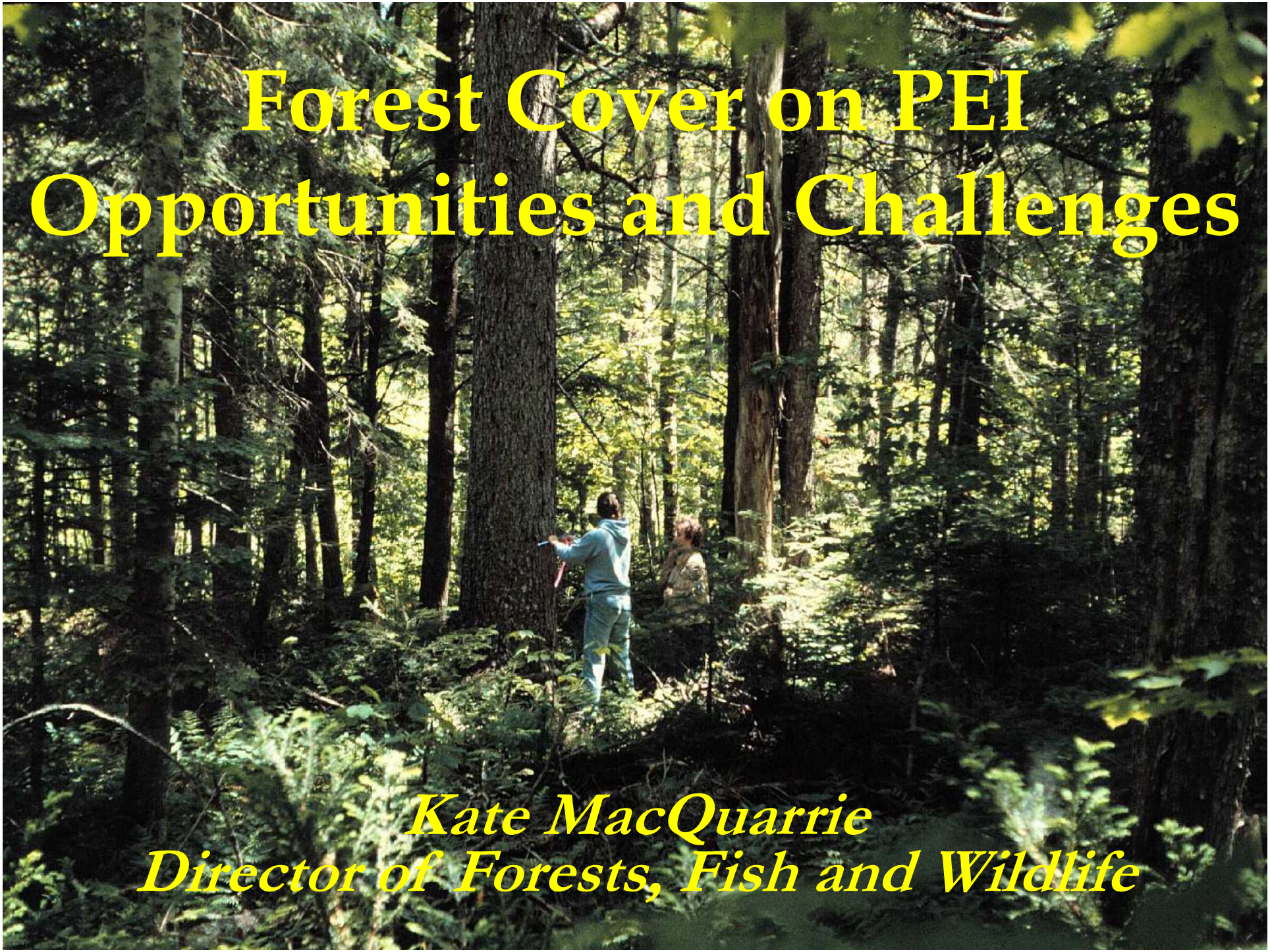


Forest Cover on PEI
Opportunities and Challenges

Kate MacQuarrie
Director of Forests, Fish and Wildlife

Why do we care?

Real Economic Value

Boreal Ecosystem Accounts - Forests	Economic Value
Forestry-related GDP	$18.8 billion
Carbon Storage	$180.1 billion
Pest Control by Birds	$5.4 billion
Nature-related Activities	$4.5 billion
Subsistence Value (Aboriginal)	$575 million
Non-timber Forest Products	$79 million
Water Quality	$18.3 million
Conservation Value	$11.7 million
Less Carbon Emission Costs (forest industry activity)	($150 million)
Total	**$209.3 billion**

Source: Anielski, M. and S. Wilson. 2003 (updated 2009). *Counting Canada's Natural Capital*. Canadian Boreal Initiative and Pembina Institute.

