



Reference: 260902

Feb 1, 2021

VIA EMAIL: [Kevin.Kriese@bcfpb.ca](mailto:Kevin.Kriese@bcfpb.ca)

Kevin Kriese, Chair  
Forest Practices Board  
310 – 1675 Douglas Street  
Victoria, British Columbia V8W 2G5

RE: Reforestation in the Interior Douglas fir Subzone: Are reforestation Choices Meeting Objectives?

Dear Kevin Kriese:

I would like to thank the Forest Practices Board (FPB) for highlighting issues relating to silviculture objectives and reforestation in the Interior Douglas-fir dry-belt subzones (the “IDF”) in the report, “*Reforestation in the Interior Douglas fir Subzone: Are reforestation Choices Meeting Objectives?*”. The report is timely and aligns with the increased level of attention government has been placing on dry IDF in recent years. As identified in the report, timber harvesting focused on mountain pine beetle salvage is coming to an end and there is an increasing level of forestry activity in dry Douglas-fir stands. As a result of these pressures and the intricate nature of the dry-belt IDF, the ministry is modernizing silviculture objectives, best practices and outcomes, to improve the resilience of this ecosystem. Several initiatives aimed at improving forest conditions in the IDF are now underway.

Forest professionals have acknowledged that a multidisciplinary and collaborative approach is necessary for successful management of IDF values. Creating awareness and understanding of the management challenges for values in dry-belt IDF subzones began in 2016, when the ministry’s South Area held workshops for internal staff representing research, wildlife, water, range, forests, and climate disciplines. In March 2017, the Resource Practices Branch partnered with Regional Operations staff to deliver the “*IDF Stand Establishment and Best Management Practices Workshop*” in Williams Lake, attended by 130 government and non-government forest professionals. This information forum has facilitated improvements to management approaches and practices in the IDF.

The goal has been to work collaboratively across the range of the dry-belt IDF, recognizing that solutions will undoubtedly be unique to the local landscape and biogeoclimatic factors. Regional Operations staff have also been focusing on issues specific to geography:

- Drought versus frost as a leading limiting factor in silvicultural success;

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- Exploring opportunities to use selection harvest silviculture systems versus patch cuts;
- Variability in harvest operator experience and training needs;
- Data collection to support adaptation of practices and specific silviculture requirements that support priority values such as ungulate winter range, visual quality, wildfire risk reduction.

The ministry acknowledges much of the report's findings and recommendations. We accept the broad direction of the following two recommendations:

*1. FLNR should promptly re-assess the long-term reforestation objectives for the dry IDF and update them based on the likely consequences of climate change.*

*2. FLNR should update reforestation standards to reflect the updated objectives combining a combination of legally required direction and best management practices so that the public can be confident that the objectives will be achieved.*

Although reforestation objectives in the dry-belt IDF have traditionally focused on restoring timber values and maintaining range management opportunities, there are many values supported by dry-belt IDF forests that are steadily emerging as management priorities. We agree that the dry-belt IDF is under significant strain from increasing harvest levels, range use, water use, and recreation demands. Forest health conditions are exacerbated by extreme climate events and variability, drought severity and frequency, and wildfire risk. The cumulative pressures affect the health and resilience of these unique forest types. Reforestation objectives linked to the management of these pressures need to be incorporated into silviculture plans and activities. The ministry is heavily engaged in re-evaluating long-term objectives for dry-belt fir management through a climate-change resilience lens. There are currently several initiatives and activities underway that support the development of new management strategies, with some specific to the IDF zone:

- Government Action Regulation (GAR) orders such as the Ungulate Winter Range GAR which direct harvesting practices;
- Wildfire Risk Reduction and Community Wildfire Protection Plans are in various stages of development throughout urban interface areas, often characterized by the dry-belt IDF;
- Ecosystem restoration work being carried out in open forest and grassland interface areas;
- Exploration of modernized land use planning objectives or amending existing plans to inform future desired forest conditions;
- Using alternative silvicultural systems to build landscape resilience and buffer influences of a changing climate;
- The *Land Act* and the new FRPA are being used to investigate options to manage the dry-belt fir ecosystems and improve resilience;
- The anticipated Forest Landscape Planning framework under the new FRPA is being piloted in two districts where dry-belt IDF management is a focus.

The report states that initiatives are not being developed consistently between ministry jurisdictions. I can confirm that we are aware of these different approaches. However, it should be recognized that each region or district has its own unique circumstances pertaining

to indigenous relations, legal, societal, and ecological drivers. Granted, this makes it challenging to adopt consistent approaches that fit across multiple districts.

