Who is the Appropriate Audience for Rural Drainage Stewardship Initiatives?

Jacqui Empson Laporte
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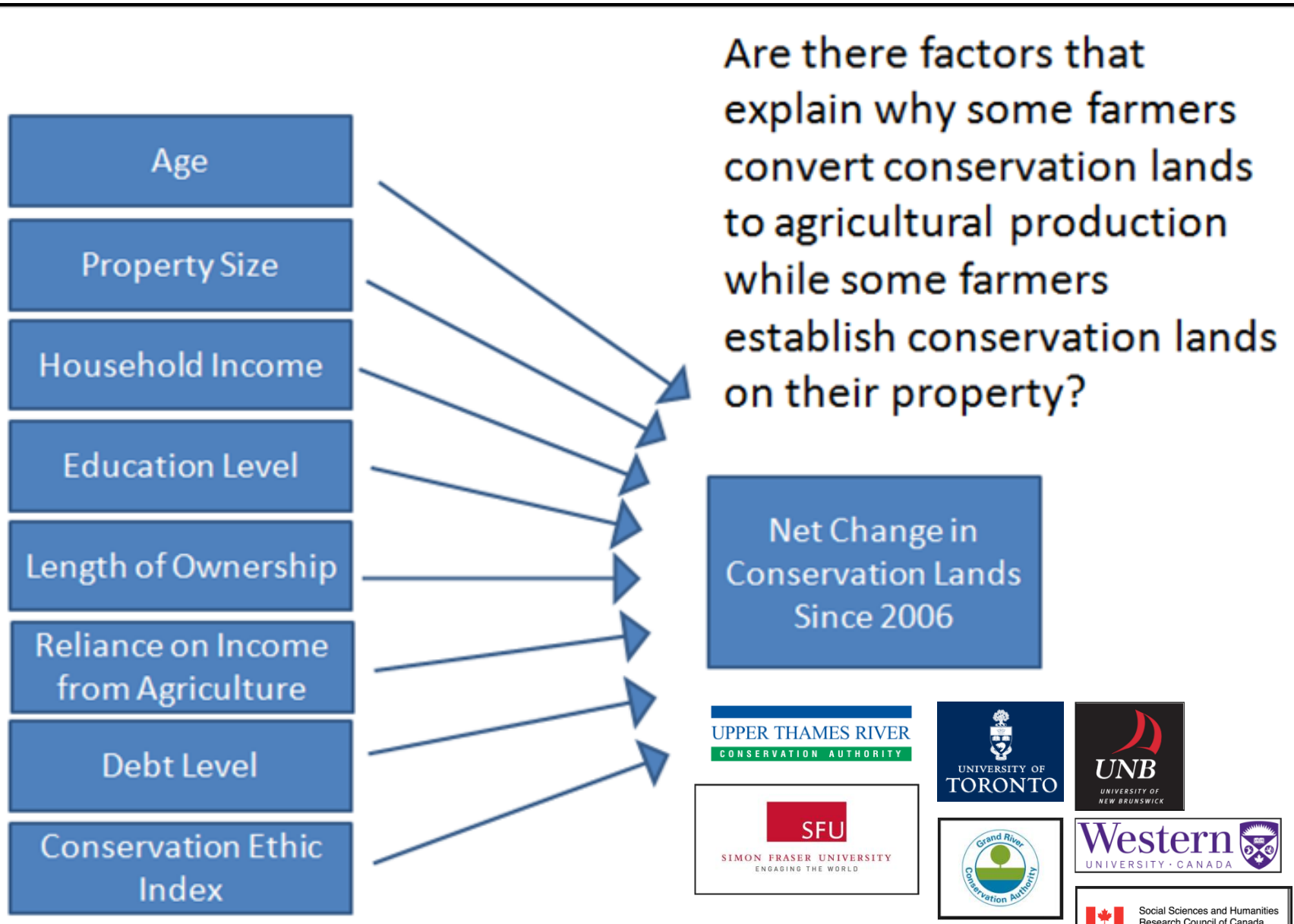
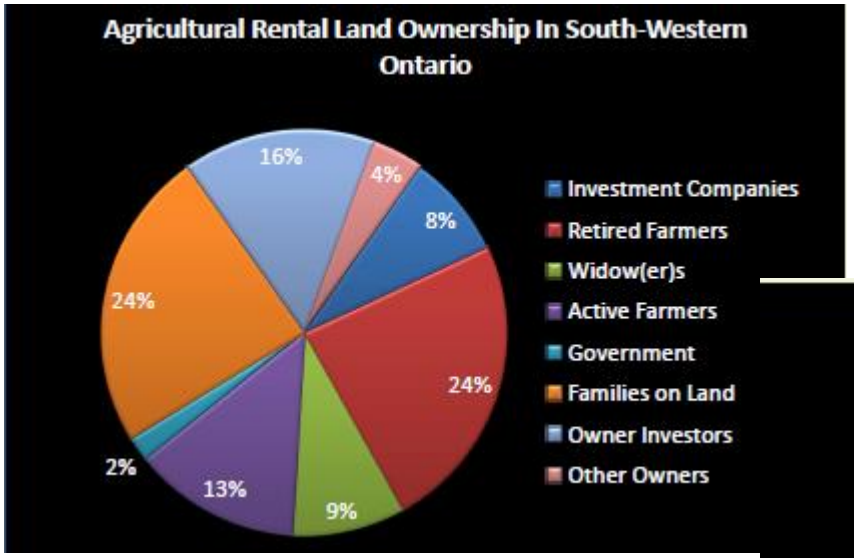


