

January 2022 Newsletter

Message from the SMWS Board

The SMWS Board of Directors wishes to acknowledge our partnership with Cowichan Tribes who guide our work within the unceded territory of the Quw'utsun people.

The SMWS would like to express our gratitude to our members, volunteers, funders, and community at large for their ongoing support during these unprecedented times. Despite the challenges of these times, the SMWS has accomplished much in 2021 in our work restoring the S'amunu/Somenos Watershed. Information about these successes is shared below.

A lot of changes have happened within the SMWS over the last six months. The 32nd Annual General Meeting (AGM) was held in September and with it came the stepping down of Paul Fletcher as President as he moves into a new role of Executive Director. The new President, Paul Gowland, last year's Vice-President, has stepped into his new role seamlessly as he has been very involved in Board activities for the last two years.

GreenStreams Community Stewardship Program

Over two years ago, the SMWS launched the GreenStreams Community Stewardship Project (GreenStreams). The project is coordinated by the SMWS in partnership with Cowichan Tribes, and in collaboration with local governments, government agencies, landowners and other local conservation groups. Much of the funding for this initiative comes from a Municipality of North Cowichan Service Agreement and a Provincial Gaming Grant.

The primary purpose of GreenStreams is to restore the riparian corridors and improve the water quality of Somenos watershed streams and lake for the benefit of wildlife, fish, and people while at the same time, preserving important Cowichan Tribes cultural areas within the stream drainages for all time.

Secondary purposes include educating, informing and enlisting streamside property owners to help in riparian area improvements on their properties and to create a step-by-step guide for other stewardship groups who are considering developing their own watershed restoration plans.

The GreenStreams CSP project list includes:

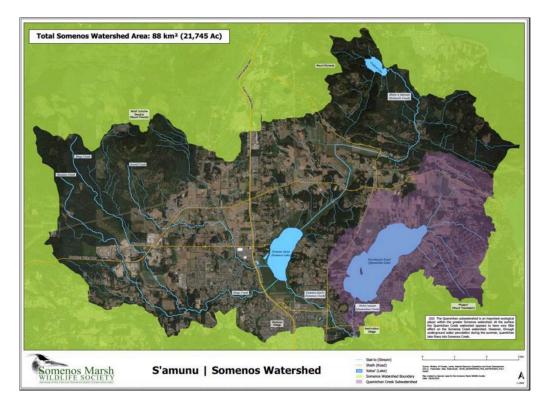
- * Watershed streams restoration plan
- Water Quality and Fish Monitoring Programs
- * Parrots Feather Management Project
- * Beverly Street Stormwater Treatment Wetland monitoring
- * S'amunu Stormwater Wetland Project

This year's GreenStreams good news is that we will be hiring a part-time First Nations person in April for our Traditional Watershed Stewardship Specialist position. This position will last until the end of 2002 with the hopes of making it a full-time position at some point. Thanks to the Real Estate Foundation of BC for funding this position. This person will provide a direct link to our GreenStreams Partner, Cowichan Tribes, and will enable us to have better connections and understanding of protocols in respect to our activities involving traditional lands.

This year's efforts were also greatly enhanced by our three summer students; Amanda, Asa, and Francesca who worked tirelessly mostly outdoors in the brutal summer conditions we experienced last summer.

S'amunu/Somenos Watershed Streams Restoration Plan

Dave Clough, a registered Professional Biologist, along with SMWS staff and board volunteers, have now completed Level 1 and 2 stream assessments of all the major creeks that flow into Somenos Lake. This year's work was funded by the Pacific Salmon Foundation, Municipality of North Cowichan (North Cowichan) and the SMWS. The assessments have enabled our staff to create a 5-year Restoration Plan that identifies the restoration needs and estimated costs for each creek. The Plan also provides a priority sequence for the needed works and separates out larger scale works to be done by North Cowichan so that they can prioritize future projects within their budgets. We have already completed a couple of smaller projects and have some similarly small projects ahead for this summer. We are now seeking the multi-year funding needed to implement the restoration plan.



Bings Creek Reach 1 Salmon Habitat Enhancement

Our previous assessment work identified an area on Bings Creek close to the Somenos Marsh Open Air Classroom (OAC) where improvements could be made in an area known to host spawning salmon. Using wheelbarrow brigades, staff, board members and volunteers wheeled prescribed sizes of rock to improve gravel areas for spawners. Much to our delight, the project was deemed a success this November when spawning salmon were seen using the restored site. Many thanks to North Cowichan and Ministry of Highways who contributed to this project. Thanks to Hillside Stone and Gravel for contributing the essential supplies to this project. We will be restoring one more spawning area in the same vicinity later this coming summer.