Guidelines

Below the minimum threshold: < 30% Forest Cover

High Risk Approach: 30% Forest Cover

- may only support <1/2 potential species richness
- marginally healthy aquatic systems

Medium Risk Approach: 40% Forest Cover

- likely to support >1/2 potential species richness
- moderately healthy aquatic systems

Low Risk Approach: 50% Forest Cover

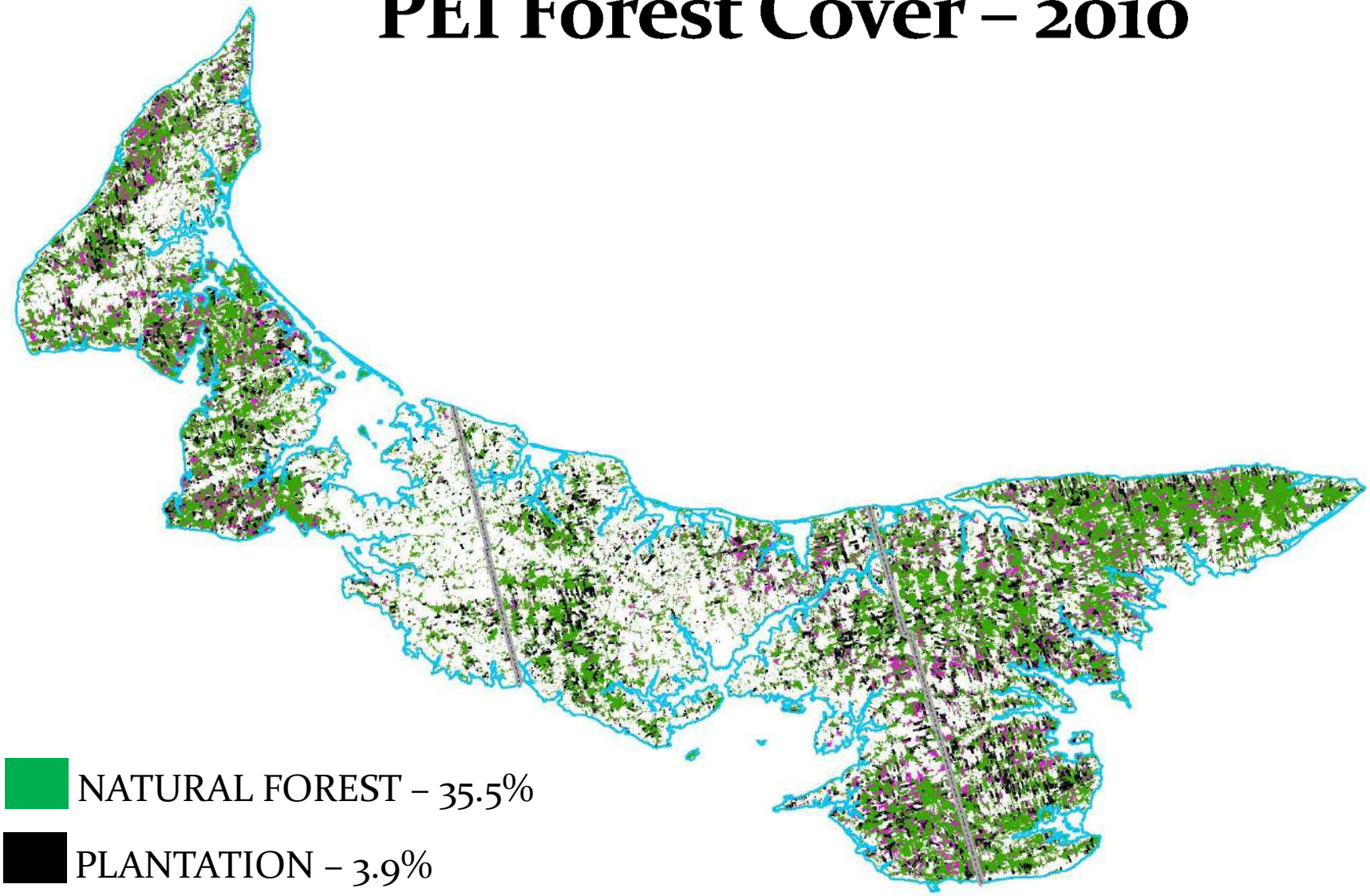
- likely to support most of the potential species richness
- healthy aquatic systems

Use with caution !

- other factors (patch size, shape, edge:interior, community types including maturity/structure); data gaps; guideline is not a cap

Source: Environment Canada. 2013. *How much habitat is enough?* Third Edition. Environment Canada, Toronto, Ontario