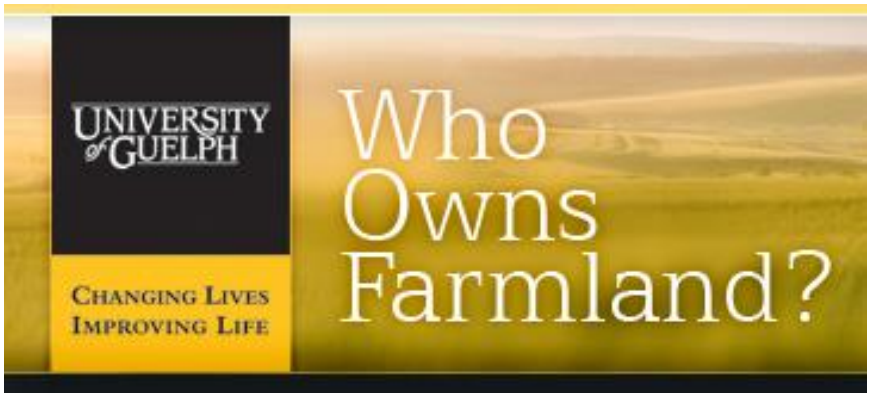
Figure 4: Basic Research Design

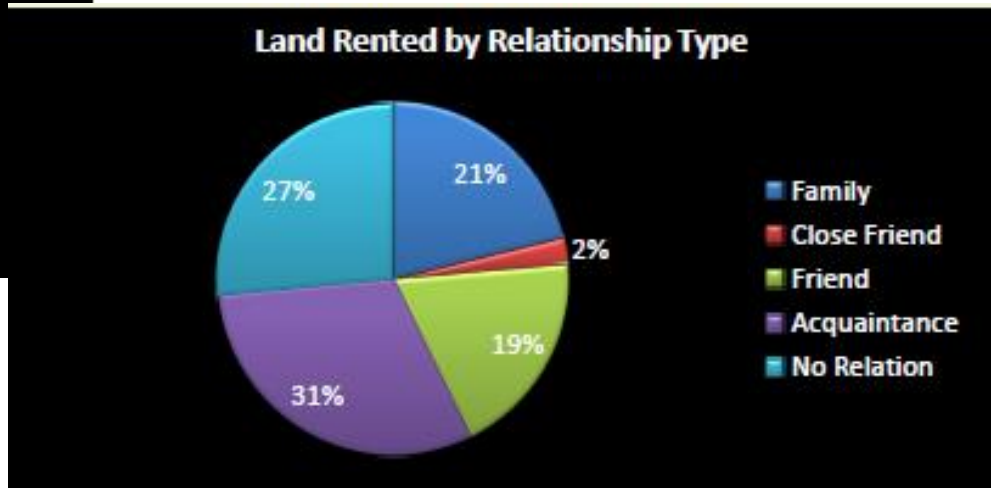
Study Findings

- Farmers with larger properties tend to exhibit more conservation oriented behaviour
- Farmers that have owned their land for a longer period of time tend to be more conservation oriented
- Older farmers are more conservation oriented than younger farmers
- Farmers with higher debt loads tend to be less conservation oriented than farmers with lower debt load

But its not just about the landowners….