Water Quality & Salmon Monitoring

Our citizen-science water quality and salmon monitoring program has moved into winter mode where we conduct monthly monitoring, instead of weekly sampling, to monitor water quality in Somenos Lake as well as Somenos, Bings, Averill, and Richards Creeks. We have been sampling for several years and our data is starting to pay off as we are now able to map the impacts of climate change and other issues challenging the watershed.

This year we again put out a call to action from the community to help us by reporting salmon spawning activity through the Salmon Watch Program, SMWS staff, and volunteers who have been reporting salmon sightings in all three tributary creeks of Somenos Lake, which brings us hope and comfort in knowing that salmon are still making it back to their birthing streams. This year we are exploring more exacting ways to monitor fish movement, numbers, and smolt production using cameras, sonar, or a fish fence.



Somenos Creek Parrot's Feather Management Project

Our past Parrots Feather management strategy to tackle the invasive aquatic Parrots Feather plant, that covers a significant amount of Somenos Creek, was to shade, smother and study the plant. This strategy is now changing somewhat as the smothering experiment using pond liner sitting on the bottom of the creek has not been successful and will not be continued this year, apart from monitoring the existing smothering experimental areas for the rest of the summer before pulling the pond liner out in early fall.

We will continue to plant shading vegetation with this year's focus being on the section of Somenos Creek from the Lakes Road bridge to the Tzouhalem Road bridge. Due to complexity of planting in this area due to it being a flood plain that experiences an annual inundation of flood waters, we commissioned a landscape design specialist to design a planting plan that would accommodate winter flooding. North Cowichan provided funding through their Service Agreement with us to fund the planting plan.

We will continue our monthly monitoring of the entire creek to determine the extent and coverage of Parrots Feather in the system. This monitoring work has raised some very interesting questions including, why is the start of the Parrots Feather mass slowly moving downstream, and does freshwater inputs reduce growth/spread potential? We publish monthly updates and, if you would like to learn more, they can be found on our website in the deeper research page.

https://www.somenosmarsh.com/deeperresearchnew



The most exciting prospect that we have been exploring for the last two years is the purchase of a mechanical harvester; an in-stream boat fitted with a rake or other extraction device, to clear a channel through the Parrots Feather mats to help improve oxygen levels and to allow earlier passage for salmon to access S'amunu/Somenos Watershed spawning areas as we currently believe that their access is delayed by up to a month due to the heavy concentrations of Parrots Feather reducing oxygen levels to the point that salmon cannot safely pass through. We have now received Cowichan Tribes, North Cowichan and DFO support to explore this possibility further. Stay tuned...

Beverly Street Stormwater Treatment Wetland- Phase 2

North Cowichan completed the expansion of the Beverly Street stormwater wetland to further treat urban storm water before it crosses the dike and makes its way into the Cowichan River. This was phase 2 of the project that we originally initiated in 2015 and, fittingly, we were the last stage of work onsite as we planted over 900 plants with the help of Cowichan Highschool students. Despite currently looking like a warzone, it will green out by spring functioning even better as the plants go to work cleaning the stormwater effluent. We have put in a proposal to North Cowichan to continue monitoring the site to measure if the wetland is removing contaminants in the stormwater flowing into the wetland. This is particularly interesting considering new research that has found a tire compound used to preserve the tires, leaches off the roads and kills Coho salmon specifically. We hope to one day study if this could be happening in Somenos as all the TransCanada Highway stormwater, from the middle of Duncan all the way to the municipal hall north of town, drains into the Somenos system.

S'amunu Stormwater Wetland Project

We have been encouraged by the positive feedback we have received about returning the old RCMP detachment property on Canada Avenue back into a wetland to provide additional salmon habitat, filter stormwater before it crosses into the Somenos Marsh Conservation Area and to act as a buffer against winter storm surges. While we would love the property to revert entirely to wetland, we also realize that some or all the building could remain and be re-purposed and would make a wonderful nature and education centre. The costs to renovate and revitalize this old building has many issues that may still be cost-prohibitive. There are many unknowns and the conversation continues with North Cowichan.

