Elise Dagdick Environment Officer Environmental Stewardship Division Environmental Approvals Branch 1007 Century St. Winnipeg MB R3H 0W4

September 23, 2021

File No. 3893.10

Re: Response to Additional information to address public comments

Dear Elise Dagdick,

Please find attached the response to your letter dated August 6, 2021. Additional information was requested on a small subset (eight out of 132 public comments). The information follows under each of the eight comments, which are quoted word-for-word.

There is misunderstanding regarding harvesting in the Resource Land Use Category in the Duck Mountain Provincial Park. Quota Holders have the right to harvest in the Resource Land Use Category, while LP does not. This is evidenced by Environment Act Licence 2191E, in the section entitled "Respecting Harvest Restrictions"

7. The Licencee shall not harvest hardwoods within the boundaries of Duck Mountain Provincial Park. Timber harvesting by quota holders or third party operators which are the subject of existing commitments and allocations, may continue. If, to benefit regeneration, quota holders or third party operators are directed by the I.R.M.T. to harvest incidental hardwood volumes when harvesting softwoods from mixed wood stands, the hardwood timber shall be utilized and declared in accordance with the Louisiana-Pacific Canada Ltd. Forest Management License Agreement.

We trust the information supplied will be helpful.



Todd Yakielashek Area Forest Manager

Louisiana-Pacific Canada Ltd. Box 998 558 3rd Avenue S. Swan River, MB R0L IZ0

Cc: Dan Toivonen Kevin Betcher Matt Conrod

Additional information to address public comments.

1. "A full 61 per cent of Duck Mountain Provincial Park is at risk of clearcut logging, and much of that forest has already been clearcut during Louisiana-Pacific's 25year tenure."

Information to address comment 1.

The boundaries of the Duck Mountain Provincial Park were modified in 1997 to have four different Land Use Categories (LUCs):

- i. Roads and access LUC;
- ii. Recreation LUC (cottages, beaches);
- iii. Backcountry LUC; and
- iv. Resource LUC (Quota Holders who have had harvesting rights since the 1950's). LP is not able to harvest in the Duck Mountain Provincial Park, as per Environment Act Licence 2191E section 7.

As described in the Forest Management Plan, Variable Retention harvesting is used by both the Quota Holders and LP. Variable retention harvest includes retaining in-stand structural diversity as an important aspect of emulating natural disturbance (wildfire) patterns. Structural diversity is achieved by leaving individual trees, patches of trees, or patches of trees with understory protection.

The total area of Duck Mountain Provincial Park is 142,106 hectares. The backcountry LUC (46,936 hectares) and the recreation LUC (8,779 hectares) make up the portion of the park zoned for no forest management. The resource LUC (86,391 hectares) is the area within the park where forest management activities occur. Since 1996 approximately 8,585 hectares (6% of the total park area) of the resource LUC has been harvested and regenerated as per provincial forest renewal standards. In the last 25 years, approximately 10% (0.4% per year) of the resource zone has been harvested and regenerated as per provincial forest renewal standards.

2. "It is urgent to manage our resources in a sustainable manner, clear cutting is not. We need to preserve the habitat for animals, birds, fish, and clean air."

Information to address comment 2.

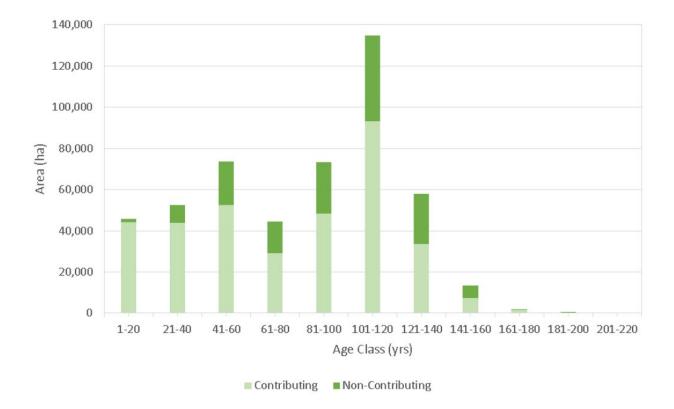
Sustainability is the primary focus of the 20-Year Forest Management Plan. Some highlights, but not the full list of resources, are shown in the table below.

