

The FREP Vision:

Sustainability of Forest and Range Resources through Science and Stewardship

The FREP Mission:

To be a world leader in resource stewardship monitoring and effectiveness evaluations; communicating science-based information to enhance the knowledge of resource professionals and inform balanced decision making and continuous improvement of British Columbia's forest and range practices, policies, and legislation.

2010/2011 Year In Review

INTRODUCTION

During 2010/2011, British Columbia's Forest and Range Evaluation Program (FREP) actively continued its foundational role of assessing the effectiveness of forest and range practices under the *Forest and Range Practices Act (FRPA)*. Through evaluation and monitoring activities, FREP is committed to determining whether forest and range practices in the province are achieving the government's stewardship objectives for 11 FRPA resource values, with a focus on ecological function and social considerations. An important goal of the program is to provide current, high-quality information that supports the continuous improvement of policy and management practices in the interest of all British Columbians.

The purpose of this document is to provide a summary of FREP activities and expenditures for last fiscal year, as part of our public accountability. The intended audience for this newsletter is individuals interested in the return on investment in FREP. In the fiscal year 2010/2011, resource stewardship monitoring for stand-level biodiversity, water quality, and the fish/riparian FRPA resource values took place in most forest districts. Results are now available for these and other resource values, including visual quality, cultural heritage, forage (range), and timber resources. With over 5 years of province-wide implementation, FREP monitoring results have successfully informed policy development, timber supply reviews, and on-the-ground practices.

Highlights for 2010/2011 include:

- Completing 820 resource stewardship monitoring assessments
- Resource stewardship monitoring for stand-level biodiversity, water quality, timber (stand development monitoring), and fish/riparian resource values (164 stand-level biodiversity checklists, 173 water quality checklists, and 134 riparian checklists)
- Implementing and (or) piloting the monitoring for visual quality (23 evaluations in six districts), cultural heritage (43 assessments in seven districts), stand development monitoring (190 site assessments), and forage (201 assessments)
- Publishing 6 FREP reports and 10 extension notes

In March 2011, headquarters, region, and district staff from the B.C. Ministry of Forests, Lands and Natural Resource Operations and representatives from the B.C. Ministry of Environment took part in the seventh annual Continuous Improvement Workshop using Live Meeting web conferencing technology. The feedback received during this session helped inform the update of FREP's strategic plan, annual work plan, and the application for National Quality Institute's quality certification.

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The following section describes FREP's resource stewardship monitoring and evaluation initiatives and provides some recent results. For detailed information about FREP, the status of each resource value, or to view the protocols and reports, go to <http://www.for.gov.bc.ca/hfp/frep/indicators/table.htm>.

KEY ACCOMPLISHMENTS IN 2010/2011

Resource Stewardship Monitoring Implementation

Stand-level Biodiversity

Stand-level biodiversity monitoring during the 2010 field season took place on 164 cutblocks. These blocks were harvested between 2005 and 2010 are governed under legislative requirements set out in the *Forest Practices Code of British Columbia Act* and the FRPA. Over the last several years of biodiversity monitoring, over 1813 sites have been assessed and numerous extension notes and other extension products have been produced (see http://www.for.gov.bc.ca/hfp/frep/publications/extension_notes.htm).

Fish/Riparian

Over 1800 streams have now been assessed province-wide. Streams (all classes 1–6) were randomly sampled from a population of cutblocks harvested under the legislative requirements set out in the *Forest Practices Code of British Columbia Act* and the FRPA. The majority of those sampled fell into the smaller stream classes (S4–S6), which is consistent with the proportional abundance of these streams found in nature. The Riparian Management Monitoring Protocol provides a description of the stream classes and the assessment procedures (see <http://www.for.gov.bc.ca/ftp/hfp/external!/publish/frep/indicators/Indicators-Riparian-Protocol-2009.pdf>).

Cultural Heritage Resources

During 2010, the final pilot year for cultural heritage resource monitoring, 43 sites and features were sampled within (or next to) 42 forest cutblocks in seven forest districts. To date, 97 assessments have been completed. Although the year-to-year findings show significant consistency, some variability is attributed to refinements in the field protocol, the number of assessments, and wider variety of cultural heritage resource values held by participating First Nations in 2009. The monitoring field cards and protocol are now finalized and ready for operational implementation in the 2011 field season (see <http://www.for.gov.bc.ca/hfp/frep/indicators/table.htm#heritage>).

