

A scenic landscape photograph of a forested hillside. In the foreground, there is a grassy slope with tall, green grass and some small yellow wildflowers. A dense forest of tall, green coniferous trees covers the middle ground. In the background, a calm lake reflects the sky, and distant mountains are visible under a blue sky with scattered white clouds.

# Public Views on Future Management of Dry-Belt Douglas-Fir: What we heard

July 2021

A series of public engagement activities was conducted by the Dry-Belt Douglas-fir Initiative in May and June 2021 as part of a process to assess, and plan for the future management of, Dry-Belt Douglas-fir in the Cariboo. Funding was provided by the Cariboo Resource Region, FLNRORD.

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Cover Image: Dry-Belt Douglas-fir landscape at Big Bar Lake, photo by Ken Day

## EXECUTIVE SUMMARY

Planning for the future of Dry-Belt Douglas-fir in the Cariboo Resource Region requires a coordinated effort to change policy, working relationships, and best management practices. This process of change starts with identifying strategic goals, values, and interests, followed by the development of legal objectives and supporting guidelines. Engaging the public is an important part of this process. To that end, the Dry-Belt Douglas-fir Planning initiative conducted a series of public engagement activities in May and June 2021 with the purpose to better understand interests, values, areas of focus, and potential solutions in regards to future management of these forests. Specifically, public engagement comprised a web-based survey (N=255) that was distributed between May 10-31, 2021 via [govTogetherBC](#) platform. Engagement activities further included a public webinar (N=37) and a technical session (N=83) which took place via Zoom video conference platform on June 16 and June 23 respectively. The results and outcomes of these engagement activities are summarized in this report.

A range of topics related to planning for the future of Dry-Belt Douglas-fir was covered during the public engagement activities:

- Forest Interests & Values
- Indigenous Knowledge
- Management Goals, Tools, and Practices

Overall, the survey responses, and the input from the webinar and technical session, demonstrate that people are invested in the future management of Dry-Belt Douglas-fir, and have high expectations as to what these forests should be and provide. People overwhelmingly agreed that changes to the current management of Dry-Belt Douglas-fir require careful balancing of multiple interests and values that underpin the future management as envisioned by individuals and communities that work, live, recreate, conduct research, practice spirituality, and visit in the Dry-Belt Douglas-fir forests of the Cariboo.

In addition to considering multiple forest management goals, collaborative efforts with First Nations are needed to ensure that Indigenous knowledge and cultural perspectives, alongside Western science, form the basis of management. Survey respondents, and participants in the public webinar and technical session alike, emphasized the importance of respecting and incorporating traditional values and culturally important features of the landscape in planning for the future management of Dry-Belt Douglas-fir.

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## 1. INTRODUCTION

The Dry-Belt Douglas-fir forests of the Cariboo provide many benefits to communities. However, there is increasing pressure for development, recreation, and economic timber harvest<sup>1</sup>. Natural disturbances, pressures on wildlife habitat, and the need to adapt to a changing climate, further intensify the need for coordinated efforts in planning for the future of these forests <sup>2</sup>.

Dry-Belt Douglas-fir forests have sustained people and wildlife for millennia. With colonialism came changes that restricted Indigenous burning practices, and actively suppressed wildfires. Since the early 1900s, management mostly focused on timber production and supporting the local economy. Currently the landscapes and stands have reduced resistance to disturbance, and their resiliency is threatened<sup>3</sup>. The current conditions threaten critical values and achievement of forest management goals - meaning that management of Dry-Belt Douglas-fir forests in the Cariboo Region needs to adapt. The Dry-Belt Douglas-fir initiative seeks to integrate Indigenous and western knowledge. We recognize the current landscape planning project and the ongoing engagement underway with the communities of the Secwepemc Nation. This initiative is coordinated and additive to that planning, along with other innovative projects within the Region.

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<sup>1</sup> Day, K. (2000). Commercial Thinning In Dry-Belt Douglas-Fir Stands On Mule Deer Winter Range In The Cariboo Forest Region. Contract Report, Ministry of Agriculture and Food Contract GE1-230D. Alex Fraser Research Forest, 35 pp.

