



DFMP UPDATE

PROGRESS REPORT ON THE DEVELOPMENT OF MILLAR WESTERN'S 2017-27 DETAILED FOREST MANAGEMENT PLAN

Issue 2

April 8, 2016

Every 10 years, forest companies holding Forest Management Agreements (FMAs) with the Alberta government are required to develop a Detailed Forest Management Plan (DFMP), a long-term strategic plan that describes how FMA areas will be managed over the next decade. Follow our progress, as we work to develop our DFMP for 2017-27.

DFMP Progress: VOITs receive Agreement-in-Principle

Since our last progress report in November 2015, the DFMP has made significant advancements. First Nations consultations on the **Values, Objectives, Indicators and Targets (VOITs)** were substantially concluded by early 2016. The Alberta government granted the VOITs agreement in principle (AIP) on March 2, 2016, while asking for minor changes and additional follow-up with First Nations. (AIP is not final approval, but provides reasonable assurance that a DFMP component is, upon



Plan Development Team (PDT) at work

initial review, consistent with government expectations.) Millar Western has also completed a first draft of its **structure retention strategy**, which defines how much standing timber is left behind in cutblocks to address

ecological values. Currently with the Alberta government for review, the strategy may undergo further revision following the government's release of a draft structure retention directive that is to become effective May 1, 2017. **Volume sampling**, which involves collecting data from sample plots to measure forest productivity for the purpose of forecasting future growth patterns, has also concluded (see sampling story on Page 3). The government has completed its initial review of the first draft of the DFMP's **Chapter 3, Forest Landscape Assessment**,

Cont. Page 2

Millar Western first to use updated wildlife modelling approach

Forest companies have long incorporated wildlife values into forestry planning. In developing previous DFMPs, for example, Millar Western launched the Biodiversity Assessment Project (BAP), to ensure sufficient wildlife habitat was maintained on the landscape over time; however, wildlife habitat analyses like these were typically completed late in the planning process, after a Spatial Harvest Sequence (SHS) was developed.

This year, the Alberta government introduced an updated modelling method that assesses wildlife habitat conditions at an earlier stage in the planning process, with the goal of producing an SHS that results in the least impact on forest-dependent species. The test case for this approach is Millar Western's 2017-27 DFMP.

The revised habitat modelling approach will be applied to five songbird species (Black-throated green warblers, Bay

-breasted warblers, Brown creepers, Ovenbirds and Canada warblers), along with Barred owls



American Marten

and American marten. "These species were selected, because they are heavily affected by forest changes and have habitat needs in common with other sensitive forest

Cont. Page 2

FORESTRY FACTS

- In Canada, the annual rate of deforestation, or the permanent removal of trees, is less than 0.02%, with most attributed to agriculture, non-forestry resource extraction and urban expansion and recreation.
- Only one quarter of Canada's forests are managed for commercial use. The vast majority (70%) of the boreal region remains un-accessed.
- Since 1920, more than 80% of disturbances (temporary tree removal) in the boreal forest were caused by fire and insects. Harvesting accounted for only 15%.

Inside this issue:

REGEN SURVEYS	3
NEW WEBSITE	3
MAY OPEN HOUSE	3
ABOUT US	4



“UNDERSTANDING
POTENTIAL
WILDLIFE IMPACTS
SOONER PREVENTS
HAVING TO RE-
WORK THE SHS...IT
ALSO BENEFITS
WILDLIFE BY
MAKING THEIR
NEEDS INTEGRAL
TO THE PLANNING
PROCESS”

DFMP progress (cont. from Page 1)

and Millar Western is in the process of incorporating its feedback into the final version. A proposal for how Millar Western will apply the **natural range of variation (NRV)** approach to forest management was approved on February 22, 2016. This methodology strives to achieve managed forests that are similar in structure and composition to natural forests, with a goal of improving ecosystem integrity, biodiversity and forest resiliency and aiming for the

best balance among environmental, economic and social objectives.

