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.

2014/2015 Year in Review

INTRODUCTION

As part of the British Columbia Ministry of Forests, Lands and Natural Resource Operations’ Forest and Range Evaluation Program’s (FREP) commitment to public accountability, this annual review summarizes FREP activities and expenditures for the 2014/2015 fiscal year, providing details for those interested in the program’s return on investment.

Highlights for 2014/2015 include:

• Completing 691 resource stewardship monitoring assessments
• Publishing the Assistant Deputy Minister Resource Stewardship Report with analysis of data collected to the 2012 field season.
• Training and mentoring for riparian, water quality, biodiversity, stand development monitoring, visual quality and cultural heritage resource stewardship monitoring assessments
• Completing Multiple Resource Value Assessment (MRVA) pilots and reports for 5 timber supply areas or natural resource districts, in addition to the 25 completed in previous two fiscal years
• Developing a process to incorporate monitoring results from the broader natural resource community into MRVA reports (known as MRVA2) and piloting that in four areas of the province.
• Comprehensive assessment of the current FREP sampling approach and alternative methodologies to ensure the program is meeting client needs.

The following sections describe FREP’s resource stewardship monitoring and evaluation initiatives and provide some recent results. For detailed information about FREP, the status of each resource value, or to view the protocols and reports, go to: www.for.gov.bc.ca/hfp/frep.
KEY ACCOMPLISHMENTS IN 2014/2015

Resource Stewardship Monitoring Implementation

Stand-level Biodiversity
Stand-level biodiversity monitoring during the 2014 field season took place on 120 cutblocks. These blocks were harvested between 2011 and 2013. Since 2006, a total of 2265 sites have been assessed.

Landscape-level Biodiversity
A Geographic Information System (GIS) model incorporating publicly available forest cover information for the province has been developed in co-operation with the Forest Practices Board. This model uses three landscape-level biodiversity indicators: (1) seral stage, (2) interior old forest, and (3) leading tree species by site index (a surrogate for site quality). The model produces both spatial and tabular output for these indicators. 2014/2015 saw development of a procedure to incorporate landscape-level results into MRVA reporting.

Fish/Riparian
In 2014, 109 streams were sampled, bringing the total number of streams assessed since 2006 province-wide to 2039. The largest stream in or near randomly selected and recently harvested cutblocks is sampled. The majority of streams sampled fell into the smaller stream classes (S4 and S6).

Cultural Heritage Resources
During 2014, cultural features were assessed within, or adjacent to, 46 cutblocks in 8 districts. To date, including the data from operational pilots, 243 cutblock assessments have been completed.

Stand Development Monitoring (Timber Resource Value)
In the 2014 field season 18 districts participated, collecting 110 samples. This monitoring provides key information on the productivity and health of free-growing forest stands, including stand density and stocking, levels of pest incidence, and current status of stand health.

Water Quality
In 2014, water quality monitoring originated at 140 cutblocks, resulting in 711 site assessments. Since this monitoring began in 2008, water quality has been assessed for 1064 cutblocks and associated road networks/stream crossings (5478 sites in total).

Visual Quality
In 2014, 31 visual quality samples were collected. These 2014 samples came from five Natural Resource Districts. 249 scenic areas were assessed from 2006 to 2008 on Forest Practices Code cutblocks within scenic areas with recommended Visual Quality Classes or Visual Quality Objectives. Visual samples have been collected for 499 cutblocks in scenic areas regulated under the Forest and Range Practices Act (FRPA) (31 cutblocks in 2014).

Forage/Range Health
In 2014, range program staff completed 327 upland, 89 stream, and 104 wetland assessments in 12 natural resource districts. This information is used to direct resource use at a district level. The Range Branch also completed several intensive carrying capacity surveys concerned with forage objectives. This information will be reported out at a later date.

Soils
No soils assessments were completed in 2014 due to lack of funding for the required high resolution photos of harvested areas.

Wildlife
Streamlining of the wildlife value monitoring began in 2014 with plans to go forward with a geographic information system (GIS) overview assessment of wildlife habitat areas to be followed by field-based assessments where the GIS assessment indicates the need.

Resource Features
This value is specific to karst (limestone) features such as sink holes, cave entrances and sinking streams. The protocol has been field tested and will be finalized in 2015/16.

Recreation
FREP did not conduct any recreation monitoring during 2014.
**Sampling Design Workshop**

A continuous improvement workshop was not held in 2014. However, a workshop to investigate the need and potential for changing the FREP sampling strategy was held January 26 and 27, 2015 in Victoria. There were 28 participants, 12 of them district staff involved in the FREP program. The workshop objectives included:

- establishing a common understanding of concerns with the current sampling design and motivations behind potential additional stratification or other modifications of the sampling design
- discussion of potential improvements to the current sampling design

Further work on this project will proceed during 2015.

**People-Focus: Program and District Recognition**

The Forest and Range Evaluation Program owes much of its success to dedicated staff in districts around the province.

The Assistant Deputy Minister’s Award for Excellence in Resource Stewardship Monitoring is given to the district demonstrating the highest level of contribution during the program’s monitoring field seasons. The award for the 2013 field season was given jointly to Nadina, and North Island/Central Coast Natural Resource Districts. For more information on this award, go to: www.for.gov.bc.ca/hfp/frep/recognition/adm.htm.

