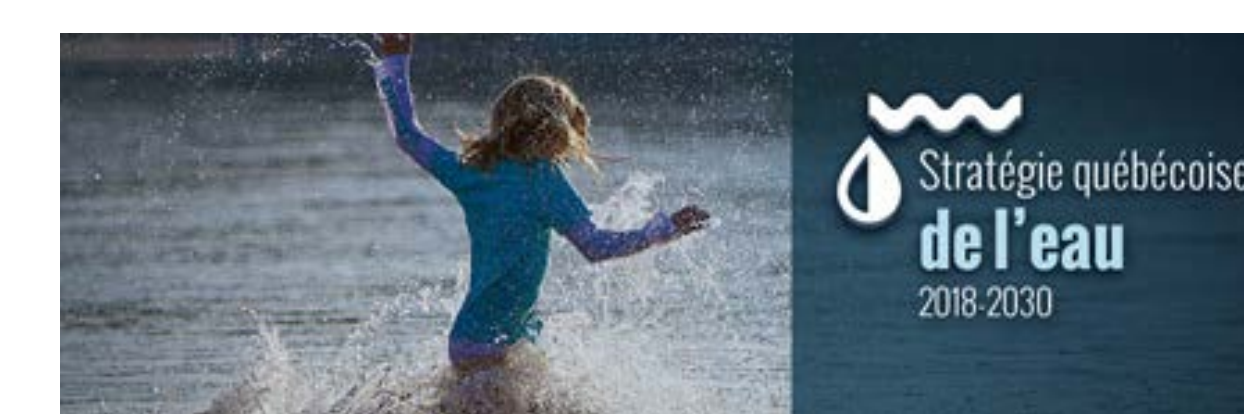


The Castor Project of Quebec's Water Strategy – An Agri-environmental Living Laboratory



Presented at the First International Forum on Agroecosystem Living Labs, October 4-6, 2023, Montréal, QC, Canada

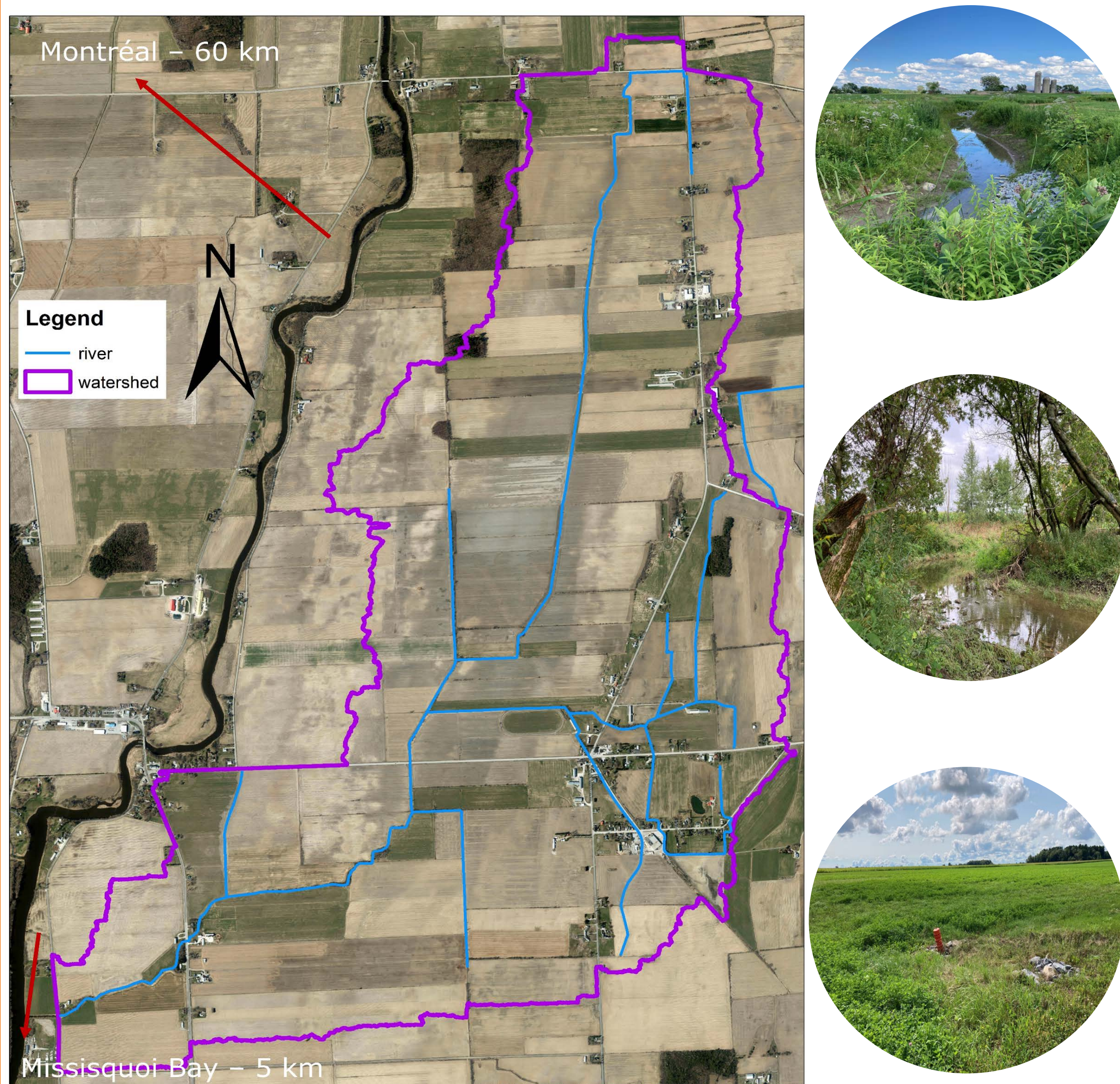
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The Living Labs Initiative is a new approach to **agricultural innovation** in Canada that brings **together** farmers, scientists and other partners to **jointly develop** and **test** innovative practices and technologies to **solve** agri-environmental **problems**.

