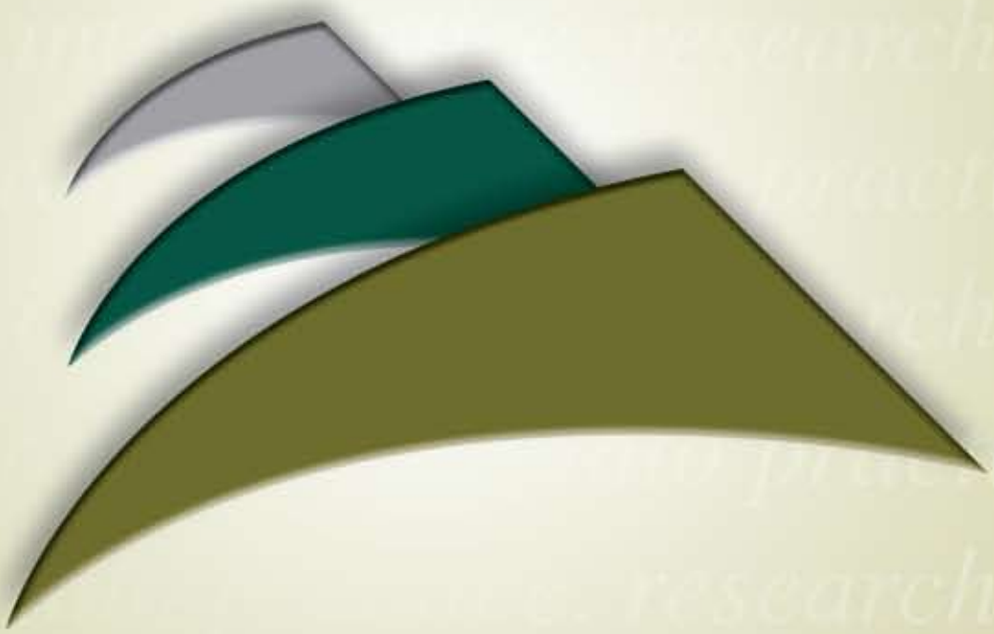

research growing into practice.

2007-08 ANNUAL REPORT

foothills
RESEARCH
INSTITUTE
research growing into practice.

the research continues under a new name . . .

Over 60 per cent of the Foothills Research Institute core study area is protected. The remaining area is a working forest. This model of partnership encourages the coordinated management of a large and rich landscape.

Foothills Research Institute's core study area is located in west-central Alberta, with an administrative office in the resource community of Hinton, some three hours west of Edmonton.

The area covers about 2.75 million hectares (27,500 square kilometres), and includes Jasper National Park of Canada, Willmore Wilderness Park, William A. Switzer Provincial Park and the Forest Management Area of Hinton Wood Products, A Division of West Fraser Mills Ltd. It also includes some provincial forest management units and the Hinton Training Centre's Cache Percotte Training Forest. Within its boundaries are three forest types – boreal, montane, and sub-alpine – and many forest uses including timber, petroleum and coal extraction, tourism and recreation.

Table of Contents

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A new name, a new website

The research continues – under a new name. Foothills Model Forest is now the Foothills Research Institute.

With the addition of our new energy sector shareholders – ConocoPhillips Canada, Petro-Canada, Talisman Energy Inc., Canadian Natural Resources Limited, and EnCana Corporation – we believe it is important to re-brand ourselves. However, only our name is changing. Our core business will remain the same.

The Foothills Research Institute finds itself well positioned, after the cessation of the federally-sponsored model forest program, to continue its work in implementing and reporting on leading-edge research programs.

We will ensure that our sustainable management knowledge and applications are demonstrated to forest and land managers, practitioners, operators, the public at large, and others with a stake in the sustainability of our forest landscapes.

The continued support of our existing sponsorship partners Alberta Sustainable Resource Development, Jasper National Park and West Fraser Mills Ltd., and the additional contributions from the energy partnerships to our core funding, will allow us to continue to deliver these benefits.

It is these committed dollars that give us the ability to leverage additional funds for core programs such as GIS support, program administration and communications.

Check out our new website, www.foothillsresearchinstitute.ca

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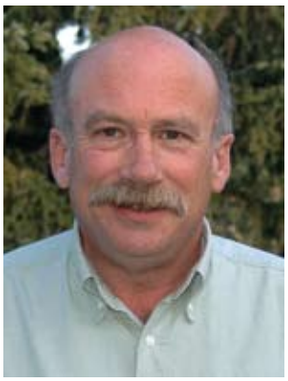
President's Message



This past year has been an exciting time of growth in all activities at the Foothills Research Institute. We are well on track to achieve the goals of our 2007-2012 Business Strategy, aided in no small part by the doubling of our operating budget over the last three years.

We changed our name to Foothills Research Institute, while keeping the focus on those characteristics that make this organization so unique and successful. We continue to have an expanding partnership base, we are broadening the number and scope of our research theme areas, we are building networking capability and we are enhancing our tool development and extension capabilities. And we continue our unwavering commitment to trusted partnerships, relevant applied research, sound business principles, and superior return on investment.

The year began with the addition of Foothills Energy Partners as core funding shareholders, plus a substantial five-year funding commitment by the Alberta Forestry Research Institute. I would like to thank both of these organizations for their substantial commitments.

Our research programs continued to expand, meeting the partner needs defined in our business strategy. On the new program and research front, the Mountain Pine Beetle Ecology Program completed its first year, incorporating new research and integration of Institute programs. Concept work and activity team formation for a new Water Program, to be launched in late 2008, is ongoing. A new program lead and funding are in place for our Yellowhead Ecosystem Group, with initial meetings scheduled for this fall. Seed funding is in place and development of our new Climate Change Program continues.

It was also a busy year for networking and extension activity. Some examples are our agreement to provide information and administrative services to the newly formed Yellowhead Ecosystem Group and the Natural Disturbance Program's planning assistance provided to the Minister of Sustainable Resource Development in the Southern Rockies area of Alberta.

Underpinning the above is the need to maintain our excellence in GIS/Information management as well as administrative services to partners and network associations. Investment in GIS staffing and technology increased 30 per cent over last year, accounting and staffing was increased and employee benefits were expanded to ensure that the Institute remains a capable and preferred work place. A knowledge management review was commenced and will deliver recommendations for enhanced knowledge management ability later in 2008. A commitment was made to fill the newly-created position of Program Coordinator in line with our Business Strategy.

A cornerstone of the Institute's success is its communications and extension capability. We undertook a major re-build of our web site, with a launch scheduled for October 2008. The site will enable a far more robust communications and extension ability, as well as greatly expanded information management and networking capabilities. It will play a key role in realizing the Institute's Business Strategy goals.

I would like to thank retiring board members Cliff Henderson and Ron Hooper for their long-standing contribution to the Institute's success, as well as retiring General Manager Don Podlubny, who set the bar high for our new General Manager Tom Archibald. I would also like to thank Lisa Jones for her leadership in growing our communications abilities during her time with us.

Of course none of the accomplishments of the Institute over the year would be possible without the commitment of our shareholders and partners. It is they who enable our researchers and staff to achieve excellence. I am indebted to them all and remain committed to maintaining and enhancing the Institute's reputation for delivering a superior return on investment.

Jim LeLacheur
President

Board of Directors 2007/2008

Ron Bjorge
Executive Director,
Fish and Wildlife Division,
Alberta Sustainable Resource Development

Rick Bonar
Chief Biologist and Planning Coordinator,
Hinton Wood Products,
West Fraser Mills Ltd.

Nick Burt
General Manager,
Elk Valley Coal – Cardinal River Operations
Resigned from the Board June 2007

Shawn Cardiff
Manager, Integrated Land Use Policy & Planning,
Jasper Field Unit,
Parks Canada

Kyle Clifford
Area Manager,
Parks and Protected Areas,
Alberta Tourism, Parks, Recreation & Culture

Phil Comeau
Associate Professor,
Dept. of Renewable Resources,
University of Alberta

Bob Demulder
Integrated Landscape Management Program Manager,
Alberta Chamber of Resources
Resigned from the Board February 2008

Greg Fenton
Superintendent,
Jasper Field Unit,
Parks Canada
Elected to the Board December 2007

Terry Fredin
General Manager,
Elk Valley Coal – Cardinal River Operations
Elected to the Board December 2007

Edwin Francheater
Councillor,
Sunchild First Nation
Elected to the Board June 2007

Rob Gibb
Surface Land & Community Supervisor/Aboriginal Relations,
Talisman Energy Inc.
Elected to the Board December 2007

Cliff Henderson
Assistant Deputy Minister,
Forestry Division,
Alberta Sustainable Resource Development

Ron Hooper
Superintendent,
Jasper Field Unit,
Parks Canada
Resigned from the Board December 2007

John Kerkhoven
Surface Land Supervisor,
Petro-Canada

Dave Kmet
Director, Forestry,
Alberta Forest Products Association

John Kristensen
Assistant Deputy Minister,
Parks and Protected Areas,
Alberta Tourism, Parks, Recreation & Culture
Resigned from the Board June 2007

Stan Lagrelle
Chief,
Sunchild First Nation
Elected to the Board June 2007

Jim LeLacheur
Manager, Alberta Fibre Supply,
West Fraser Mills Ltd.