The winners of the 2015 FREP Photography Contest were announced during a Resource Stewardship Monitoring call. Recognition for best overall photograph went to Norma Stromberg-Jones, Stewardship Forester for the Prince George Natural Resource District, with a wildlife photo entitled “Lynx relaxing after a swim”. View all the photo entries at: https://plus.google.com/photos/103683886685839758222.

**Training**

In 2014, FREP delivered training and mentor training for the following resource values: cultural heritage, fish/riparian, timber (stand development monitoring), stand-level biodiversity, visual quality, and water quality. Eight training sessions for stand development monitoring were conducted around the province. In total, 55 district field staff received formal training. Resource value team leads and trainers delivered 10 Fish/Riparian training sessions, with 30 staff receiving full training and 35 receiving refresher training. Five Stand-Level Biodiversity training sessions were scheduled in 2014, with 12 district staff receiving full training and 9 receiving mentor training. The Water Quality Resource Value Team delivered six sessions (1-day mentor and 2-day full training sessions) to 29 district staff. Eighteen district staff attended a Cultural Heritage Resource training session in Smithers that focused on the practical implementation of monitoring, and involved a mix of classroom instruction and field visits. For 2014, 13 district staff received Visual Quality resource value training. Most range program staff have received training on the evaluation of rangeland health. Each spring, groups spend 1 day re-acquainting themselves with the evaluation techniques. Forage analysis is initiated at the request of districts. Typically, Range Branch members lead the efforts and train district range staff.

**Communications**

FREP continued to enhance its communication efforts throughout the 2014/2015 fiscal year. In addition to communications led by Resource Practices Branch staff, district staff used the communication methods that best suited their local client situation and needs.

In 2014 an enhancement of the Multiple Resource Value Assessments (MRVA) reports began. Four expanded MRVA reports were drafted bringing in other sources of monitoring data on specific areas. The four areas considered were Merritt TSA, Lake Babine First Nation, Wet’suwet’en First Nation and Cariboo Land Use Plan area.

**FREP Reports**

**2013/14 FREP Year in Review**

This annual review summarizes FREP activities and expenditures for the previous fiscal year. To read previous Year in Review publications, please visit: www.for.gov.bc.ca/hfp/frep/publications/yearinreview.htm.

**ADM Resource Stewardship Report**

A report including summary results for data collected to the end of the 2012 field season was posted on the FREP website. This year’s report summarized value results at the three area levels North, South and Coast were sufficient data was available. https://www.for.gov.bc.ca/hfp/frep/publications/chief_forester.htm
FREP FUNDING AND EXPENDITURES FOR 2014/2015

The table below shows an approximate breakdown of FREP expenditures for 2014/2015.

<table>
<thead>
<tr>
<th>Expenditure Category</th>
<th>$</th>
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<tbody>
<tr>
<td>Monitoring Checklist Development, Pilot Testing, and Implementation</td>
<td>90,000</td>
</tr>
<tr>
<td>Training</td>
<td>77,000</td>
</tr>
<tr>
<td>Program Support, Planning, Development, and Extension</td>
<td>58,000</td>
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<tr>
<td>Quality Management (including data validation, verification, and management)</td>
<td>25,000</td>
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<tr>
<td><strong>Subtotal:</strong></td>
<td><strong>250,000</strong></td>
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<tr>
<td>Field-based Operating Costs (e.g., helicopter, boat access costs) [estimated]</td>
<td>168,000</td>
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<tr>
<td>Annual Salaries Associated with FREP (estimate of combined operations and provincial staff)</td>
<td>768,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>1,186,000</strong></td>
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KEY FREP INITIATIVES FOR 2015/2016

- Completing a target of 40 monitoring assessments per district
- Publishing the Assistant Deputy Minister Resource Stewardship Report
- Resource stewardship monitoring for biodiversity, fish/riparian, water quality, cultural heritage, timber (stand development monitoring), visual quality, forage, resource features, and soil resource values
- Continuing quality assurance activities, including training, mentoring, site checks (re-sampling of some sites to ensure accuracy of assessments), and data validation and verification
- Communicating results via reports, extension notes, and other communication products, such as YouTube videos
- Reviewing and updating the FREP Strategic Plan, and Work and Improvement Plan
- Ongoing updating of MRVA reports to support district needs
- Completion of the four initial Multiple Resource Value Assessment enhanced pilots (MRVA2) that will use the MRVA concept and expand upon it with non-FREP monitoring data
- Enhanced collaboration with cumulative effects initiatives
- Completing work on the FREP landscape-level biodiversity assessment tool
- Continuing to embrace, embed, and enhance quality management activities within all aspects of FREP using Excellence Canada criteria
- Participating in the Natural Resource Sector Monitoring and Evaluation Collaborative
- Field-testing electronic data entry on tablets
- Completing a monitoring protocol for old growth management areas
- Increasing wildlife monitoring
- Completing assessment of current simple random sampling approach to FREP assessments and identification of appropriate options to meet current client needs

MORE INFORMATION

For additional information about FREP, please refer to our website at: www.for.gov.bc.ca/hfp/frep, or view our YouTube videos at: www.youtube.com/user/frep101.

The FREP Year in Review is an annual 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.