PEI Forest Cover – 2010

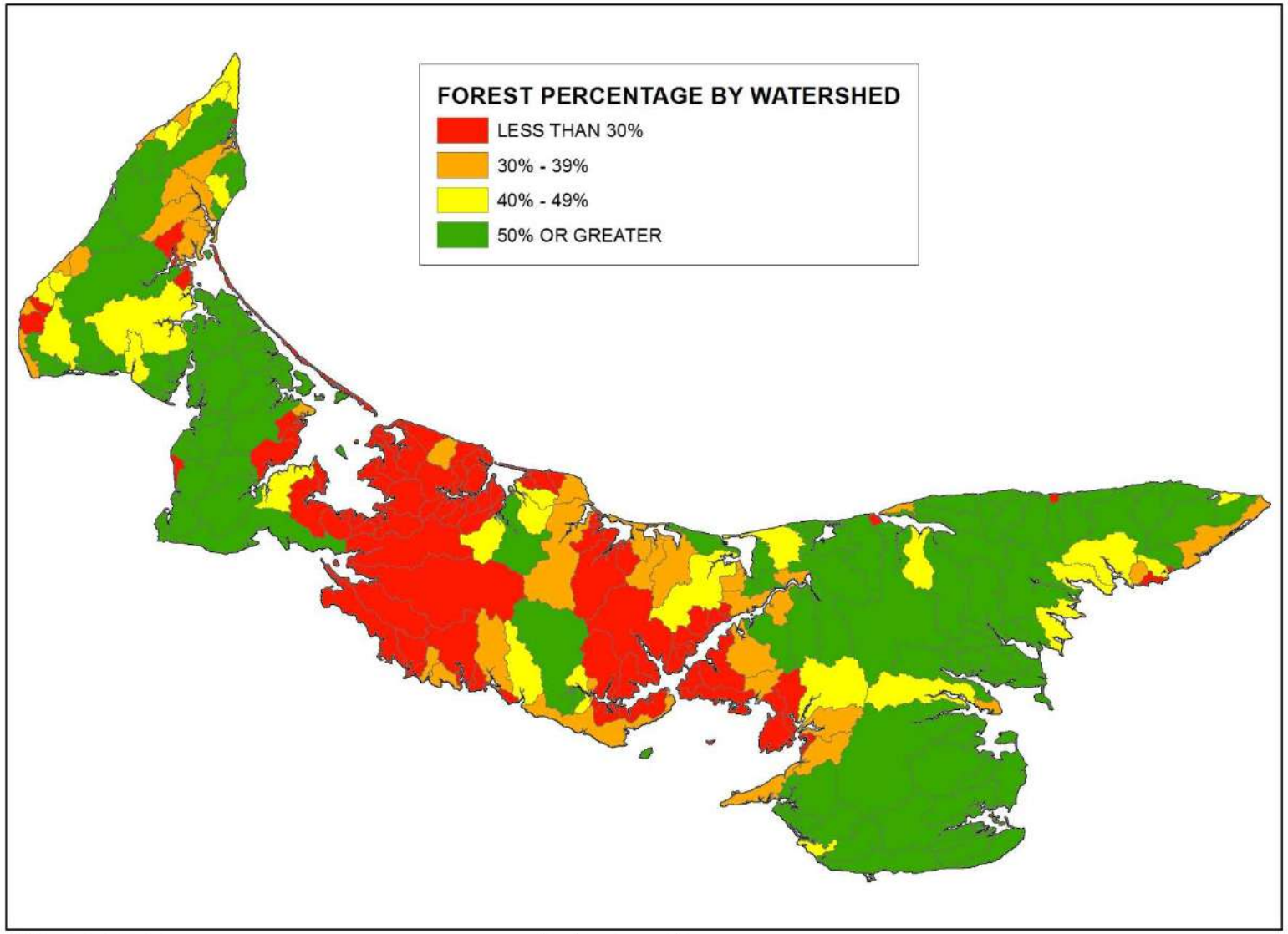


NATURAL FOREST – 35.5%

PLANTATION – 3.9%

HARVESTED / REGENERATING - 4.5%

Forest Cover by Watershed

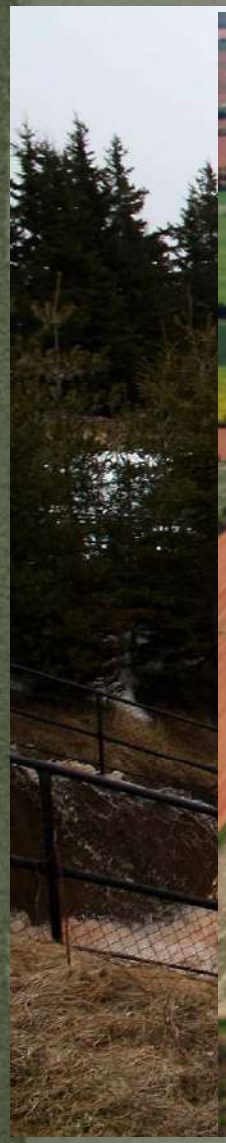