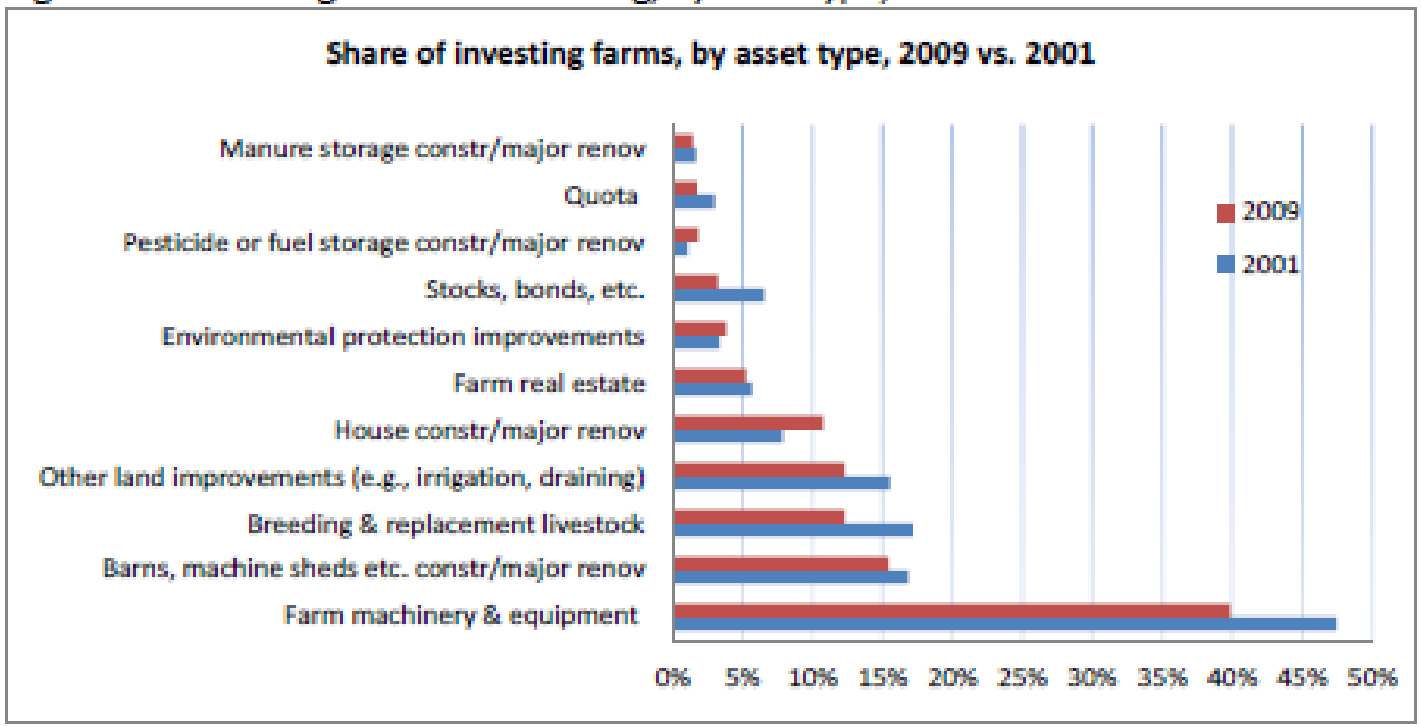




An Empirical Examination of Landowner Characteristics, Social Capital, and Farmland Rental Rates in Southern Ontario