Dave Lye
Group Leader,
Environment, Health and Safety,
Encana Corporation
Elected to the Board, December 2007

Keith McClain
Director, Science Policy and Strategy,
Forest Division,
Alberta Sustainable Resource Development

Rachelle McDonald
Operations Manager,
Aseniwuche Winewak Nation

Jimmy O'Chiese
Chief,
Foothills Ojibway Society
Elected to the Board, June 2007

Steve Otway
Manager, Resource Conservation,
Jasper Field Unit,
Parks Canada

Gary Sargent
Manager, Resource Access,
Canadian Association of Petroleum Producers

Doug Sklar
Executive Director,
Forest Management Branch,
Forestry Division,
Alberta Sustainable Resource Development

John Spence
Chair and Professor,
Dept .of Renewable Resources,
University of Alberta

Murray Summers
Chief Forester,
West Fraser Mills Ltd.

Glenn Taylor
Mayor,
Town of Hinton

Bill Werry
Assistant Deputy Minister,
Tourism, Parks, Recreation & Culture
Elected to the Board December 2007

Lorne West
Forestry Liaison Officer,
Canadian Forest Service,
Natural Resources Canada

General Manager's Message

The 2007-2012 Business Strategy identifies seven strategic objectives that guide us as we strive to be a respected provider of scientific knowledge and a safe place to test new ideas. Following are some of our accomplishments under these objectives.

Partnerships

The addition of the five companies within Foothills Energy Partners as new shareholders has strengthened our core partnership and in turn secured additional committed funding for this business cycle.

Programs

We signed several collaborative research agreements during the year, and continued technology transfer through our *Footnotes* newsletter, workshops, short courses, tours and publications that included *A Hard Road to Travel and The Resilient Forest.*

Communications and Extension

We focused resources on our name change through creation of a new website to be launched this fall, as well as the design of products to promote the new name. The Communications and Extension Program took a lead role in providing logistical support for workshops and short courses.

The Executive Series was developed to enhance understanding and support for the research and technology being developed by Foothills Research Institute. Two of the objectives were to bridge the communications gap between scientists and non-scientists and to facilitate the adoption of our knowledge, tools and models for integrated land management into forest and resource management policy and practices. The Executive Series of meetings was presented to senior managers and executives in the oil and gas industry, provincial government deputy and assistant deputy ministers, Alberta Cabinet Policy Committee on Resources and the Environment, Grand Alberta Economic Region summit, Alberta Forest Products Association Board of Directors and Forest Technical Committee, and Alberta Chamber of Resources Board of Directors.

Network of Nodes

We continue promoting a "Network of Nodes" through our proven ability to develop knowledge and tools in the province of Alberta. This past year we focused on collaborative research agreements, leading a GIS network of experts, building and maintaining joint data models, and starting a spatial data inventory that will enable us to manage and share such data with partners and like-minded organizations.

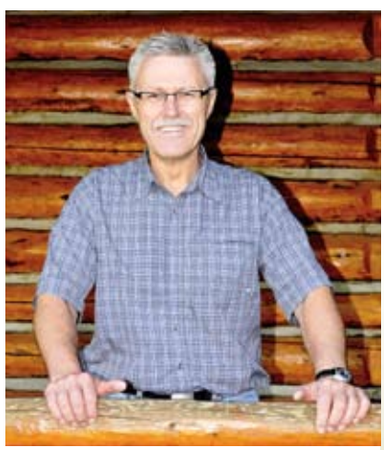
Operations

We have strengthened our Geographic Information Systems, and our Finance and Administrative support. This included increasing the capacity of our GIS Program through additional staff and infrastructure, as well as continuing to provide excellent accounting and administrative support to our programs and associations.

Demonstration, Evaluating and Reporting on Innovation

We supported the Foothills Landscape Management Forum (formerly Caribou Landscape Management Association) on development of an integrated industrial access plan, as well as the Aboriginal Involvement referral process project and the Grizzly Bear DNA project. We continue to provide outstanding research to our partners in resource and landscape management through other major programs, many of which are detailed later in this annual report.

Human Resources



We supported staff in realizing their goals through personal development opportunities, a staff recognition program and a new retention initiative designed to support a strong workforce.

We will continue to strengthen existing programs and will develop new activities in areas such as climate change, water and ecosystem management. We are moving beyond our boundaries provincially, nationally and internationally through new agreements and understandings. We are increasing the engagement of our partners and continually investigating the new opportunities that promise an exciting and productive future at Foothills Research Institute.

Tom Archibald,
General Manager

Foothills Research Institute's core study area supports a wide variety of uses.

Our Shareholders

SPONSORING PARTNERS

PETRO-CANADA

ConocoPhillips

EnCana

TALISMAN ENERGY

West Fraser

Alberta

Parks Canada Parcs Canada

Canadian Natural

PARTNERS

Partnership is the lifeblood of the Foothills Research Institute. Through our partners' contributions, our tools and knowledge are integrated into land and forest management policy, planning and practice. Hence the advancement of forest and land management in Alberta. The strength of our organization would not be what it is today without our partners' commitment and we are honoured to have contributions of all shapes and sizes.

foothills RESEARCH INSTITUTE research growing into practice.

FUNDING PARTNERS

Management Partners

Management Partners provide financial and in-kind support to the Foothills Research Institute. They are also responsible for land, resource, or forest management, and are interested in using research institute knowledge and tools in their businesses.

Ainsworth Lumber Co. Ltd.
Alberta Energy
Alberta Newsprint Company
Alberta Pacific Forest Industries Inc.
Banff National Park of Canada
Blue Ridge Lumber Inc. – A division of West Fraser Mills Ltd.
BP Canada Energy Company
Buchanan Lumber – Tolko Industries Ltd.
Canadian National Railway
Canfor Corporation
Coal Valley Mine Resources Ltd.
Daishowa-Marubeni International Ltd.
Devon Canada Corporation
Elk Valley Coal Corporation
Enbridge Inc.
Fisheries and Oceans Canada
Foothills Forest Products Inc.
Government of British Columbia
Grande Cache Coal Corporation
Husky Energy Inc.
Louisiana-Pacific Canada Inc.
Manning Diversified Forest Products Ltd. – Manning Forestry Research Fund
Millar Western Forest Products Ltd.
Nexen Inc.
Persta Resources
Peyto Energy Trust
Shell Canada Limited
Slave Lake Pulp – A division of West Fraser Mills Ltd.
Spray Lake Sawmills
Suncor Energy Inc.
Sundance Forest Industries Ltd.
Sundre Forest Products, A division of West Fraser Mills Ltd.
TransCanada Pipelines Limited
Waterton Lakes National Park of Canada
Weyerhaeuser Company

Program and Project Partners

Program and Project Partners provide financial and in-kind support to specific programs or projects. These organizations believe in and support Foothills Research Institute.

AADAC (Alberta Alcohol and Drug Abuse Commission)
Alberta Aboriginal Relations
Alberta Advanced Education and Technology - Alberta Forestry Research Institute
Alberta Chamber of Resources
Alberta Conservation Association
Alberta Environment
Alberta Fish & Game Association
Alberta Forest Products Association
Alberta Research Council
Alberta Stewardship Network
Alberta Transportation
Alexis Nakota Sioux Nation
Aseniwuche Winewak Nation of Canada
Bandaloop Landscape-Ecosystem Services
Boreal Forest Research Centre
Bighorn Stoney First Nation
Canadian Association of Petroleum Producers
Canadian Cooperative Wildlife Health Centre
Conservation Biology Institute
Earth Systems Institute
Environment Canada, Canadian Wildlife Service
Foothills Ojibway Society
Forest History Association
Forest Resource Improvement Association of Alberta
FP Innovations – FERIC
Hinton Training Centre
Margaret Donnelly Consulting
Mistik Management Ltd.
Moose Mountain Environmental Fund
Nackowinewak Nation
Natural Resources Canada, Canadian Forest Service
National Sciences and Engineering Research Council of Canada (NSERC)
Northwest Hydraulic Consultants Inc.
Peregrine Helicopters
Petroleum Technology Alliance Canada
Royal Alberta Museum
Saskatchewan Institute of Applied Science and Technology
Sunchild First Nation
The Forestry Corp
Town of Hinton
Trout Unlimited Canada
University of Alberta
University of British Columbia
University of Calgary
University of New Brunswick
University of Saskatchewan
University of Waterloo
West Athabasca Watershed Bioregional Society
Wilfred Laurier University

Other Partners

The following associations, businesses and communities support the vision and goals of the Foothills Research Institute.