One well-defined watershed



A common objective

Improving water quality...

- In a win-win socio-economical context for farmers
- Including recognition of their role as a major driving force towards agri-environmental sustainability

One team for a collective project

2 Provincial Ministries (M) – 20 farms (F) – 6 Universities (U) –
 4 water governance institutions (W) – 6 external partners (P)
An integrated watershed management framework



A unique methodological framework

- Presentation of the partners' expertise
- On-site discussion of applicability to local needs vs. research-technical-legislative interests
- Definition of a research project - One pager
- Amendments to work plan
- Setting up agreements
- Starting the project

A structured multi-disciplinary approach



- Each thematic workshop involving...**
- 3 independent (no self interest) farmers
 - 1 external professional expert
 - 1 lead researcher
 - All participating farms

2021-2023 Activities

- Theoretical" research on small plots
- Customized professional diagnostics
- Field trials
- Large-scale actions (recognized, little applied)
- Training/awareness-raising

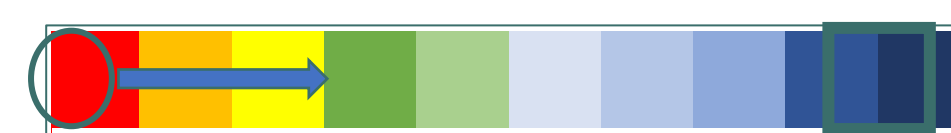


Given a set of metrics¹

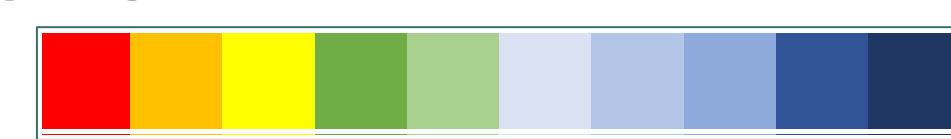
Ecosystem health
 Initial State – 15%
 2023 Trend – +25%



Mobilization, commitment and sustainable adoption
 Initial State – 05%
 2023 Trend – +300%



Economic health of farm businesses
 Available after 3 years of project



1- the actual set of metrics is composed of 40 indices divided into the 3 above categories. Overall results presented above are under validation

A commitment to long-term success

	Number of new and beneficial practices – Innovating areas –	and farmers
2020	3/4	66 ha N.A.
2021	4/16	400 ha 16
2022	9/20	260 ha ¹ 20

¹ More beyond the watershed boundaries

- A platform for agronomic monitoring
- Over 90 environmental monitoring devices
- A quarterly newsletter
- Envisioned as a 10 year + project

