Methodology for Making Non-Detriment Findings For Tree Species in Canada

September 16, 2015

Meeting of the Working Group of Experts on Non-detriment Findings.
Practical guidance for trees included in CITES

Natural Resources Canada
Ressources naturelles Canada

Canada

Presentation Outline:

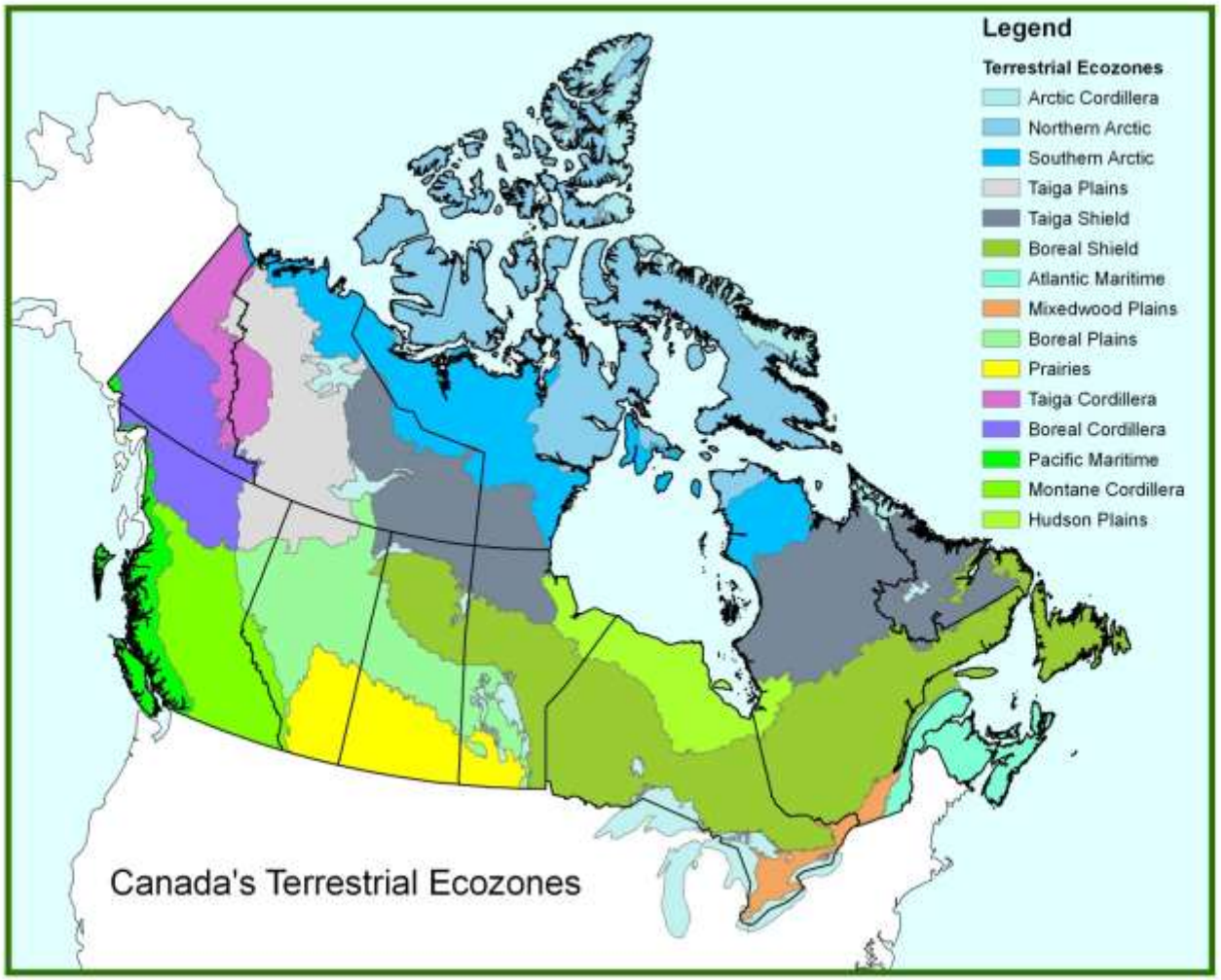
- Characterization of Canada's forest regions and ecozones
- Endangered tree species in Canada and causes
- Overview of Canada's forest ownership, management and harvest regime
- Overview of standard approach to NDF's in Canada
- Identification of forest-specific information sources for making tree species NDF's