Stand Development Monitoring (Timber Resource Value)

During the 2010 field season, 14 forest districts participated in a stand development monitoring (SDM) pilot, collecting roughly 190 samples. This monitoring provides the key information on the productivity and health of second-growth, free-growing stands: stand density and stocking, levels of pest incidence, and current status of stand health. The pilot was completed in 2010 and stand development monitoring will be ready for operational implementation in 2011. To date, SDM data has been used in silviculture decision making (e.g., refining species, species mixes, and planting densities), updating site productivity estimates and inventory labels and for providing forest health status data for several timber supply reviews.

Water Quality

In 2010/2011, 173 water quality assessments were completed. A total of 527 water quality assessments have now taken place since this monitoring began in 2006. Besides its use in the provincial FREP program, the Water Quality Protocol has been adopted by a number of forest licensees working in community watersheds in British Columbia for their sustainable forest management certification requirements. Water quality extension products detailing monitoring results can be found on the FREP website at http://www.for.gov.bc.ca/hfp/frep/publications/extension_notes.htm.

Visual Quality

From 2006 to 2008, visual samples were collected from 255 *Forest Practices Code* cutblocks within scenic areas with Recommended Visual Quality Classes or Visual Quality Objectives. From 2008 to 2010, visual samples were collected from 99 cutblocks governed under the FRPA. An extension note detailing performance under the *Forest Practices Code* is available at http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_13.pdf. A report comparing Code and FRPA performance is expected in 2012.

Forage

In 2010, the forage/range resource value team completed 24 stream assessments, 129 uplands assessments and 48 wetlands assessments for a total of 201 assessments. In addition, a report entitled *Monitoring Grassland Bird Nest Cover Using Digital Photography at Two Locations in the Cariboo Grasslands of British Columbia* was published in February 2010 (see <http://www.for.gov.bc.ca/hfp/frep/publications/reports.htm#rep23>). For more information on the forage/range resource value, go to <http://www.for.gov.bc.ca/hfp/frep/values/forage.htm>.

Continuous Improvement Workshop

In March 2011, FREP held its seventh annual Continuous Improvement Workshop. This workshop helps us to look for opportunities to improve all aspects of the program and to continue on the path of achieving the FREP mission.

This workshop enables FREP to:

- Build and strengthen its relationships;
- Review and discuss its successes and challenges; and
- Review and discuss some of the resource stewardship monitoring and evaluation results from the past field season.

In addition, this workshop provides all people involved in FREP with an opportunity to voice their feedback and to contribute suggestions on how the program should go forward. The 2011 session was conducted via Live Meeting, with six locations electronically linked across the province.

People-Focus: Program and District Recognition

FREP owes much of its success to dedicated staff in the province's forest districts. On September 15, 2010, Chief Forester **Jim Snetsinger**, the program's executive sponsor, awarded the 2009 Chief Forester Award for Excellence in Resource Stewardship Monitoring to the Columbia Forest District (now the Selkirk Forest District). This annual honour is awarded to the forest district that demonstrates the highest level of contribution and excellence during FREP's RSM field season. After a field tour, Jim hosted a small celebration for district staff.

For more information on this award, go to <http://www.for.gov.bc.ca/hfp/frep/recognition/chief.htm>.

The winners of the RSM Photography Contest were announced during the March 2011 Continuous Improvement Workshop. Recognition for best overall photograph went to the South Island Forest District's **Attila Gereb**, with a photo entitled "Standing Out." View all the photo entries for the 2010 field season at <https://picasaweb.google.com/103683886685839758222/FREP2010FieldSeasonPhotoContest?authkey=Gv1sRgCL7Qy4LVk8LRQA#>.

Quality Management and Data Integrity

FREP continues to embrace quality management (culture, principles, and best practices) using National Quality Institute (NQI) criteria. Since 2006, the program has achieved the first three levels of certification through the NQI's Progressive Excellence Program and on October 21, 2008 received the Silver Trophy of the Canada Award for Excellence. FREP applied for Level Four Organizational Certification in April 2011.

FREP has also continued the focus on ensuring superior data quality. Processes such as data logic validation and data entry verification are performed at both district and resource value team (subject matter experts) lead levels. Because of these processes and due diligence, FREP continues to maintain a high level of data integrity.