Alberta Caribou Committee
Alberta Provincial Biodiversity Monitoring Institute
Alberta Tourism, Parks, Recreation and Culture
AVID Canada
Canada Centre for Remote Sensing
Canadian Institute of Forestry
Canadian Model Forest Network
College of Alberta Professional Foresters
College of Alberta Professional Forest Technologists
Council of Forest Industries
Cows and Fish Program
Ember Research Services Ltd.
ENFORM
Forest History Society, Durham, NC
G & A Petroleum Services
Golder Associates
Hinton Fish and Game Association
Inside Education
Integrated Ecological Research
International Model Forest Network
Jasper-Yellowhead Museum & Archives
Linnet – The Land Systems Company
Municipality of Jasper
Sustainable Forest Management Network
Telemetry Solutions
World Wildlife Fund Canada

A Broader Partnership

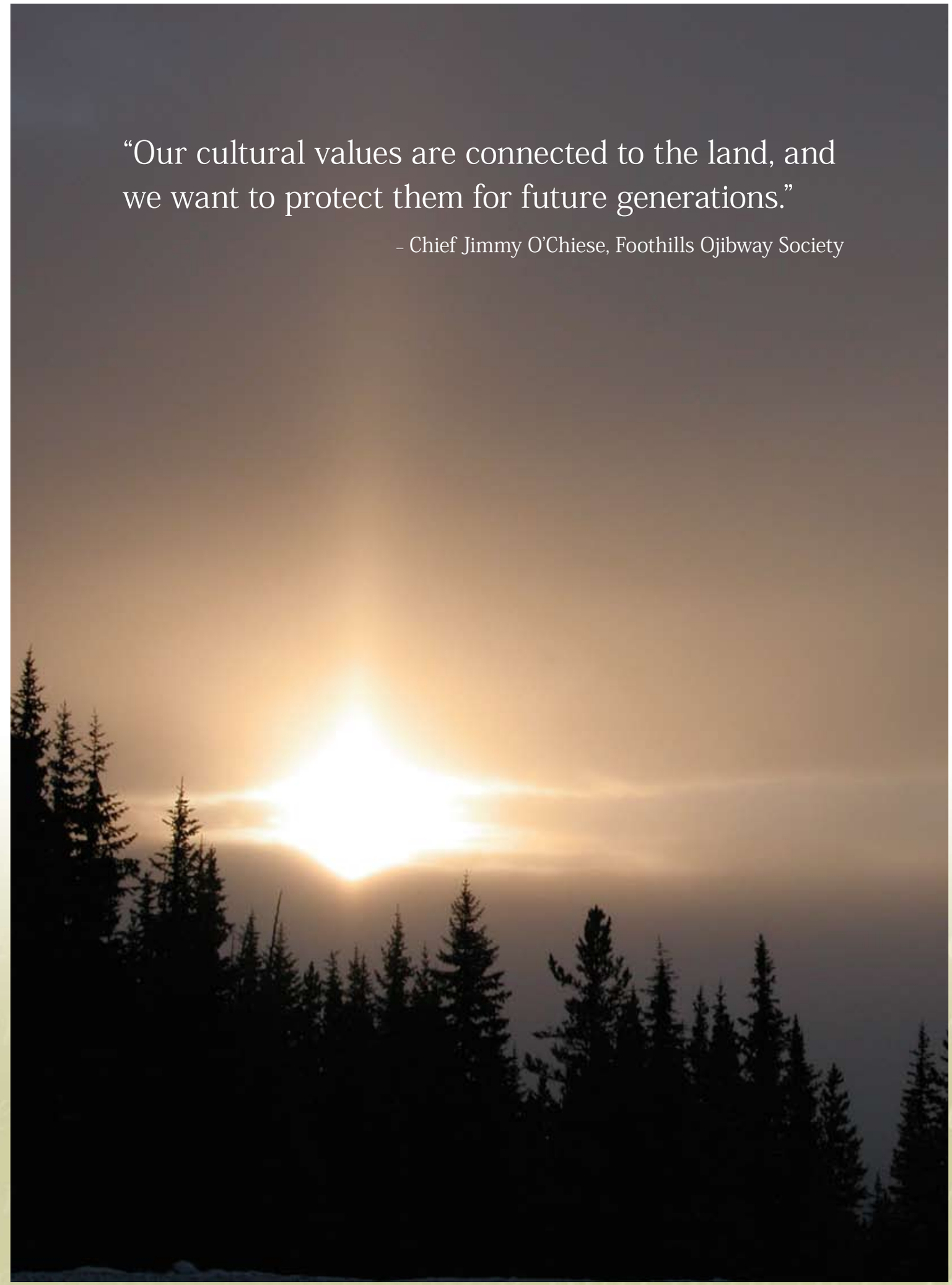
Foothills Research Institute has more than 100 partners including forest companies, three levels of government, oil and gas, Aboriginal communities, universities, environmental groups and not-for-profit organizations. Our partners are active on the study area, and also have a broader sphere of influence beyond our boundaries.

One example is found in our Aboriginal Involvement Program. This is a multi-community Traditional Use Study. The associated Referral Process is a made-in-Alberta resource that meets national benchmarks relating to respectful and equitable relationships between development proponents and those with traditional ties to the land.

The program is led by five Aboriginal communities with powerful historic ties within our core landbase and beyond. They are the Foothills Ojibway Society, Asenicwuche Winewak Nation, Nakcowinewak Nation, Bighorn Stoney First Nation, and the Sunchild First Nation. In this program they work with West Fraser Mills Ltd., Petro-Canada, Talisman Energy Inc., the Canadian Association of Petroleum Producers and Luscar Ltd. – Coal Valley Mine, as well as government. The referral process they have developed could be used across Alberta and nationally, as a tool to bring people together in shared decision-making.

"By fostering relationships, relying on an information base rather than politics and policy, and turning good data into on-the-ground activities, this program acts as a 'tool shed' for Aboriginal communities and resource managers," says Brad Young, Aboriginal Involvement Program Lead.

Jimmy O'Chiese, chief of the Foothills Ojibway Society, emphasizes the value of traditional-use sites on the landbase. "These sites are our heritage," he says. "Our cultural values are connected to the land, and we want to protect them for future generations."


“Our cultural values are connected to the land, and we want to protect them for future generations.”
– Chief Jimmy O’Chiese, Foothills Ojibway Society

Common Resource Management Issues

Foothills Landscape Management Forum

The Foothills Landscape Management Forum serves partners wanting to integrate activity on the landscape with the aim of reducing industry's overall environmental footprint.

In three years the forum has brought together nine oil and gas companies and four forestry companies united in a common drive to integrate and mitigate the environmental impact of human activities on the land.

A milestone success this year was provincial approval of the forum's new template for an annual Integrated Industry Access Plan. Companies submitting the plan are making a commitment to best practices in integrated land management, and in return benefit from an approvals process that is more swift and predictable than traditional, individual submissions.

Forum members coordinate activities such as road and job-site development, reducing the duplication and impact of infrastructure and building credibility of the process.

"The partnership approach and shared commitment give credibility to the whole process," says program director Wayne Thorp. "Now we're looking at what land management tools are out there in other jurisdictions and seeing which ones are most effective. That's what this is all about – continuous improvement and adaptive management."

The forum is an evolution of the former Caribou Landscape Management Association that changed its name to reflect a broader scope of interest. The change reflects a desire to manage and mitigate the overall industrial implications for all features on the landscape, not just caribou.

Forum members have access to the most up-to-date data on natural and human features on the landscape, a benefit that aids in good planning as well as adherence to provincial policy directions.

"This kind of support provides a real advantage to companies working to meet policy objectives such as Integrated Land Management," says Thorp. "And in a sense the ILM initiative is a mitigation strategy in itself – it drives companies to integrate their management, planning and activities on the landscape as a way of reducing their footprint."

The forum is a self-funded group of resource companies operating under the umbrella of the Foothills Research Institute.

Common Resource Management Issues

Foothills Stream Crossing Program

This program is moving into delivery mode after a couple of years of intensive planning and partnership building.