Highlighted Element	Trend	FMP Chapter & section	Page #
SUSTAINABLE BALANCE			
Moose habitat	Maintain and improve	Ch. 5; sections 5.7.4.3 and 5.8.3.1	74 and 81
Roads	23% road reduction	Ch. 5; section 5.8.3.2	82 - 84
Bird Species-At-Risk habitat	Maintained and increased	Ch. 5; section 5.7.4.1	70, 71
17 indicator Birds' habitat	maintained	Ch. 5; section 5.7.4.2	72, 73
Watersheds	Well below 30% threshold	Ch. 5; section 5.7.3.3	68
Wetlands	maintained	Ch. 3; section 3.1.7	65 - 68
Carbon	stable and sustainable	Ch. 3; section 3.1.4.3	32 - 35
Softwood and hardwood harvest	Even and sustainable	Ch. 5; section 5.7.2.1	64

As described in the Forest Management Plan, variable retention harvesting is used by both the Quota Holders and LP rather than clearcutting.

The current age class distribution of all forest stands across FML #3 is shown below. The age class graph is divided into contributing forest, and non-contributing forest (*i.e.* no harvest areas such as parks backcountry and recreation areas, Wildlife management areas, buffers, *etc.*). There is a significant age class imbalance, to mature, over mature, or very over mature. The age class 1-20 years are recent stand-replacing disturbances, including softwood harvesting by Quota Holders, hardwood harvesting by LP and Quota Holders, as well as 14,300 ha of blow down that occurred in 2012, and finally a few small fires. The age class structure of the Duck Mountain (FMU 13) has been heavily influenced by the 1890's fire event, where the majority of the Duck Mountain burned 130 years ago.

For more information, look in Chapter 3 – Current Forest Conditions, Vegetation subsection, page 100 - Inventory Age.



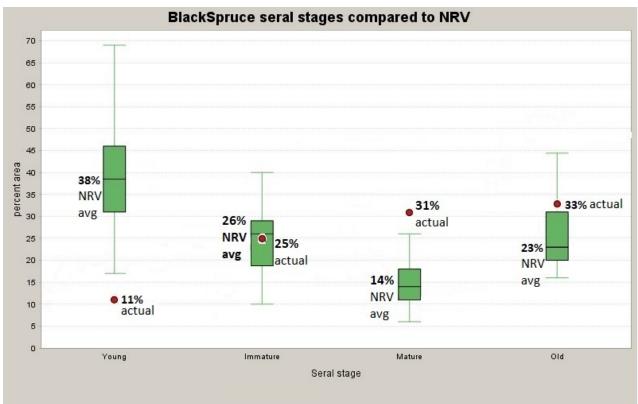
Age class structure of Forest Management Licence #3 by 20-year age classes.

Natural Range of Variability (NRV)

Another tool used in the FML #3 forest management plan to address sustainability was employing Natural Range of Variability (NRV). The Natural Range of Variability (NRV) attempts to describe what the forest would look like without human influence. Wild fire, insects, wind throw, and disease are the natural disturbance agents in the forest. These natural stand-replacing events have maintained all seral stages (young, immature, mature, and old) forest areas on the landscape.

Natural Range of Variability (NRV) is further described in Chapter 5 Scenario Planning:

- A general overview is of NRV is provided in section 5.2.2, starting on page 4;
- NRV specifics to the Baseline Scenario is in section 5.4.3 on page 27;
- NRV specifics to the Moose Emphasis Scenario is in section 5.7.1 on page 60; and



• NRV comparison between the two scenarios in section 5.8.3.5 on page 87

Example of Natural Range of Variation (NRV) for black spruce stands in FML #3. NRV also has been calculated for white spruce, jack pine, hardwoods, and mixedwoods.

