

Coastal Planning and Legislation

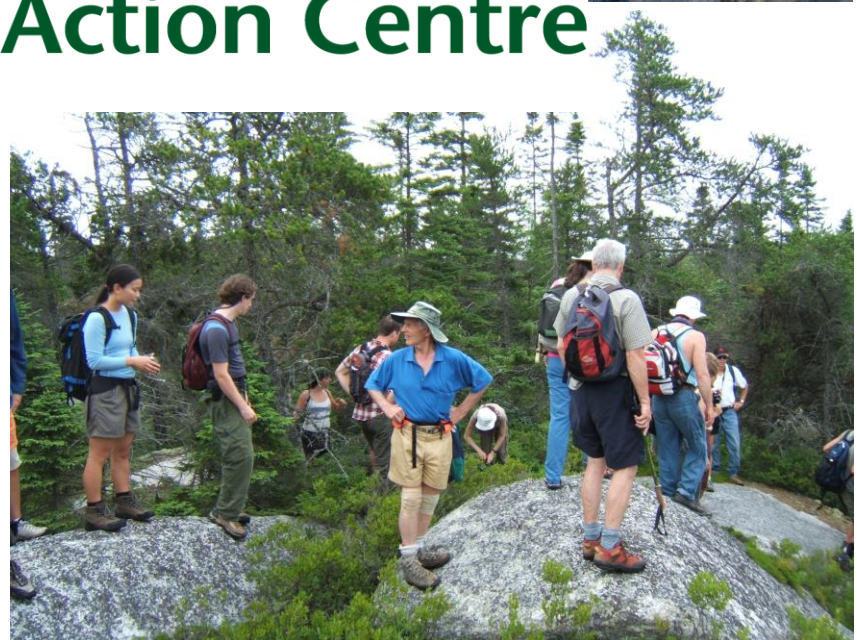
Robin Tress

Ecology Action Centre





Ecology Action Centre



Robin Tress, coastal adaptation coordinator, coastal@ecologyaction.ca

A man with short, light-colored hair, wearing a dark suit jacket over a dark shirt, stands behind a clear acrylic podium. He is looking slightly to his right. A name tag is visible on his chest. The background consists of a light-colored wood-paneled wall on the left and a dark blue wall on the right. A modern, white, conical lamp fixture is visible on the right wall. A door with a brass handle is partially visible on the left.

KEVIN SMITH
MARYLAND DEPT. OF NATURAL RESOURCES

How to start solving
these problems?
What can you do?

— stories: good + bad.
 • government responds to media.
 • Humans respond to stories.

- Define the problem.
evidence to show we're losing ecosystems + land
gov + universities.

economic evaluation of things, monitoring is daunting, small input.

+ culture + awareness
+ stories + pressure

Action

CHAMPION

[illegible]

Problems / Barriers

- Lack of commitment to equity work in general
 - To do projects that need long-term commitment is regarded as irrational in competitive situation esp. in
- Public hostility (concerns of costal adaptation issues)
- Lack of data resources to inform policy

