

# Prairie Drainage Governance

## Understanding agricultural water management during times of change

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### **BACKGROUND**

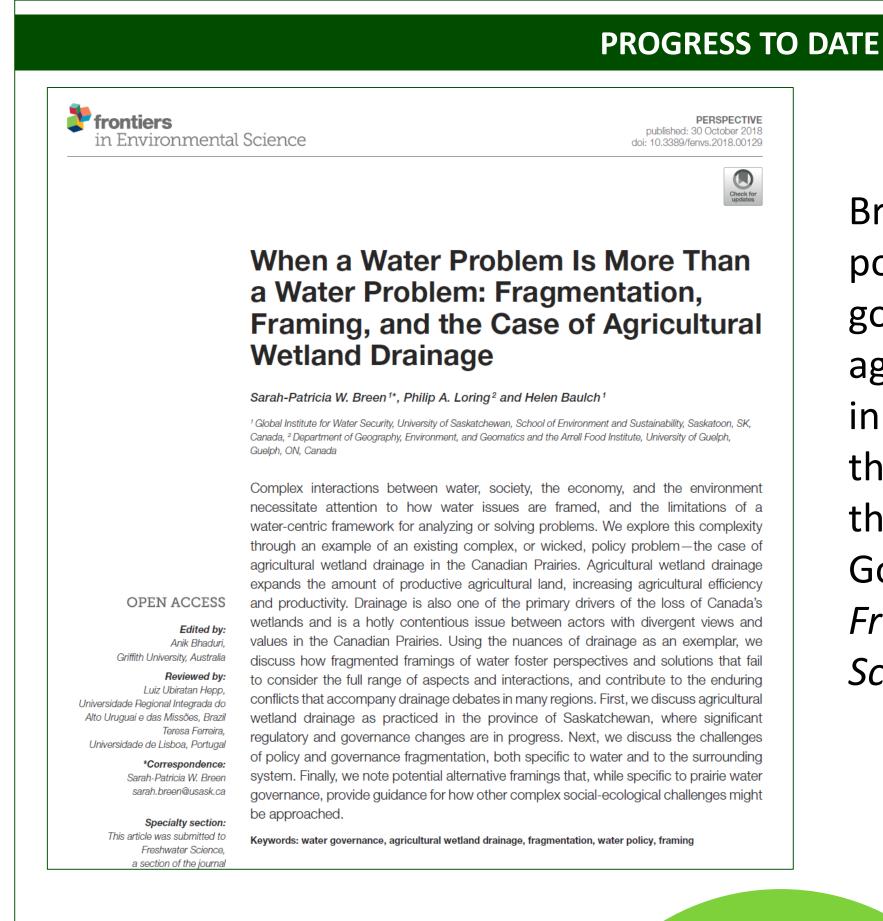
Drainage is the management and removal of water from agricultural lands which can be for the purpose of allowing earlier spring seeding, increasing the amount of productive land, improving soil conditions, and facilitating use of new technology (Weber & Cutlac, 2017; Wheater et 2013). drainage, However, particularly surface drainage wetlands, can negatively affect water quality, biodiversity, and risk and resilience to drought. The risks, impacts, and benefits of drainage are distributed unevenly across stakeholders. catchments and Additionally, Saskatchewan, in drainage policy differs across and within jurisdictions, and regulations are not fully enforced. As such, it is little wonder that debate and conflict over drainage has been ongoing for than a century (Blann, more Anderson, Sands, & Vondracek, 2009).

## **RESULTS AND OUTCOMES**

Our work will help build a better understanding of how people develop institutions to govern water, how existing institutions function, and how conflict or collaboration emerges.

The three intended outcomes of this research are:

- 1) A clear understanding of the governance workflow for managing drainage and addressing related conflict in both wet and dry regimes;
- 2) Identification of opportunities for improving nutrient mobilization and increasing watershed resilience; and
- the human 3) The linking of hydro-climate dimension to models, in order to forecast possible societal responses based projected climatic and hydrological change, in order to understand potential barriers and opportunities the for implementation of practices to minimize negative impacts drainage.