For more information on FREP's quality management activities, go to <http://www.for.gov.bc.ca/hfp/frep/qmgmt/index.htm>.

Information Management System

Due to a lack of system development fund, no information management system development occurred in 2010. The IMS Working Group continues to track issues and receive improvement suggestions; however, only the most critical repairs have been made.

For more information on the FREP IMS, go to <http://www.for.gov.bc.ca/hfp/frep/ims/index.htm>.

Training

In 2010, FREP delivered 11 Stand Development Monitoring training sessions around the province. In total, 14 districts and 82 field staff received formal training and two Live Meeting sessions were also held.

Resource Value Team Leads delivered three Fish/Riparian training sessions to 27 staff in three districts. A 1-day refresher session was also delivered in Vanderhoof Forest District. Riparian mentoring sessions were delivered in an additional seven forest districts.

No formal Stand-Level Biodiversity training sessions were scheduled in 2010 due to budget pressures. One informal training session occurred in the South Island District and mentoring training was conducted in several other districts around the province. One Live Meeting session was held to address stand-level biodiversity questions from field staff.

The Water Quality Resource Value Team delivered a 2-day training session and one refresher session. Thirty-two people received Water Quality training in 2010.

Cultural Heritage Resource value training was primarily field-based. Twelve field staff attended a session in Vanderhoof that focussed on the practical implementation of monitoring, and involved a mix of classroom instruction and field visits.

For more information on FREP's training activities, go to <http://www.for.gov.bc.ca/hfp/frep/rsm/training.htm>.

Communications

FREP focussed on enhancing its communication efforts throughout 2010/2011. Districts were encouraged to use the communication methods that best suited their situation and needs. Example communication events included:

- formal presentations;
- licensee/ministry joint field visits to sampling sites;
- field tours/information sessions;
- training sessions;
- District Managers and Regional Management Team conference calls; and
- a survey and results action plan on communication effectiveness and publication format and style.

During the 2010/2011 fiscal year, FREP published several reports and extension notes.

Reports

Report No. 22 – *Evaluating Forest Management Planning and Implementation under the Forest and Range Practices Act: FREP Cultural Heritage Resource Process Evaluation Pilot Project.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/reports/CHR_report_22.pdf

Report No. 23 – *Monitoring Grassland Bird Nest Cover Using Digital Photography at Two Locations in the Cariboo Grasslands of British Columbia.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/reports/FREP_Report_23.pdf

Report No. 24 – *Conceptual Models for Wildlife Effectiveness Evaluations: A Recommended Approach.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/reports/FREP_Report_24.pdf

Report No. 25 – *Effectiveness Monitoring of Badger Wildlife Habitat Areas: Summary of Current Areas and Recommendations for Developing and Applying Protocols.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/reports/FREP_Report_25.pdf

Report No. 26 – *Evaluating the Effectiveness of Wildlife Habitat Areas for Northern Goshawks (*Accipiter gentilis laingi*) in Coastal British Columbia: Selection of Indicators.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/reports/FREP_Report_26.pdf

Report No. 27 – *State of Stream Channels, Fish Habitats, and their Adjacent Riparian Areas: Resource Stewardship Monitoring to Evaluate the Effectiveness of Riparian Management, 2005–2008.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/reports/FREP_Report_27.pdf

For more information about these and other FREP Reports, go to <http://www.for.gov.bc.ca/hfp/frep/publications/reports.htm>.

Extension Notes

Extension Note No. 8 – *Coarse Woody Debris Background.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_08.pdf

Extension Note No. 9 – *Forest and Range Evaluation Program Riparian Protocol: Why These Indicators?* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_09.pdf

Extension Note No. 10 – *Forest and Range Evaluation Program Stand Development Monitoring.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_10.pdf

Extension Note No. 11 – *Cultural Heritage Monitoring: Results, Perspectives, and Opportunities for Improvement.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_11.pdf

Extension Note No. 12 – *What is a Water Quality Effectiveness Evaluation?* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_12.pdf

Extension Note No. 13 – *The Effectiveness of Managing Visual Resources under the Forest Practices Code.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_13.pdf

Extension Note No. 14 – *Evaluating Badger Wildlife Habitat Areas: Pilot Study Results.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_14.pdf

Extension Note No. 15 – *Evaluating Northern Goshawk Wildlife Habitat Areas: Selecting Monitoring Indicators.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_15.pdf

Extension Note No. 16 – *Using Conceptual Models to Select Indicators for Wildlife Resource Values.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_16.pdf

Extension Note No. 17 – *State of Stream Channels, Fish Habitats, and Adjacent Riparian Areas: Resource Stewardship Monitoring to Evaluate the Effectiveness of Riparian Management, 2005–2008.* http://www.for.gov.bc.ca/ftp/hfp/external!/publish/FREP/extension/FREP_Extension_Note_17.pdf

For more information about these and other FREP extension notes, go to http://www.for.gov.bc.ca/hfp/frep/publications/extension_notes.htm.