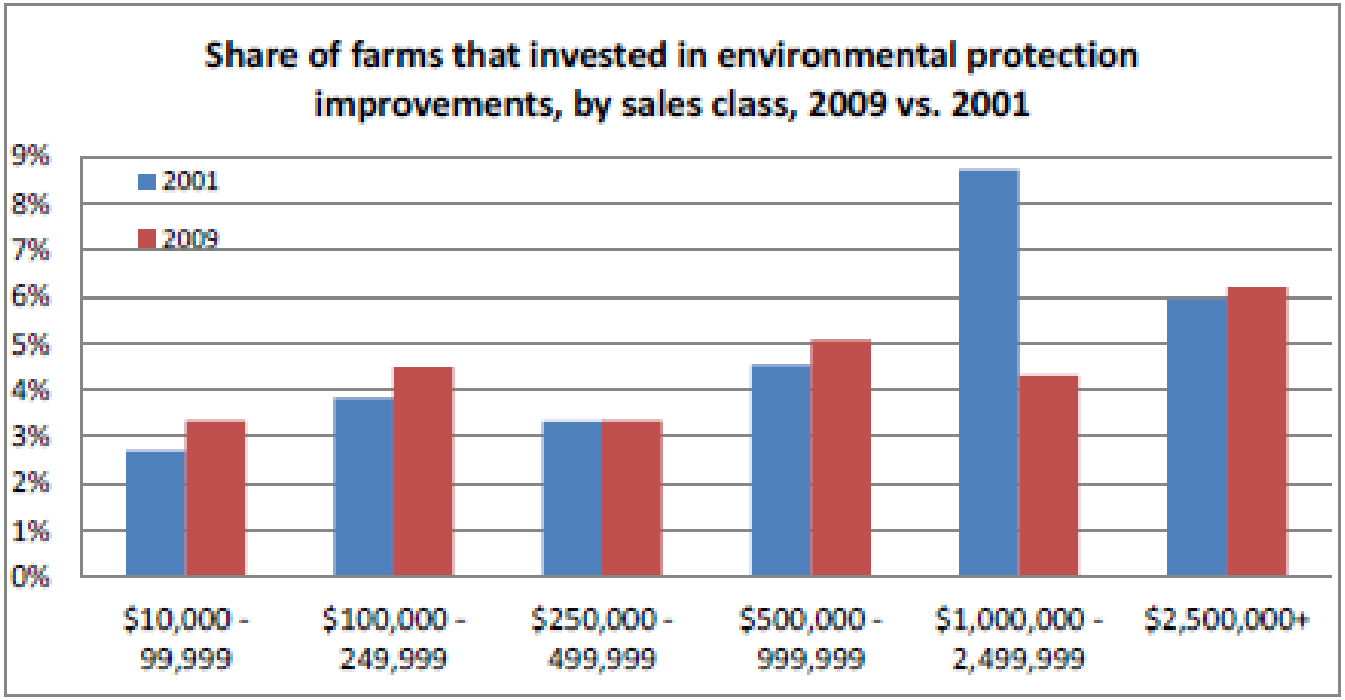
James Bryan, B. James Deaton, Alfons Weersink – *University of Guelph*

Figure 11. Percentage of farms investing, by asset type, 2009 vs. 2001



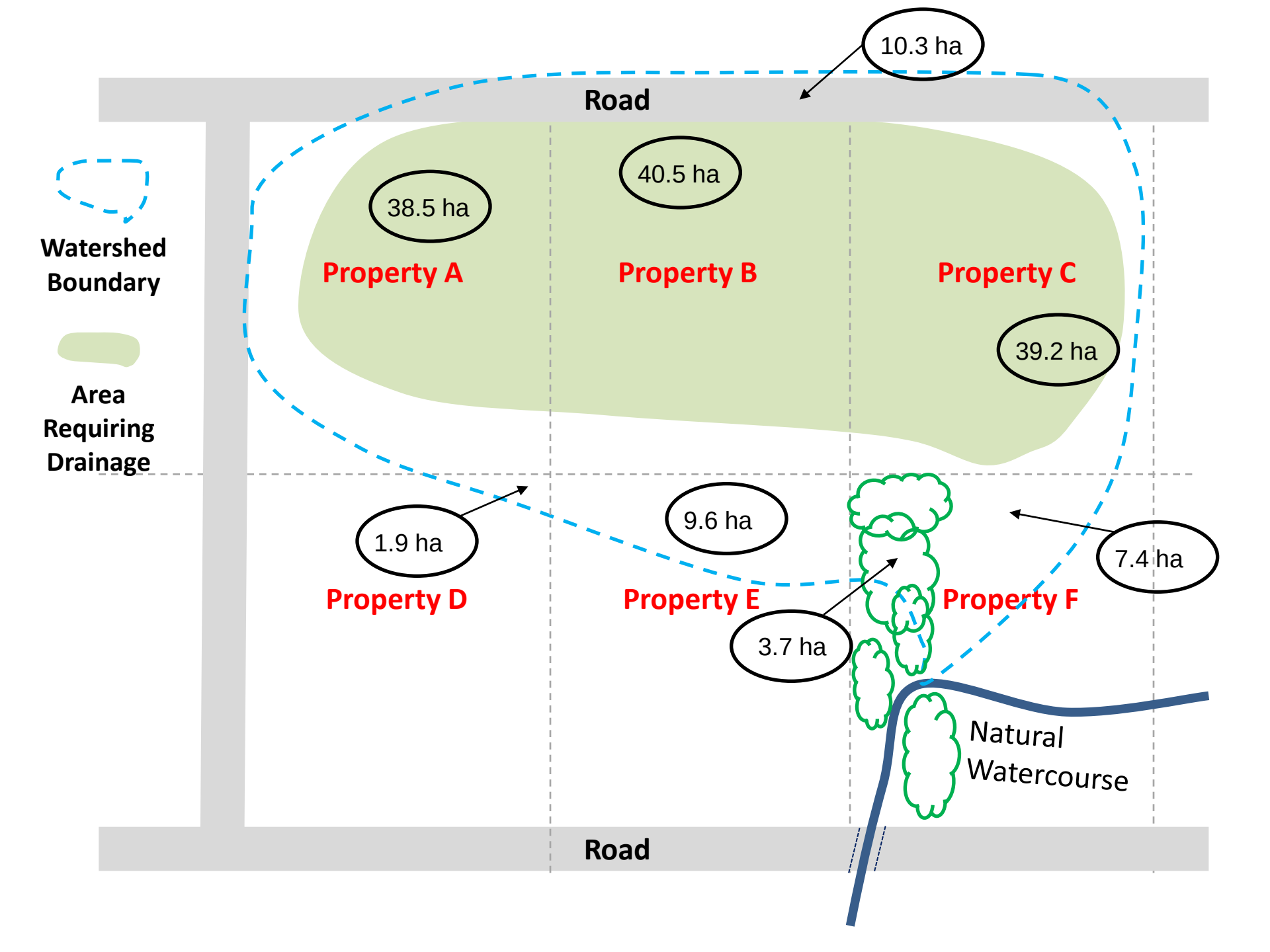
Source: Statistics Canada, Farm Financial Survey 2001 and 2009