Bings Creek EAP process

SMWS staff participated in the Provincial Government funded, Bings/Menzies Creeks Ecological Accounting Process Technical Advisory Committee, an interesting process as described as "The EAP methodology focuses on the historical and current land use practices that have changed landscapes, modified hydrology, and have led to present-day community perceptions of the worth of the stream or creekshed and the ecological services it provides. A whole-system understanding is the starting point for developing meaningful metrics". Essentially the process determines the 'natural asset' value that the stream provides to the community. The final report is not complete but will help argue the case for putting those 'natural asset' dollars back into the watershed through restoration efforts.

Averill Creek Flow Monitoring

Another interesting process that SMWS staff have become involved In, is a provincial flow study of Averill Creek being done for Cowichan Tribes. The summer's work has been completed and the work is planned to continue next year. Much has been learned this year and gives us a window into how aquifers, faults and other interesting watershed influences exist and are measured. This is serious science that is guiding our efforts and making us smarter in our work to bring the salmon back.

Other S'amunu/Somenos Conservation Area Projects

New Bird List being published

Barry Hetschko, one of our current longest-serving Board members, has initiated, and contributed funding to, the production of a replacement bird list for our very out-of-date 1998 bird list. The new list will cover a larger geographic area, including the Koksilah and Cowichan Rivers along with the Cowichan Estuary Important Bird and Biodiversity Area (IBA) and Somenos Marsh IBA. We are very excited to soon have this new list in our hands that will be made available to interested parties.

OAC Talking Circle Project

The good news is that our new Talking Circle Project, funded by Peninsula Co-op, is now complete apart from the interpretive sign and native fruit trees which await planting. The sign will continue our tradition of showing Hul'q'umi'num names wherever possible. Please support our other project donors: Dogwood Lumber; Duncan Paving; the BC Forest Discovery Centre for the yellow Cedar rounds; and rebar from Jim Avon. Thank you to all.

Facilities

Flooding was what was everyone's minds as Somenos rose to new heights in early winter. We anticipated damage but suffered much less than expected with only the front fence suffering significant damage. On the boardwalk the Derrick's Way platform tilted in one corner and both the entrance and exit portion of the boardwalk also shifted. Our biggest fear was for the new Talking Circle, as it was newly installed and we had not anticipated flooding levels this high, but it survived unscathed due to the engineering prowess of Board Member Malcolm MacLeod. Malcolm already has plans in place to re-erect the front fence and, later in spring, undertake the repairs to the boardwalk.





Project Nest Box

Project Nest Box is the overall label for all our bird restoration and research in the S'amunu/Somenos Conservation Area. We are now developing a plan to add more nesting boxes for bats, owls and other flying critters. We also hope to collaborate with a local school or schools to develop a monitoring plan for the Tree and Violet Green Swallows who nest in the Conservation Area. The first step in the process will be the replacement of old boxes and the installation of additional nest boxes around the OAC boardwalk.

Farm Field Project

The small field bordering the southside of the OAC boardwalk was cut mid-summer and then again in late summer to expand the mowed into an area of hardhack plant that used to be part of the field. The work was done by Mike Van Boven, the farmer who maintains the fields for the Nature Trust of BC in the Conservation Area. This will be the first time this field has been cut in several years and we are very pleased to report that Mike will continue to cut the field annually to improve the year-round viewing opportunities, especially in winter when the migrating waterfowl are feeding and resting at S'amunu. We are excited to explore the idea of bringing this field back as an experimental farm where we may explore growing different wildlife-benefitting crops to improve the potential of the area.

S'amunu (Dike) Trail Signage Project

We are very excited to announce that, since North Cowichan and Cowichan Tribes agreed to our request to rename the 'dike' trail, from Tzouhalem Road to the Somenos Marsh OAC, the S'amunu Trail, we have been working in partnership with North Cowichan, Cowichan Tribes, and Genevieve Singleton to install trail interpretive signposts at 9 key entry points to the S'amunu Trail. These signposts will include a short piece of S'amunu information in Hul'q'umi'num and English. Thanks to North Cowichan for providing funds for this project.

Issues

Big O Tire fire

The recent Big O Tire fire has likely had a serious impact within the S'amunu/Somenos Conservation Area due to the volume of water used to fight the fire and the resultant runoff containing chemicals and tire contaminants. We have just started researching the impacts of burnt tires and what we have found out is already disturbing. We are following up with North Cowichan to understand their role and what environmental measures they will be undertaking to determine the damage caused and what can be done to prevent future contamination of the watershed by fire runoff.