Regional Operations staff have worked collaboratively with licensees to update stocking standards and develop new enhanced basic standards for dry-belt IDF variants in many parts of southern British Columbia. Stocking standards development has been coordinated across regional boundaries to ensure consistency in approach. Modernized stocking standards are shifting to more resilient and ecologically suitable species. Examples of modernized stocking standards include the removal of lodgepole pine as a preferred species and promoting more resilient species like Interior's Douglas-fir. The shift to Douglas-fir will result in more careful consideration of silviculture systems and the subsequent regeneration strategies. These standards are now in place in Forest Stewardship Plans (FSPs) in southern BC.

The ministry acknowledges the current legal framework limitations for stocking standards and is currently reviewing opportunities to develop robust and practical legal direction. The modernization of FRPA is providing an opportunity to consider new approaches with silviculture regimes and stocking standards where existing standards are inadequate to meet ecological realities.

The recent introduction of the Climate Based Seed Transfer policy and the ongoing development of a Climate Change Informed Species Selection tool will help guide foresters to better informed decision making. The *IDF Stand Establishment and Best Management Practices (BMP) workshop*, Williams Lake 2017, resulted in a request to develop new Best Management Practices for plantation establishment. A report and BMP brochure for field use has been completed for the Thomson Okanagan district while a companion document for establishment in the dry-belt IDF portion of the Cariboo Region is nearing completion. Concurrently, best practices are being developed for managing forests for wildfire risk reduction, an important step to protect and develop resilience in these forests.

While we share the FPB's concerns regarding cutblock regeneration performance, it is our observation that many of the actions and initiatives undertaken are improving dry-belt IDF outcomes. We also agree that effectiveness monitoring will be an important tool to ensure success and are in the process of undertaking quantitative regeneration performance assessments of sites across the dry IDF subzones.

Once again, I wish to thank the Board for raising attention on this important matter of forest management, and for the time and resources it has invested in producing the report.

Sincerely,

A handwritten signature in blue ink, appearing to be 'DN', with a long horizontal flourish extending to the right.

Diane Nicholls, RPF  
ADM, Chief Forester  
Office of the Chief Forester

260902 Kevin Kriese, Chair, Forest Practices Board

pc: Paul Rasmussen, ADM Regional Operations South  
Shane Berg, Deputy Chief Forester, OCF  
Norah White, Manager, Sustainable Resource Management, RPB  
Neil Hughes, Forest Establishment Leader, Harvesting & Silviculture, RPB



**Forest  
Practices  
Board**

File: 97325-20/2018-16

February 25, 2021

Diane Nicholls RPF  
Chief Forester  
Ministry of Forests, Lands, Natural Resource  
Operations and Rural Development  
PO Box 9352 Stn Prov Govt  
Victoria, BC V8W 9M1

Dear Diane Nicholls:

**Re: FLNRORD Response to the Board's Special Investigation Report**  
*Reforestation in the Interior Douglas-fir Subzone:*  
*Are Reforestation Choices Meeting Objectives?*

Thank you for your February 1, 2021 response to the Board's recommendations made in its "Reforestation in the Interior Douglas-fir Subzone" special investigation.

The Board is encouraged that the ministry supports the recommendations and is working towards developing new management strategies to improve reforestation practices in dry-belt fir ecosystems. While the ministry's initiatives are appropriately focused, some are described in broad terms and it is not completely clear how they specifically apply to reforestation in the dry IDF.

Recognizing that full implementation of the recommendations will take time, the Board will continue to monitor the ministry's progress, and we look forward to the next update by September 30, 2021. To help the Board understand the reforestation objectives, standards, legal direction and guidance the ministry is developing, please describe in that update how the initiatives support management strategies specific to the dry IDF, and when implementation may be expected.

Yours sincerely,

Kevin Kriese  
Chair



Reference: 267518

Sept 29, 2021

**VIA EMAIL: Kevin.Kriese@bcfpb.ca**

Kevin Kriese, Chair  
Forest Practices Board  
310 – 1675 Douglas Street  
Victoria, British Columbia V8W 2G5

Dear Kevin Kriese

I would like to reiterate my thanks to the Forest Practices Board (FPB) for highlighting issues relating to management of the Interior Douglas-fir dry-belt subzones (the “Dry IDF”) in the 2020 report, “Reforestation in the Interior Douglas-fir Subzone: Are Reforestation Choices Meeting Objectives?”. Management of the Dry IDF is important to the ministry, and to me as BC’s Chief Forester. I appreciate the attention your report has brought to this issue.