For more information on FREP communications, go to <http://www.for.gov.bc.ca/hfp/frep/pmgmt/index.htm> or contact Peter Bradford (Peter.Bradford@gov.bc.ca).

FREP Program Development

In 2010, FREP continued the process of reviewing and updating its strategic plan based on the results of the annual quality survey, the FREP Continuous Improvement Workshop, and the Ministry of Forests, Lands and Natural Resource Operations business plan. Because of the nature and extent of recent organizational change, FREP narrowed the time frame for the current strategic plan to 3 years (2010–2013).

Detailed tasks for each strategic area are outlined in annual work and improvement plans (<http://www.for.gov.bc.ca/hfp/frep/pmgmt/index.htm>) and quality control protocols (<http://www.for.gov.bc.ca/hfp/frep/qmgmt/index.htm>).

For more information on FREP's strategic plan, go to <http://www.for.gov.bc.ca/hfp/frep/pmgmt/index.htm>.

Each year, an annual Program Improvement Plan is developed on the basis of the Strategic Plan, as well as on staff and stakeholder input. This document details the major tasks and focus areas for program improvement. For a copy of the most recent plan, go to <http://www.for.gov.bc.ca/hfp/frep/pmgmt/index.htm>.

FREP FUNDING AND EXPENDITURES FOR 2010/2011

The table below shows an approximate breakdown of FREP expenditures for 2010/2011.

Expenditure Category (\$)	\$
RSM Checklist Development, Pilot Testing, and Implementation	46 000
Intensive Evaluation Projects	0
Training	47 000
Program Support, Planning, and Development	24 000
Quality Management including data validation and verification	21 000
Field-based Operating Costs (e.g., helicopter, boat and other site access)	125 000
Total (does not include salaries)	263 000

The FREP Year in Review is a regular publication of the Forest and Range Evaluation Program designed to inform stakeholders on program development and implementation, and report on the results of evaluation projects.



KEY FREP INITIATIVES FOR 2011/2012

- Monitoring for biodiversity, fish/riparian, water quality, cultural heritage, timber, forage, and visual quality resource values
- Continuing quality assurance activities, including training, mentoring, and data validation and verification
- Sampling only areas harvested under *FRPA* (i.e., increasingly fewer *Forest Practices Code* cutblocks)
- Communicating results via reports and other extension products
- Completing an updated FREP Strategic Plan
- Enhancing communication efforts
- Continuing focus on quality management with the National Quality Institute/Excellence Canada, including Level Four Certification and the Gold Award of the Canada Awards for Excellence
- Investigating a multiple-resource value assessment approach

ACKNOWLEDGEMENTS

The FREP team sincerely appreciates the significant contributions of everyone involved in helping attain the achievements and successes of the program in its seventh year of operations.

Special thanks are extended to:

- Our field staff (as there are so many field staff names, please see FREP website for district contacts) for their hard work in achieving program implementation and innovations.
- Chief Forester, Jim Snetsinger.
- Ian Miller, Lorne Bedford, and Jim Sutherland for their guidance as the Resource Practices Branch Management Team.
- Resource value team leaders (Nancy Densmore, Laura Darling, Richard Thompson, Peter Tschaplinski, Doug Fraser, Stephane Dube, Alex Woods, Frank Barber, Jacques Marc, Dave Maloney, Laura Darling, Kathy Paige, Wendy Bergerud, Steve Lehnert, and Peter Bradford) for their dedication in developing and continually improving indicators, protocols, and training.
- Our lead trainers and contractors (Derek Tripp, Dean McGeough, Brian Carson, Susan Bannerman, and Amanda Nemeč) for providing inspired in-house workshops, field training, mentoring, analysis, and advice.

MORE INFORMATION

For additional information about FREP, please refer to our website at <http://www.for.gov.bc.ca/hfp/frep/index.htm>.