FORESTRY FUTURES TRUST ONTARIO

Enhanced Forest Productivity Science Program: A Case Study

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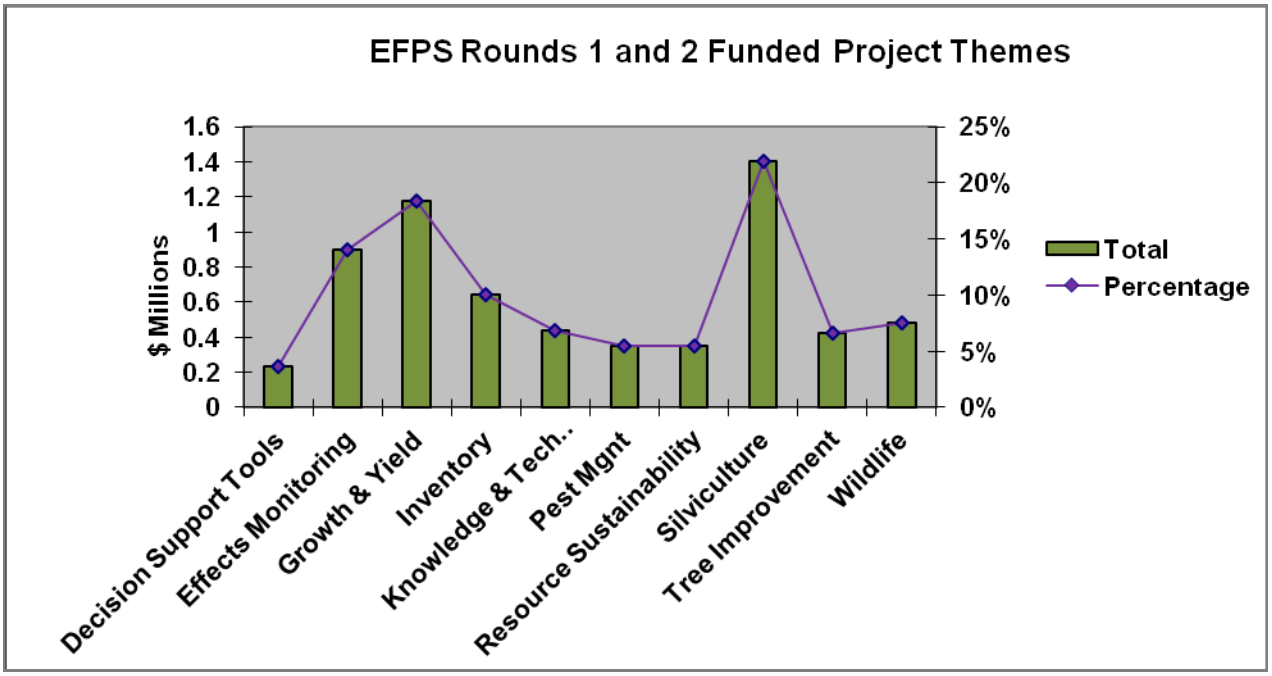
The enhanced Forest Productivity Science (EFPS) program was established in January 2005 to encourage and support applied research to better define, and find solutions for an identified near-future wood supply shortage. It was a three year initiative announced by the Minister of Natural Resources, with a total commitment of $6.9 million from the Forestry Futures Trust Fund. The program, designed and managed by the Forestry Futures Committee, funded 42 projects. The EFPS program successfully mobilized applied research and outreach programs that contribute to a better understanding of how to enhance site productivity and mid-term quality wood supply through management interventions and informed decision making.