Activity in the first months of 2008 has focused on three tasks - completing initial fish inventory work, completing current members' inspections on the Forest Management Agreement area and completing and submitting to the regulators a remediation plan for the Pine Creek and Nosehill Creek test basins. The two test basins will be used this coming year to pilot a remediation strategy based on a watershed approach and collaborative principles.

Program Manager Jerry Bauer says the stream crossing program demonstrates practical, on-the-ground resource integration involving both industry and government. "This program provides essential support to management of an important natural resource, namely watersheds and their associated habitat," he adds.

The program is supported by the Foothills Research Institute, and is an independent, partner-driven initiative to improve the management of stream crossings in the region.

Industry and researchers created the program in 2005 with the intent of developing an industry-driven approach, establishing a standardized stream crossing inspection process, establishing a system to identify priorities for maintenance and replacement, and improving the quality/performance of stream crossings. Inspection priorities include safety, effect of sedimentation on water quality and ease of fish passage.

Program participants include eight voting members/crossing owners, and six non-voting agencies that provide technical support. Participants have combined resources to develop the inspection manual and complete inspections done to date.

The voting members are: BP Canada Energy Company, Canadian Natural Resources Limited, ConocoPhillips Canada, Devon Canada Corporation, Hinton Wood Products, a Division of West Fraser Mills Ltd., Petro-Canada, Suncor Energy Inc. and Talisman Energy Inc.

Technical support is provided to the group by Alberta Chamber of Resources, Alberta Infrastructure and Transportation, Alberta Sustainable Resource Department – Forest Division and Fish and Wildlife Division, Fisheries and Oceans Canada and Foothills Research Institute.

Common Resource Management Issues

Mountain Pine Beetle Ecology Program

A comprehensive Mountain Pine Beetle Ecology Program has been designed to gather important new data on the invasive pest, plus strengthen partnerships and develop new tools for land managers.

Program Manager Don Podlubny reports that the past year saw a workshop to identify priority project areas. This was followed by development of terms of reference and selection of an activity team. The team fine-tuned the terms of reference and drafted a five-year business plan.

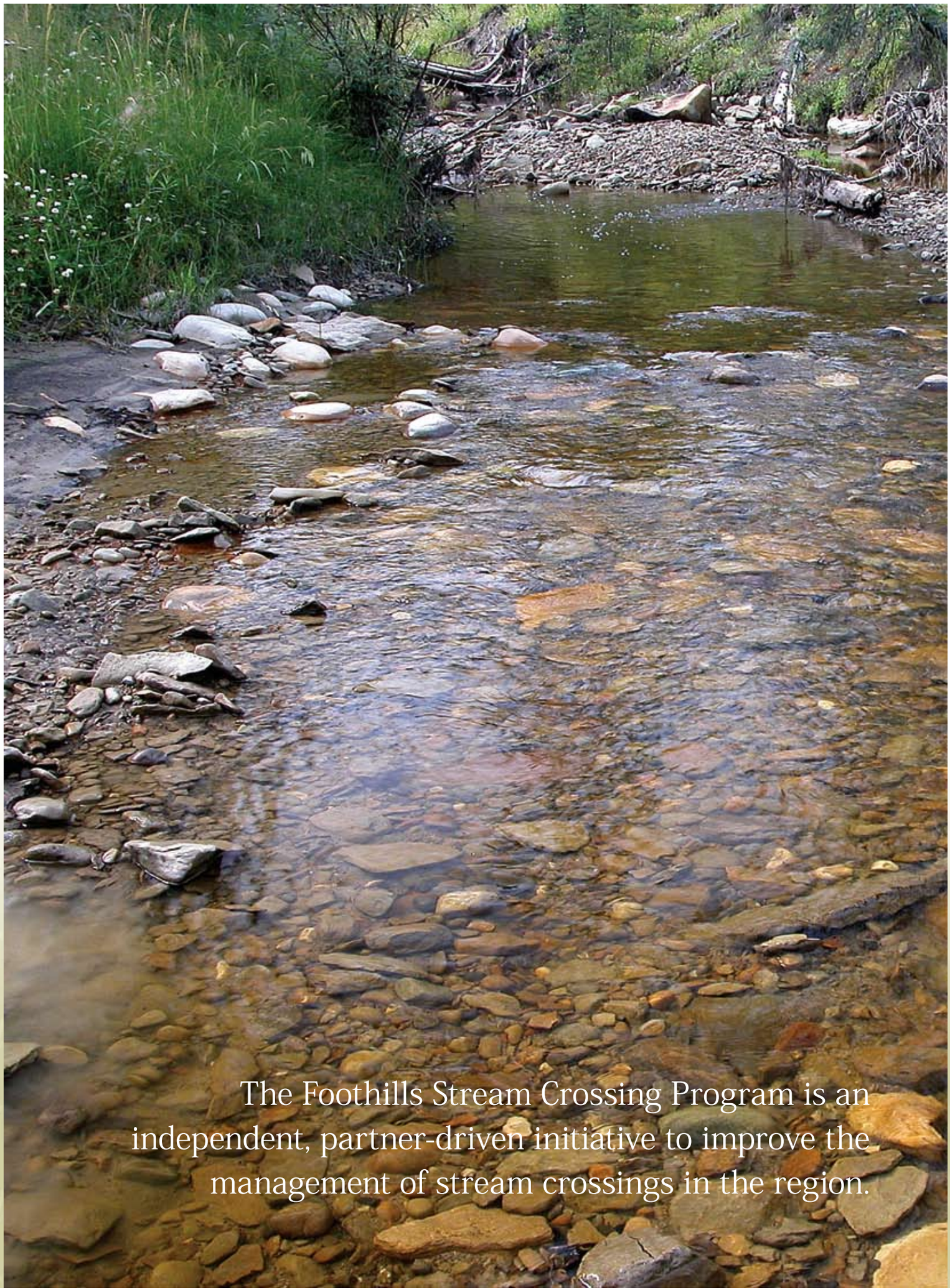
Two projects were approved in this first year – *Effects of Mountain Pine Beetle attack on hydrology and post-attack vegetation and hydrologic recovery in lodgepole pine forests in Alberta, and Monitoring and decision support for regeneration management in a Mountain Pine Beetle environment.* Additional funding for the projects was secured through the Forest Resource Improvement Association of Alberta's Open Funds and the Alberta Forestry Research Institute.

The overall program makes a strong contribution to the Institute's major theme area of landscape dynamics research.

"The program was prompted by interest from government and industry in dealing with some of the gaps in the existing research," Podlubny says. "And with the beetles thriving more than ever, especially in south-western Alberta, there is definitely a need for more information about them."

In the hydrology component, Foothills Research Institute will pool resources with the University of Alberta to determine how mountain pine beetle infestations affect groundwater. If areas of beetle-killed trees cause run-off and groundwater patterns to change dramatically, managers in charge of roads, culverts, bridges and aquatic habitat need to know how, when, and by how much.

The regeneration component links Institute researchers with the Foothills Growth and Yield Association in building a decision support system around how forest stands are likely to regenerate after a major die-off caused by the beetle.



The Foothills Stream Crossing Program is an independent, partner-driven initiative to improve the management of stream crossings in the region.

Science-Based Tools & Knowledge

Grizzly Bear Program

The Grizzly Bear Program is closing in on its tenth anniversary (September 2008) and continuing a tradition of addressing a common management issue for partners, providing tools and solutions that benefit the bear and society, and ensuring findings are shared as widely as possible.

Energy, utilities, mining, forestry and government stakeholders all shared an interest 10 years ago in knowing more about bear habitats, behaviours and needs so that human activity could be managed with their requirements in mind.

The program now has more than 50 partners, and has made great strides in developing science-based tools and knowledge – most recently with the completion of comprehensive habitat maps for the entire grizzly bear range in Alberta. "The result is a seamless map product that shows all our partners what areas are most likely to serve as important bear habitat," says program manager Gord Stenhouse.

"Another benefit is that we have a lot of knowledge about grizzly bear habitat use and selection that we didn't have before, allowing us to identify the bears' travel patterns and habitat preferences as the seasons change through the year."

