#### Municipality of North Cowichan **Regular** Council ADDENDUM AGENDA

Wednesday, June 16, 2021, 1:30 p.m. Electronically

#### 7. **DELEGATIONS AND PRESENTATIONS**

7.1.	Somenos Marsh Wildlife Society		
	7.1.1.	Presentation from Somenos Marsh Wildlife Society	2 - 13

Pages



# Somenos Marsh Wildlife Society

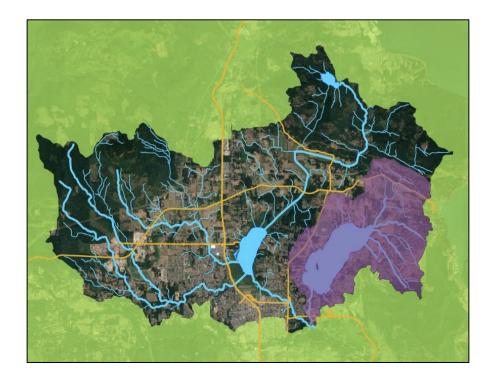
Paul Fletcher, President

# Introduction

- The Somenos Marsh is internationally known for its diverse, rare and abundant species. It is also documented as having over 2,000 years of archeological significance to First Nations.
- The BC Wildlife Viewing Committee named the Somenos Marsh as the #1 BC Wildlife Viewing Opportunity close to an urban centre (1988).
- The Somenos Marsh Wildlife Society ("SMWS") was incorporated as a non-profit society in 1989 with the primary mission to protect the wetlands, watershed and cultural values around Somenos Lake.
- Somenos Marsh was declared a globally significant Important Bird and Biodiversity Area (IBA) by Bird Life Canada (2000).
- A 5-Year Strategic Plan has been developed focusing on restoration of the Somenos watershed, increasing public awareness and ongoing monitoring programs to gauge progress.

# SMWS – Watershed Map

- The S'amunu/Somenos watershed drains a significant portion of the Cowichan Valley, including a large part of the Duncan/North Cowichan urban area that surrounds Somenos Lake.
- Three streams drain the watershed into Somenos Lake year round:
  - Bings/Menzies Creeks draining the northeast slope of Swuq'us (Mt Prevost)
  - 2) Averill Creek draining the south side of Swuq'us
  - 3) Richards Creek draining the south side of Mt Richards
- These three streams all suffer from poor water quality, storm surges and diminishing riparian areas. Somenos Lake is considered to be eutrophic mostly due to excessive phosphorus levels which contribute to summer algae blooms.
- Parrots Feather, an invasive aquatic plant occupies a significant portion (80%) of Somenos Creek, which empties Somenos Lake into the Cowichan River, a Canadian Heritage River.



S'amunu/Somenos watershed outlined in blue.

#### GreenStreams Community Stewardship Project

- GreenStreams is coordinated by the SMWS in partnership with Cowichan Tribes, local governments, adjacent landowners and other conservation groups.
- Primary purpose is to restore the S'amunu/Somenos Watershed to improve the water quality in the watershed streams and lake to help increase the numbers of spawning and rearing salmon in the watershed.
- Secondary purpose is to educate, inform and enlist streamside property owners as well as producing a step-by-step resource guide that can be used by other groups seeking to restore their watershed streams.



Community outreach with residents of Somenos Creek, 2020. A total of 54 properties (blue) received an educational poster outlining the threats posed to Somenos Creek, as well as information about Parrot's Feather and stewardship opportunities. Partnerships with landowners were developed for land access (green).

## GreenStreams - Partnerships

- **Cowichan Tribes**: Cowichan Tribes is an ongoing supporting partner in the GreenStreams Project.
- **Municipality of North Cowichan:** Provides collaboration and funding to support through a Service Agreement.
- Somenos Management Committee: The SMWS led the establishment of the SMC in 2000 and chairs the quarterly meetings of Somenos landowners, local governments, Cowichan Tribes and approving agencies under the SMC banner.



Beverly St. stormwater wetland construction



Finished wetlands - 2020

## GreenStreams - Water Quality

- SMWS has been conducting water quality testing in Somenos Lake and Creek for over 5 years.
- Water Quality Testing Program has increased in scope to include the creeks and a greater range of testing ie: phosphates.
- Weekly water quality tests suggests that PF creates anoxic and lethal conditions for fish until late fall.



# GreenStreams - Parrots Feather

- Parrots Feather ("PF") is an invasive aquatic plant, first noticed in 2015, and now covers over 80% of the 3 km length of Somenos Creek.
- PF is contributing to poor water quality and delays the migration of salmon in Somenos Creek.
- SMWS is actively pursuing several management options in collaboration with North Cowichan and Cowichan Tribes.



#### Parrots Feather- Management Strategy

- The primary PF Management Strategy has been to shade, smother and study
- 230 native wetland trees were planted in 2020 on south bank of Somenos Creek.
- A 1,000 sq ft pond liner was installed in 2020 to smother PF infestation in one test section.
- Staff recently completed the 2021 Parrots Feather survey on Cowichan Tribes portion of Somenos Creek.
- Developing a Riparian Planting Strategy with Robin Annschild for one of the most needed sections of the creek.



# Parrots Feather- Looking ahead

- SMWS has also been researching other methods to eradicate PF used in other areas of the world.
- One method is utilizing a floating harvester to remove PF from the waterbody by either mowing or pulling by the roots.
- Similar vessels are being used to remove milfoil from lakes on Vancouver Island and the BC mainland.



Pulling: Pulls aquatic vegetation instead of cutting, Pulling vs cutting: Reduced floating weed fragments, Can also be used to skim algae: 1.5 acres/hour

# GreenStreams CSP in 2021

- Five staff now working, 2 full time and 3 students working for the summer.
- Level 1 & 2 Watershed Assessments of Averill and Richard Creeks completed early June
- 5-Year S'amunu Watershed Restoration Plan being prepared
- Bings Creek restoration projects with MoTI and NC funding in the planning stages.



#### Thanks

The Board of the Somenos Marsh Wildlife Society would like to say thanks to the Municipality of North Cowichan for your support for our work in the S'amunu/Somenos Watershed.

# Contact Information

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