Breen et al. (2018) discuss the policy challenges and governance fragmentation of agricultural wetland drainage in the Canadian Prairies. Find this paper, a deliverable from the Prairie Drainage Governance Project, online in *Frontiers in Environmental Science*.

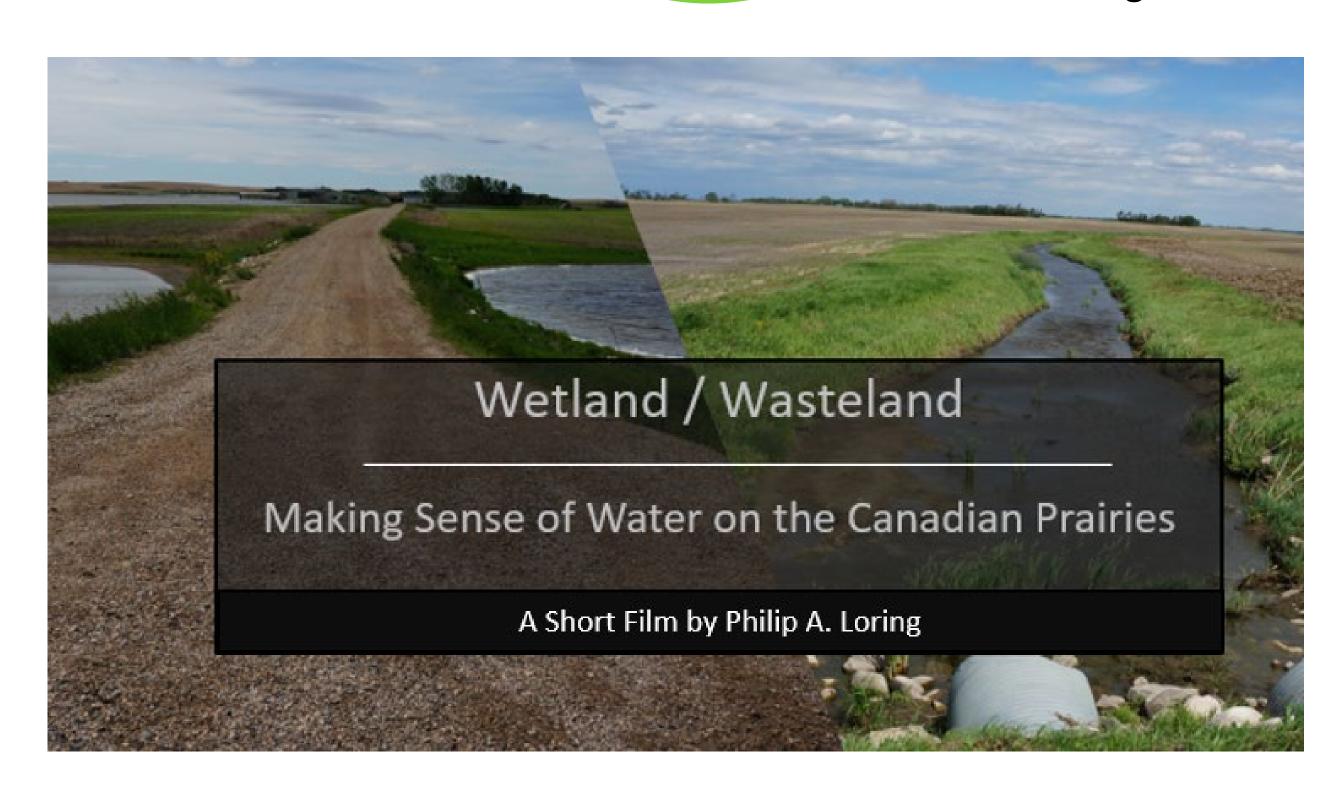
**Case Studies** 

 Conceptualizations of the SES framework are being investigated through the socialecological model of existing drainage governance.

Emergent scholarship

Interviews & Multimedia

- This project is moving forward with a focus on the Dry Lakes network in Saskatchewan.
   More cases will be added as appropriate.
- 10 stakeholder interviews have been conducted so far. These interviews will be transcribed and analysed.
- We will produce a short-film that will explore perspectives on Drainage.



#### CONTACT

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#### **REFERENCES**

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