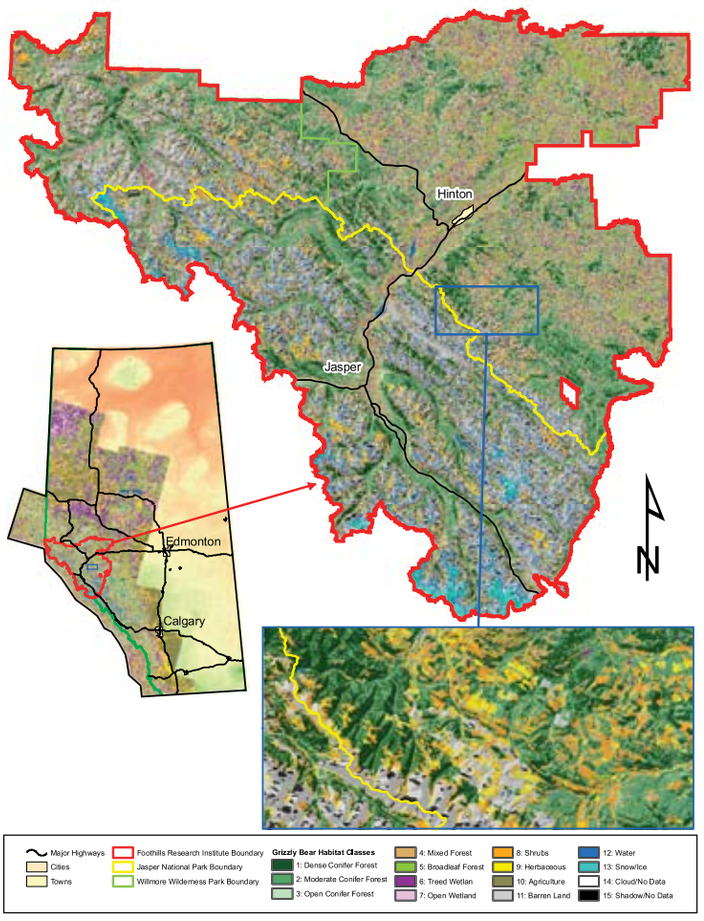
A decade of work has provided insights also into the health, reproduction rates and stress levels of grizzlies, using technologies ranging from radio collars and satellite receivers to scat-sniffing dogs to today's less-invasive approach of using darts to collect DNA information with a minimum of handling and stress for the animal.

Program products such as mortality risk and movement corridor models, along with software that allows users to see what effects development will have on grizzly habitat over time, are now being used by government as well as energy and forestry managers. A library of 60 scientific papers on the Institute's website adds to the accessibility and utility of the information acquired by the program.

Further dissemination of knowledge has been achieved with a new training course on use of grizzly habitat management tools and a multitude of presentations to the public, policymakers and industry.

Some of the research data is now being used for the implementation of the provincial Grizzly Bear Recovery Plan approved by the government in October 2007.

Grizzly Bear Habitat Map



Science-Based Tools & Knowledge

Neptune Software

Ten years of extensive research and development culminated this year with the launch of a groundbreaking new software program called Neptune.

Neptune integrates data on historical natural disturbance patterns such as wildfire and insect attack to show, in a graphic and spatial sense, how these influences affect the way forests grow and evolve. The ability to see how this process takes place allows land managers to mimic some of the patterns, thus avoiding practices that might be detrimental to forest development.

Model developer Dave Andison says the model might, for instance, help forestry or energy sector managers plan road construction or logging in a way that more closely reflects landscape disturbances resulting from natural processes triggered by fire or insect.

The tool is easy to use, in contrast to the complexity of its development, he adds. The fact that natural disturbances do not have a universal or predictable outcome in all instances made for some very sophisticated programming. Not to mention the difficulty of coming up with a common language.

"In any forest fire, there are areas where the landscape is only partially burnt or where the fire burns back on itself," Andison explains. "One group might call the unburned area an island residual, while another might say it was a feathered edge or peninsula. So our first task was to translate all the disparate data we had into a common language so that the software could point to something and conclusively say what it was."

Only when that hurdle was overcome could the project move forward. The software was programmed with a huge database of historical records, and is now ready for use by project supporters. These include Hinton Wood Products, a Division of West Fraser Mills Ltd., Alberta Newsprint Company, Alberta Pacific Forest Industries Ltd. and Mistik Management Ltd. of Meadow Lake, Saskatchewan.

Andison expects that by the end of 2009, an updated version of Neptune will be calibrated to model disturbance patterns for all of Alberta and Saskatchewan.

Science-Based Tools & Knowledge

Fish and Watershed Program

A Foothills Research Institute model can predict – with 96-per-cent accuracy – which streams in the region contain fish populations.

The tool, described in a scientific paper *(Predictive modeling and spatial mapping of fish distributions in small streams of the Canadian Rocky Mountain foothills)* in February 2008, is the first of its kind in Alberta to map fish habitat at a regional scale.

Fish and Watershed Program manager Rich McCleary says the model will be of great value to land managers responsible for stream crossings and other activities that might affect fish habitat.

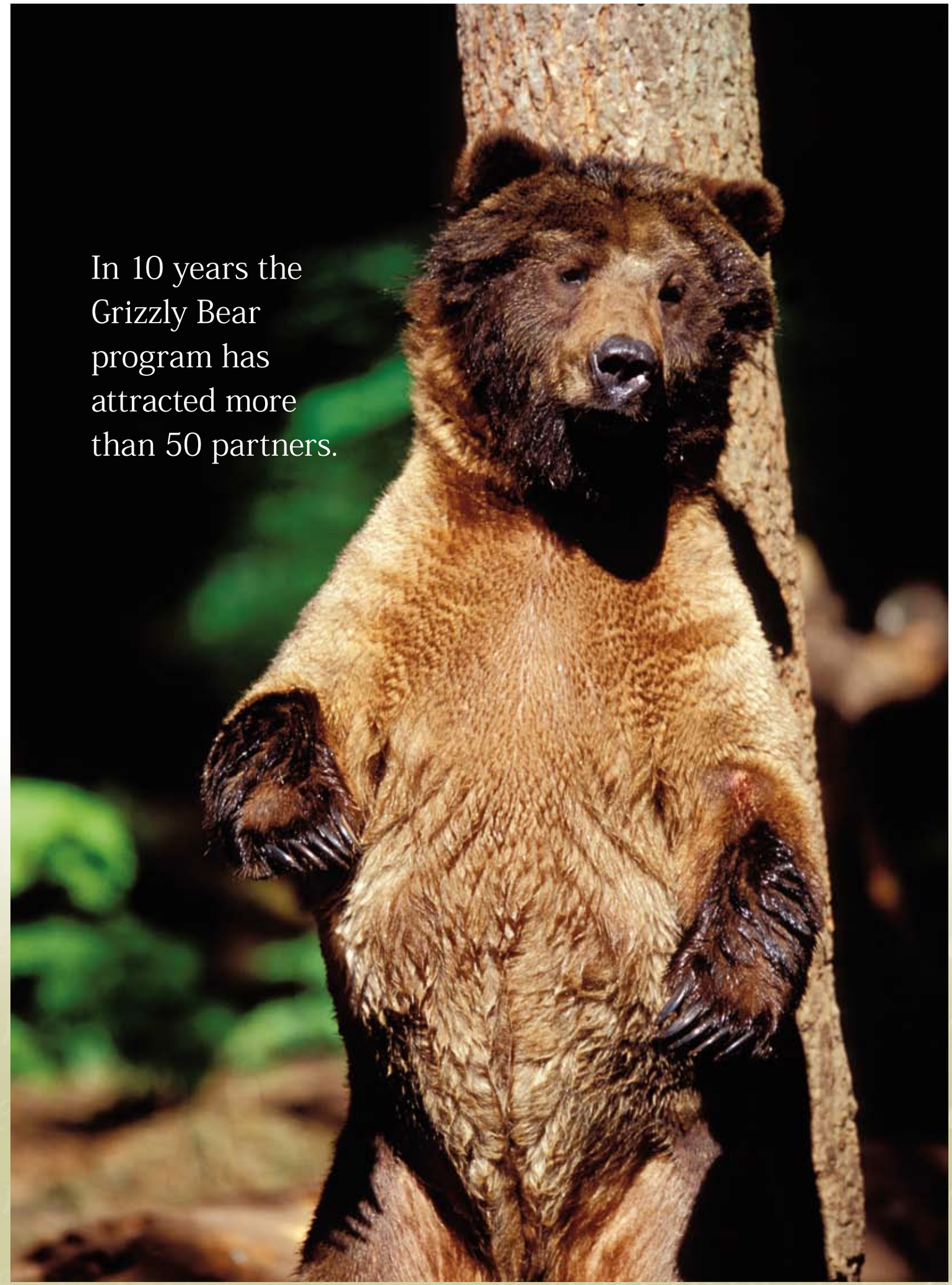
"The ability to map fish habitat at a regional scale is essential for long term conservation of fish, especially the Bull Trout, which is listed as a species of specific concern," he explains. "One of the main challenges for industry is knowing which stream sections are fish-bearing or non-fish bearing. That's the reason we set out to develop relationship models to predict which headwater streams were important fish habitats and for which species."

