year to try and identify what is driving their mortality. Chinook are holding in the river, chum have begun to move, 2 year old Coho are moving as well.

Tracey Fleming – Compass hired by Ministry of Environment taking on an independent review of the creeks within Shawnigan.

Tim Kulchyski – Completed a chinook fry project of the tributaries into the lake, one stage with swimmers in the water, and ground crew following doing beach and pole seines. Hope was to catch chinook, timing was a little off but had to use up funding. Identified chinook in Shaw creek, had chinook in main stem of the river as well. Trying to put together a brown trout predation study with timing around the hatchery releases. Funding has not yet been announced. PIT tagging by BCWF was able to get full funding to put in an array just below the counting fence, one up at Parker's house. Work will be done on wild fish.

Don Closson – Heritage River report has been submitted, can be made available to our website.

Keith Laurence – Continued support for long term storage options, the dry warm weather recently is a reminder we still need that water from a raised weir. Two other items in strategic plan 1: Continued support to the watershed board. 2. Risk assessment and evaluations in the watershed areas, data gathering from many sources. Completed the infrastructure for the flood protection works, a few remaining bits to be finished up, such as ramps up for walking. Grant approved from Plan H to build capacity in the community around the airshed protection – both funding and training components. The new bylaw for the control of noxious weeds pilot for Giant Hogweed will see some focus this summer.

Genevieve Singleton – May 29th, Beer and Burger fundraiser at Cow Bay Pub with silent auction fundraiser for more bluebird releases. Eagle Heights timber price cost to come in shortly.

Parker Jefferson – River is dropping quickly, rescued about 3000 fry from drying side channels. Broadway Run with live staking is greening up well. Some sloughing has occurred, but good plant survival. Riparian damage down by a private landowner on Greendale Rd will likely result in no charges laid. There are no laws that can be currently be laid down Federally, Provincially there are but they likely won't do it.

Business

Cowichan History – Tracy Fleming For Luschiim

The traditional land core territory map does not include the marine territory or shared territories. The Cowichan Nations controlled the south arm of the Fraser River, strong connections extending into the San Juan and Puget Sound. Village sites were always there and designated, people often travelled to access resources. Very complex relationships across all villages and territories, these things were set and sorted and encouraged.

Cowichan Tribes is the most populace in BC. Before the reserve lands were set, houses were moved during flooding; however for the many village sites located in these regions, the river system was healthy enough at the time made flooding a non-issue. For the most part, the river that it could meander at will and need with very little differentiation between the Cowichan and Koksilah within the estuary. 7 current village sites can be found today in a very restricted territory.

Water Flows – Genevieve Singleton

Great winter water levels, but it is dropping more precipitously than last year. Not a lot of heavy precipitation forecasted. We have had way more water this winter, and because of this the steelhead and chinook were spawning way up high in the tributaries. However, the water is dropping very quickly and there are a lot of steelhead redds already drying out. These pools are already isolated, drying up and killing fry. The flow may be dropping from 25 to 20 cms, but not ready to drop yet due to these fish concerns. The water is already 14 degrees Celsius, which last year we didn't reach 14 until May. The lake is below this year than last. Yet again, the river is not in a good situation. Joe Saysell is going out and saving fish, the river is likely not to come back up again and these fish will die without salvage efforts

Somenos Basin Juvenile Salmonid Summer Habitat Survey and Assessment – Dave Preikshot

Somenos Lake has a big problem – cyanobacteria blooms due to the phosphate nutrients that have built up in the system. The blooms are fueled by the phosphate already in the lake. The bacteria lives and dies fast, then sinks to the bottom which is broken down by more bacteria. This process consumes all of the oxygen and creates anoxic conditions. These anoxic conditions release the phosphorus based in the sediment to the water and fuels another cycle.

For Bings Creek, trends are projecting that by August within one decade the creek will very likely be drying out. The salmon used to be in the lake year round, but the lake cannot support salmon during the summer anymore. Temperature data loggers are recording temps, an array in the middle of the lake ever 6 meters. The surface is way too hot, but where it is cool is anoxic due to the cyanobacteria.

For pH a range of 6.5 to 8.5 what we consider suitable to fish survival. In the lake pH affects the chemistry of a lot of things such as nitrogen. In water with a high temperature the nitrogen is held mostly as ammonia. So if it isn't the lack of oxygen and high heat, it's the borax-like pH. When lake turnover happens, it mixes the entire content so the pH, dissolved oxygen, etc is hostile to everything, including migrating adults. The pulse of high pH and low oxygen is liberated during the storm event of September, which while providing needed water, can cause other issues.

During the summer, we would expect to see fish growing. During June and July, they were. However, in July through September they "stopped" growing, but probably what happened is the larger fish died. The temperature was ok, but the total flow was going down. For Richards Cr, the source water is what is stored in Croften Lake and feeds Richards. North Cowichan reduced the flow to 5% of what it should be for drinking water protection last summer, this drop likely left no habitat for the larger fish. Bings Creek saw very heavy agricultural demand increases.

Potential Solution: One of the approaches is to oxygenate the water to stop the anoxic conditions which locks up the phosphate and shuts down the cyanobacteria. However, in Somenos the water isn't deep enough. Oxygen is able to bind phosphorus into a metal ion. In Alberta they are trying iron amendments to bind the phosphate, hopefully create a bound layer with a layer of material overtop and nearly permanently takes care of the problem. This could have a huge impact in the success of coho, which transfers into the recreational fisheries and the boon to local economy and enjoyment.

Parrot Feature grows thick enough in Somenos Creek that waterbirds can actually walk across it. It forms incredibly dense mats and could possible impede fish passage. This is very dangerous if it gets into other creeks where low flows is a risk to fish already let alone massive plant vegetation.

Next Meeting
May 19th, 2016