<sup>2</sup> Leclerc, M.-A. F., Daniels, L. D., & Carroll, A. L. (2021). Managing Wildlife Habitat: Complex Interactions With Biotic and Abiotic Disturbances. *Frontiers in Ecology and Evolution*, 9, 113.

<sup>3</sup> Brookes, W., Daniels, L. D., Copes-Gerbitz, K., Baron, J. N., & Carroll, A. L. (2021). A Disrupted Historical Fire Regime in Central British Columbia. *Frontiers in Ecology and Evolution*, 9, 420.

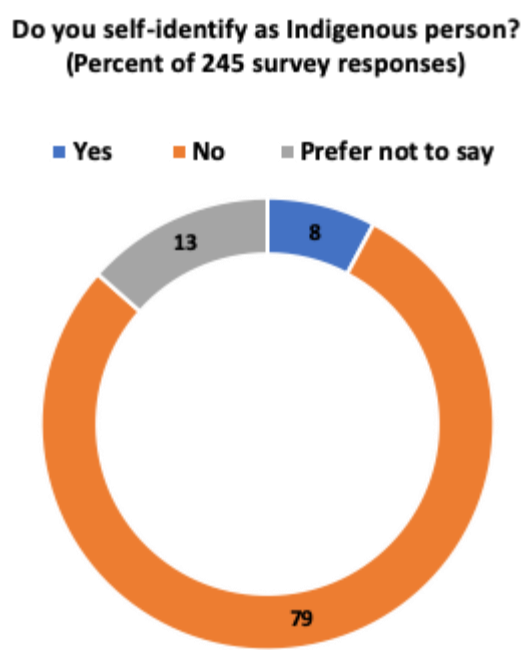
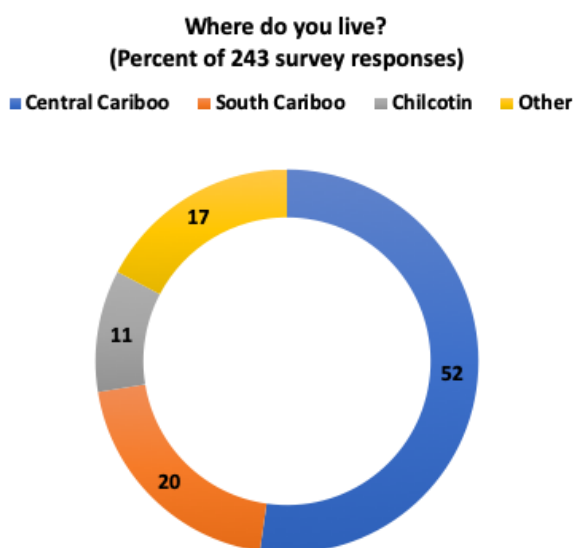


The results reported here summarize the insights gained during a series of engagement activities that mark the first step in a continued effort to capture public views on the Dry-Belt Douglas-fir planning process in the Cariboo Resource Region.

## 2. PARTICIPANT PROFILE

Most survey respondents indicated that they live in the Central Cariboo (52%) and South Cariboo (20%), followed by respondents who live in communities outside the Cariboo Resource Region (17%), with the fewest respondents living in the Chilcotin (11%). Similar to the survey, a large number of participants in the public webinar and technical session entered the Central and South Cariboo as regions in the chat, alongside a number of people, notably forestry professionals and researchers, that attended from other parts in the Province.

Eight percent of survey respondents self-identify as Indigenous, and 13% preferred not to share personal information about their identity. A mixed audience was also present in both the webinar and technical session.





### 3. FOREST INTERESTS

In the survey people were asked to share special memories, places, and cultural activities that they feel connects them with the Dry-Belt Douglas-fir forests of the Cariboo. The answers to the question yielded a great variety of locations, personal memories, and associations from nearby places and surrounding areas that people visit and spend time.