Uzea, Nicoletta, and Sparling, David. **Investment and Growth on Canadian Farm 2001- 2009.** http://sites.ivey.ca/agri-food/files/2013/03/Farm-Capital-Investment-and-Growth-2001-2009.pdf March, 2013.



Uzea, Nicoletta, and Sparling, David. **Investment and Growth on Canadian Farm 2001- 2009.** http://sites.ivey.ca/agri-food/files/2013/03/Farm-Capital-Investment-and-Growth-2001-2009.pdf March, 2013.

What does this mean to rural drainage?


Watershed Boundary
Area Requiring Drainage
Road
10.3 ha
38.5 ha
40.5 ha
39.2 ha
Property A
Property B
Property C
1.9 ha
9.6 ha
7.4 ha
3.7 ha
Property D
Property E
Property F
Natural Watercourse
Road

Landowners A, B, and C

- Will most likely be full time farmers or rent their farm land to a full time farmer
- Equipment size and accessibility will be determining factors in how the field will be drained and cropped
- How the field is managed and how challenges, such as drainage and erosion, are addressed is based loosely on verbal contracts
- Cost of the drainage project weighed against economic variables:
  - Price per acre of land lost to drainage project
  - Days per year that the land is more accessible after drainage
  - Crop yield increase after drainage
  - Time in minutes of labour + equipment per field per management practice

Landowner F

- Small acreage property with a few acres of workable land
  - Farm/garden market
  - Horse pasture and hay
  - Rural retirement property
- Natural channel in line with principles of property use
- Is not eligible for ADIP grant

Landowners D and E

- Only small portion of their properties are in the area requiring drainage
- Most likely full time farmers or rent land to full time farmers
- If they have drainage and erosion problems, they are likely to be involved in another municipal drain project
- Landowner D not assessed much in any scenario so ambivalent about drainage design
  - Choice could be made based on neighbourly relations, background, stage in life, future plans for property
- Landowner E pays significantly more for natural channel but is eligible for ADIP grant
- Landowner E probably cleared the woodlot on his property decades ago, and any drainage problems on his property viewed as the result of existing woodlot