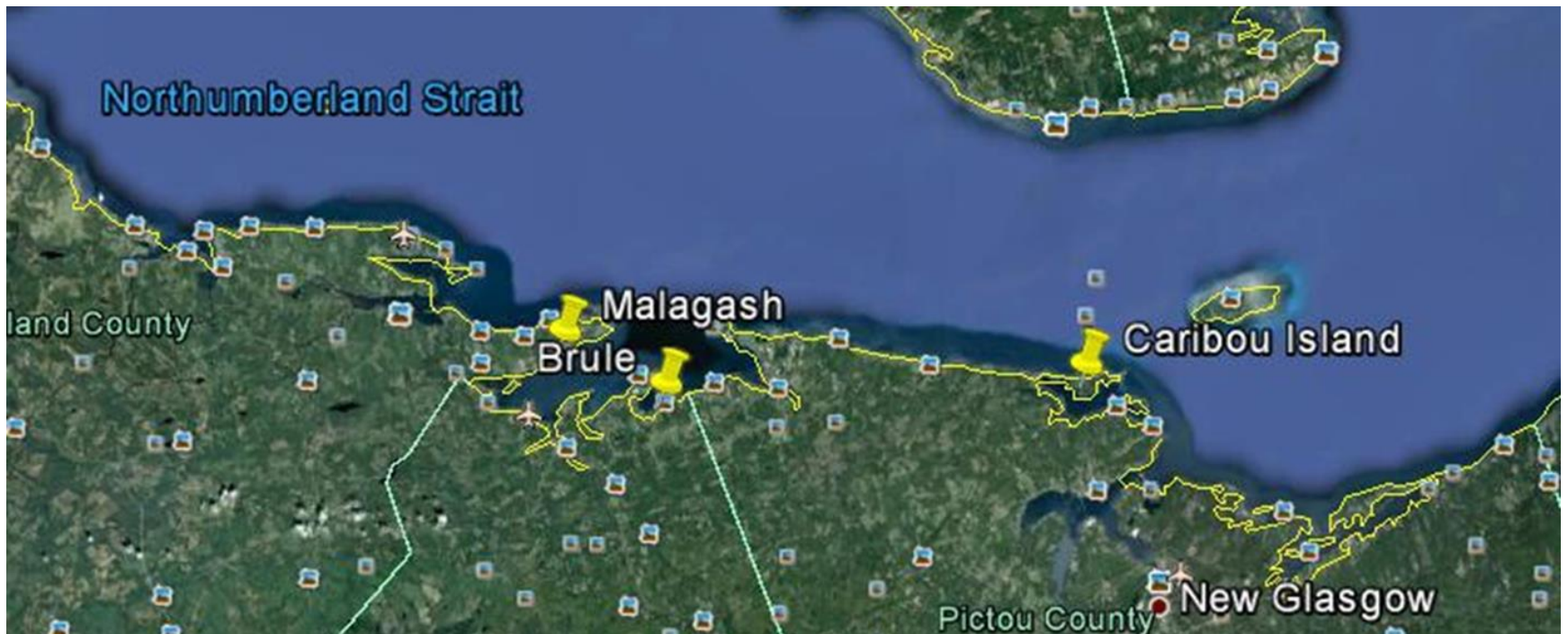
Tendency to separate organizations and different management schemes (capital, technology, etc. must be built in harmony)

Two distinct philosophies are present in the way business and industry view the relationship between elected officials and

- lack of data + resource
to get data.
fact + ~~sign~~ science-based
decision making suffers.
research to show
S. function +