Successful completion of the project means that managers are now able to predict and map the sections of any stream in the region for low, medium and high probability of the presence of a fish species.

Road planning, which calls for bridges or culverts any time a stream is encountered, will be an immediate beneficiary of the new tool. Great care is required whenever fish are present. Maintenance of older bridges and culverts can also be priorized according to the predicted presence of fish.

"Some conventional culverts beneath older roads can be an impediment to fish migration," says McCleary. "Now that we have identified which streams have high or low potential for fish habitat, we can recommend to companies which crossings are the best candidates for repair in terms of improving access to upstream habitat. We still recommend that companies do their own crossing inventory work, but we can now help them focus on the most important stretches of water."

Support for this project was provided by Hinton Wood Products, a Division of West Fraser Mills Ltd., Alberta Sustainable Resource Development, the University of British Columbia, Trout Unlimited Canada, the Alberta Conservation Association and the Forest Resource Improvement Association of Alberta.


In 10 years the
Grizzly Bear
program has
attracted more
than 50 partners.

Disseminating Our Knowledge

Natural Disturbance Modeling

Foothills Research Institute has developed a short course that teaches the conceptual foundations for using natural disturbance patterns and processes as guides for forest management.

The course, catering to government and industry land managers, demonstrates how to integrate Institute-generated natural disturbance data and modeling with day-to-day planning activities. The goal is to provide information on best practices for managing sustainable ecosystems.

Natural disturbances such as fire and insect outbreaks exhibit patterns when viewed over past decades and centuries. These patterns have contributed to the characteristics of the forests in existence today, and so there's a sense that if managers can shape industrial activities to mimic those patterns, forests will continue to flourish.

Dave Andison, course director and consultant to the Institute, says seeing the big historical picture when it comes to ecosystems means stepping away from a tendency to micromanagement. He prefers a "coarse filter" outlook on natural disturbance patterns that aims to include all the pieces of the puzzle.

"We toss the word ecosystem around a lot, but it's a pretty complicated thing and for the most part we haven't been managing the system, we've been managing pieces of it," he says. "The foundations provided in this course provide an immediately useful way of managing the system as a whole – which we've come to realize now is a good idea."

His course provides a common vocabulary and a forum for discussion on best strategies for implementing development plans based on broad natural disturbance patterns. So far, several forestry companies are integrating natural disturbance patterns into their forest management plans.

The Institute delivered two courses last winter and another the winter before, in Peace River and Edmonton. Andison says the institute does its best to attract a wide cross-section of participants. So far, it's attracted attendees from British Columbia, Alberta, Saskatchewan and Manitoba, representing forest management companies, government, the oil and gas sector, rangeland and water specialists.

Partners supporting the sessions are the Saskatchewan Institute of Applied Science and Technology, Alberta Sustainable Resource Development through the Hinton Training Centre, Jasper National Park of Canada, Hinton Wood Products, a Division of West Fraser Mills Ltd. and Alberta Newsprint Company. A group of five natural disturbance experts from across Canada collaborates to create course presentations. Participants will be sought this fall for another course planned for spring of 2009.

Disseminating Our Knowledge

Adaptive Forest Management/History Program

The Foothills Research Institute supports a program that examines the history of human and natural influences over the forests and communities of west central Alberta.

Program leader and former Institute president Bob Udell says this program provides knowledge and guidance to policymakers and resource managers, as well as to members of the public interested in how forest management has evolved over the years.

To date, two books have been published and a third will come out in 2008. Learning From the Forest (Fifth House, 2003) is an important account of the earliest large-scale industrial forestry program in Alberta, spanning nearly 50 years. A Hard Road to Travel (Foothills Research Institute, Forest History Society, 2007) is a fascinating and beautifully illustrated account of the human and natural history of the upper Athabasca River region.

Mountain Trails (Foothills Research Institute, Alberta Sustainable Resource Development, 2008) is the memoir of Jack Glen, a Dominion Forestry Branch ranger who arrived at Entrance in 1920 and spent the next 25 years patrolling, building trails and fighting fires, mainly in the area now known as Willmore Wilderness Park.

Five reports have also been produced and are available through the Institute:

- The Development of Adaptive Management in the Protected Areas of the Foothills Research Institute (2000) looks at similarities and differences in management of national parks and provincial protected areas since their inception.
- The Evolution of the Forest Management Agreements (January 2002) traces the evolution of the forest management agreement system in Alberta, from its inception in 1952 to 1995.
- The Hinton Forest: A Case Study in Adaptive Forest Management 1955-2000 (2002) provided the foundation for the 2003 Learning From the Forest book.
- The Resilient Forest: After the Stumps - A 35 Year Retrospective on a 1970s Environmental Campaign (2007) examines the

assertions and forecasts of a controversial environmental campaign in light of subsequent events.

- 50 Years of Harvest and Reforestation - A Historical Photo Review of the Hinton Forest Management Agreement Area (2007) is a photo essay examining the evolution of forest renewal practices through 50 years.

The program has also supported projects that are complementary to the Foothills Research Institute's history series, including Dr. Ian S. MacClaren's Culturing Wilderness in Jasper: Studies in the Human History of the Upper Athabasca River Valley (2007).

Disseminating Our Knowledge
Interpretive Signage

New interpretive signs were installed along two creeks in 2008 to inform the public and resource managers about the importance of watershed stewardship.

At Anderson Creek Crossing, 20 km southwest of Hinton, three signs explain the benefits of the unique "stream channel simulation" bridge that replaced a conventional culvert back in 2004. Besides opening up the creek for fish and other creatures, the bridge design allows for greater flood resistance and is quite cost effective.

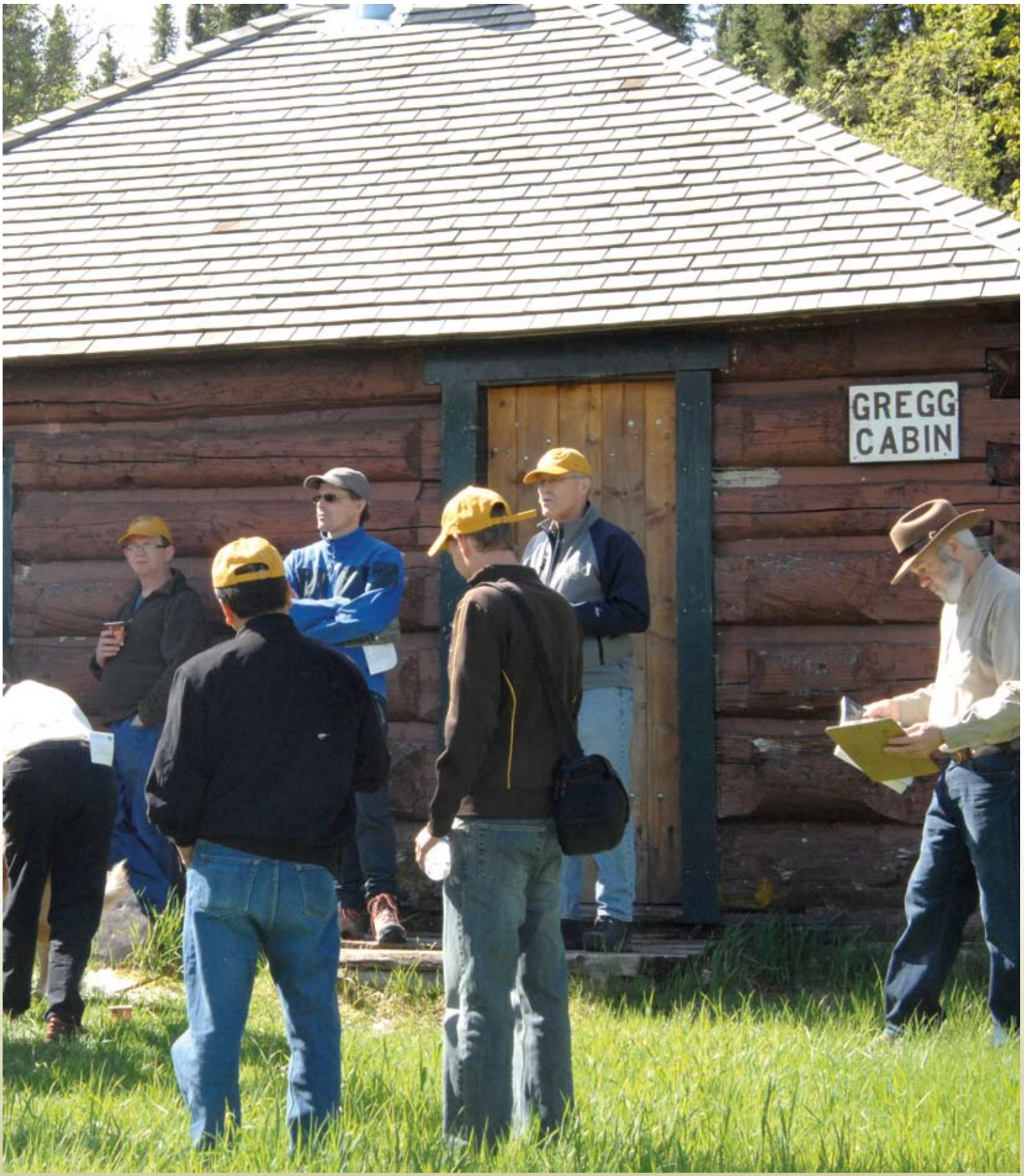
The site also features a pull-out area for parking, which Foothills Research Institute's Fish and Watershed program manager Rich McCleary says is invaluable when he conducts tours for stream-crossing owners.