Observations from the above graph include:

<u>Young black spruce</u> – historically, wildfire would have an average of 38% of the area in young black spruce. As of the year 2020, we only have 11% young black spruce, which is only one-third of the estimated natural state.

<u>Immature black spruce</u> – historically, wildfire would have an average of 26% of the area in immature black spruce. As of the year 2020, we have 25% immature black spruce, which is in the desired range (green box) of the estimated natural state.

Mature black spruce – historically, wildfire would have an average of 14% of the

area in mature black spruce. As of the year 2020, we currently have 31% mature black spruce, which is higher than desired range (green box) of the estimated natural state. Disturbances such as fire or harvesting would help bring the forest closer to the natural state.

<u>Old black spruce</u> – historically, wildfire would have an average of 23% of the area in mature black spruce. As of the year 2020, we currently have 33% mature black spruce, which is higher than desired range (green box) of the estimated natural state. Once again, disturbances such as fire or harvesting would help bring the forest closer to the natural state.

In the boreal forest, wild fire and other disturbances have historically maintained ecosystems and their associated species. Therefore, NRV can be a historical tool that guides forest management. These concepts are well described in a short promotional video by FRI research in Hinton, AB: http://lessonsfromnature.ca/

The Healthy Landscapes project <u>https://friresearch.ca/program/healthy-landscapes-</u> <u>program</u> was expanded to include FML #3. The expanded project area totals 125 million hectares across western Canada. 3. "Streams and wetlands are being damaged by logging in Duck Mountain ProvincialPark."

Information to address comment 3.

Streams are purposefully protected by Quota Holders operating in the Duck Mountain Provincial Park-Resource Land Use Category.

Planning stream crossings

Stream crossings are planned to maintain natural surface run-off and stream flow patterns. Furthermore, crossings are designed to minimize disturbance to fish-bearing or potentially fish-bearing habitats.

Treed buffers are planned to protect streams. The Manitoba guideline for buffers is utilized in the initial plan and may be refined based on ground observations or mitigation with the Province of Manitoba's Integrated Resource Management Team. Furthermore, stream crossings are part of the Operating Plan process, and are subject to review and approval by the Manitoba government.

Installing stream crossings

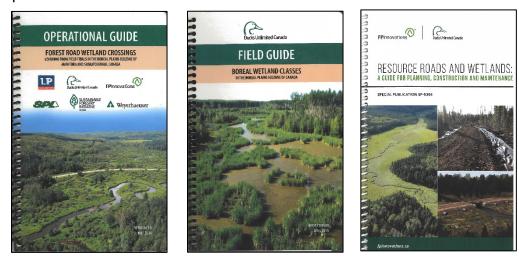
The Quota Holders install low-impact water crossings that minimize or eliminate stream bank disturbance. One goal is to maintain water quality.

The provincial guideline on stream crossings is followed by the Quota Holders. Furthermore, their staff supervise and review active crossings. The Province of Manitoba field inspects harvest areas and crossings.

Manitoba Natural Resources and Canada Fisheries and Oceans. 1996. Manitoba stream crossing guidelines for the protection of fish and fish habitat. 56 pp.

Decommissioning stream crossings

Erosion control measures by the Quota Holders proactively prevents soil erosion. This includes installing erosion control measures along the road right-of-way and the decommissioned water crossings by using both non-vegetative erosion control techniques and by re-establishing vegetative cover. Likewise, wetlands are purposefully protected by Quota Holders. They co-developed and field-tested the Ducks Unlimited Canada wetlands crossing guide (2014), which was further refined by FP Innovations in 2016. Wetlands can be correctly identified using the 2015 field guide. These are leading-edge best practices to protect wetlands and maintain the wetlands' hydrologic flow in the Park, Forest Management Licence #3, and other parts of western Canada.