ecology
ulate
ely

Living Shorelines in Nova Scotia



Brule Shore



Planting Day, Late May 2013



Early September 2013



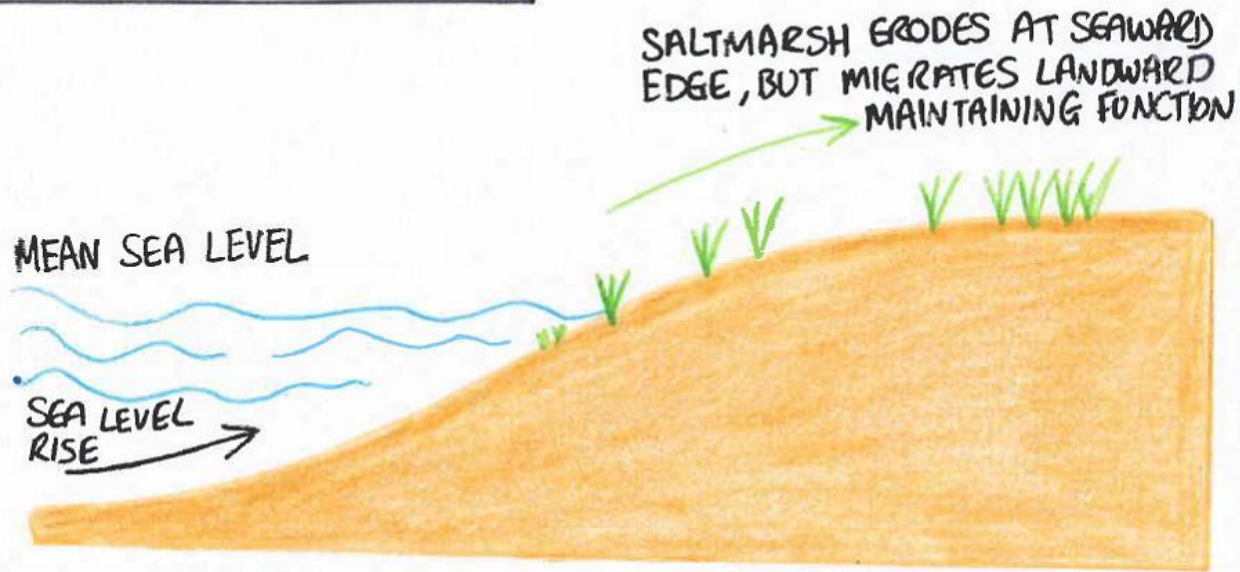
Willow Stake September 2013



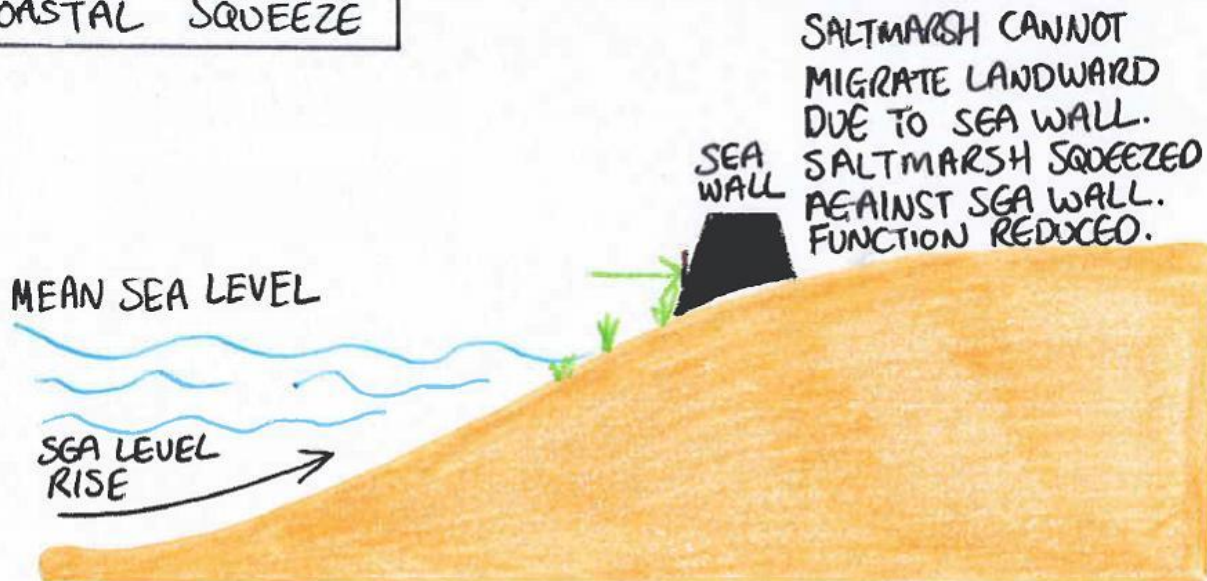
Late April 2014



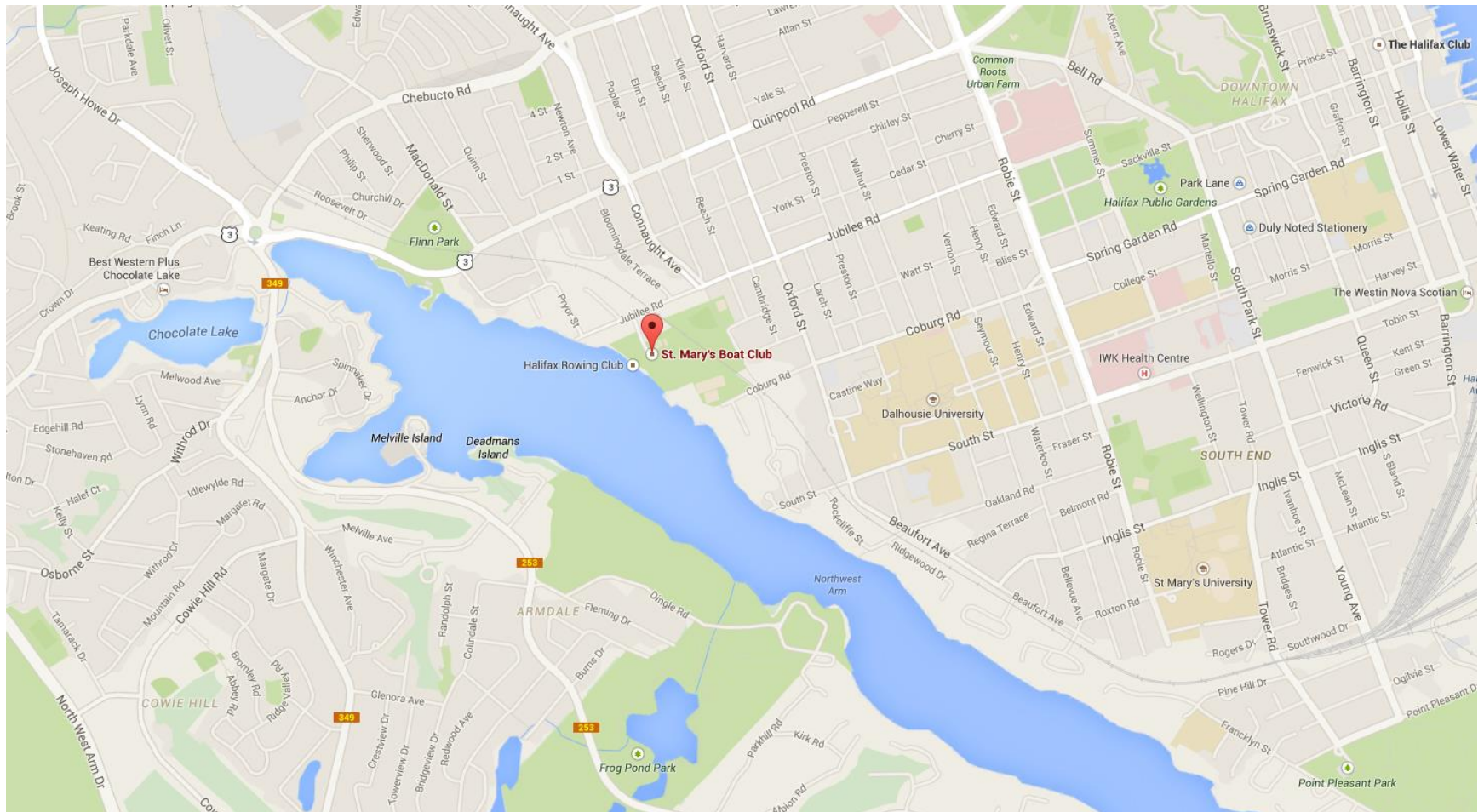