As for next steps, Millar Western hopes to have the **classified land base**, which is the area available for timber harvest, defined and submitted to the Alberta government for AIP by the middle of May. After yield curves are developed, work can begin on the **timber supply analysis**, which will include the Alberta government’s updated wildlife habitat model (see Page 1

story), as well as the NRV analysis. Millar Western can then start to generate management scenarios, as it works toward a **preferred scenario**. The goal is to have the **spatial harvest sequence (SHS)** maps ready for a new round of public and First Nations consultations in late summer or early fall. Once final input is received, the company will **complete then submit all eight chapters of the DFMP to the Alberta government** by late 2016, for approval by May 2017.

Wildlife modelling approach (cont. from Page 1)

dwellers,” said Fauve Blanchard, Wildlife Biologist with Alberta Environment and Parks, and a member of the DFMP Plan Development Team. The songbird models are being developed with habitat data collected by the Alberta Biodiversity Monitoring Institute (ABMI), an independent, non-profit organization that tracks changes in wildlife habitat within the province.

Once complete, all wildlife models will be entered into the Timber Supply Analysis (TSA), which forest planners will use to generate forest management scenarios and assess how each affects different values, including wildlife habitat. This iterative process eventually produces a preferred scenario, one that best balances ecological, social and economic objectives

on the landscape. The preferred scenario then becomes the basis for the SHS – maps that show where harvesting will take place over the plan’s lifetime, after values such as habitat have been taken into account.

Blanchard explained that incorporating these species models sooner in the DFMP development process should produce a more wildlife-friendly SHS that will maintain sufficient habitat on the landscape over time. “It has been customary to model for wildlife on the back end of the planning process, but this carried an element of uncertainty for companies,” said Blanchard. “Understanding potential wildlife impacts sooner prevents having to rework the SHS, saving time and costs. It also benefits wildlife by

making their needs integral to the planning process, enabling a more thorough examination of viable management options



Canadian Warbler

at the front end of plan development.”

Millar Western’s Chief Forester Bob Mason welcomed the opportunity to be the first forest company to follow the enhanced process. “We expect that this updated approach will allow for greater plan refinement in the area of habitat protection. With better information comes better decision making.”

Sampling reveals high productivity in older harvested areas

In Canada, forest companies harvesting timber on Crown land are legally required to ensure the renewal of productive forests. Historically, forest companies conducted reforestation surveys to determine if harvested areas had been adequately stocked with healthy growing trees; however, these results did not link back to yield curves, to confirm that the young managed stands were achieving growth projections.

Suspecting that, due to higher planting densities and improvements in vegetation management, forest productivity in harvested areas

was not only meeting but exceeding expected growth rates in natural forests, the Alberta Forest Products Association (AFPA) proposed in 2004 that the Alberta government establish a more formal connection between reforestation standards and long-term timber yields. Not only would this confirm that forests were being managed sustainably but, potentially, provide a basis for higher annual allowable cuts (AACs), if productivity gains could be proven.

The Alberta government agreed to revisit its regeneration standards and, in

2005, began developing alternative standards, which evolved into today's Regeneration Standards of Alberta (RSA). The RSA establishes processes and procedures to "assess the level of reforestation success in managed stands following harvest." Blocks that were harvested post 1991, after the introduction of new renewal standards, and sampled according to the current RSA can now use a managed-stand yield curve that reflects the growth measured through the RSA sampling process.

Cont. Page 4



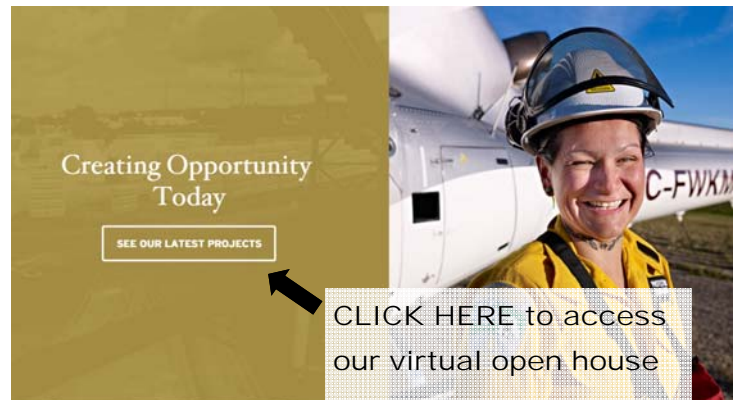
Intensive forest renewal strategies in managed stands have resulted in productivity gains that surpass growth rates in natural stands