Road Authority

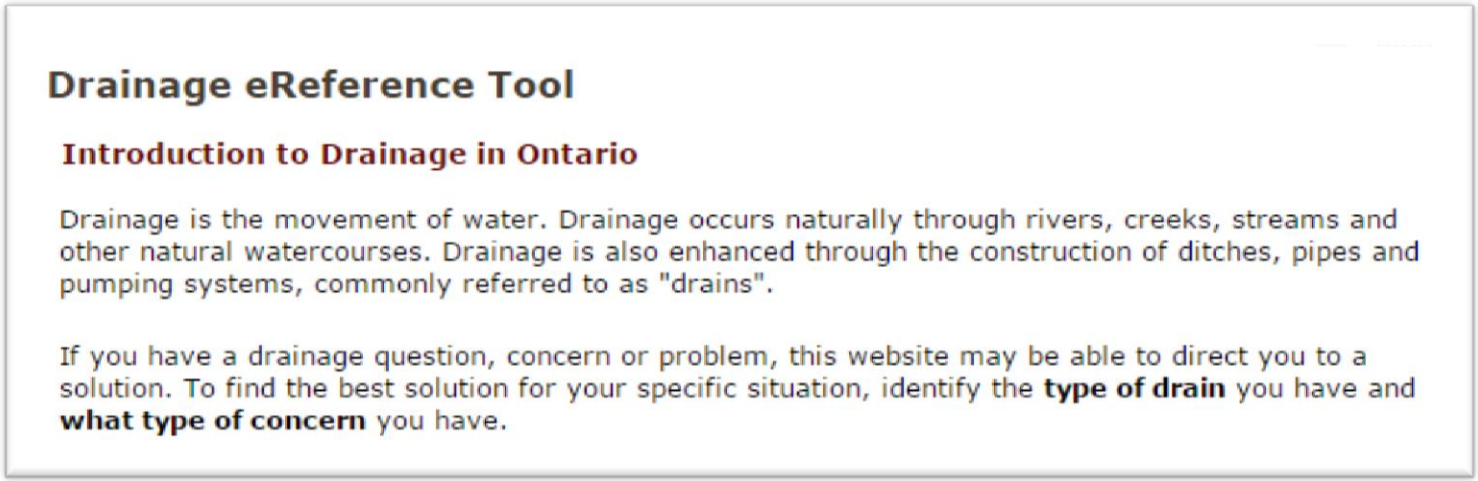
- Unlike other landowners, who pay individual amounts
- Assessment paid out of general tax revenue of the municipality
- As important for the road authority to be engaged on options for drainage design as the landowners

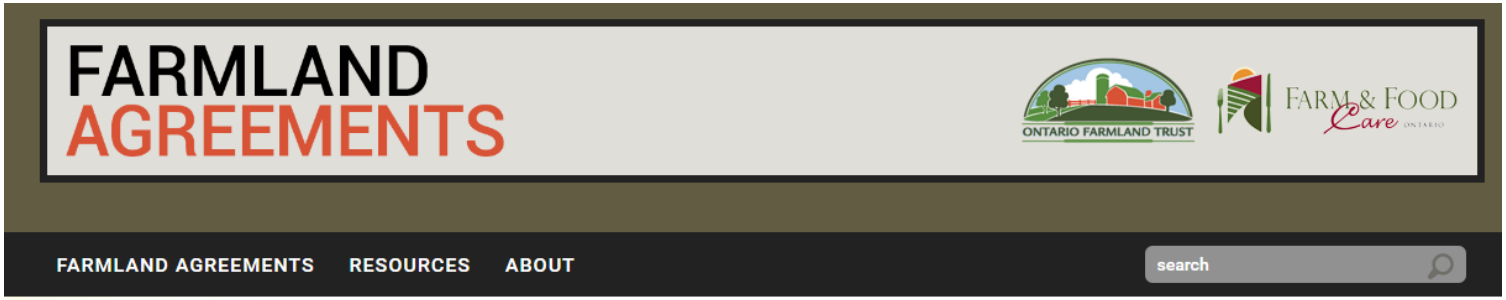
What does it all mean??

- Rural drainage is paid for by a limited number of landowners
- Recognize competition for dollars from key spending areas such as equipment
- Lingering traditional view of “drainage” that may be contrary to natural channel designs
- Capacity to pay for a complex drainage project varies depending on the land use
- Adoption of recommendation by the drainage engineer mostly dependent on variables not addressed in the engineers report

Rural drainage is inherently different

- Even more important for the engineer or geomorphologist to listen to the fears/needs of the landowners who will be paying the bills
- While grants may offset initial costs, long term costs such as farming efficiency is not funded
- Availability of grants may not coincide with the need for drainage, public engagement and design work
- Land use plays a huge role in drainage design
- In rural drainage, acceptance of recommended drainage design and assessment may have absolutely nothing to do with the type of drain or design





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