Overview:

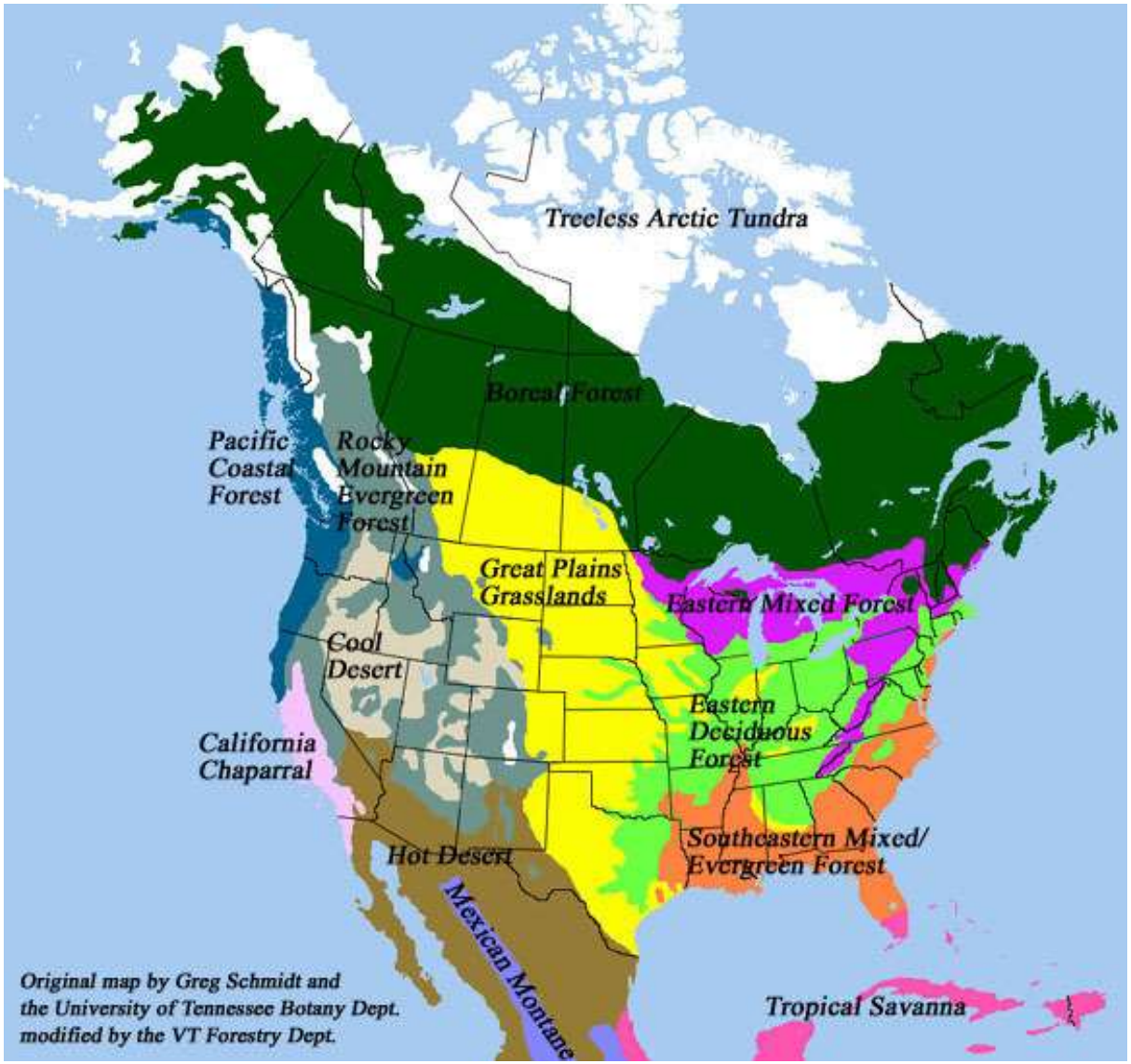
- To date, no non-detriment (NDF) finding required for a Canadian tree species
- Characteristics of forests and forestry in Canada largely mitigate trade-generated population decline, however;
- Potential NDF-generators could be higher taxa CITES listings, look-alike species, invasive species, climate change
- General NDF process in Canada is consultative, harvest-focused and applicable to tree species
- Standards and reporting required for sustainable forest management are rich data sources for NDF development