I’m pleased to provide an update to our initial response and a follow up to your letter dated February 25, 2021:

### **Vision and Context:**

Our vision is for IDF ecosystems to remain climate resilient, to support multiple values, and to be managed collaboratively with Indigenous Nations. We are aware of the management challenges associated with Dry IDF ecosystems and we understand that these sites are likely to change in the future as a result of climate change.

Dry IDF sites can be found in the Cariboo, Kootenay Boundary and Thompson Okanagan regions. To best manage these sites to be healthy and resilient into the future, we need established provincial forest management and reforestation objectives, standards, legal direction and guidance, as well as comprehensive, integrated and locally appropriate management approaches. We are working hard on all these necessary elements.

### **Provincial Actions**

To ensure ongoing provincial focus is maintained, I have initiated a new provincial level Dry IDF Steering Committee. This Steering Committee will provide provincial leadership, guidance and consistent principles to ensure we continue to improve the management of Dry IDF. They will also sponsor research and provide support to regional teams who are working on strategies and actions to address local Dry IDF ecological characteristics. In addition, they

<Full Name>, <Position Title>

will ensure the consistency the FPB are asking to see, and that our ministry is committed to achieve.

The Steering Committee is working on the consistent management principles and approaches. The committee has established coordination and cooperation between the regional working groups and will provide support to the work of those regional working groups. The province has initiated many significant forest management initiatives and some of these create opportunities for improving Dry IDF management. The Steering Committee is working to leverage these opportunities:

- The new Forest Landscape Planning regime will provide an opportunity to establish objectives and legally enforceable silviculture and reforestation strategies for the IDF where it exists within the plan boundaries. The ministry's commitment to continuing to improve the *Forest and Range Practices Act* (FRPA) will also provide opportunities for improving management of the Dry IDF.
- The Steering Committee will continue to provide provincial level leadership and support for IDF research, reforestation guidance and best management practices (BMPs) to guide the work of practitioners.
- Significant effort has been directed towards the extension with practitioners and partnerships with industry to ensure the best practices are widely accepted and understood. For example, the provincial reforestation program has developed guidance including the BMPs of dry site management in Thompson Okanagan region to distribute to practitioners. A similar BMP is in-progress in the Cariboo region with expected completion by the end of fiscal 2021/2022.
- Also, a considerable number of research and operational projects are underway that will inform practices and policies in the Dry IDF, including provincially funded work on climate change informed species selection trials.

Finally, I recognize my role as Chief Forester in providing provincial leadership on Dry IDF management. As provincial management principles and approaches are developed, I will be communicating my expectations to ministry staff and forest licensees.

## **Regional Actions**

Regional work on Dry IDF issues has been underway since 2013. All the regions in the South Area are addressing a range of specific issues in Dry IDF as well as linking in through the Provincial Steering Committee to ensure consistency across BC. Initiatives and projects that support Dry IDF management (and their associated timelines) are described below:

- New Biogeoclimatic Ecosystem Classification (BEC): New BEC mapping and guidance have been released within the Thompson Okanagan and Kootenay Boundary regions, including the areas of Dry IDF. These guides will significantly contribute to improving IDF management. The guides will be accompanied by new Chief Forester's Stocking Standards, and they will be updated in associated Forest Stewardship Plans within six months of the new BEC release. The Thompson Okanagan and Kootenay regions have developed new stocking standards which will include the Dry IDF to ensure appropriate site types and species selection are considered. Standards implementation will be required to follow the new BEC.
- Updating regional stocking standards: The Cariboo region has updated the even and uneven aged regional stocking standards and has developed enhanced standards to improve stocking levels in the Dry IDF focussing on reforestation of Douglas fir. The Thompson Okanagan

<Full Name>, <Position Title>

region has also updated the even and uneven aged regional stocking standards that include changes to Dry IDF subzones. In the Thompson Okanagan region, the area within the Elephant Hill wildfire has also developed and implemented enhanced standards to improve Douglas-fir regeneration. The Thompson Okanagan and Cariboo regions have also developed variances to standards that create flexibility to manage site limiting factors in an effort to increase survival of Douglas-fir on difficult sites.