- **Ducks Unlimited Canada. 2014.** Operational Guide Forest Road Wetland Crossings. Version 1.0 Edmonton, AB. 43 pp.
- **Ducks Unlimited Canada. 2015.** Field Guide Boreal Wetland Classes in the boreal plains ecozone of Canada. Version 1.1 Edmonton, AB. 86 pp.
- **FPInnovations and Ducks Unlimited Canada. 2016**. Resource Roads and Wetlands: A guide for planning, construction and maintenance. Special publication SP-530E. 86 pp.

4. "Roads are not closed and decommissioned properly in Duck Mountain ProvincialPark, causing ongoing forest disturbances."

Information to address comment 4.

Road construction, access management, and decommissioning are planned in a road prescription before they are built. Roads prescriptions are submitted to the Province of Manitoba as part of each Operating Plan, which must be approved before operations can commence.

Quota Holder's roads meet and exceed the Province of Manitoba's Forestry Road Management Guidelines.

Manitoba Conservation and Water Stewardship. 2012. Forestry Road Management. Forest Practices Guidebook. Forestry Branch. 200 Saulteaux Crescent, Winnipeg, Manitoba. 29 pp.

Once forest management activities are completed, roads are closed and decommissioned as prescribed. The Province of Manitoba field inspects Quota Holder operations and will not issue final clearance until all prescribed activities are complete, including road decommissioning.

5. "Once the land is logged it never returns to being a Forest despite attempts to plantseedlings. There is no diversity of species. Reforestation is not conservation, it's just a tree plantation. As such, all the benefits of a true forest are lost to all its former inhabitants and to humans."

Information to address comment 5.

Certificate of reforestation – the Manitoba government recognizes that a new forest is growing based on stocking results from Forest Renewal Assessments (Province of Manitoba 2021). Post-harvest surveys are required on all harvested areas in Manitoba.

Below are certificates for (left) softwood Forest Renewal Assessments on 128 blocks totaling 6,773 ha, and (right) hardwood Forest Renewal Assessments on 35 blocks totaling 912 ha.



A summary of Forest Renewal Assessment survey results is publicly available in Forest Management Licence #3 Annual Reports (1996 to 2017) and two-year reports (2018 to present). 100% of sites harvested are renewed to a new young forest.

Province of Manitoba. 2021. Forest Renewal Assessment manual. Manitoba Agriculture and Resource Development. Forestry Branch. 200 Salteaux Crescent, Winnipeg, MB. 32 pp.

The forest industry purposefully manages for ecological, social, and economic benefits both for the present and future generations. Sustainable Forestry Initiative (SFI) certification, which both LP and the Mountain Quota Holders are certified to, requires that many different objectives be met as proof of managing and maintaining many different benefits of the forest. There are multiple Performance Measures and Indicators within each SFI Objective.

SFI Objectives for Forest Land Management (section 2 of the 2015-2019 SFI standard)

- Obj 1 Forest Management Planning
- Obj 2 Forest Health and Productivity
- Obj 3 Protection and Maintenance of Water Resources
- Obj 4 Conservation of Biological Diversity
- Obj 5 Management of Visual Quality and Recreational Benefits
- Obj 6 Protection of Special Sites
- Obj 7 Efficient Use of Fiber Resources
- Obj 8 Recognize and Respect Indigenous Peoples' Rights
- Obj 9 Legal and Regulatory Compliance
- Obj 10 Forestry Research, Science, and Technology
- Obj 11 Training and Education
- Obj 12 Community Involvement and Landowner Outreach
- Obj 13 Public Land Management Responsibilities
- Obj 14 Communications and Public Reporting
- Obj 15 Management Review and Continual Improvement

Sustainable Forestry Initiative (SFI) website link is Home - forests.org

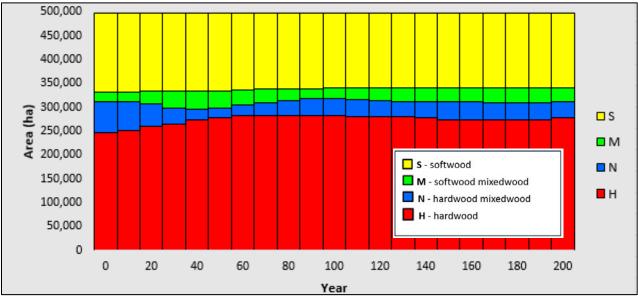
6. "Force Louisiana Pacific to use selective logging techniques, which are known to produce more wood over the long term while maintaining a completely intact, biodiverse forest in perpetuity. The LP plan leaves swaths of destruction and turns the Duck Mountain Provincial Park into a tree monoculture."