<i><b>Places</b></i>	<i><b>Memories</b></i>	<i><b>Culture &amp; Identity</b></i>
<i>"Hiking the eskers around Alberta and Meadow Lake and seeing the abundance of birds and wildlife while following those beautiful natural elevated roads put there so long ago by the glaciers. What a special place!"</i>	<i>"I have a love and connection to this forest type as I was born and raised here. It offers a unique outdoors environment that is both relaxing, beautiful, and unique"</i>	<i>"Salmon fishing and camping at the Fraser River First Nation fishery with my parents and relatives while drying salmon and picking berries."</i>
<i>"Beautiful photos of hiking and exploring in many of the dry belt areas especially around Williams Lake and 100 Mile House"</i>	<i>"Favorite Memory - up close and personal interaction with a cougar (10m)"</i>	<i>"Salmon fishing, wherever the FN fishing stations are located."</i>
<i>"Camping on Hwy 20 to Bella Coola. Bikepacking down the west side of the Fraser, fishing at Big Bar Lake, etc."</i>	<i>"Blue Lake for a 70th birthday party with multiple generations, birds singing in the trees, shelter for the sun for the older people, the fresh air, fun."</i>	<i>Hunting and being out on the land!</i>
<i>"Special place: anywhere on the Gustafsen Fire or the Young Lake portion of the Elephant Hill Fire."</i>	<i>"I will always remember being in these forests growing up. When I close my eyes and imagine a forest, I picture dry Douglas-fir forests."</i>	<i>"Too many to be shared at high-level. Requires further consultation in form of in-depth discussion with the whole community"</i>

Survey respondents and participants in the public webinar listed a wide range of interests that they like to pursue in the Dry-Belt Douglas-fir forests of the Cariboo, particularly recreational activities. Hiking, biking, hunting, and fishing ranked high among those activities, followed by bird watching and berry picking. Working, as well as observing and protecting wildlife were also frequently mentioned.

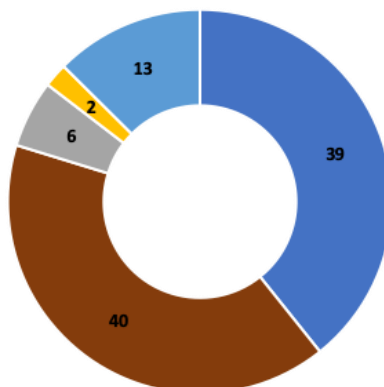


## 4. INDIGENOUS KNOWLEDGE

Thirty-nine percent of survey respondents indicated they are familiar with Indigenous knowledge and culturally important features of the landscape, 40% are somewhat familiar, and 13% indicated that they would like to learn more about First Nations culture and Indigenous ways of knowing.

**How familiar are you with traditional values/culturally important features on the landscape? (Percent of 248 responses)**