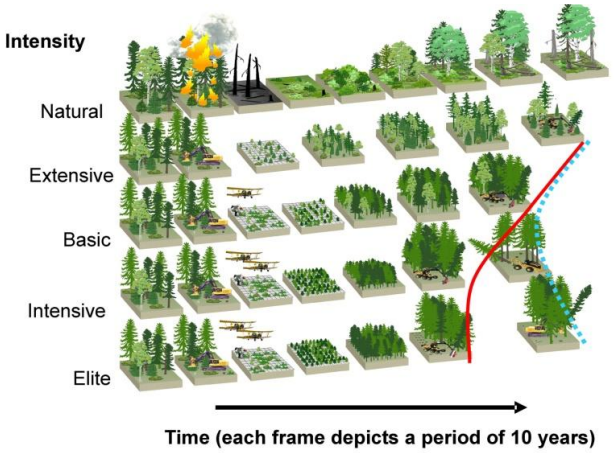
The two rounds of applications were categorized across ten themes. The graph below displays the total program funding and percentage of projects funded per theme. A key requirement of the EFPS program was that researchers share their information. This was accomplished by developing decision support models, reports that were widely distributed, yield and crop plans and training and extension programs. An average of 20 presentations, workshops, datasets or papers were developed from each approved project (based on a 10% sample of completed projects). The following text describes three representative projects funded through the program. A complete list of projects with short descriptions is posted on the FFTC web site (www.forestryfutures.ca).



Regenerating Boreal Mixed woods: Effects of Herbaceous Vegetation Control and Aspen Stem Density on Stand Development: Funding was used to establish an Ontario research site to study the impact of grass, herb and shrub competition control on the establishment of white spruce and aspen in mixed stands. A companion research site was established in Alberta. Results showed the biological and economic benefits of harvesting aspen fiber crops in mid rotation. The application of this quantitative knowledge will increase both plantation productivity (yield) and reduce planting and tending costs. It also documented the benefits of managing mixedwood forests for both commercial wood and to enhance wildlife habitat. Funding for this project successfully leveraged 4.9 times more funding than the FFTC investment from other sources including forest industry and federal partnerships.

Striking a Balance: Enhancing forest productivity to meet future wood supply: The proponents quantified the fiber production benefits of silvicultural treatments at four levels of management intensity: None (N), extensive (E), basic (B), intensive (I) and elite (E), while documenting the effects on plant community species composition and structural diversity. The levels of management intensity are collectively referred to as NEBIE and are illustrated below. There are 8 permanent NEBIE locations established throughout Ontario in Dryden, Sioux Lookout, Thunder Bay, Wawa, Kapuskasing, Timmins, North Bay and Petawawa. Funding for this project successfully leveraged 4.5 times more funding from other sources. These included: OMNR, forest industry, federal partnerships, and universities. Results from this project provide scientific support for more enhanced levels of management

NEBIE Plot Network Management Intensity



Reference

W. Bell, J. Parton, N. Stocker, D. Joyce, D. Reid, M. Wester, A. Stinson, G. Kayahara and B Towill. 2008. Developing a silvicultural framework and definitions for use in forest management planning and practice. The Forest Chronicle 84(5): 678-693.

Aboriginal expectations of sustainable forest management and the perceived effectiveness of Ontario forest practices and forest certification: The results from this project added depth to our understanding of resource sustainability and the Aboriginal community involvement in the forest certification process (eg: Forest Stewardship Council (FSC), Canadian Standards Association (CSA)). Results were shared with the certification bodies who accepted and used the information to refine certification standards associated with addressing Aboriginal issues. First Nation communities involved in the project included: Dokis, Whitefish Lake, Mattagami, Ojibway of Pic River, Couchiching and LacSeul, half of which are from certified management units. A successful workshop was hosted in Ottawa, to report on community outcome research and to present the research findings. Funding for this project received matched funding from other sources including: federal government, the Canadian Boreal Initiative and the National Aboriginal Forestry Association.

Overall, the EFPS investment of $6.4 million leveraged $5.5 million in cash contributions and $10.9 million of in-kind contributions from industry, MNR, federal government agencies, universities, the Forest Research Co-op and the Forest Research Partnership. The program served as an effective catalyst that brought researchers and resource managers together to investigate current issues. In conclusion, the Enhanced Forest Productivity Science program generated outcomes that have been adopted in the development of effective forest policy development.