- Indigenous partnership: The Cariboo region is also actively engaging with Indigenous partners on the future management of Dry IDF. There are conversations specific to wildfire and IDF management as well as public and practitioner engagement sessions which were held in spring 2021.
- Other ministry initiatives: Wildfire Risk Reduction and Ecosystem Restoration is a common initiative in the Dry IDF ecosystems within the South Area. In the Kootenay Boundary region, the IDF grassland that overlaps in the Rocky Mountain Trench is actively managed through ecosystem restoration utilizing manual thinning and prescribed fire projects. All districts throughout the South Area are actively working on wildfire risk reduction collaboratively with Indigenous communities. Additionally, LIDAR imagery was obtained in 2020 for a large portion of the Cariboo IDF so that the new stand and stock tables can be created to inform future forest management decisions around partial harvest systems in the Dry IDF.

## Closing

We are aware of the uncertainty going forward with Dry IDF ecosystems and the influence of climate on these extreme sites. This uncertainty highlights the importance of continuing to ensure that best management practices and latest scientific information are available to inform planning and practices in the IDF. To ensure the best outcomes for Dry IDF ecosystems going forward, a long-term use of adaptive management principles will be utilized. The work initiated by the South Area regions will ensure the ministry is ready for new opportunities to manage Dry IDF under these changing environmental conditions, climate variability and new forest management regimes.

I would be happy to follow up with you to discuss any of these specific issues including the proposed legislative updates and how we expect them to improve reforestation outcomes in the Dry IDF forests.

Sincerely,



Diane Nicholls, R.P.F.  
ADM Chief Forester

pc:

Paul Rasmussen, Assistant Deputy Minister, Regional Operations, South Area

Shane Berg, Deputy Chief Forester, Office of the Chief Forester

Rachael Pollard, Acting Director, Resource Practices Branch, Office of the Chief Forester

Leith McKenzie, Acting Manager, Sustainable Resource Management, Resource Practices Branch, Office of the Chief Forester



<Full Name>, <Position Title>

Neil Hughes, Forest Establishment Leader, Harvesting & Silviculture, RPB  
Katrina Sigloch, Stewardship Resource Manager, South Area



**Forest  
Practices  
Board**

File: 97325-20/2018-16

November 1, 2021

Diane Nicholls RPF  
Chief Forester  
Ministry of Forests, Lands, Natural  
Resource Operations and Rural Development  
PO Box 9352 Stn Prov Govt  
Victoria, BC V8W 9M1

Dear Diane Nicholls:

**Re: FLNRORD Response to the Board's Special Investigation Report *Reforestation in the Interior Douglas-fir Subzone: Are Reforestation Choices Meeting Objectives?***

Thank you for your letter of September 29, 2021, providing an update on the ministry's work to address the Board's recommendations in its "Reforestation in the Interior Douglas-fir Subzone" special investigation.

The Board is encouraged that the ministry is working towards developing new management strategies, objectives, standards, legal direction and guidance to improve reforestation practices in Interior Douglas-fir dry-belt subzones (the "Dry IDF").

Recognizing the uncertainty and complexity of Dry IDF ecosystems and the challenges faced when changing legal and planning regimes, the Board appreciates that it will take time to implement the actions outlined in your response. The formation of a Dry IDF Steering Committee will provide the leadership, guidance and support needed to consistently develop and implement ways to improve reforestation in the Dry IDF. We look forward to seeing improved provincial forest management and reforestation objectives and legal direction in the future.

The ministry's progress with the implementation of stocking standards and best management practices is promising. The new standards and guidelines will contribute towards improving silviculture practices and meeting forest management goals.

Diane Nicholls, RPF

November 1, 2021

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The ministry is clearly working to implement our recommendations with the aim of assuring Dry IDF sites are healthy and resilient in the future. The Board will continue to monitor reforestation practices in the Dry IDF through its routine audits and investigations, and we look forward to seeing improved forest planning and practices as the ministry's initiatives are implemented.

I want to thank you and the many staff involved in this file for their cooperation throughout the special investigation. The Board will now close this file.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kevin Kriese', followed by a horizontal line extending to the right.

Kevin Kriese,  
Chair

cc: Paul Rasmussen, Assistant Deputy Minister, Regional Operations, South Area  
Shane Berg, Deputy Chief Forester, Office of the Chief Forester  
Rachel Pollard, Acting Director, Resource Practices Branch, Office of the Chief Forester  
Leith McKenzie, Acting Manager, Sustainable Resource Management, Resource Practices Branch, Office of the Chief Forester  
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Katrina Sigloch, Stewardship Resource Manager, South Area