Prince Edward Island
Agriculture & Forestry
Forest, Fish and Wildlife
March 2015

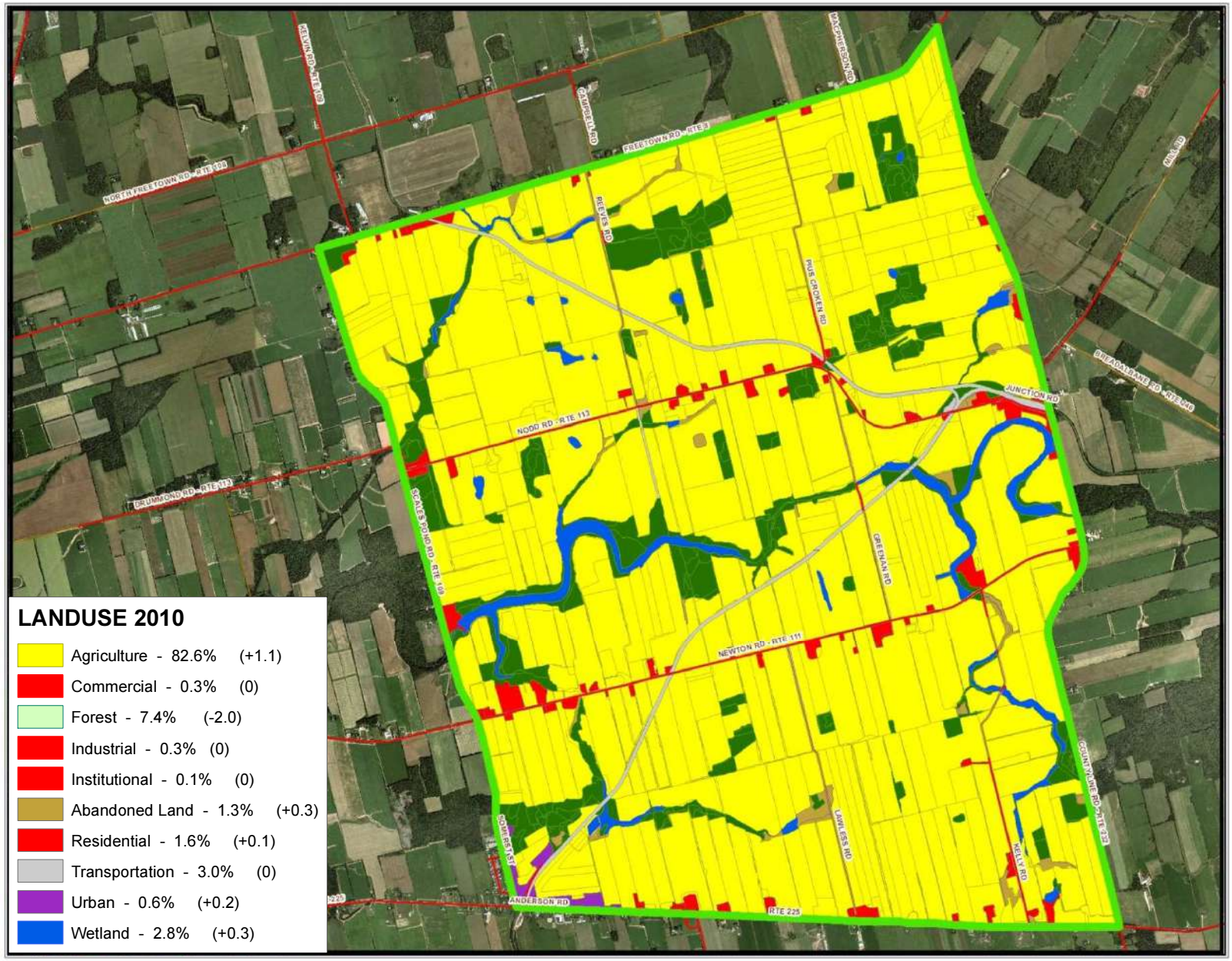
0 5 10 20
Kilometers

This map is not intended for legal description or to calculate exact land dimensions.