New corporate website includes "virtual open house"

Millar Western's new corporate website will go live April 18. In addition to a new design, the website offers a "virtual open house" section that offers DFMP-related public consultation documents, accessible by clicking the "Latest projects" link on the home page. As well as progress reports, you'll find the DFMP Terms of Reference, brochures, presentations and posters. Additional materials such as eligibility and SHS

maps will be added as they become available. "We understand that some people can't make it to open houses, so we're trying to provide better access to plan materials through our website," said Communications Manager and PDT member Louise Riopel. You will also be able to submit questions and comments via the website directly to our forest planners.

To access the site, visit www.millarwestern.com.



Visit us at the Whitecourt Trade Fair, May 6 to 8

As part of our DFMP consultations, Millar Western will be at the Whitecourt & District Chamber of Commerce's annual trade fair, taking place from May 6 to 8 at the Scott Safety Centre in Whitecourt, Alberta. Stop by

to check out eligibility maps, showing the general area of anticipated harvesting activities for 2017-27, and talk to our forest planners about the DFMP process and how you can contribute to planning our forests for the

future.

And for those who can't make it, stay tuned for dates of fall consultations or visit our website.





About us

Millar Western is an Alberta-based forest products company headquartered in Edmonton, Alberta, with lumber operations in Whitecourt and Fox Creek,

Alberta, and a pulp mill in Whitecourt. We source the majority of our timber from government-owned, or Crown, land, including from our FMA area located near Whitecourt.

The balance of our fibre needs are met through fibre-exchange agreements with other companies and purchases on the open market.

MILLAR WESTERN FOREST
PRODUCTS LTD.

16640-111 AVE.

EDMONTON, ALBERTA T5M 2S5

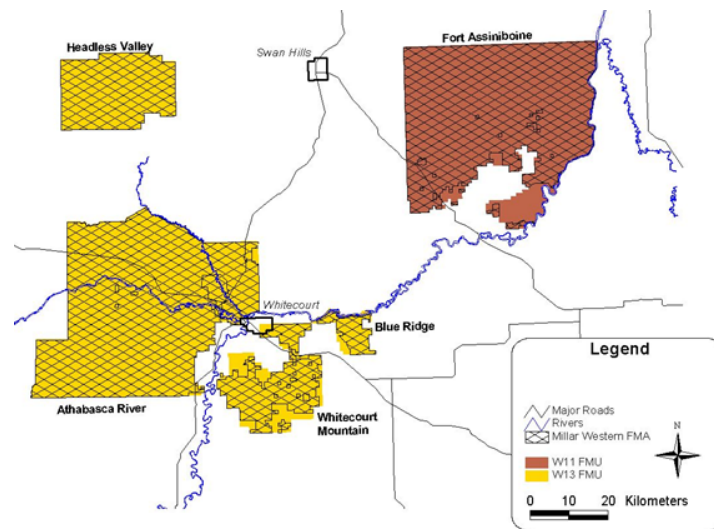
PHONE: 780-486-8200

FAX: 780-486-8282

EMAIL: mwfp@millarwestern.com

www.millarwestern.com

Millar Western FMA Area



Sampling reveals high productivity (cont. from Page 3)



While the new RSA was a welcome development for areas harvested after 1991, it did not address stands cut before 1991 – areas where Millar Western was also observing strong growth. So, in preparation for the development of its latest DFMP, Millar Western undertook a \$100,000 project to assess some older blocks using temporary sample plots, to see if they, too, were

experiencing better than anticipated yields. The results were exceptional, verifying volume gains of 40% to 50% over natural stands.

As well as providing assurance of sustainable forest management, the data serves as a potential basis for AAC increases down the road.

Forestry Superintendent Tim McCreedy said that Millar Western has been harvesting in the area for over 90 years

and generations of foresters have witnessed the return of healthy, robust forests. “Now, we have solid numbers to support our long-held belief of superior forest productivity in managed cutblocks, which bodes well for the future of our forests and for the long-term health of our industry.”