■ Familiar ■ Somewhat Familiar ■ Not Familiar ■ Not Sure ■ Like to know more

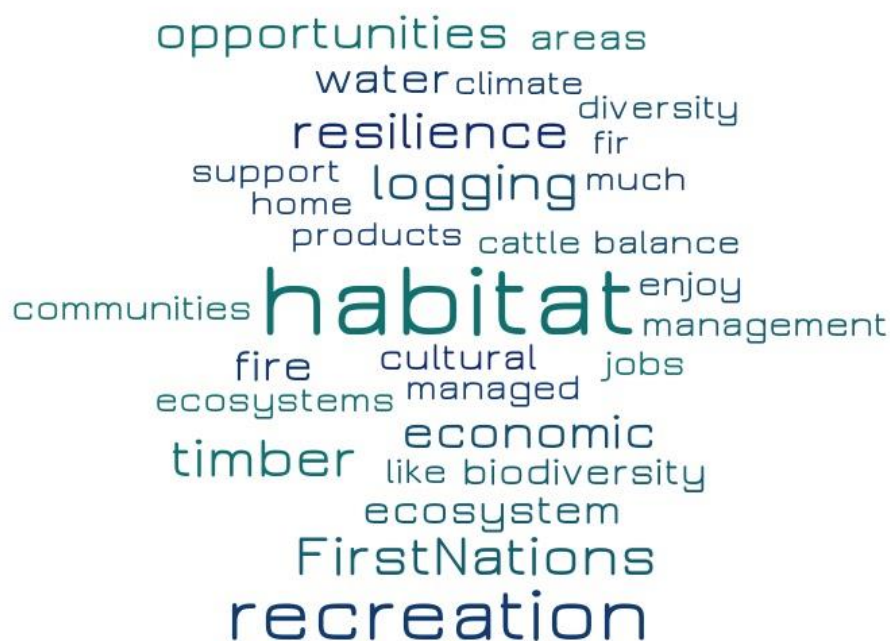


In the public webinar, people were asked to name a traditional value, or culturally important feature of the landscape they are familiar with. Mule deer, foraging, and culturally modified trees stood out among the answers entered in the chat box.

medicine picking  
Hunting Chilcotin River  
plants Firewood  
soopallalie forest Spiritual  
stories ceremony  
Culturally Modified Trees  
**Mule Deer**  
Kigly Holes berry Places  
trees  
balsamroot Medicinal fire  
names  
Memories Of Place  
**Forage**  
Winter Range