Back in Hinton at Hardisty Creek, a small tributary of the Athabasca River that is once again a haven for local fish species, visitors can stroll along a trail and follow the story of how the watershed was restored. Restoration began with CN Rail constructing a riffle (a swift area of water running over gravel) below the mouth of a culvert. This effectively raised the streambed and allowed fish to once again pass through the pipe beneath the railroad tracks.

McCleary says it's a very accessible site and the interpretive signs play a valuable role in spreading the word about watershed care and protection.

"The Hardisty Creek Restoration Project in Hinton is key because it provides a central showcase for school-aged youth and the general public about watershed health, and about effective streambank and fish habitat restoration techniques," he says.

A total of $46,000 in funding for the signage projects came from industry, government and Green Street Communities, a national program providing environmental learning programs to Canadian elementary and secondary school students.



Networking and extension are critical tools for making research results available to decision-makers in Alberta and around the world.

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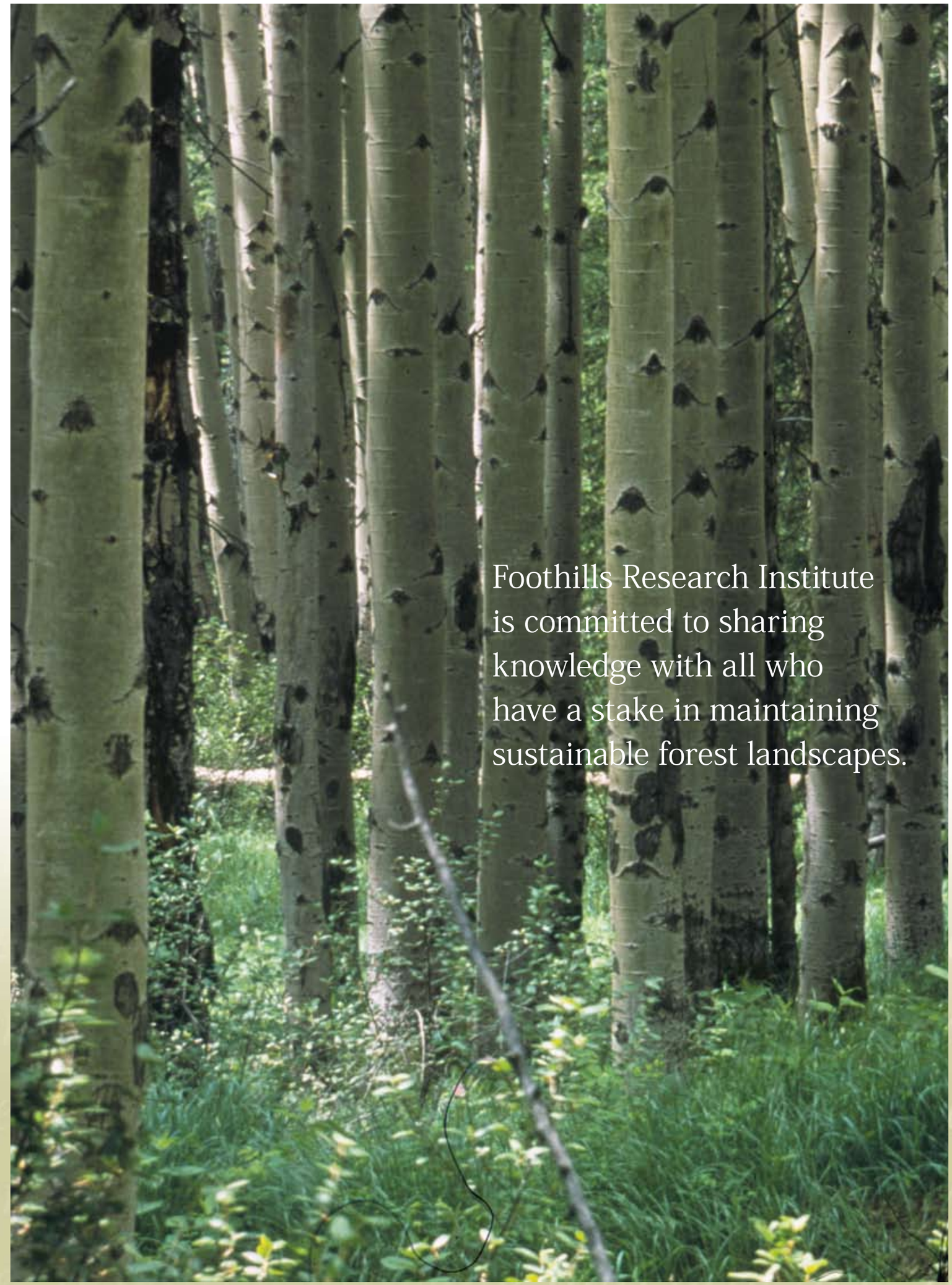
research growing into practice.


Foothills Research Institute
is committed to sharing
knowledge with all who
have a stake in maintaining
sustainable forest landscapes.

Aboriginal Involvement Program

Foothills Research Institute's Aboriginal Involvement Program has made significant progress towards its 2008-09 objectives.

One major objective mandated continued traditional-use research by the program's community nation partners, which are the Asinewuche Winewak Nation, Sunchild First Nation, Bighorn (Chiniki) First Nation, Nakcowinewak Nation and the Foothills Ojibway. Through collective efforts an additional 700 traditional use sites have been identified and are now accounted for in a central, protected database. The database now contains information on over 2,300 traditional use sites. This rich dataset verifies the on-going spatial basis of traditional culture, Treaty rights, and Aboriginal rights on the eastern slopes of the Rockies in Alberta, centred around the Foothills Research Institute's landbase.

Another objective involved refining the Referral Process, the program's proprietary traditional use site disturbance mitigation technology. Importantly, the Referral Process is now web enabled, allowing for remote inquiry, and can trigger Aboriginal consultation engagement between industry and community nation partners. Together with past pilot runs, numerous traditional use sites have been protected and more importantly, now that remote web access is possible, highly efficient mitigation of disturbance(s) can be facilitated. Large volumes of potential development projects, administrative backlog, and frustration around Aboriginal consultation engagement can be tackled proactively.

A third objective, developing a 'One Window Aboriginal Engagement' mechanism, has been moved forward to a formal request to government partners for support. As of the writing of this report, numerous presentations and meetings with relevant government entities have been conducted. A decision is forthcoming on a possible pilot phase (Winter 2008) for utilizing the Referral Process as a 'One Window Aboriginal Engagement' tool in the Foothills region of Alberta.

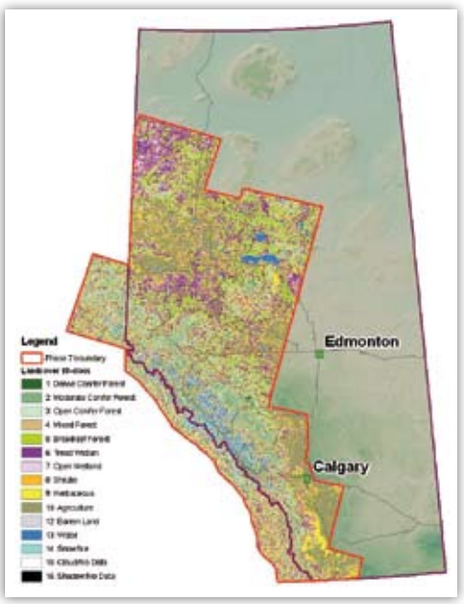
Geographic Information Systems

The GIS Program supports the research activities and programs within the Foothills Research Institute, and is founded on a commitment to sound data management and data sharing practices.

