The Wetland Lens: Private and Public Drivers for Investment



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Guiding Questions

1) What is the lens with which we view wetlands?

2) What drives how wetlands are valued?

3) What drives producer decision-making?

4) What are acceptable reasons for farmers to accept BMP or wetland regulation?



Biophysical values: Constructed

Shoreline slope

Chloride

Nitrate + nitrite

Env. stress

Perceived social values:

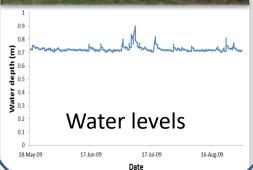
Aesthetics

Flood control

Cultural heritage







Natural

Biophysical values:



Nutrients

Hydrograph

Groundwater connectivity

Native biodiversity

Biotic integrity

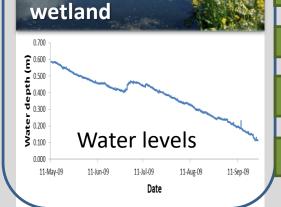
Perceived social values:

Biodiversity

Erosion control

Water quality improvement

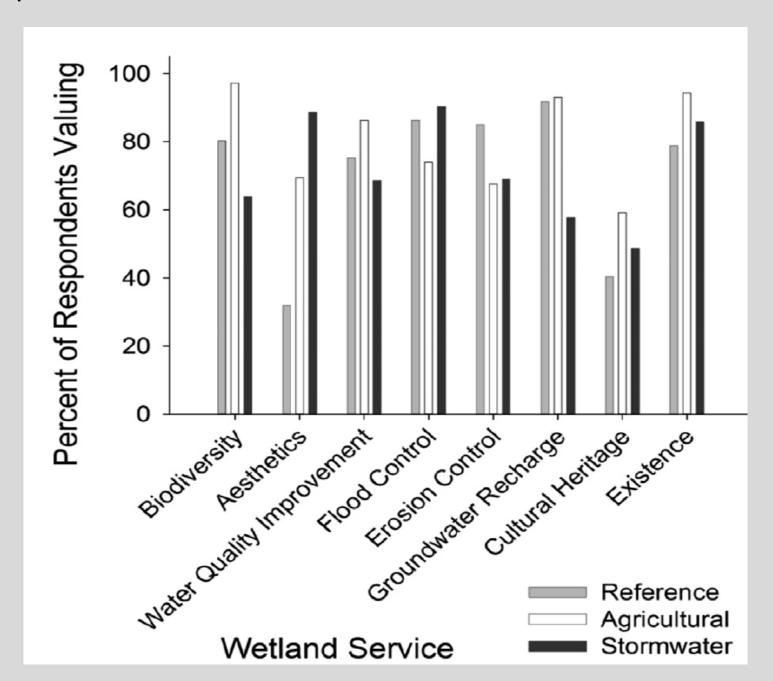
Groundwater recharge



Agricultural



Perspectives on Wetland Services in Central Alberta

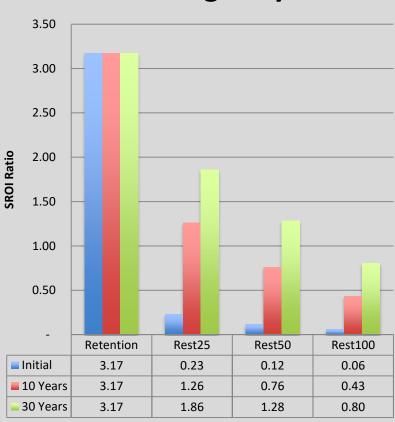




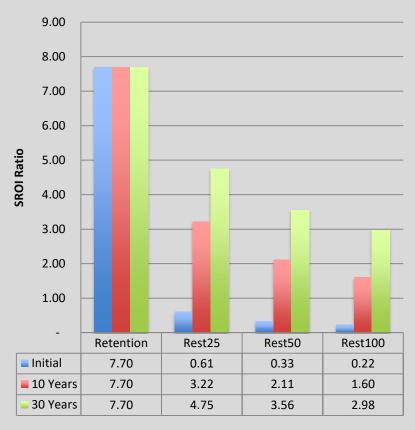
Case Study: Smith Creek, Saskatchewan

$$PV = \sum_{t=1}^{T} \frac{TC_i^t}{(1+r)^t}$$

Flooding Only



Suite of Ecosystem Services

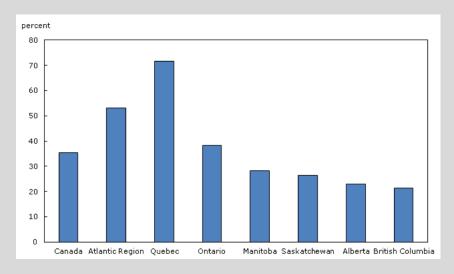


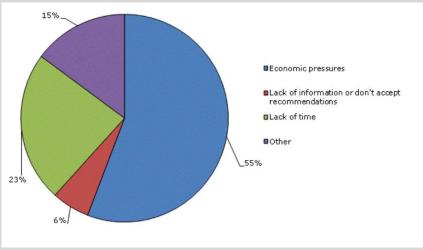


Environmental Farm Plans (EFP)

Participation Rates

Reasons for Not Adopting







Conclusions

- Our lenses are different but not that different.
 Communication and education is essential.
- ➤ Wetlands are incredibly valuable ecosystems from economic, social and environmental perspectives. Public demand drives valuation approaches.
- Farmers are driven by economic incentives which often trump other values, whether they want them to or not.
- Private costs and public benefits can align through regulation and market based incentives.



Acknowledgements and References

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Questions



