UVIC SUSTAINABILITY SCHOLARS PROGRAM

Graduate Internship Opportunity

SUMMER 2026

Project Title

Weighing the balance: environmental, economic, and social aspects of agricultural practices vs watershed health in North Cowichan, BC

Organization

Somenos Marsh Wildlife Society

About the Opportunity – Sustainability Scholars Program Info

These 250-hour internships are offered in partnership with community organizations and provide UVic graduate students from any discipline with opportunities to gain applied sustainability research experience. Scholars work under the guidance of a partner mentor and contribute to projects with real community impact.

The 2026 pay rate is approximately $34.72/hour. To apply, visit the Sustainability Scholars Program website and review the application guide to confirm eligibility and required materials. Applications close at 11:59 pm PT on Sunday, February 1, 2026. Questions? Contact Laurel Currie: sustainability-scholars@uvic.ca.

Project Background

Somenos Lake is a eutrophic lake located within the Municipality of North Cowichan. The lake has a high annual inflow of nutrients from farming, septic, and storm water sources. It is suspected that a large proportion of the nutrient inflow comes from a farming area to the north of the lake. Farming takes place on a low-lying area that is inundated in the winter months.

The project seeks to identify the source of a specific nutrient: phosphorus (P). Some of the guiding questions of this project are: how does this nutrient get from the farming area to Somenos Lake? Does P accumulate in the soils, drain from farmer fields into the lake, or both? Once excess nutrients reach Somenos Lake they cause algae blooms and low oxygen conditions. These responses to the nutrient inflow have an impact on fish that use the lake. The degraded condition of Somenos Lake is an issue in the community. This degraded condition has caused some highly publicized fish mortality events.

With the farming community in North Cowichan as influential as it is, any proposed modifications to farming practices must be preceded by consultations. We are curious to know whether nutrient flow to the lake can be curtailed while maintaining farm productivity.

Project Objectives + Activities

The Sustainability Scholar will conduct applied research to better understand the environmental, economic, and social dimensions of nutrient loading in Somenos Lake, with a focus on phosphorus movement from agricultural lands north of the lake.

Key objectives and activities include:

- Identifying and engaging key stakeholders, including the farming community, municipal and other government representatives, and environmental organizations
- Assessing the ecological condition of Somenos Lake and the impacts of eutrophication on fish populations and watershed health
- Examining the economic and social importance of agricultural activity in the former wetland area north of the lake
- Investigating how phosphorus moves through soils and waterways from agricultural lands to the lake
- Evaluating trade-offs between lake health and agricultural productivity
- Developing recommendations to reduce nutrient impacts while supporting viable farming practices and community interests

Project Scope

The project will involve:

- Reviewing scientific and policy literature related to eutrophication and phosphorus dynamics
- Assessing the environmental, social, cultural, and economic values associated with Somenos Lake and its watershed
- Analyzing agricultural practices in the surrounding area and their contribution to nutrient loading
- Synthesizing findings to inform balanced, practical recommendations for stakeholders

Deliverables

A final report summarizing findings, analysis, and recommendations related to nutrient management, watershed health, and agricultural practices in the Somenos Lake watershed.

Time Commitment + Timeline

The period between May 1 and August 15 is ideal for this project. The impact of excessive nutrient inflow on Somenos Lake will be obvious in this time period. Farming activity will not start until May or June due to inundation and slow draining of pooled water.

Required / Preferred Skills and Experience

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Community engagement experience
- Strong analytical skills
- Ability to work independently

- Deadline oriented
- Project management and organizational skills
- GIS training or experience would be good, but not essential
- Familiarity preparing feasibility studies, high level only
- Comfortable around water, and able to test water from a kayak or boat
- First Aid training is an asset but is not essential

Additional Project Information

A background in scientific studies is preferred. Field work will be done at various sites in North Cowichan, so access to a car will be required.