Bell McKinnon Land Use Plan

As you have read in the local papers, or in various Facebook discussions, the Bell McKinnon Land Use Plan is a hot topic these days. The sad irony is that the new hospital site will sit on the previous homesite of Syd and Emily Watts, local conservationists, and naturalists, and two of the earliest fighters for Somenos Marsh. Syd was one of the founders Somenos Marsh Wildlife Society. The OAC boardwalk is called *Watts Walk* in memory of both.

The SMWS is particularly concerned with the runoff anticipated from the large community that is projected to grow around the new hospital. Our concern stems from the plan to discharge stormwater into Averill Creek. We are lobbying that the impacts of this practice be eliminated by increased numbers of small wetlands and other water-filtering green installations to cleanse the water before it reaches Averill Creek.

Homelessness and vandalism

Unfortunately, the dike continues to be the homeless highway into Somenos. Particularly hard hit is the OAC with fires, garbage, discarded needles, and trails into sensitive areas to establish, then abandon campsites. Our cash donation box continues to be assaulted by both desperate people and well-equipped thieves. One recent attempt saw someone using a power tool to cut through the ¼ inch plate steel to get the few dollars inside. The coming summer is going to be quite worrisome due to increasing numbers of homeless campers and the fires they regularly start. Last year we had 2 significant fires, one which damaged the viewing tower and the other, which had not been spotted, could have been devastating.



WildWings Nature & Arts Festival

WildWings 2021 was a success despite the challenges of Covid that reduced audiences, caused cancellations, and moved some events to zoom. Many thanks for this success go to our Festival Partners- Cowichan Tribes, the Cowichan Valley Arts Council, and the Cowichan Valley Naturalists.

The festival highlight was the Wade Davis keynote speech at the Cowichan performing Arts Centre speaking to our theme "Sharing a sense of place" Many thanks to past SMWS Director Craig Richards who got Wade here and to the Edmonton Community Foundation who generously provided funding for us to host Wade to a half-size Covid capacity crowd. The wrap up 'It Ain't Easy be Green Gala" (the Green Gala) was a success again this year. Despite reduced capacity and vaccination passports we still managed to fill the Birds Eye Cove Farm for our guests to enjoy a wonderful night of music by John Wade and the WildWings band along with a delicious dinner catered by the Farms Gate Catering crew. All the other events (that weren't cancelled) were well attended and appreciated by all. Notably, our Indigenous events were again some the most popular of the festival, in particular, Qwustenuxun's Pik'wun on Cowichan Tribes territory in Cowichan Bay was as memorable as always.

Planning has already begun on the 2022 WildWings Nature & Arts Festival. This year's theme is 'Bringing Back the Stseelhtun" reflecting our interest in bringing the salmon back to the S'amunu/Somenos Watershed. As always, we will explore new and interesting events to entertain and educate about the amazing valley, its nature, its art, and its culture. Since funding the festival is an ongoing challenge, as the uniqueness of our festival makes it difficult to find funding that fits, we will be exploring some other ideas that include finding ways to encourage out-of-town visitors to the festival.

WildWings would not be WildWings without the support of some special Friends of Somenos. These are Sheila at Valley Voice Magazine, Mark at Marks Instant Sign Shop, Community Farm Store, LT Roofing, Liz and Lance and Just Jakes Restaurant, Birds Eye Cove Farms, Farms Gate Foods & Catering, Nature Trust of BC, and Averill Creek Winery. With a very special mention to John Wade who pulls amazing musicians out of the hat every year.



Stay in Touch

Please stay abreast of our activities by <u>Liking</u> both our Somenos Marsh and WildWings Festival Facebook, Instagram and Twitter pages. These are best sources to hear and view day to day accounts of our work and successes. There are also our 2 websites, <u>https://www.somenosmarsh.com/</u> with its extensive research library and <u>http://wildwingsfestival.com/</u> where you can see photos of past festivals and will be soon updated with last year's photos and preliminary information about this year's coming festival. Photos are courtesy of SMWS Board and staff members. And if you want to get more involved... there are many ways you can. Please contact me to learn more.

Thanks as always for riding with us Paul Fletcher