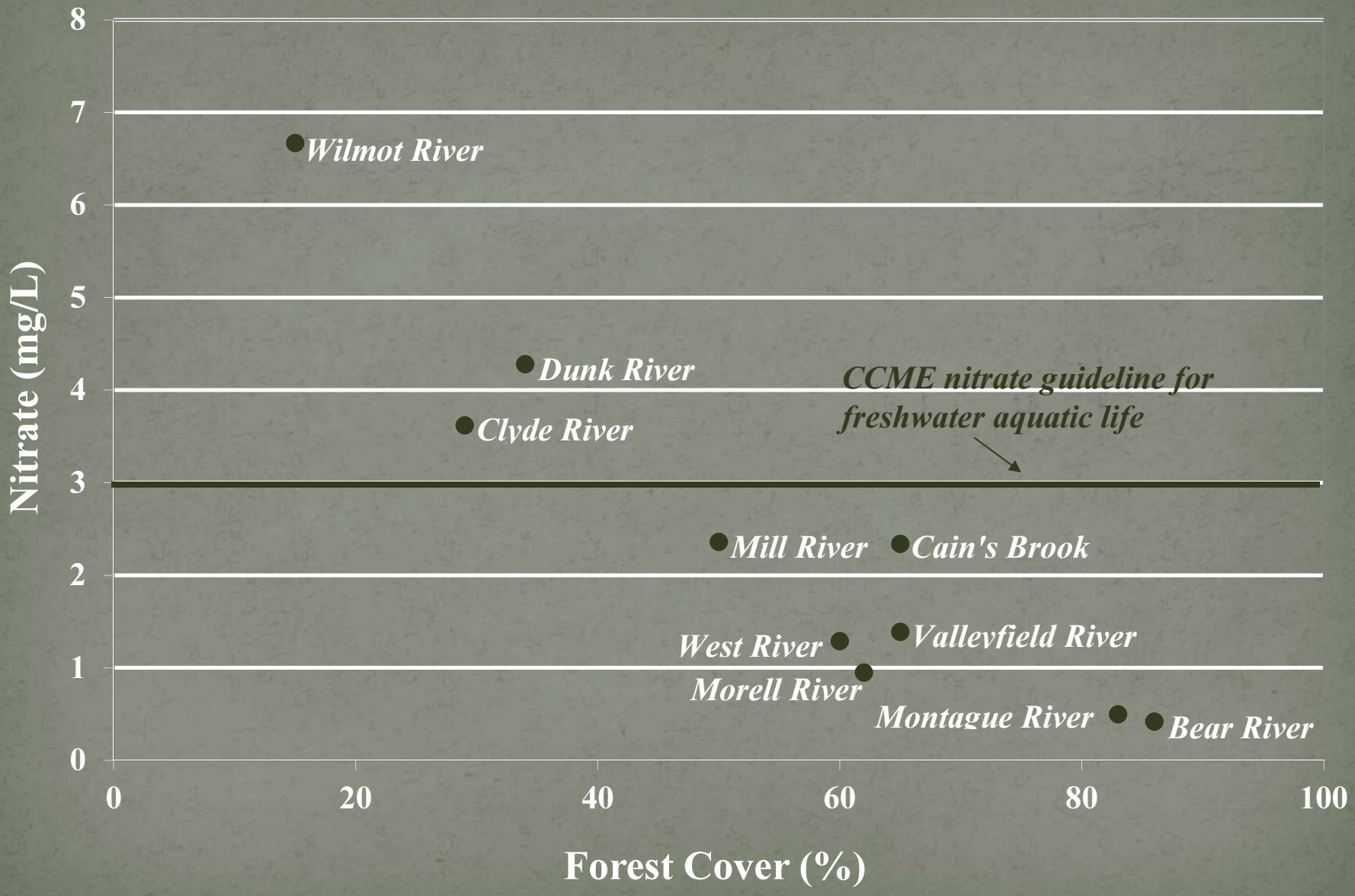
Challenge: Making Connections



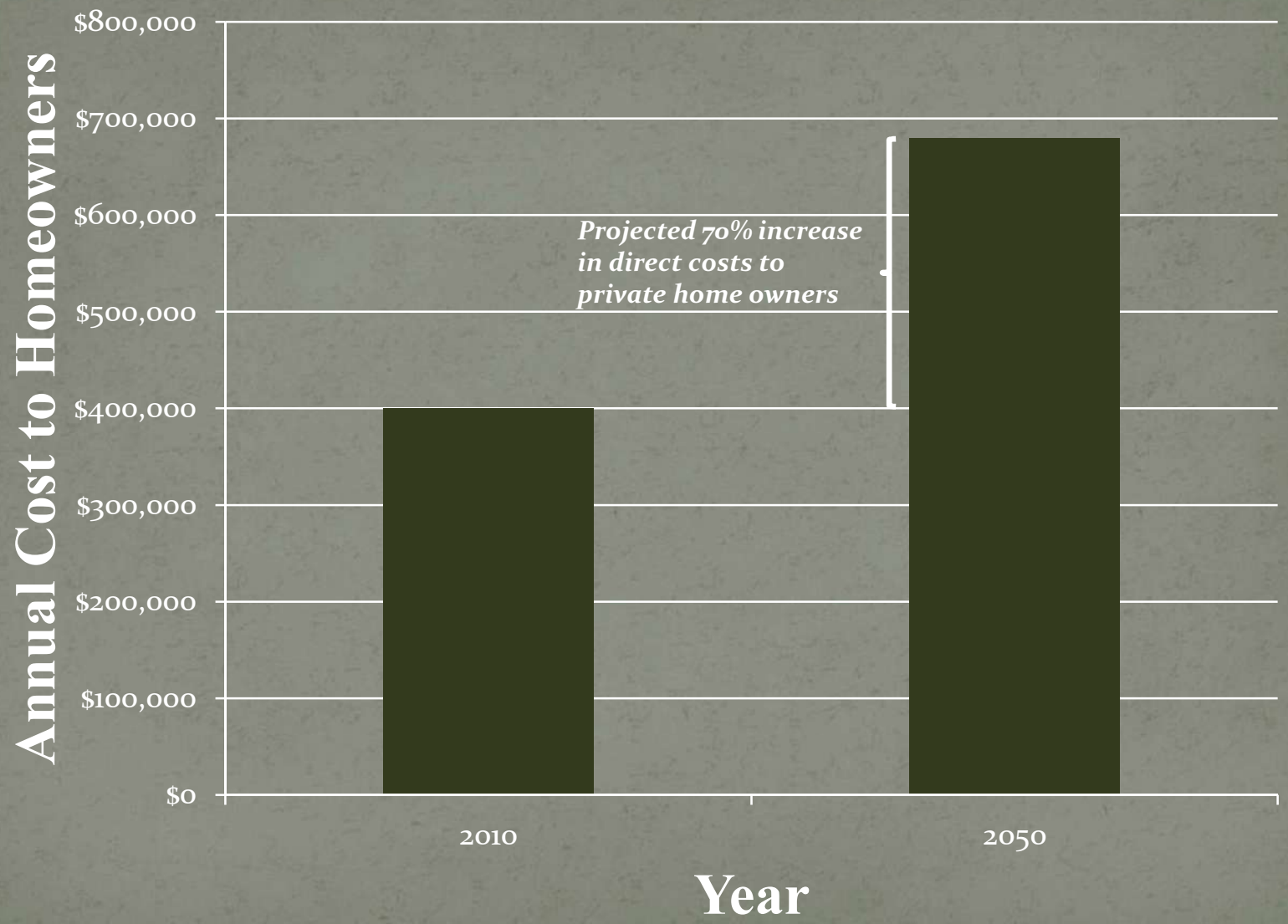
Challenge: Making Connections



Challenge: Making Connections



Challenge: Making Connections



Source: Somers, G. and M. Savard. 2008. *Economic implications of increasing nitrate in groundwater due to climate change, Prince Edward Island, Canada.*

Opportunity: Value Natural Capital

Develop Natural Capital Accounts for PEI. Example:

- UN System of Environmental-Economic Accounting (SEEA) has definitions and internationally-accepted accounting rules;
- Currently used in EU, Australia, South Africa, China, Philippines

Revise programs to reward good land management and recover depletion costs. Examples:

- Retire farmland adjacent to legislated 15m buffer: $185/ha/year
- Leave forest adjacent to the 15m buffer: $0/ha/yr

- Wetland Compensation Fund Model

Alternative Land Use Services
ALUS
Prince Edward Island

Opportunity: Value-added Industry

Natural Capital includes **goods**, not just services:

- forest products are important
- connecting landowners to the value of their forests is important

PEI can't win the high-volume / low-value commodity game. We can:

- support the value-added sector across Departments (development of local businesses and export markets);
- manage forests for high-quality wood; and
- connect landowners and industry to the potential for high-value wood

