

Citizen action, perceived quality of life and the environment in the New London Bay watershed of Prince Edward Island

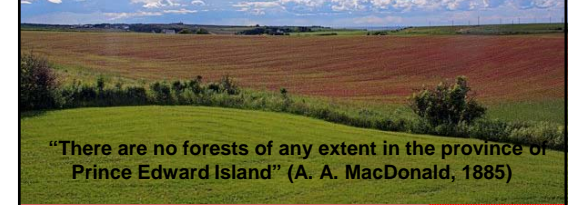


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The onset of massive forest clearance and agricultural development began on PEI after 67 townships of 20,000 acres were given away to British elites, by lottery, in 1767



"... groves upon groves of wilderness woods with here and there a mean house in a small opening erected on the edge of a river" (John Cambridge, 1793)



"There are no forests of any extent in the province of Prince Edward Island" (A. A. MacDonald, 1885)

Today: 50% tree cover but few forest ecosystems



Other trends through time

- Industrialization of agriculture
- Overfishing / collapse of local fisheries
- Introduction of extensive aquaculture
- Shore and riparian development for summer homes
- over 60% of real estate value now within 500m of shore

The environmental consequences of forest clearance persist and have intensified with the transition to industrial agriculture



- Nitrates in groundwater, which provides 70% of flow in streams
- Fish kills from pesticides

Impacts on estuaries



- Shellfish beds smothered by soil in spring runoff
- Shellfish closures due to bacteria from sewage & manure
- Summer sea lettuce blooms, anoxia, fish kills & toxic algae blooms in estuaries due to nitrate overload

Climate change has arrived

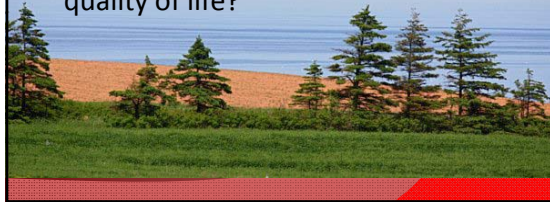


- Coastal erosion
- flooding
- storm damage

Government response: Land Use Commissions of 1973, 1990, 1997, 2009

- hundreds of recommendations, largely ignored
- Movement in indicators of progress since 1997: 9 +ve; 11 -ve; 4 no change; 6 no data
- 2010: Still no comprehensive land use planning (Commission on Land Use & Local Governance, 2010)

In this context, how do people view the environment? What role does environment have in perceived quality of life?



TREC-IIS Study on environment and quality of life: 2004-2009

- 23 in depth interviews with key informants in New London Bay watersheds (Stanley River, Southwest River)
- Mail-out survey to 300 random households: only 29 responses

Do environmental changes affect quality of life? (survey results)

- Air quality: little perceived change, minor impact on QoL
- Forest quality: 1/3 perceived decline but this had no/minor impact on QoL
- Drinking water quality: almost 50% perceived decline in quality and experienced a slight decrease in QoL
- Stream & ocean water quality: over 50% perceived decline and experienced slight to major decline in QoL as a result

Social factors

- Increased volunteerism and sense of belonging = improved QoL
- Influx of newcomers / seasonal residents = decreased QoL for some
- Majority want involvement in watershed management
- Time stress, poor health reduced capacity for engagement in such community work
- Full employment = great/good/OK QoL; part time = good; retirement = good / OK or occasionally diminished QoL

"20 years ago you could boat right up to the bridge; now it's just all full of silt"

"New London Bay seems lifeless"

"When it goes anoxic I would not want to swim in it"

"The smell is nearly unbearable"

"There's no clams, they are all smothered"

"I haven't tested my water but I believe it's polluted"

Dominant citizen concerns (survey & interviews):
water pollution from farm chemicals & soil erosion



Other concerns include: Mussel aquaculture

"That industry's just got too big too fast on PEI"

"We hold meetings trying to get the mussels out of the little rivers."

"There's a lot of leases have been given out that shouldn't have been given out."



The decline of agriculture

Increased scale: "There used to be a lot of small farmers and now there are very few. Its gone to mostly large scale farming."

Decreased viability: "Forty years ago when I started farming here, you could have farmed almost any commodity and made a living on it. I don't know what you can make a living on any more."

Increased coastal & rural subdivisions

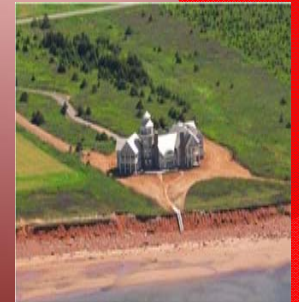
"He just got a septic system put in. How he got it passed I don't know, because it's within 50 feet of the shore."

"More trees have been cut... to have more lot developments around the river."



