Open data applications and community mapping

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Elaine Ho-Tassone, PhD

Postdoctoral Fellow and Part-time Faculty, Algoma University | Project Coordinator, Lake Huron North

elaine.ho@algomau.ca | e-h2o.ca

Freshwater context



Source: Bachand et al., 2017



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Treaty territories Pilot project

- Water Rangers Freshwater Explorer testkits (July 23-November 5)
 - Air and water temperature, alkalinity, chlorine, hardness, pH, conductivity, Dissolved Oxygen, and water depth; conversion to Total Dissolved Solids from conductivity
 - 15 test days at 3 sites; 13 test days at 4 sites
- Benthos surveys (September 16 and 23, 2021)
- E. coli laboratory (November 2021-March 2022)







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Using community-derived open data



Coordination



Collaboration



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Management response



Democratization

Community mapping

Why consider this approach? A few of many reasons:

- Gain local and cultural insights
- Access to areas and information you otherwise don't have
- Capacity building
- Engagement of people and organizations who can help your cause (shared ownership
- Stories are integrated connections can be made

E.g., a more conventional 'map'

(There are other formats as well!)





'Hope and Survival' by Laurie Swim

A Memorial Quilt for the 1917 Halifax Explosion --The Maritime Museum of the Atlantic Halifax (NS) September 2017.

Read the story on <u>Flickr</u>.

Collaborative watershed analysis (for cumulative effects – or not)

- May provide a more complete, holistic understanding of the issues.
- May reduce conflict when multiple observations differ in conclusions about a phenomenon.
- Likely useful to implement alongside predictive modelling

Thank you!

elaine.ho@algomau.ca | e-h20.ca