

## **WEB LINKS RELATED TO THE PRESENTATION “PROTECTING THE MIDDLE SHUSWAP”**

### **The Middle Shuswap**

[https://www.fraserbasin.bc.ca/Library/TR\\_SWC\\_2/SWC\\_Nutrients\\_WaterQualityResearch\\_Summary\\_Sept2023\\_WEB.pdf](https://www.fraserbasin.bc.ca/Library/TR_SWC_2/SWC_Nutrients_WaterQualityResearch_Summary_Sept2023_WEB.pdf)

### **The Shuswap Watershed**

[https://www2.gov.bc.ca/assets/gov/environment/waste-management/industrial-waste/industrial-waste/agriculture/aem-cop/maps/shuswap\\_lake\\_basin\\_and\\_shuswap\\_river\\_watershed\\_map.pdf?bcgovtm=20200721\\_GCPE\\_AM\\_ES\\_1\\_\\_SEARCH\\_BCGOV\\_EN\\_BC\\_\\_SEARCH](https://www2.gov.bc.ca/assets/gov/environment/waste-management/industrial-waste/industrial-waste/agriculture/aem-cop/maps/shuswap_lake_basin_and_shuswap_river_watershed_map.pdf?bcgovtm=20200721_GCPE_AM_ES_1__SEARCH_BCGOV_EN_BC__SEARCH)

### **The FB Post that started it all**

<https://www.facebook.com/profile.php?id=100064328514144>

### **Other worrisome data**

<https://www.mlccrc.ca/BessetteEColi>  
<https://www.crmc-cherryville.ca/thecherryvillewaterstewards>

### **Frequent algae blooms ....**

<https://globalnews.ca/news/9218516/unprecedented-algae-blooms-shuswap-watershed-council-action/#>  
<https://www.saobserver.net/local-news/watershed-report-shows-years-of-nutrient-buildup-in-shuswap-lakes-5888388>

### **Sources of pollution**

<https://shuswappassion.ca/environment/shuswap-lake-pollution-report-leaves-questions/>

### **This is the problem**

<https://www.cbc.ca/news/canada/british-columbia/feedlot-blamed-as-source-of-stink-violated-repeated-compliance-orders-1.4498417>

### **It's not the cow, it's the how**

<https://www.grassrootdairies.com/>

### **The Problem is well known**

<https://vancouversun.com/news/metro/bc-government-proposes-rules-for-safe-manure-use#:~:text=Among the proposals in the review:&text=A ban on discharge of,soils, or on standing water.>

### **And yet at the same time**

<https://vancouversun.com/opinion/columnists/stephen-hume-effluent-linked-to-contaminated-water-in-okanagan>

## **Hullcar pollution**

<https://www.cbc.ca/news/canada/british-columbia/spallumcheen-s-drinking-water-polluted-by-liquid-manure-says-uvic-law-centre-1.3434372>

<https://www.cbc.ca/news/canada/british-columbia/review-contaminated-north-okanagan-water-source-hullcar-aquifer-recommendations-1.4429920>

<https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-permitting-compliance/hullcar-aquifer>

<https://www.bcgwa.org/wp-content/uploads/RR-2018-WSA-Hullcar-and-Groundwater-Licensing.pdf>

<https://www.cbc.ca/news/canada/british-columbia/review-contaminated-north-okanagan-water-source-hullcar-aquifer-recommendations-1.4429920>

<http://www.elc.uvic.ca/wordpress/wp-content/uploads/2016/02/Drinking-Water-Protection-Order-submission-2016Feb1.pdf>

<https://www.cbc.ca/news/canada/british-columbia/hullcar-aquifer-water-contamination-environment-spallumcheen-1.4232921>

<https://www.castanet.net/news/Vernon/478393/Spallumcheen-is-to-receive-3-8-million-for-upgrades-to-water-infrastructure>

<https://www.cbc.ca/news/canada/british-columbia/spallumcheen-s-drinking-water-polluted-by-liquid-manure-says-uvic-law-centre-1.3434372>

[https://www.kelownadailycourier.ca/opinion/article\\_6de15cd8-ada6-11e4-8b8e-2f3365c86830.html](https://www.kelownadailycourier.ca/opinion/article_6de15cd8-ada6-11e4-8b8e-2f3365c86830.html)

<https://www.vernonmorningstar.com/news/algae-bloom-warnings-continue-for-north-okanagan-water-customers-4400629>

<https://vancouver.sun.com/opinion/columnists/stephen-hume-effluent-linked-to-contaminated-water-in-okanagan>

## **Nitrate contamination spreads**

[https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-wells/no3020715\\_fin2.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-wells/no3020715_fin2.pdf)

<https://www.revelstokereview.com/news/algae-bloom-warnings-continue-for-north-okanagan-water-customers-4538268>

## **There is no enforcement**

<https://www.wcel.org/blog/are-we-protecting-our-water>

## **Regulations don't work**

<https://members.cgs.ca/documents/conference2006/Seatosky/S4/0140-147.pdf>

<https://www.producer.com/livestock/b-c-project-seeks-to-clean-up-manure/#:~:text=The dairy sector in the,with the National Research Council.>