Good data management aids in deriving useful information that can assist in making sound management decisions across all program areas. Effective data sharing allows for effective information exchange between the Institute program areas and other organizations.

Some highlights from the last year include:

- Restructuring network server storage space and the acquisition of a tape autoloader for improved data backups.
- Successful proposal submission to GeoConnections to undertake a User Needs Assessment for a Regional Online Sustainable Land Management Atlas.
- Refinement of "caribou intactness" areas for the Foothills Landscape Management Forum.
- Began creation of a spatial data inventory for Foothills Research Institute GIS data holdings.
- Converted many historical programs/scripts to process grizzly bear collar data to more advanced and up to date scripts. Also created tools that can be used from ArcToolbox (which is a component of our ArcGIS GIS software). This also allows grizzly bear program staff to more easily and successfully complete their tasks in relation to grizzly bear collar information management.
- Database improvements to the Stream Crossing Association Geodatabase. This will help process user requests more efficiently.
- Database upgrades to the Streams and Watersheds Geodatabase.
- Map design and creation for the upcoming book Mountain Trails.



Highway 40 Demonstration Project

After more than two years of meetings, the Highway 40 Demonstration Project Planning Team has completed its work.

Using natural disturbance patterns as a backdrop, representatives of eight different agencies worked together to design a single 8,000 ha disturbance event. This event incorporates 10 years of harvesting for three forest management companies, plus prescribed fire activities within a 70,000 ha study area. The single event is designed to function as a physical barrier to both wildfire and mountain pine beetle, while providing multiple wildlife corridors via 3,000 ha in undisturbed residuals.

The first report detailing the planning process has now been completed and distributed to partners and beyond. A second report, to be completed in 2008, includes an introspective analysis of how and where the processes succeeded, and how they could be better next time around. The value of undertaking a demonstration exercise of this magnitude is significant, and lessons learned will find practical application in the future.

An initial report on using natural patterns as the foundation for operational planning is posted on the Foothills Research Institute website, and can be seen at: http://foothillsresearchinstitute.ca/Content_Files/Files/ND/Hwy40_report1.pdf.

Local Level Indicators Program

The results of Local Level Indicator establishment and measurement over time using scientifically sound methods help direct research to fill knowledge gaps as well as adaptive management solutions where warranted.

Foothills Research Institute's Local Level Indicators reporting process is unique in Alberta in that it represents goals and indicators common to the whole organizational partnership and reports on a landscape, multi-jurisdictional level.

Considerable work has been done to fine-tune reporting protocols since the area's first Local Level Indicators of Sustainable Forest Management Initial Status Report was released in 2003. An activity team has developed a revised plan to produce the follow-up state-of-the-forest report. This recommends 50 indicators for reporting, focused on a reduced number of priority "core" indicators for which data is available. An improved reporting format for the indicators will be implemented in the next report.

Over the past year, members of the activity team have been gathering and analyzing data and writing the core indicator descriptions. The release date for the Local Level Indicators of Sustainable Forest Management for the Foothills Research Institute Status Report is scheduled for the fall of 2008.

Foothills Growth and Yield Association

Foothills Growth and Yield Association was formed in 2000 by companies and other organizations interested in improving the forecasting and validation of managed stand growth and yield, particularly of lodgepole pine.

Projects are selected based on their utility for stand level forecasting, their scientific defensibility, relevance and value to forest managers, and their cost effectiveness. Following are descriptions of four of the field trials currently under way:

Lodgepole pine regeneration – 408 field plots are monitored across the forested landscape of Alberta to annually measure, monitor and forecast the development of lodgepole pine regenerated after harvesting. The utility of these plots for information beyond that originally envisaged (e.g. climate change) is reinforcing their value to the industry.

Cooperative management of historic research trials – The association, in cooperation with the Canadian Forest Service and Alberta Sustainable Resource Development, maintains and measures a number of CFS lodgepole pine studies that were abandoned in the late 80s when the CFS curtailed its growth and yield program in Alberta. With some installations dating back to the 1940s, the data from new measures of these plots are accelerating the development of knowledge on the growth and yield of lodgepole pine under various cultural regimes over long time periods.

Enhanced management of lodgepole pine – This project is focused on filling information gaps in nutrition and density management of both fire-origin and post-harvest stands. It is complementary to other association projects to improve the assessment of lodgepole pine growth and yield in managed stands, as well as other work being conducted in Alberta and B.C.

Regeneration management in a mountain pine beetle environment – In 2007, the mountain pine beetle increased its grip on Alberta forests with

a spreading incursion in the northwest as well as the south of the province. The association was successful in acquiring funds through the Forest Resource Improvement Association of Alberta and the Foothills Research Institute to begin work on a project that will provide Alberta managers with information and options for post-beetle stand management.

Member companies are Alberta Newsprint Company, Blue Ridge Lumber Inc., a Division of West Fraser Mills Ltd., Canadian Forest Products, Millar Western Forest Products Ltd., Spray Lake Sawmills, Sundance Forest Industries Ltd., Sundre Forest Products, a Division of West Fraser Mills Ltd., Hinton Wood Products, a Division of West Fraser Mills Ltd. and Weyerhaeuser Company. Alberta Sustainable Resource Development and the Foothills Research Institute participate as non-voting members.

Communications and Extension

Foothills Research Institute's Communications and Extension Program continues to raise awareness and support for our research programs, and facilitates the application of our research in policy and practice.

Over the past year, the adoption of our new name required development of new communications and marketing materials, including brochures, a display, signs and stationary. The change was announced in advertisements in regional newspapers and specialty publications. Foothills Research Institute contacts and partners have been notified about our new name via emails, eNotes and through The Edge forest business magazine.

In tandem with this work, a new website has been developed with a launch date expected to coincide closely with the release of this annual report. eNotes, our electronic newsletter that provides periodic updates on publications, workshops and other developments, was sent out bimonthly.

Staff partnered with Jasper National Park's interpretive program to deliver our Grizzly Bear "Within Growling Distance" theatrical interpretive program at Whistlers Campground 10 times over the summer of 2007. The same program is delivered on request to school groups and Junior Forest Wardens.

We also partnered with Grande Yellowhead School Division to develop a GIS/GPS three-credit course. This was piloted in October 2007 for three days at the Palisades with regional high school students. A locally-developed course application has been sent into Alberta Education with the plan to offer a one-semester course starting in September 2009.

Staff provided GPS/GIS support for the Youth Stewardship Course for grade 10 Career Technology Science/Biology students from across the Grande Yellowhead division. We also helped develop and deliver an educational module on the grizzly bear for a Grande Yellowhead Species at Risk course. This was delivered via video conference technology and included students across the division as well as some in Saskatchewan and Nunavut.

We delivered a GPS activity that showcases the Traditional Cultural Study of our Aboriginal Involvement Program to aboriginal youth taking part in an Aboriginal Youth Leadership session held at the Pallisades in June 2007 and May 2008.

Many other activities fill our schedule, from facilitating speakers to workshop organization, from input to the local Communities in Bloom committee to coordinating a French film crew that arrived in February.

Balance Sheet

Capital Assets	$ 0
Prepaid Expenses	5,104
Accounts Receivable	465,616
Bank/Cash	1,794,354
SUBTOTAL	$2,265,074

Deferred Revenue	$ 0
Accounts Payable	256,545
Unrestricted Funds	253,683
Internally Restricted Funds	1,754,846
Capital Assets	0
SUBTOTAL	$2,265,074

Revenue

ASRD	$1,468,800
Canadian Forest Service	120,000
West Fraser Mills Ltd.	403,000
Foothills Energy Partners	250,000
Forest Industry	1,169,641
Oil & Gas Industry	485,190
Nongovernment Organizations	54,250
Government of Alberta (excluding ASRD)	648,160
Mining Industry	25,000
Other	123,021
SUBTOTAL	$4,747,062

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Program Expenses - Detail

Aboriginal Involvement	$ 180,854
Adaptive Forest Management	24,137
Administration	265,521
Lost Creek Fire Research	66,307
Communications & Extension	285,155
Local Level Indicators	21,751
Fish and Watershed	315,647
Grizzly Bear Program	1,878,080
Foothills Growth and Yield Association	230,656
Geographic Information Systems	182,215
Natural Disturbance	393,871
Mountain Pine Beetle Ecology Program	63,480
Foothills Landscape Management Forum	562,712
Water for Life	0
Circumboreal	0
Social Sciences	10,000
Climate Change - NRRBC	220
Forest Productivity	2,512
Global Forum	3,223
Yellowhead Ecosystem Group	574
TOTAL	$ 4,486,914

Questions? Comments on this annual report?
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