Canada's Forest Regions

Canadian Terrestrial Ecozones



North American View of Forest Types



Tree Species at Risk in Canada

- Eight species having highly restricted ranges:
  - Endangered: *Betula lenta*, *Cornus florida*, *Magnolia acuminata*
  - Threatened: *Celtis tenuifolia*, *Fraxinus quadrangulata*, *Gymnocladus dioicus*, *Ptelea trifoliata*
  - Special Concern: *Quercus shumardii*
- Four species impacted by invasive pathogens:
  - Endangered: *Castanea dentata*, *Juglans cinerea*, *Pinus albicaulis*, *P. flexilis*
- One species impacted by hybridization with, and replacement by an exotic tree species
  - Endangered: *Morus rubra*

Species at Risk Act. S.C. 2002.

Canada's Forests & Management Regime

- 348,000,000 hectares of forested land
- Few native tree species, many with extensive ranges
- Regeneration (rotation) periods long (often 100 years+)
- Grow rates modest
- Extensive forest management in natural forests
- Harvest and silvicultural techniques designed to emulate natural disturbance (wildfire, insects, blowdown)
- Plantation-based forestry limited

Forest Ownership and Tenure

- 94% of forested land publicly owned and administered
- 90% owned and administered by Provinces and Territories
- Federal government responsible for international trade agreements, strategic research, national compilation and reporting of forestry data
- Harvesting licenses granted to private companies in exchange for payment of royalties
- All jurisdictions require operators to practice sustainable forest management aimed at maintaining and enhancing the long-term health of forest ecosystems

General Form of a Canadian NDF

- Summary of Finding
- Summary of Trade Aspects
- Supporting Information
- Harvest Regime
- Biological Characteristics
- Status
- Harvest Management
- Control of Harvest
- Harvest Trend
- Harvest Monitoring
- Incentives and Benefits of Harvest
- Protection from Harvest
- Jurisdictional Break–down

Data Source: Forest Management Plans

- Plans are renewable, cover a period of 10 to 20 years, are prepared by the company seeking permission to harvest
- Plans require licensee to continually:
  - assess the current state of the forest
  - detail the desired future state of forest values
  - identify management objectives
  - describe harvesting, regeneration and silvicultural systems
- Plans require licensee to develop:
  - Timber surveys (species, volume present)
  - Maps of operating and sensitive areas
  - Outline of harvest system and silvicultural inputs
- All licenses stipulate a fixed allowable cut

Additional NDF Data Sources for Tree Species

National Forestry Database

http://nfdp.ccfm.org/index_e.php

- Forest inventory
- Wood supply data
- Forest disturbance data
- Forest trade data
- Silvicultural data

Third Party Certification Systems

http:// Certificationcanada.org

- Canadian Standards Association
- Forest Stewardship Council Canada
- Sustainable Forestry Initiative

Changing Forest Management Paradigms and NDF Implications:

Sustainable Yield Management

- Well-adapted (initially) to projection of harvest level over time
- Likely to generate strong site-level and species-specific NDF data
- Less likely to assess or maintain the historical role of the species in the ecosystem

Sustainable Forest Ecosystem Management

- Adapted to projection of population status over time
- Likely to generate strong regional- and ecosystem-specific NDF data
- Aimed at assessing and maintaining the historical role of the species in the ecosystem

Conclusion:

- Development of an NDF for a Canadian tree species would follow a process consistent with NDFs made previously
- The NDF process would require a multi-jurisdictional collaborative exchange of knowledge by a range of stakeholders
- Data requirements identified in existing CITES NDF guidance for tree species could be met largely by reference to legally mandated forest planning, monitoring, harvesting and reporting information.

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