NATURAL HABITAT MIGRATION



COASTAL SQUEEZE



Saint Mary's Boat Club







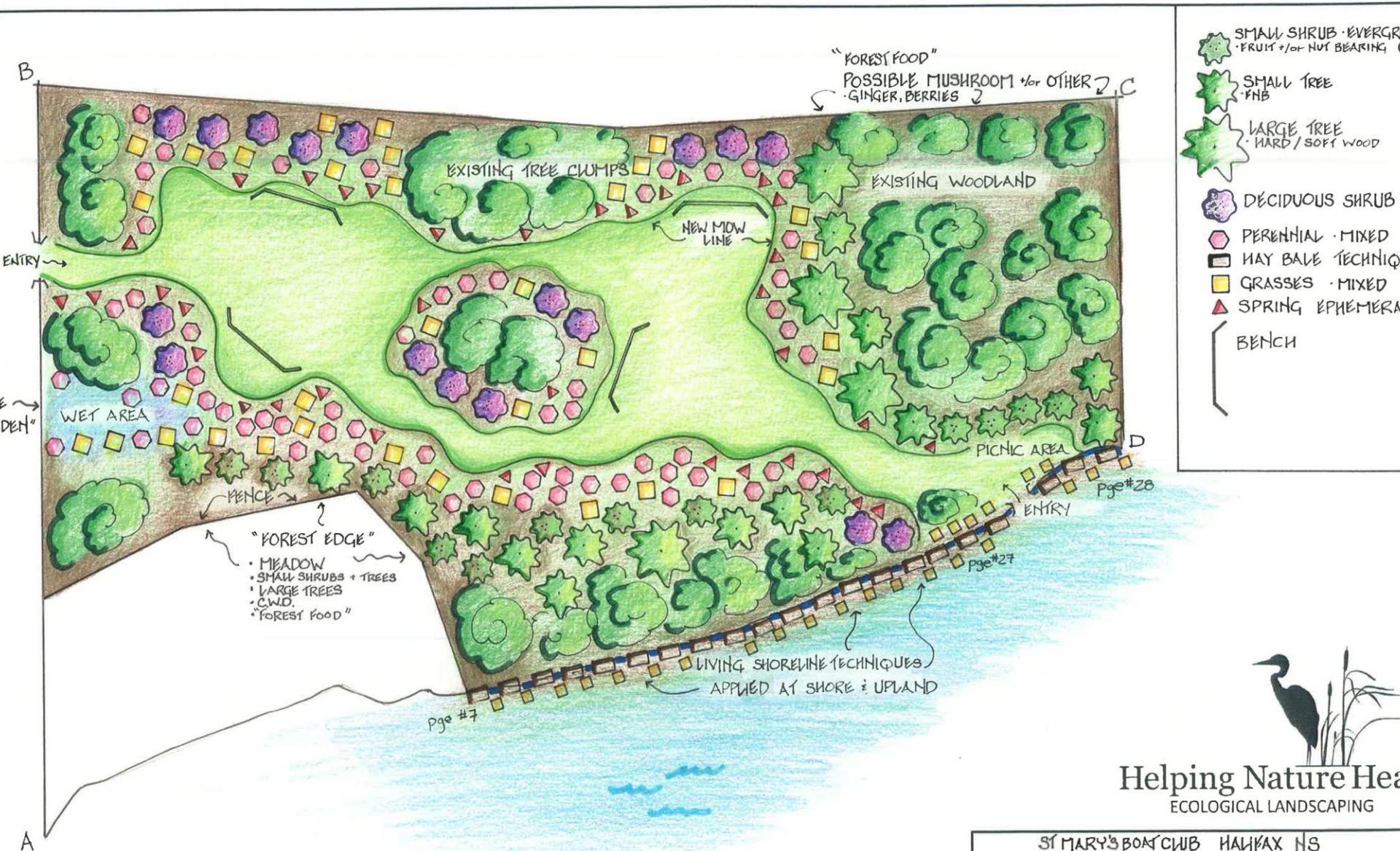




Contributions to the UFMP

- A1: 40% canopy cover
- A3: Native species
- A9: 80% canopy cover in riparian zones
- A10: Educate about trees in riparian zones
- A11: Give priority to planting in parks and schools
- A15: Innovative interpretation for the public
- A16: Citizen led urban forest initiatives
- A18: Urban forest research and monitoring
- A20: Partner with non-governmental sector
- A23: Urban forests as stormwater management