Information to address comment 6.

There are no LP operations inside the Duck Mountain Provincial Park as per Environment Act Licence 2191E.

A strategic landscape-level objective in the Forest Management Plan for FML #3 was to maintain cover types at the landscape level. Province of Manitoba cover types are:

- S (softwood dominated) 80 to 100% softwood (0 to 20% hardwood)
- **M** (softwood leading mixedwoods) 50 to 80% softwood (20 to 50% hardwood)
- **N** (hardwood leading mixedwoods) 50 to 80% hardwood (20 to 50% softwood)
- **H** (hardwoods) 80 to 100% hardwood (0 to 20% softwood)



Forest cover types are estimated to be stable with efforts to maintain the mixedwoods (N and M) over the next 200 years. Time zero is the year 2020.

Selective logging to maintain tree cover at the stand-level can work with shade-tolerant tree species such as white or black spruce. However, jack pine, tamarack, aspen, birch, and balsam poplar are all shade intolerant trees species that do not regenerate or grow well in the shade of a mature tree canopy.

Selective logging has an unfortunate side effect of drastically increasing the amount of forest roads needed to harvest the same amount of wood. Public comment number 4 (above) has concerns about roads. Implementing selective harvesting would greatly increase the amount of forest roads required.

There are naturally-occurring, single-tree species leading ecosystems including:

- pure black spruce on organic soil (peat);
- jack pine on sandy soils;
- aspen hazel; and
- balsam poplar on moist sites.

Many wildlife species such as moose, other ungulates, and birds to name a few require young forest as part of their habitat requirements. Natural fires have provided disturbance and young forest habitat for a long time. Variable retention harvesting aims to emulate fire, which provides wildlife habitat.

Natural Range of Variation (fire emulation)

Fire as a natural disturbance is the desirable disturbance pattern. Selective logging is very different than natural fires. Fires burn patches of trees in highly variable sizes and retain or skip over patches of live trees, creating variability. This is exactly what variable retention harvesting attempts to emulate.

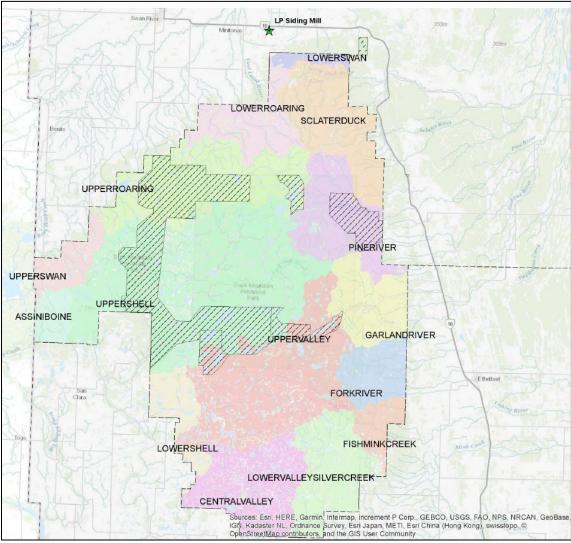
7. "LP's methods cause flooding of farmland followed by drought by destroying the forest and roots that used to hold the water back and release it slowly."

Information to address comment 7.

Within the Duck Mountain, 30% is the maximum allowed area in a 'harvested state' within a watershed to greatly reduce the risk of excessive spring runoff from snowmelt. A 'harvested state' has been defined by the Province of Manitoba as:

- 0 to 5-year old hardwood (6+ years no longer in a harvested state provided the area has been certified regenerated); and
- 0 to 10-year old softwood (11+ years no longer in a harvested state provided the area has been certified regenerated).

