

# 2016/2017 Year in Review

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## INTRODUCTION

As part of the British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development's Forest and Range Evaluation Program's (FREP) commitment to public accountability, this annual review summarizes FREP activities and expenditures for the 2016/2017 fiscal year, providing details for those interested in the program's return on investment.

Highlights for 2016/2017 include:

- Completing 743 resource stewardship monitoring assessments,
- Publishing 2 extension notes and 2 reports
- Holding a two day FREP Continuous Improvement Workshop
- Training and mentoring for riparian, water quality, biodiversity, visual quality and cultural heritage resource stewardship monitoring assessments
- Integrating work between the Ministry of Forests, Lands and Natural Resource Operations and Rural Development and the Ministry of Environment, as well as across Forests, Lands and Natural Resource Operations branches, programs, regions, and districts
- Stand-level Wildlife Habitat Monitoring Protocol completed for pilot implementation in 2017/18
- Recommended refinements to the approach for the office-based assessments of condition and effectiveness of habitat designations (Wildlife Habitat Areas, Ungulate Winter Range)
- Completion of the first version of the FREP landscape-level biodiversity assessment approach
- Province wide engagement in the development of a new, Executive endorsed, three year program strategy, focused on achieving a statistically sound, 5-year rolling monitoring data, that will directly support forest management and practice improvements
- Ongoing program focus on continually enhancing collaboration between Resource Practices Branch and Natural Resource Regions and Districts

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:

<http://www2.gov.bc.ca/gov/content?id=F799814F5E004CA0A02A02D63CB69E55>.

## KEY ACCOMPLISHMENTS IN 2016/2017

### Resource Stewardship Monitoring Implementation

#### *Stand-level Biodiversity*

Stand-level biodiversity monitoring during the 2016 field season took place on 166 cutblocks. These blocks were harvested between 2013 and 2015. Since 2006, a total of 2669 sites have been assessed.

#### *Landscape-level Biodiversity*

A methodology was developed which consists of a comparison of the observed versus "expected" seral stage distributions for the major biogeoclimatic variants that exist within a management unit. The amount of protection from harvested is also considered. Seral stage definitions and the "expected" seral stage distributions come from the Forest Practices Code Biodiversity guidebook to ensure consistency at a provincial scale. This assessment was reported in the fiscal 2016/2017 ADM stewardship report.

### ***Fish /Riparian***

In 2016, 154 streams were sampled, bringing the total number of streams assessed since 2006 province-wide to 2329. The largest stream in or near randomly selected and recently harvested cutblocks is sampled. The majority of streams sampled were stream classes S3 and S6.

### ***Cultural Heritage Resources***

During 2016, cultural features were assessed within, or adjacent to, 120 cutblocks in 14 districts. To date, including the data from operational pilots, 456 cutblock assessments have been completed. A traditional ecological knowledge project initiated with Lake Babine Nation was ongoing in 2016/17.

### ***Stand Development Monitoring (Timber Resource Value)***

A revised protocol was developed and was tested in the Nadina and Thompson Rivers Resource Districts. The revised protocol was designed so the data collected would be compatible with the data collected from FAIB's Young Stand Monitoring program. The plot design focused on the collection of a tree list to enable projection to harvest using a growth model and the forest health information collected is now incidence and severity.

### ***Water Quality***

In 2016, water quality monitoring originated at 154 cutblocks, resulting in 642 site assessments. Since this monitoring began in 2008, water quality has been assessed for 1364 cutblocks and associated road networks/stream crossings (6603 sites in total). Additional water quality work included refining procedures for community watersheds. 2016 also saw the implementation of digital data collection in the field with the use of iPad for all water quality monitoring.

### ***Visual Quality***

In 2016, 145 visual quality samples were collected. These 2016 samples came from 20 Natural Resource Districts. The 2016 samples are part of 723 samples collected for cutblocks in scenic areas regulated under the *Forest and Range Practices Act (FRPA)*. 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.

### ***Forage / Range Health***

In 2016, range program staff completed 330 upland, 65 stream and 106 wetland health assessments in 11 natural resource districts. Monitoring results are used in decisions to renew grazing licences and make required changes to range use plans as well to qualify for funding to do range improvements to better manage livestock and protect resource values.

### ***Soils***

In 2015 the Province of BC acquired access to Google Earth's high resolution air photos. With these, the soils program is able to perform an assessment of permanent and temporary access across the province using 4000 "Google Earth tiles" and high resolution imagery. This involved developing an algorithm for road classification and use of an expert elicitation process to refine road classification and to identify other issues with the road networks. Analysis work was done in 2015/2016 and will be reported out in the winter of 2017.

### ***Wildlife***

Based on review of pilot studies conducted last fiscal and engagement with other environmental monitoring initiatives, refinements to the approach for office-based assessments of condition and effectiveness of habitat designations (Wildlife Habitat Areas, Ungulate Winter Range) were recommended. A field-based Stand-level Wildlife Habitat monitoring protocol to complement the Stand-level Biodiversity monitoring protocol was also completed for pilot implementation in 2017/18.

### ***Resource Features***

This value is specific to karst (limestone) features such as sink holes, cave entrances and sinking streams. In 2016, a draft protocol and a set of digital field cards were developed. The protocol and cards will be tested

and finalized in the beginning of 2017/2018. Extension Note 37: Preliminary Analysis of Surface Karst Feature Data From Northern Vancouver Island was published in June 2016.

## Recreation

FREP did not conduct any recreation monitoring in 2016.