Challenge: Tax system

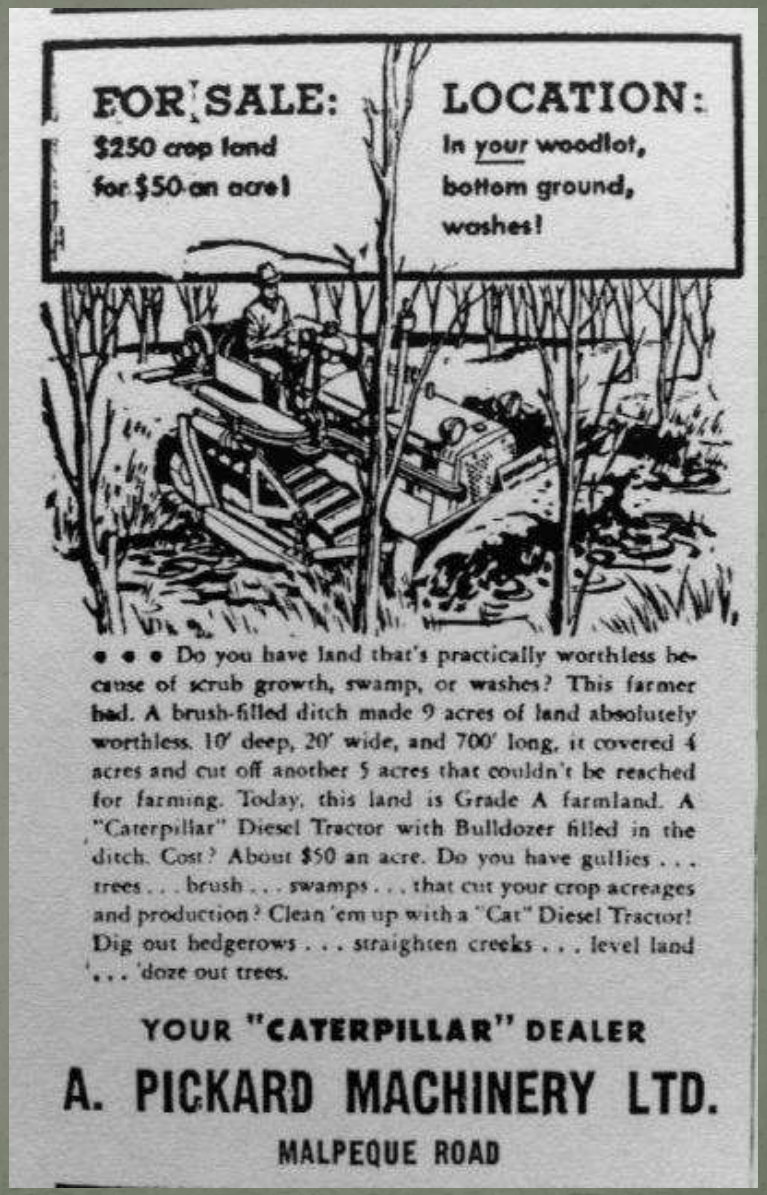
Examples:

• Clearing, leveling and draining land still tax-deductable;

• Provincial property tax ($1/$100 assessment for residents) –

- farm assessment: $150/acre Class 2 clear land
- farm assessment: $75/acre Class 2 woodland
- non-farm assessment: $300/acre Class 2 woodland

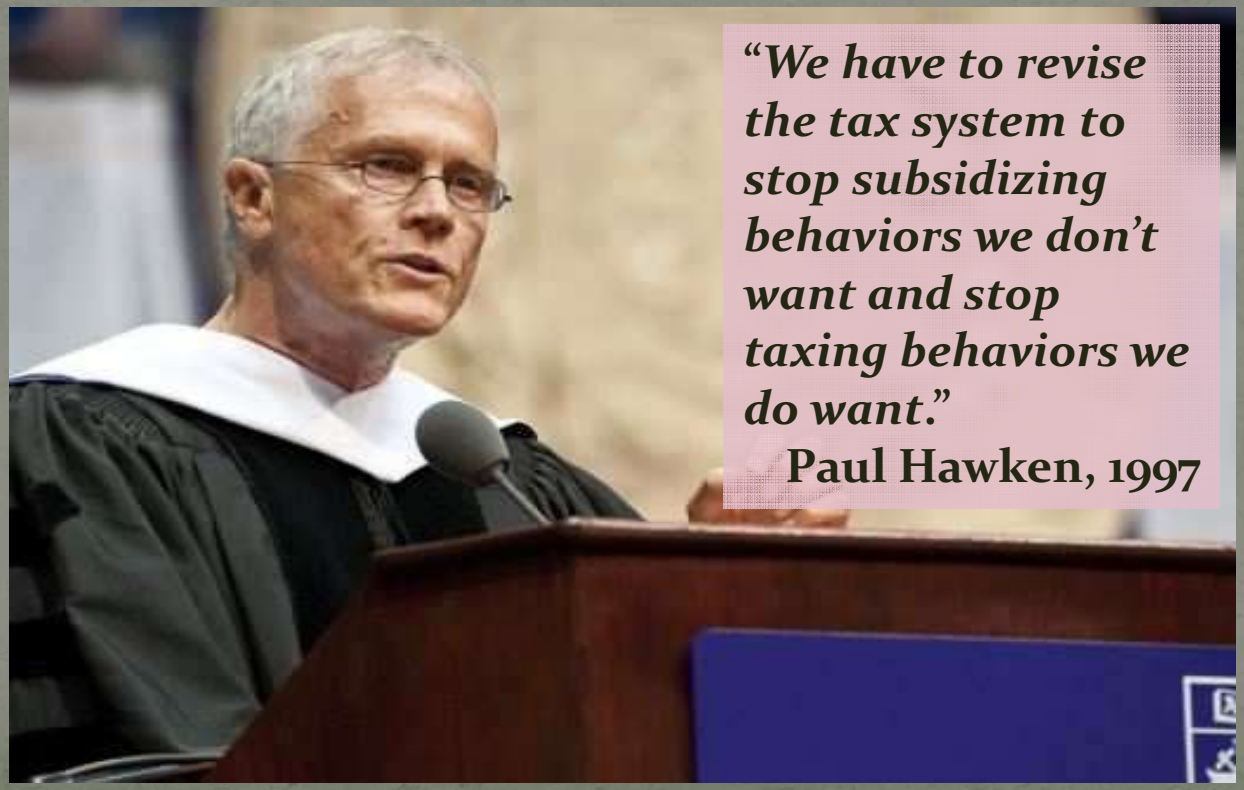
• 100 acres HW CC on Class 2 land under farm assessment = $150 tax/yr
• 100 acres managed woodland = $300 tax/yr