Seasonal mansions

"Rich, fancy houses, I just think it's disgusting... they're not adding anything, just taking away from the community."



Land regulation (or lack thereof)...

The view from the ground.....

"Some of the regulations for the buffer zones are ridiculous. They let them farm... right to the marsh."

"As far as farmers go... they have a lot of pull with government so you see a lot of abuse of the land."

Recognition of the need for stricter laws, and consistent enforcement

"You know, in a lot of bigger places there would be charges laid for that kind of damage that was done.... I don't know if we don't value our water systems enough?"

"This is the biggest problem on PEI – the corruption in the government."

Farmer's resistance to land use regulation, government interference

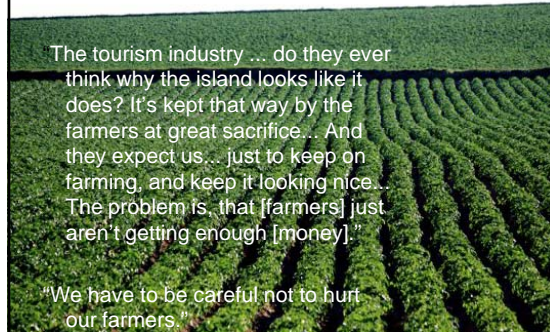
"I find that it's almost too much public control on what the individual farmer does... I don't think the buffer zones should be near as wide, because if there is going to be thirty feet of weeds, that is going to be disgusting."



Need for farm land protection

The tourism industry ... do they ever think why the island looks like it does? It's kept that way by the farmers at great sacrifice... And they expect us... just to keep on farming, and keep it looking nice... The problem is, that [farmers] just aren't getting enough [money]."

"We have to be careful not to hurt our farmers."

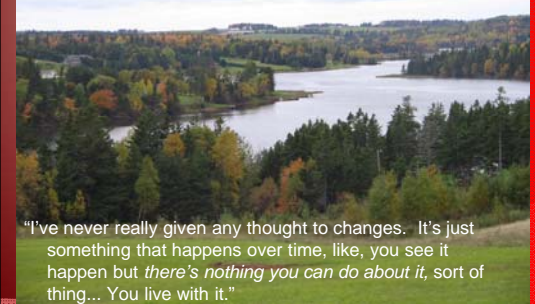


Resistance to "environmentalism"



Approach it in a positive way ... "not in an environmental activist type way which turns government and farmers off".

Disempowerment...



"I've never really given any thought to changes. It's just something that happens over time, like, you see it happen but *there's nothing you can do about it*, sort of thing... You live with it."

Perceived lack of capacity among government staff

"I've come to the conclusion that we've got people sitting in offices designing programs to give themselves work."

"I don't think anyone has any concept in the department of agriculture what the full circle of life is."

Growing recognition that we can't have it all...

"In my humble opinion we should never be growing GMO's, never! And sometimes there is sacrifice connected with that... In my family... we ate what was good for us, not necessarily what we wanted."



What defines Quality of Life? surveys reveal differences between watersheds...

Tyne Valley area

- #1 Community social well-being (safe, supportive)
- #2 Personal well-being
- #3 Positive social relations (friends & family)
- Money and the environment were at the bottom of their list

Stanley Bridge area

- #1 Personal well-being (health, freedom, hobbies)
- #2 Healthy environment and beautiful landscapes
- #3 Community social well-being

Money was at the bottom of their list

Why was environment so prominent?

Possible answer: Trout River Environment Committee active in New London watershed since 1993, vs No watershed group in Tyne Valley.



Trout River Environment Committee



- led by local people
- includes and works with farmers
- Offers opportunities to volunteer in hands-on restoration work

The role of TREC in shaping public perception

People appreciate TREC's positive, collaborative approach

All respondents were aware of and supportive of TREC programs

Almost all enjoy receiving TREC newsletter

Most feel need for more environmental education; some need additional supports



What TREC Needs (local view)

more government funding support
more people to get engaged
greater power in decision-making



Peoples' view of the Provincial role

- funding for watershed groups
- effective legislation & enforcement

"If we are going to have rural planning it has to come from the Provincial level because if you try to tackle that at the community level, you get neighbour against neighbour and ... it's hard to look for the greater good when you're dealing with your neighbour's livelihood."



Key Conclusion

- Watershed groups such as TREC can have a profound influence on public perception of the environment and its role in supporting quality of life.

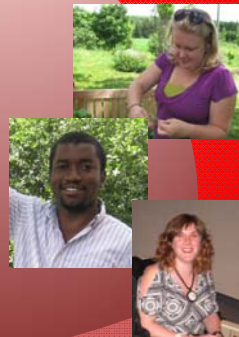
Thanks! To our community partners

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- Quality of Island Life Co-op



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