

**Municipality of North Cowichan  
Council - Regular and Public Hearings  
ADDENDUM AGENDA**

Wednesday, July 21, 2021, 1:30 p.m.  
Electronically

**Pages**

**12. NEW BUSINESS**

**12.6. *Somenos Marsh Wildlife Society advice and recommendations regarding  
Official Community Plan Update Project***

**2 - 18**

Purpose: To consider the reply received from the Somenos Marsh Wildlife Society in response to Council's March 3, 2021 request for their advice and recommendation on what is necessary to achieve Council's goals of restoration and regeneration of North Cowichan's lakes, streams, rivers and estuaries and protecting biodiversity, in relation to the land use policy development within the revised Official Community Plan.

**From:** Paul Fletcher <[president@somenosmarsh.com](mailto:president@somenosmarsh.com)>  
**Sent:** Sunday, July 18, 2021 10:33 PM  
**To:** Chris Hutton <[chris.hutton@northcowichan.ca](mailto:chris.hutton@northcowichan.ca)>  
**Subject:** Re: Somenos Marsh Wildlife Society Enviro response

Hi Chris

Please find attached the SMWS OCP recommendations.  
Also attached is a copy of Heather Pritchard's presentation that she made to council earlier this year on behalf of the SMWS. It provides some background information as well as recommendations re riparian setbacks that we would like to see implemented in the OCP.

Thanks

Paul

Paul Fletcher  
President, Somenos Marsh Wildlife Society  
[somenosmarsh.com](http://somenosmarsh.com)  
250 732-0462

*Stewards of the S'amunu/Somenos Conservation Area*



July 16, 2021

Attn: Municipality of North Cowichan  
From: Somenos Marsh Wildlife Society

## **RE: OFFICIAL COMMUNITY PLAN REVIEW**

### **Introduction**

The Somenos Marsh Wildlife Society ("SMWS") wishes to thank the Municipality of North Cowichan ("MNC") for the invitation and opportunity to engage in the Official Community Plan ("OCP") review process. We feel that this is a very important and timely process that must be carefully nurtured for the long-term benefit of our community. The efforts of the MNC to involve local stewardship and community groups in preparing a new OCP are very much appreciated.

### **Background of the Somenos Marsh Wildlife Society**

The SMWS has been operating as a registered charitable society in the Province of British Columbia with an office in Duncan since 1989. The SMWS mandate is stated as follows, "to operate, maintain, manage, restore and preserve areas for research, nature study, observance of flora and fauna, protection of wildlife habitat, instruction in natural history and other purposes of a like nature for the advancement of public education and to use such means of communication as are deemed appropriate to create a deepened and broadened understanding of the wildlife habitat to ensure public support for its proper use and care."

The fundamental undertaking for the SMWS is for the restoration and long-term protection of the S'amunu/Somenos Watershed, a once thriving habitat for salmon and many other species that is now suffering through failure to protect this ecosystem.

The SMWS - GreenStreams Community Stewardship Project encompasses the S'amunu/Somenos Watershed with four specific segments:

- Forested headwaters
- Industrial, farm and residential properties
- Three creeks feeding Somenos Lake
- Somenos Creek outflow connecting to the Cowichan River

The goal of GreenStreams is to improve the water quality of the S'amunu/Somenos Watershed.



### **SMWS OCP recommendations**

In respect to North Cowichan's forthcoming Official Community Plan the SMWS recommends that:

- the MNC collaborates with the SMWS and other stewardship groups to adopt a watershed-wide management approach focusing on riparian health, drainage issues, Salmon spawning and rearing habitat restoration, nutrient control and contaminant monitoring.
- Collaboration with the SMWS and other environmental groups to secure funding and grants for programs with common goals.
- the important Somenos Watershed headwaters be afforded long-term protection by establishing protection zones around these areas.
- the MNC take steps to preserve its unique forested land position as important biodiversity and carbon capture elements for our ecosystem (this may serve as a long-term source of revenue for the MNC through monetization of carbon credits). Some of these forested areas may well serve to expand parkland within the MNC thereby increasing opportunities for eco-tourism.
- the OCP establishes 'Cultural Protection Zones' in collaboration with Cowichan Tribes.
- the OCP encourages riparian area restorative improvements through tax incentives
- the MNC further identify and expand natural methods to mitigate stormwater impacts on the Somenos ecosystem.
- the municipal QEP be the approving officer for all riparian area development requests and that the overall health of the watershed be considered, not just the immediate affected area, in all riparian area decision making.
- the MNC establish a tree protection bylaw for the MNC. These are standard practise in many other jurisdictions.
- the MNC explore tax exemption opportunities with landowners to implement conservation covenants for riparian areas

Sincerely,

Paul Fletcher, President

# Riparian Protection:

Meeting community and ecological needs



**Heather Pritchard, RPF**  
**November 18, 2020**





# Impacts in the Somenos watershed:

- Excessive nutrient loading
- Invasion of Parrot's Feather
- Reduced summer flows
- Decreased oxygen levels
- Increased water temperatures



**➔ Loss of fish populations in the lakes and creeks**

# What does science say about riparian buffer widths?

Function	Full Range	Common Range
Bank stabilization	10 – 30 m	10 – 30 m
Sediment control	5 – 100 m	10 – 30 m
Reduce flood risk	20 – 150 m	20 – 150 m
Filter N, P	5 – 90 m	10 – 20 m
Stream temperature	10 – 70 m	10 – 30 m

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<b>Litter inputs</b>	<b>3 – 100 m</b>	<b>10 m</b>
<b>Large fallen trees</b>	<b>50 m</b>	<b>50 m</b>



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Filter N, P	5 – 90 m	10 – 20 m
Stream temperature	10 – 70 m	10 – 30 m
Litter inputs	3 – 100 m	10 m
Large fallen trees	50 m	50 m
<b>Terrestrial species</b>	<b>10 – 500+ m</b>	<b>50+ m</b>
<b>Birds</b>	<b>45 – 200 m</b>	<b>100+ m</b>
<b>Amphibians, reptiles</b>	<b>120 – 300 m</b>	<b>120 – 300 m</b>

# How have other LGs improved riparian protection?

## 1. Predetermined riparian protection setbacks

(Squamish, West Vancouver, Saanich, Courtenay)

- 30 m buffers on main streams
- 30 m for new developments
- 15 m in already developed areas
- 15 m on ephemeral watercourses

# How have other LGs improved riparian protection?

2. **Riparian restoration** (Saanich)
3. **Connectivity** (Saanich, Cumberland)
4. **Wildlife habitat** (Cumberland, Whistler, Sechelt, West Vancouver, Saanich)
  - Wildlife and habitat inventories
  - Covenants

# How have other LGs improved riparian protection?

- 5. **Blanket DPAs** (Cumberland, Whistler)
- 6. **Environmental impact studies** (Whistler, Courtenay)
- 7. **Habitat compensation**
- 8. **Education and incentives**

# Wetlands as natural assets

- \$35,000 per year per hectare
  - Flood control
  - Water supply
  - Water treatment



# Somenos Marsh Wildlife Society:

- Planted 383 trees and shrubs
- Removed over 600 kg of garbage
- Landowner education for over 200 households
- Initiated a Citizen Science program
- 77% of survey respondents support MNC redirecting \$100K per year for restoration work in Somenos



# Recommendations

## 1. Science-based predetermined setbacks

- 30 m buffer along main streams and in headwaters
- 20 m voluntary Stewardship Zone
- 15 m buffers on small ephemeral streams
- Graduated restoration program on converted lands

# Recommendations

2. Emphasis on restoration
3. “Whole of watershed”
4. Riparian restoration in ALR
5. Performance-based targets



# Recommendations

## 6. Incentives for riparian restoration

- Riparian Tax Exemption
- Carbon offsets

# Moving forward...

1. Community engagement
2. Riparian working group