Opportunity: Tax Reform

Examples:

- Link taxation to public benefit
- Deferred property tax
- Capital gains exemption on intergenerational transfers



Challenge: Silos

Departmental programs can be at odds with each other, or with groups' priorities. Examples:

- Removal of hedgerow or forest to accommodate soil conservation structures
- Property-specific rather than landscape-scale forest management

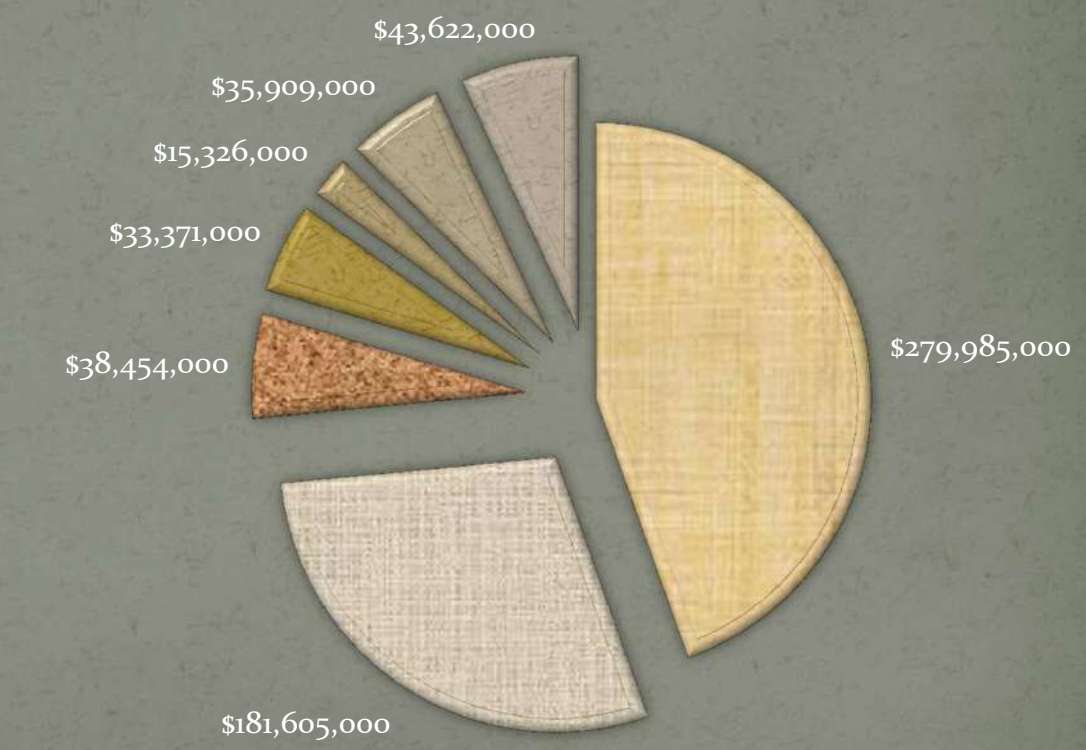
Opportunity: Collaboration

- Among Government Departments (one goal of the Model Watershed);
- Between Watershed Groups and Government (room for improvement); and
- Within watersheds (e.g. buffer zone management, landscape-scale management (ecological and economic))

Opportunity: Cross-Dept Programs

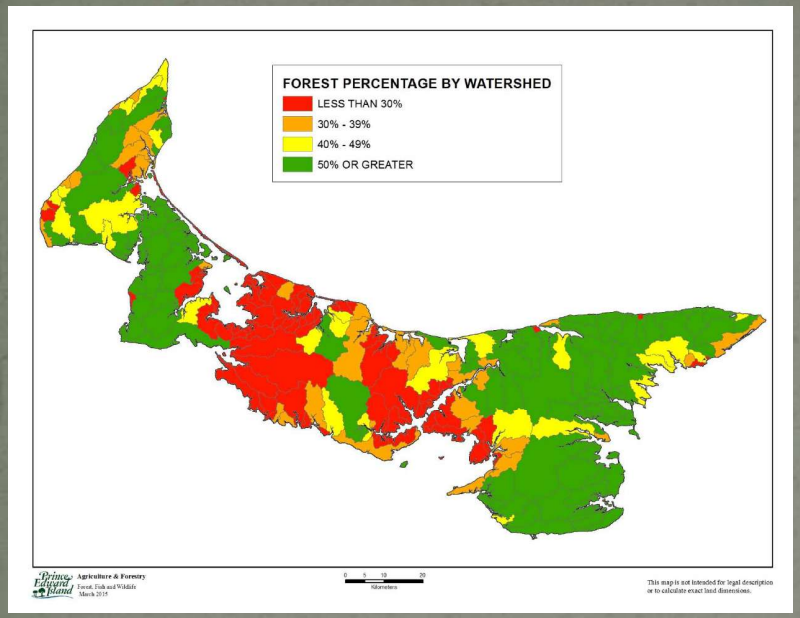
Example:

- $628 Million in farm debt
- Debt relief proportional to conversion of ag land to forest, or contribution to other watershed goals



PEI Farm Debt, Classified by Lender

Challenge: Equality



All watersheds are not equal.