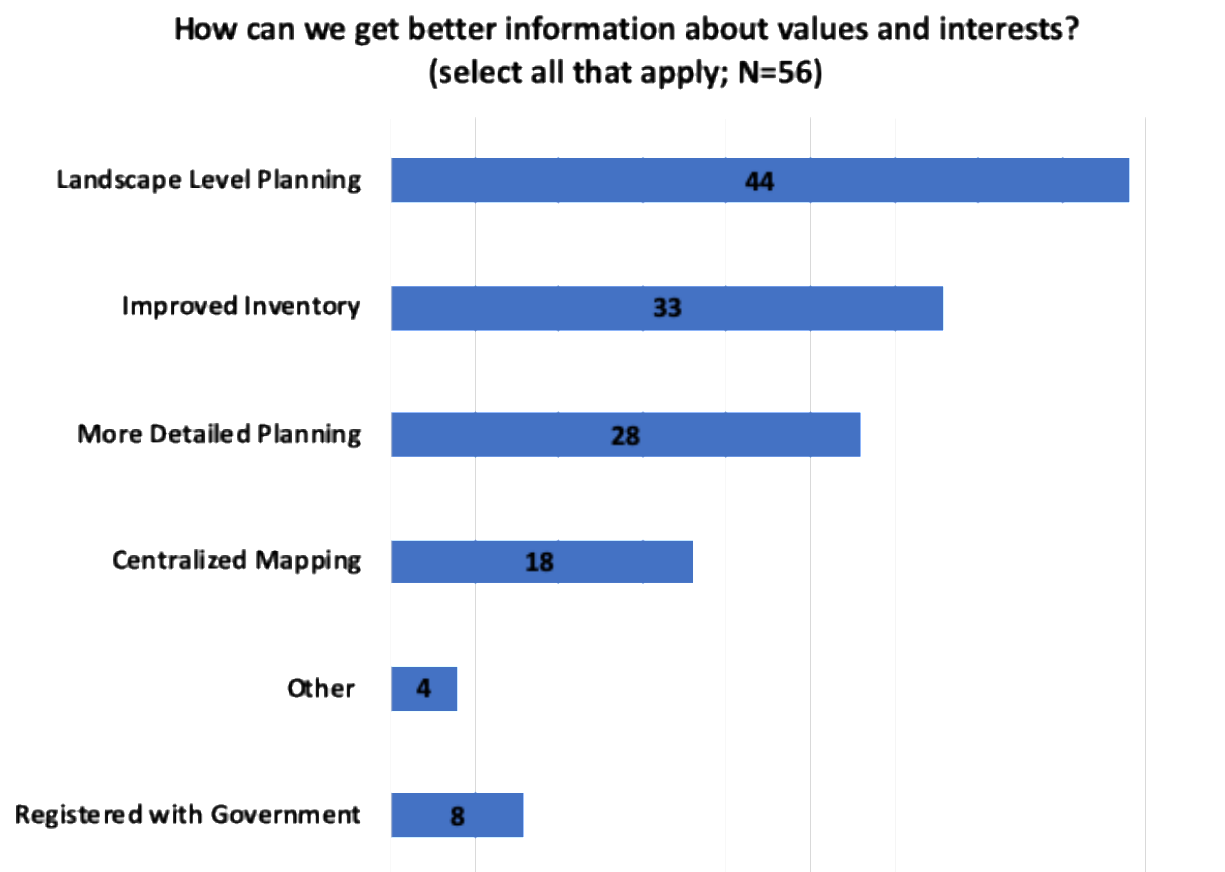
## 5. FOREST VALUES

Survey respondents and participants in the public webinar indicated habitat as a value with high significance. Managing Dry-Belt Douglas-fir for recreation and timber, and working with First Nations were also mentioned by many participants, along with the need to bring awareness to forest resilience and provision of diverse opportunities in these forests.



In the technical session, participants rated 'Landscape Level Planning' and 'Improved Forest Inventory' as two important ways for obtaining better information about forest interests and values. When the audience was asked about 'Other' ways for improving access to information about values and interests, participants mentioned 'Collaborative Efforts' as a means to improve information that enters inventories, and as a basis for setting standards for the classification and categorization of information.

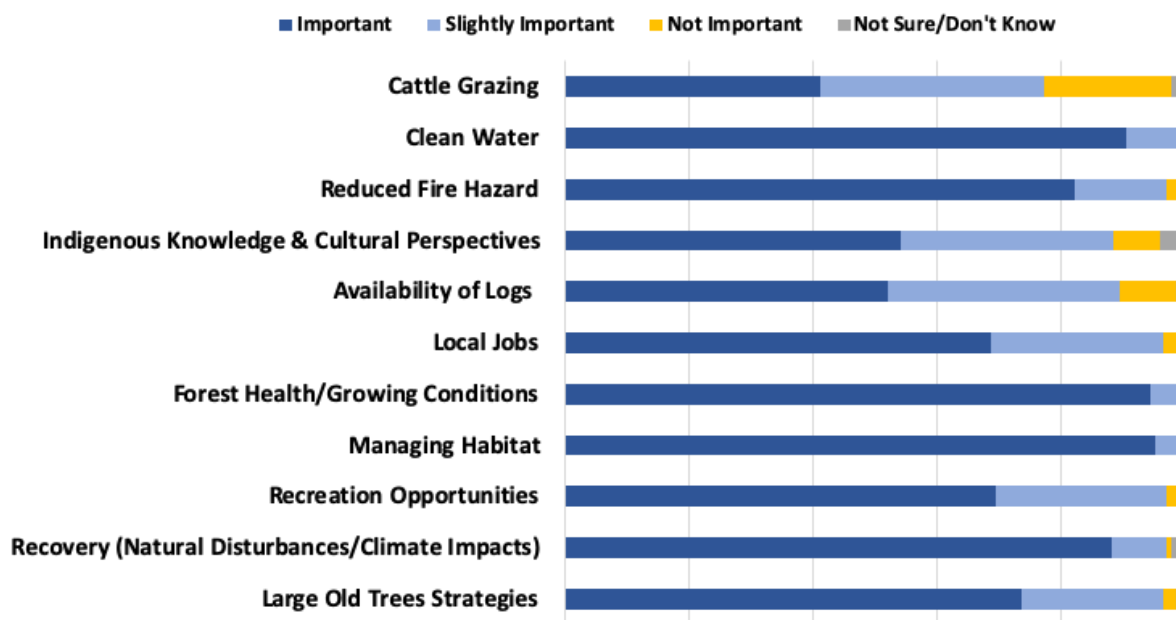
‘Field Tours’ with the public, and direct communication with diverse groups were mentioned as further ways in the ‘Other’ category, to improve access to information about forest interests and values. Participants also remarked that classification of information should start with inclusive frameworks, such as the ‘Nature’s Contribution to People Framework’, which distinguishes between ecosystem-services, that can be measured and quantified, and other important forest values that are intangible (non-spatial) in nature, such as morals and cultural traditions.



