Urban Forestry at the Science - Policy Interface:
Contributions and Concepts

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Historical CFS Presence in Urban Forests:

- Focus has been on science-based solutions that address forest invasive alien species (FIAS), the arrival point for which has always been urban forests.

- Taxonomic expertise
- Survey and detection
- Biological controls
- Species-specific molecular tools
- Risk analysis
- Research-based relationships with municipal foresters

- Arguably a “one forest” policy rather than a dedicated approach to urban forest science.
Urban Forest Issues have Broad Science Policy Significance:

- From a science policy perspective, knowledge gained in FIAS research and risk analysis supports international market access for Canadian forest products and Canada’s environmental reputation.

Points of Engagement

- Canadian Council of Forest Ministers
- National Forest Pest Strategy
- North American Forestry Commission
- North American Plant Protection Organization

- CFS engagement with the Canadian Food Inspection Agency supports regulatory actions required to address IAS challenges in Canada and internationally.
FIAS in Urban Forests Demand Financial Investment:

- Fiscal 2014-15, CFS is investing $6.9M to respond to invasive alien insect pests and diseases that threaten Canada’s forest resources.

- Fiscal 2014-15, CFS is investing $1.47 M to develop knowledge and tools aimed at detecting, controlling and mitigating emerald ash borer impact.

- CFS invasive alien species research is supported by the IAS Strategy for Canada program, which provides about $2M of annual ongoing funding.
NRCan-CFS will also work to better connect with Canadians who live in urban communities. The quality of life for those Canadians depends, in part, on a healthy environment that includes urban forests. NRCan-CFS is increasingly providing science and policy leadership on matters relevant to urban forests across the country.
The State of Canada’s Forests, 2014:

Urban forests are also recognized for their considerable benefits, including helping to reduce surface and air temperatures in cites and to improve air and water quality. Additionally, a recent study by TD Economics found that for every dollar spent on tree maintenance in Toronto, urban trees returned about $8 in environmental benefits and cost savings each year.

State of Canada’s Forests, Annual Report 2014   Page 31
Analysis of CFS Engagement in Urban Forestry – Next Steps:

- Internal strategic policy statement and vision to guide CFS engagement in urban forestry issues.
- Sharing of scientific knowledge, technical expertise and technology with key stakeholders.
- 1-2 pilot-scale, urban forestry research projects with medium-sized cities.
- Synthesis of research opportunities, gaps, and potential new science for urban forests.
Visioning: Potential New CFS Urban Forest Research Areas

- Urban forest inventory and monitoring
- Remote Sensing
- Genome research, identification of tree species and provenances adapted to urban forests
- Gene identification for best trees in future climates
- Climate change risk and adaptation
- Carbon accounting
- Urban ecosystem dynamics
Policy Visioning: Models for Urban Forest Engagement

- New partnerships and relationships
- New tools and apps, social media
- Citizen science
- Socio-economic studies
- Detailed valuation of urban forest goods and services
- Quantification of IAS costs
- National-level information on the status of urban forests
Reality Check: Managing Expectations

- The increasing CFS focus on urban forests will be directed to areas where there is demand, where CFS has capacity, and where we can have an impact.

- CFS is looking to increase impact by seeking new engagement and funding opportunities including through collaboration with communities, organizations and dedicated urban forestry agencies.
Proposed CFS Urban Forest Vision:

- “A healthy forest canopy in communities throughout Canada, contributing to quality of life of all Canadians, and to the sustainability of Canada’s forest resources.”