

An Overview of Adaptation Planning in the Canadian Forest Sector

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Definition of Adaptation

- ▶ A change in forest management activities that helps reduce the negative impacts, and allows us to take advantage of the opportunities, associated with climate change
- ▶ Does not include physiological or genetic adaptation

Factors to consider in adaptation planning

- ▶ What are we adapting to? (i.e. impacts)
- ▶ What are we trying to accomplish through adaptation? (i.e. deliver SFM in the future)
- ▶ What tools do we have to help choose among adaptation options? (e.g. SFM C&I, legislation, certification, etc.)
- ▶ What is our ability to implement adaptation? (i.e. adaptive capacity)

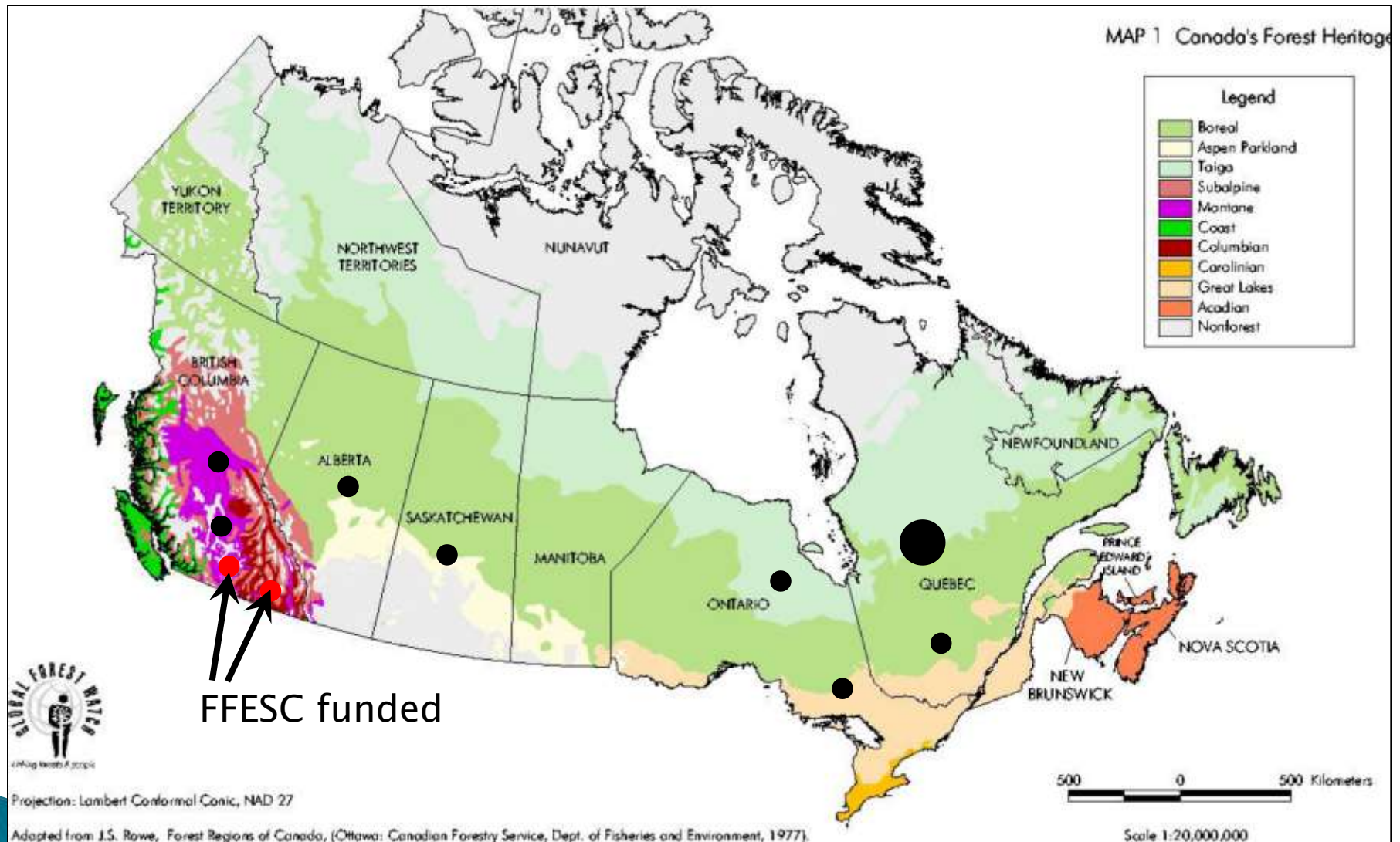
What do we know about forest sector adaptation in Canada?

- ▶ Two recent initiatives have captured much of what is happening in adaptation:
 - CCFM Forest Sector Vulnerability study
 - NRCan Regional Adaptation Collaborative (RAC) program

CCFM Forest Sector Vulnerability Assessment

- ▶ Phase 1: two existing products
 - Tree Species Vulnerability study (see poster)
 - Forestry Carbon Offset Guidelines (CCFM website)
- ▶ Phase 2 will have several outputs
 - Assessing Organizational Readiness for VA
 - Framework for VA
 - VA Guidebook
 - Special reports: climate scenarios, adaptive capacity, assisted migration, climate change indicators
 - Case studies

Case studies



Case studies

- ▶ Not funded by CCFM; project leaders were interviewed for case study synthesis, many involved in other aspects of CCFM study
- ▶ Case study leaders and others held three workshops 2010–2012
- ▶ Included local initiatives, FFESC, and RAC projects
- ▶ Wide variety of approaches:
 - Biophysical modeling
 - Policy analysis
 - Community-based
 - SFM and ecosystem-based management

Main conclusions from VA case studies (1)

- ▶ Enabling factors:
 - Funding!
 - Data at appropriate spatial and temporal scales
 - Must have both biophysical and social science expertise
 - A local champion to bridge the gap between researchers and the community
 - Guidance frameworks, e.g. the CCFM products
 - Merging of traditional/local knowledge and science

Main conclusions from VA case studies (2)

- ▶ Adaptation options were developed in some case studies, but awareness, capacity building and understating of vulnerabilities were more frequently the result and seen to be more valuable
- ▶ There is high value in developing stakeholder groups that can advise the modellers/researchers
- ▶ Uncertainty is difficult for stakeholders to understand; starting with current vulnerability is useful
- ▶ Need a thorough discussion of non-climate factors that may be important

Main conclusions from VA case studies (3)

- ▶ Many barriers to implementing adaptation were identified, e.g.:
 - lack of financial and human resources;
 - challenging technical and analytical requirements requiring specialized expertise;
 - commitment by several levels of government;
 - lack of policy and regulation for VA

Main conclusions from VA case studies (4)

- ▶ Lack of readily available climate products
- ▶ Large technical reports not useful; awareness and capacity-building much more important
- ▶ Few examples of mainstreaming currently
 - Could use municipal by-laws
 - Provincial regulators could include VA requirements in planning guidelines for industry
 - But will need to phase these options in over time as expertise and understanding accumulates

Take Home Message

Adaptation is not an end in itself, but a means to an end:

Continuing to deliver Sustainable Forest Management in a changing environment!