## Continuous Improvement Workshop

A continuous improvement workshop was held February 28<sup>th</sup> and March 1<sup>st</sup> in Victoria. Approximately 85 people attended including ministry field staff, regional staff and branch staff and representation from consultants and First Nations. Day one of the workshop focused on continuous improvement of communications and relationships. The day focused on senior manager communications, engagement with industry and First Nations, FRPA, cumulative effects and the FREP three year strategic plan. Day two's focus was on professional development. Included on this day was a RSM training Q & A, an update on stand development monitoring, an overview of the small stream project, an update on stand-level wildlife habitat monitoring, the use of new technologies and feedback on MRVA reports.

## 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 2016 field season was given to the Mackenzie Natural Resource District.

The winners of the 2017 FREP Photography Contest were announced the FREP Continuous Improvement Session. Recognition for best overall photograph went to **Berry Wijdeven** from the Haida Gwaii Natural Resource District, with a people photo entitled "Just around the bend". **Lorne Voysey** was the recipient of the Stephanie Wilkie peer award for his many years of dedicated and enthusiastic contributions to FREP.

## Training

In 2016/17, FREP delivered training and mentor training for the following resource values: cultural heritage, fish/riparian, stand-level biodiversity, visual quality, and water quality as well as related training for FileMaker forms, calibration, rangeland health and forage supply methodology.

## Data and Information Management

During the 2016 field season, digital data collection was implemented for Water Quality. The report conversion project was completed and all FREP Information Management System reports were successfully converted to the new format. In addition, some minor changes were made to the Biodiversity screens. Also in 2016/17, a small proof of concept project was undertaken to move digital data from iPad to a central location. This proof of concept will be expanded into 2017/18.

## Communications

FREP continued to enhance its communication efforts throughout the 2016/2017 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. Some example of communication events included:

- District staff online licensee meetings
- Direct conversations with licensees discussing the data collected on their harvest areas
- Data sharing and discussions --, FREP shared data with licensees over 20 times (20 individual industry conference calls).
- Reports and extension notes
- A small streams workshop with coastal licensees to kick off a FREP licensee outreach initiative to be completed in 2017
- A joint ABCFP/FREP webinar on small streams
- Resource Practices Branch presentations to District Managers and Regional Management Teams

In 2016, work continued on the NRS Integrated Monitoring and Evaluation reports. Final drafts of two reports were completed and are in review process. It is anticipated that reports for the Lake Babine First Nation, Wet'suwet'en Traditional Territory, Merritt Timber Supply Area, Peace Resource district and Haida Gwaii reports will be finalized 2017.

## Strategic Planning

A new FREP Three Year Strategic Plan was approved by FLNRO Executive in fiscal 2015/16. This plan addresses how FREP will fully implement monitoring for all 11 FRPA resource values and fill existing data gaps. The plan was based, in large part, on a scientific/statistical review of FREP sampling design, field staff, specialist and management input; and, feedback received at the 2015/16 FREP continuous improvement meeting. The plan is updated annually and is posted on the FREP website.

## FREP Reports

### *2015/16 FREP Year in Review*

This annual review summarizes FREP activities and expenditures for the previous fiscal year.

### *ADM Resource Stewardship Report*

In 2016, the ADM Resource Stewardship Report was completed using the Multiple Resource Value Assessment methodology and reporting structure. This year's report summarized value results at the regional level where sufficient data was available.

### *Extension Notes*

Extension Note 37: Preliminary Analysis of Surface Karst Feature Data From Northern Vancouver Island

Extension Note 38: The Importance of Small Streams in British Columbia.

## FREP FUNDING AND EXPENDITURES FOR 2016/2017

*The table below shows an approximate breakdown of FREP expenditures for 2016/2017.*

Expenditure Category	Estimated Expenditure
Developing protocols, pilot testing, intensive evaluations/special projects, contract data collection	418,000
Training	185,000
Program support, planning, development and extension	26,000
Quality Management (including data validation, verification and management)	101,000
Subtotal	730,000
Field-based operating costs (e.g., helicopter, boats etc.)	203,000
Annual salaries associated with FREP (operations and provincial staff)	1,090,000
<b>TOTAL</b>	<b>2,023,000</b>

## KEY FREP INITIATIVES FOR 2017/2018

- Continued focus on efficiency in the delivery of FREP activities, with a particular focus on supporting Districts with achievable monitoring targets and adequate resourcing
- Completing district-based targets for monitoring assessments per district, these targets are dependent on past sampling within a particular district the goal is to achieve 30 samples for each value over a rolling five year window
- Leading the development and publication of the new *Assistant Deputy Minister Stewardship Report* (FREP and other stewardship data)
- 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 training videos
- Focused licensee outreach on small streams including workshops and face to face meetings in an effort to more fully engage licensees under the professional reliance model
- Reviewing and updating the FREP Strategic Plan, and Work and Improvement Plan
- Updates to 11 FREP-MRVA reports to support district needs
- Completion of the Natural Resource Sector Monitoring and Assessment pilot reports that use the MRVA concept and expand upon it with additional monitoring and assessment data
- Enhanced collaboration with cumulative effects initiatives
- Inclusion of FREP landscape-level biodiversity assessment in ongoing reporting
- Completion of the Karst cards and protocols
- Pilot implementation of the Stand-level Wildlife Habitat monitoring protocol in selected districts
- Integration of the Stand-level Biodiversity and Stand-level Wildlife Habitat monitoring protocols into one protocol
- Participating in the Natural Resource Sector Monitoring and Evaluation Collaborative
- Delivery of working digital data collection for water quality, riparian and cultural heritage
- Completion of phase one of Cultural Heritage Traditional Ecological Knowledge project

## MORE INFORMATION

For additional information about FREP, please refer to our website at:

<http://www2.gov.bc.ca/gov/content?id=F799814F5E004CA0A02A02D63CB69E55>