### **But instead it's allowed....**

<https://infotel.ca/newsitem/north-okanagan-dairy-farm-believed-to-be-contributing-to-high-nitrate-levels-allowed-to-expand/it30980#:~:text=Vernon News-,North Okanagan dairy farm believed to be contributing,nitrate levels allowed to expand&text=Manure is spread on a field above the aquifer in summer 2015.>

### **No willingness, no capacity**

<https://policyoptions.irpp.org/magazines/canadas-water-challenges/agricultural-water-policy-challenges-in-bc/>

### **It all drains downstream**

[https://www.ers.usda.gov/webdocs/publications/42731/16740\\_ap037a\\_1\\_.pdf?v=0](https://www.ers.usda.gov/webdocs/publications/42731/16740_ap037a_1_.pdf?v=0)  
<https://www.farmbrite.com/post/how-many-cows-can-i-keep-per-acre>

### **Ecological and health risks**

<https://pubmed.ncbi.nlm.nih.gov/34619591/>

<https://www.efsa.europa.eu/sites/default/files/event/documentset/120614I-p07.pdf>

### **Other related links**

<https://www.saobserver.net/news/money-available-to-curtail-nutrient-pollution-of-shuswap-watershed-3712090>

<https://www.crmc-cherryville.ca/thecherryvillewaterstewards#:~:text=The Cherryville Water Stewards Vision,data accessible to the Community>

[www.beesafemonashees.org](http://www.beesafemonashees.org)

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### **Pollution downstream already studied**

<https://www.saobserver.net/local-news/watershed-report-shows-years-of-nutrient-buildup-in-shuswap-lakes-5888388>

### **Land capacity is limited**

[https://www.ers.usda.gov/webdocs/publications/42731/16740\\_ap037a\\_1\\_.pdf?v=0](https://www.ers.usda.gov/webdocs/publications/42731/16740_ap037a_1_.pdf?v=0)  
<https://www.farmbrite.com/post/how-many-cows-can-i-keep-per-acre>

### **The alarm has been raised for years**

<https://vancouversun.com/news/community-blogs/scientist-raises-alarm-over-pollution-from-factory-farming-in-the-fraser-valley>

### **We're importing a dangerous problem**

<https://ubcjournlism.shorthandstories.com/followthewater/index.html>

<https://www.nrdc.org/stories/industrial-agricultural-pollution-101>

<https://www.newrootsinstitute.org/articles/massive-environmental-impacts>

<https://www.ciwf.org.uk/factory-farming/environmental-damage/#:~:text=Factory farming pollutes environments, contaminating,potentially catastrophic in large quantities.>

<https://members.cgs.ca/documents/conference2006/Seatosky/S4/0140-147.pdf>

**We also know:**

<https://refbc.ca/bc-watershed-security-survey/>.

**Main source of NPS pollution**

[https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/waterquality/water-quality-reference-documents/tackling\\_non-point\\_source\\_water\\_pollution\\_in\\_british\\_columbia.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/waterquality/water-quality-reference-documents/tackling_non-point_source_water_pollution_in_british_columbia.pdf)

**Nitrate contamination**

[https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-wells/no3020715\\_fin2.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-wells/no3020715_fin2.pdf)

**Studies show that .....Doublespeak:**

<https://members.cgs.ca/documents/conference2006/Seatosky/S4/0140-147.pdf>

<https://www.castanet.net/news/Vernon/478393/Spallumcheen-is-to-receive-3-8-million-for-upgrades-to-water-infrastructure>

**Indigenous leaders want factory farming to end:**

<https://animaljustice.ca/blog/bc-indigenous-leaders-want-factory-farming-to-end>

<https://animaljustice.ca/wp-content/uploads/2023/07/>

[UBIC\\_2023June\\_Resolution\\_FactoryFarmingLegislationReform.pdf](UBIC_2023June_Resolution_FactoryFarmingLegislationReform.pdf)

**Shuswap River Watershed Sustainability Plan**

[https://www.rdno.ca/sites/default/files/2021-06/141114\\_SRWSP\\_FinalFormat.pdf](https://www.rdno.ca/sites/default/files/2021-06/141114_SRWSP_FinalFormat.pdf)

**Various links related to presentation slides:**

<https://vancouversun.com/news/metro/bc-government-proposes-rules-for-safe-manure-use>

<https://vancouversun.com/news/local-news/neighbours-claim-victory-in-10-year-fight-over-towering-manure-pile>

<https://policyoptions.irpp.org/magazines/canadas-water-challenges/agricultural-water-policy-challenges-in-bc/>

<https://refbc.ca/bc-watershed-security-survey/>.

<https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/agriculture/regulation-requirements/high-risk-areas-conditions>

[https://www.fraserbasin.bc.ca/\\_Library/TR\\_SWC\\_2/SWC\\_PhosphorusActionPlan.pdf](https://www.fraserbasin.bc.ca/_Library/TR_SWC_2/SWC_PhosphorusActionPlan.pdf)