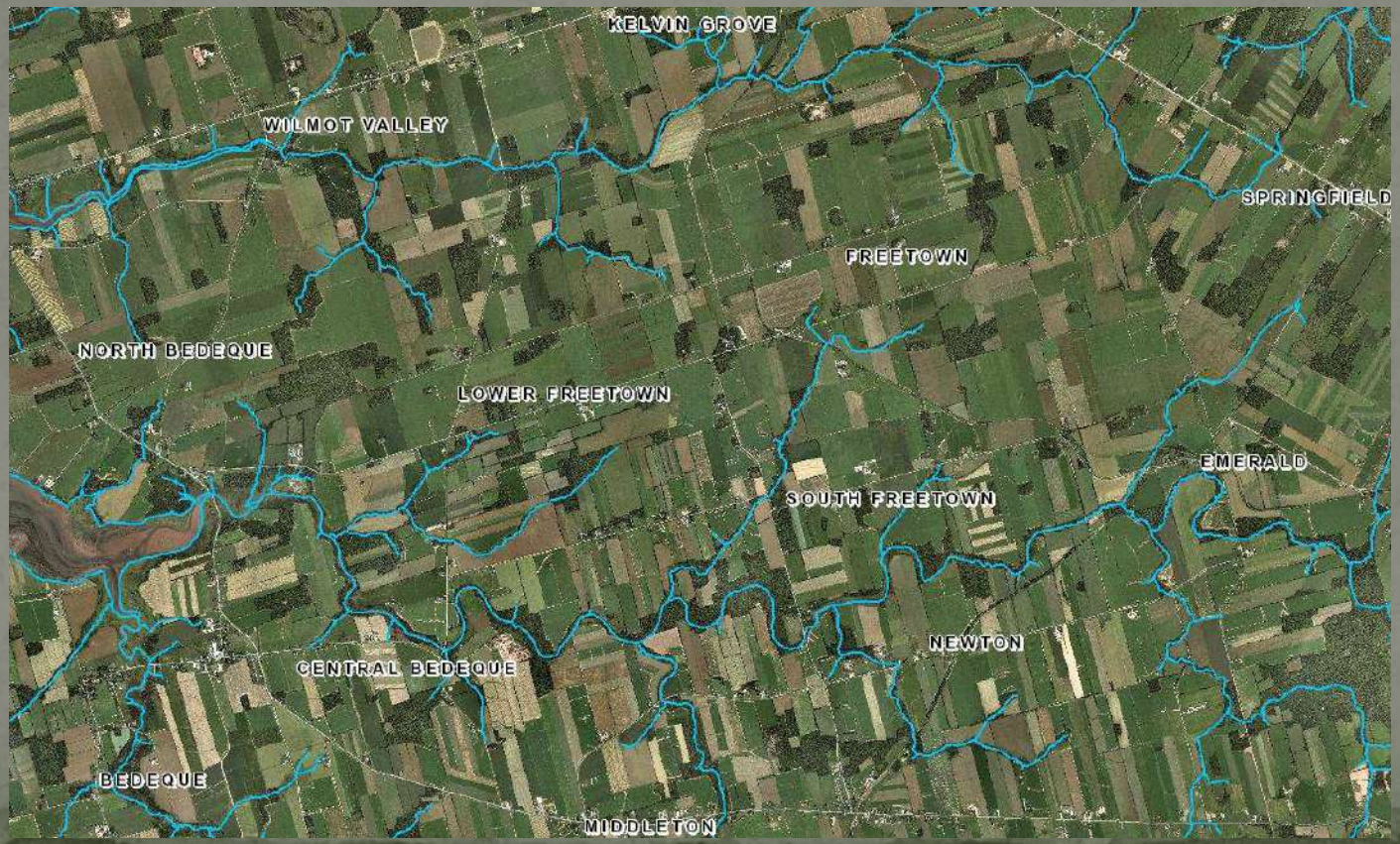
Opportunity: Targeted Incentives

- Design programs to meet watershed goals
- New concepts for Government:
  - not all programs offered in all areas
  - differential incentive rates

Challenge: Land Availability

Land use in some areas driven by agricultural contracts:

- producers may not have the flexibility to decrease acreage
- biggest challenge, with no easy solution;
- will require industry flexibility and diversification – value-added vs. commodity production



Summary: Opportunities

1. Goods and services from forests have real economic value: **calculate it**.

2. Use this value to reward good land management and recover depletion costs.

3. Focus on high-value forest management & industry development

4. Adjust the tax system to support what we want more of and discourage what we want less of.

5. Increase collaboration among Government Departments, between Watershed Groups and Government, and within watersheds.

6. Identify and break barriers: new models such as debt reduction, targeted incentives and flexible industry partnerships.