During the 20-year plan (2020-2039) the Duck Mountain watershed levels of 'harvested state' range from 0.0% to a maximum of 4.4%, well under the 30% maximum.



Map of watersheds in the Duck Mountain.

"...destroying the forest and roots ..."

LP and the Quota Holders harvesting in FML #3 are not destroying forest tree's roots since there is no rutting of the soil. The Province of Manitoba 's rutting guidelines are both followed and operationally supervised. Furthermore, the Province of Manitoba does field inspections on all harvest areas to ensure compliance.

Manitoba Sustainable Development. 2016. Reduce Rutted or Puddled Soil by Proper Operating Practices. Forest Practices Guidebook. Forestry Branch. 200 Saulteaux Crescent, Winnipeg, Manitoba. 18 pp.

Stream crossing inspections assist with maintaining the natural existing flow in creeks. Stream crossings are planned to have a minimal footprint and must be approved by the Province of Manitoba in an Operating Plan. Once installed, all crossings are inspected regularly. Early identification of any problems allows for an immediate fix to any issues. All installed, maintained, and deactivated water crossings in FML #3 are monitored. The water crossing inspection program monitors the conditions of active, deactivated, and rehabilitated crossings each spring and fall. This identifies any issues at crossing that could lead to failures or deposition of material into streams. The water crossing inspection also monitors the effectiveness of the erosion and sediment control measures. Final clearance on crossings occur two years after the crossing has been decommissioned.

Buffers also protect creeks and rivers. A significant aspect of forest planning is choosing buffer widths to protect water features. The Provincial buffer guidelines assist with process, as does mitigation with the Province of Manitoba's Integrated Resources Management Team.

Manitoba Sustainable Development. 2017. Forest management guidelines for terrestrial buffers. Forest Practices Guidebook. Forestry Branch. 200 Saulteaux Crescent, Winnipeg, Manitoba. 26 pp.

Forest renewal assessments measure stocking success on harvested sites. Fullystocked forests have live roots that hold water in the soil. Furthermore, the consistent hardwood regeneration (documented in comment 5 above) comes from live aspen roots that have not been destroyed. 8. "The logging that has taken place since the first logging licence was granted has changed the landscape of the park, resulting in erosion of soil and drastic runoff to occur, affecting provincial roads (washing them out repeatedly) as well as causing massive overland runoff towards cottage areas that have existed for 40 years."

Information to address comment 8.

Commercial logging has been occurring in the Duck Mountain since the 1890's. The Theo. A. Burrows Lumber Co. Ltd. was founded in 1879, and the Burrows Lumber company book documents some of the harvesting and sawmilling history in the Swan River area.

A Company Ahead of Its Time: The History of the Theo. A. Burrows Lumber Company, Maryel M. Andison, Author, ISBN 1-55056-869-8

The Historic Resources Branch (2000) has documented the lumber industry in Manitoba. The Duck Mountain's first timber berth on was granted in 1882. Logging occurred later, including areas that are now park.

https://www.gov.mb.ca/chc/hrb/pdf/lumber industry in manitoba.pdf

"...changed the landscape of the park..."

The soils and landforms forming the landscape of the Duck Mountain Provincial Park have not changed. Parks in Manitoba are based on 'enduring features' - soils and landforms are more stable over time and endure. When an ecological process such as fire passes through an area, the vegetation is temporarily changed, but the vegetation returns to its' previous state since the soils and landforms remain constant. Similar to fire, harvesting does not change the soils or landforms as part of the landscape.

"...erosion of soil ... "

Erosion control proactively prevents soil erosion. By stopping soil erosion, silt does not enter any waterways. Quota Holders prevent erosion from occurring in the park along road right-of -ways, active water crossings, and decommissioned water crossings by using both non-vegetative erosion control techniques and by re-establishing vegetative cover.

