Lower Souris Watershed EG&S Pilot Project

Exploring EG&S Policy Tools in a Working Agricultural Landscape

Watershed Co-ordinator - Sheldon Kyle

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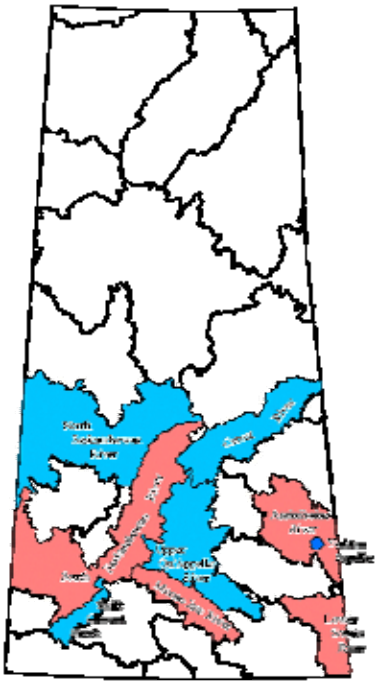


Watershed and Aquifer Planning Areas

- Completed Plans

Project Objectives

"The Lower Souris Ecological Goods and Services Pilot is a policy/research project that will examine how EG&S policy tools could be used in a real working landscape to achieve desired environmental endpoints"

Extracted from initial project proposal to ACAAF

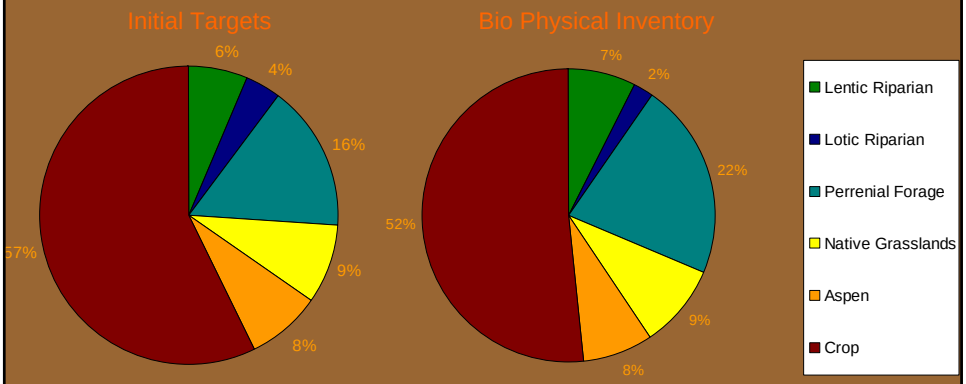
Lower Souris EG&S Pilot Project

Three part case study of an agricultural landscape:

1) Targets set for landscape quantity and quality
2) Determine the costs to provide the targeted quantity and quality of wildlife habitat
3) Conduct a policy analysis of EG&S and non EG&S tools to meet the targeted quantity and quality of wildlife habitat



Lower Souris Watershed Data



Habitat Quality Targets vs Actual

	HEALTHY		HEALTHY WITH PROBLEMS		UNHEALTHY	
TAME (78)	30	46	63	49	7	5
NATIVE (62)	36	2	57	18	7	81
ASPEN (42)	42	5	53	29	5	67
LOTIC RIPARIAN (79)	75	28	22	62	3	10
LENTIC RIPARIAN (118)	67	41	23	42	10	18

Target

Actual

In Brief Summary

- We want to maintain the current level of wildlife habitat quantity
- Need to focus on shifting wildlife habitat quality from unhealthy to healthy for native, aspen and lotic riparian

Economic Habitat Output – Habitat Quality

- If pasture productivity increases are great enough, destocking or additional pasture infrastructure can pay for itself

Analysis of Policy Tools

1. Control Measures
   - Ambient Standards, Zoning, Harvest Limits
2. Economic Instruments
   - Agri-Environmental Payments, Environmental Taxes
3. Market Measures
   - Market Labels, Recreation Leases, Carbon Credits
4. Advisory & Institutional Measures
   - Research & Development, Extension/Technical Assistance

Economic Modeling Output

	Cropland	Pasture
Drain Wetland	$79.55	-$38.66
Clear Bush	$46.26	$42.22
Convert Cropland to Pasture	$9.98	N/A
Convert Cropland to Hay	-$49.42	N/A

Economic Instruments

- Two programs compared across three RM's – Silverwood, Reciprocity & Storthoaks
- Pay $2.50/ac/yr to convert cropland to perennial forage – converting entire watershed would cost $700K per year
- Pay $79/ac/yr for wetlands in cropland to maintain 67% of wetlands would cost $2M per year

Our Group's Job

- Discuss what program recommendations will achieve these goals
- What would we do if we were in charge of developing these programs?

Five points to ponder

- Be sure to consider if:
  - Program is achievable and practical
  - Program is socially acceptable
  - Program is fiscally responsible
  - Does the program promote unintentional actions
  - Do we need to revisit our initial goals

RECOMENDATIONS

- SOME TYPE OF EG&S ANNUAL PAYMENT IS NEEDED
- PAYMENTS NEED TO RECOGNIZE OPPORTUNITY COST
- EDUCATION OF LANDOWNERS AND THE PUBLIC REGARDING EG&S

MYTHBUSTER

EG&S PAYMENTS TO LANDOWNERS

ARE NOT

INCOME SUPPORT PAYMENTS

THEY ARE PAYMENTS FOR A SERVICE CURRENTLY BEING PROVIDED AT A REALATIVELY LOW COST

The reason we do what we do