Helping Nature Heal
ECOLOGICAL LANDSCAPING

ST MARY'S BOAT CLUB HALKAX HS
LIVING SHORELINE PROJECT

©RLOHNES

2015

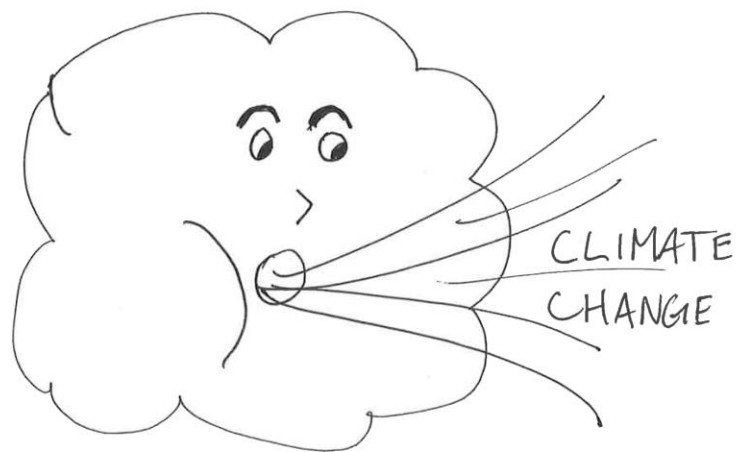
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Why am I here today?

- Define the 'coastal problem'
- Point to solutions and successes
- Suggest things planners can do

Nova Scotia's coasts

- 15% of economy derived directly from coast
- Vast majority of us live near the coast
- Every municipality has different plans, every provincial department has a different idea
- Poor public understanding of coast and how it works
- Really complicated regulatory bodies
- Climate impacts: SLR, flood, erosion, etc



Without a coastal clue, we get this:







MAXIMUM
50

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WILL BE P

Solutions: what's being done?

- Almost Coastal Strategy (2012)
- EAC is asking for a Coastal Act
- Buffers and setbacks
- Other planning bylaws

Overarching research

- U. Waterloo: adaptation priorities for Canada
 - Integrate climate considerations into every budget line
 - Embrace ecosystems as infrastructure
 - Infrastructure: can the remaining service life handle climate projections for that time period?
 - ‘No regrets’ climate policy

Maryland: Living Shorelines Law

- Requires living shorelines to be implemented in favour of other engineered structures unless otherwise approved
- Enables cities and towns to do amazing things, like Baltimore:



Bras D'or Planning Standards

- Coastally focused
- Values coastal ecosystems for providing services and protection
- Written like a bylaw – easy to adapt and implement
- Includes watercourse setbacks, awareness and education programs, and cooperation between governments

BRAS D'OR LAKES DEVELOPMENT STANDARDS
Handbook

March 2008

Prepared for:
Bras d'Or Lakes Collaborative Environmental Planning Initiative

Prepared by:
EDM • Environmental Design and Management Ltd.



Halifax

- Vertical development setbacks (3.8m)
- EAC runs flood reduction workshops, especially in the summer
 - Rain gardens
 - Living Shorelines
- Flood risk assessments for Sackville River

Truro 2012



Photo: Chronicle Herald

Colchester: LiDAR, flood risk analysis

- Flood mitigation infrastructure: berms, dykes
- Flood risk analysis: LiDAR, vulnerability assessments
- Joint Flood Advisory Committee

Calgary 2013



Photo: Calgary Herald

Calgary's new bylaws

- Only parks and utility lines are allowed in floodways
- No new buildings, outside storage, limited additions to existing buildings
- Setbacks from rivers and floodways
- Sewer backup valves for existing buildings in flood zone
- Alberta: built a dry dam around Calgary rivers

To add another layer of urgency:

- Federal disaster relief transfers, provincial mitigation funds have been slashed.
- Threshold for disaster relief is now \$3M, not \$1M
- Truro: would have got \$250,000 not \$1.5M
- H. Juan: under new rules NS would lose \$12M in federal assistance

Take home message

We can't wait to spend millions or billions in repairs before we take coastal and inland flooding seriously.

We can do it now.

Ongoing research

- U Waterloo: municipalities have implementation power
- DFO: specific sea level rise and storm surge vertical development allowances
- CLIVE: visualizations of sea level rise
- Living Shorelines across the province

What you can do

- Updating bylaws
 - Subdivision bylaws
 - Parks and protected area zoning
 - Floodway land use
- Support coastal strategy and legislation

Thank you

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Action
Centre**