The non-vegetative techniques that prevent erosion include:

- 'armoring' a culvert with rip rap;
- Utilizing geotextile;
- Adding a retaining wall;
- using silt fence to capture silt;
- digging runoff ditches to divert water; and
- covering exposed soil with straw mulch or slash.



Examples of non-vegetative erosion control techniques.

Vegetative cover was maintained or re-established when:

- stream bank vegetation is conserved by installing a steel bridge instead of a culvert;
- grass is seeded and grown under an erosion control mat;
- grass is seeded and grown on slopes;
- willows, other shrub species, or trees are planted



Examples of vegetative erosion control techniques.

"...drastic runoff; affecting provincial roads (washing them out repeatedly); massive overland runoff towards cottage areas..."

The Resource Land Use Category (LUC), where there is Quota Holder harvesting does not overlap with the recreational LUC. Therefore, any soil erosion in the recreational LUC would not be a result of any forest management activities. As with all phases of forest management activities, the Province of Manitoba inspects sites and will not provide final clearance if there are any soil erosion problems. The Duck Mountain Cottage owners association have been represented on LP's **Stakeholder Advisory Committee** for FML #3 since 1995. The committee helps advise on standard operating guidelines, operating plans, and forest management plans. To date there has never been massive overland runoff observed from any forest operations reported by the Duck Mountain Cottage owners association.

APPENDIX I: Letter of request from Environmental Approvals Branch to address public comments



Conservation and Climate Environmental Stewardship Division Environmental Approvals Branch 1007 Century St. Winnipeg MB R3H 0W4 T 204-945-8321 F 204-945-5229 www.gov.mb.ca/sd

File No. 3893.10

August 6, 2021

Todd Yakielashek Louisiana-Pacific Canada Ltd. Box 998, 558 3rd Avenue S. Swan River, MB R0L IZ0 Todd.Yakielashek@lpcorp.com

Dear Todd Yakielashek:

RE: Louisiana-Pacific Canada Ltd. 20-Year Forest Management Plan –Information Request No. 2

The Environmental Approvals Branch has reviewed the public comments received related to the Louisiana-Pacific Canada Ltd. (LP) 20-Year Forest Management Plan (FMP) for Forest Management Licence Area No. 3. Additional information is required to address the comments.

Please provide responses to the comments below:

- A full 61 per cent of Duck Mountain Provincial Park is at risk of clearcut logging, and much of that forest has already been clearcut during Louisiana-Pacific's 25 year tenure.
- It is urgent to manage our resources in a sustainable manner, clear cutting is not. We need to preserve the habitat for animals, birds, fish, and clean air.
- Streams and wetlands are being damaged by logging in Duck Mountain Provincial Park.
- Roads are not closed and decommissioned properly in Duck Mountain Provincial Park, causing ongoing forest disturbances.
- Once the land is logged it never returns to being a Forest despite attempts to plant seedlings. There is no diversity of species. Reforestation is not conservation, it's just a tree plantation. As such, all the benefits of a true forest are lost to all its former inhabitants and to humans.
- Force Louisiana Pacific to use selective logging techniques, which are known to produce more wood over the long term while maintaining a completely intact,

biodiverse forest in perpetuity. The LP plan leaves swaths of destruction and turns the Duck Mountain Provincial Park into a tree monoculture.

- LP's methods cause flooding of farmland followed by drought by destroying the forest and roots that used to hold the water back and release it slowly.
- The logging that has taken place since the first logging licence was granted has changed the landscape of the park, resulting in erosion of soil and drastic runoff to occur, affecting provincial roads (washing them out repeatedly) as well as causing massive overland runoff towards cottage areas that have existed for 40 years.

If you have any questions regarding this matter, please contact me at 204-619-0709 or <u>Elise.Dagdick@gov.mb.ca</u>.

Sincerely,

Elise Dagdick Environment Officer

cc Marianne Porteous and Matt Conrod – Forestry and Peatlands Branch Public registries