## 6. FUTURE MANAGEMENT GOALS

In the survey, respondents were asked to rate the importance of a series of goals in managing for the future of Dry-Belt Douglas-fir. ‘Clean Water’, ‘Forest Health’, and ‘Managing for Habitat’ are management goals that survey respondents ranked high in the ‘Important’ category of the 4-point rating scale. Between the ‘Important’ and ‘Slightly Important’ categories, respondents rated all goals as high, with few respondents demonstrating uncertainty about the importance of these goals. Only a low number of participants rated goals as “Not Important”, demonstrating that people, overall, have high expectations as to the variety of goals that should be upheld in the Dry-Belt Douglas-fir forests of the Cariboo.

**What do you hope the Dry-Belt Douglas-fir forests of the Cariboo will provide in the future? (Percent of ≥ 246 responses)**

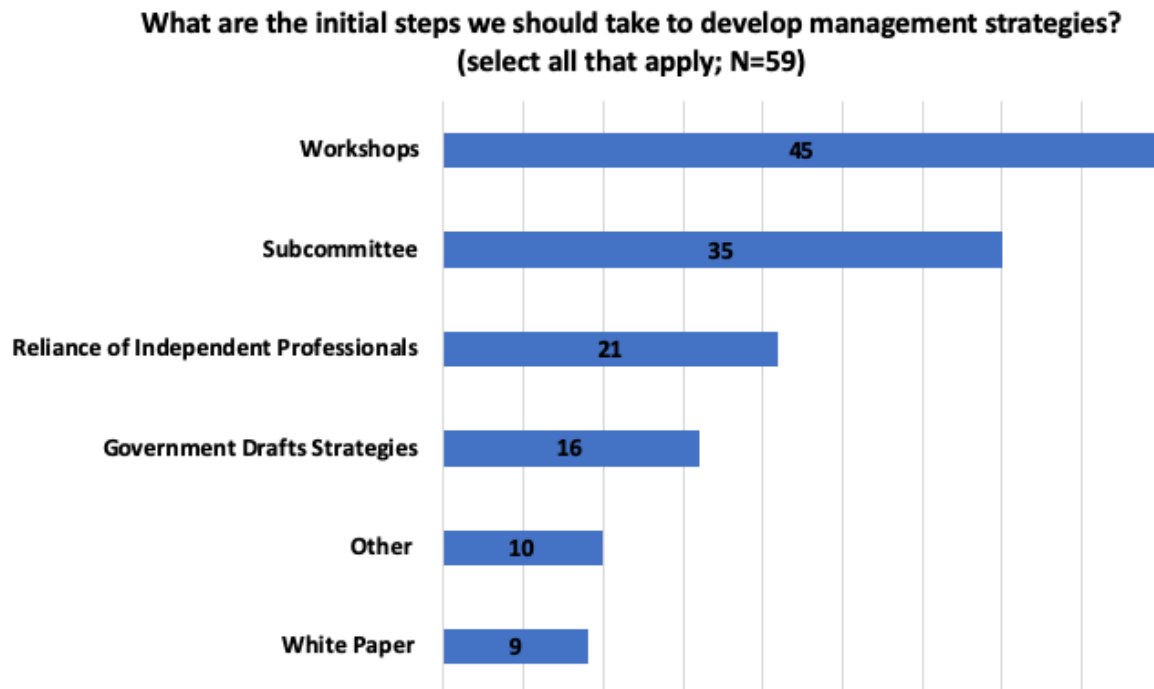


Survey respondents and participants in the public webinar identified further management goals, aside from those provided in the closed question format in the survey. 'Ecosystem-Based Management' and 'Mule-Deer Winter-Range' habitat management stood out as other goals that participants deem to be important for the future management of Dry-Belt Douglas-fir. The importance of 'Balancing Management Goals' was also frequently mentioned, which stimulated further discussion in both the public webinar and technical session on the importance of developing management strategies that can address trade-offs and balance multiple management goals. In both sessions, there was strong agreement that the theme of properly balancing goals ought to be part of further discussion in future engagement activities that will be conducted in the process of planning for the future of Dry-Belt Douglas-fir.





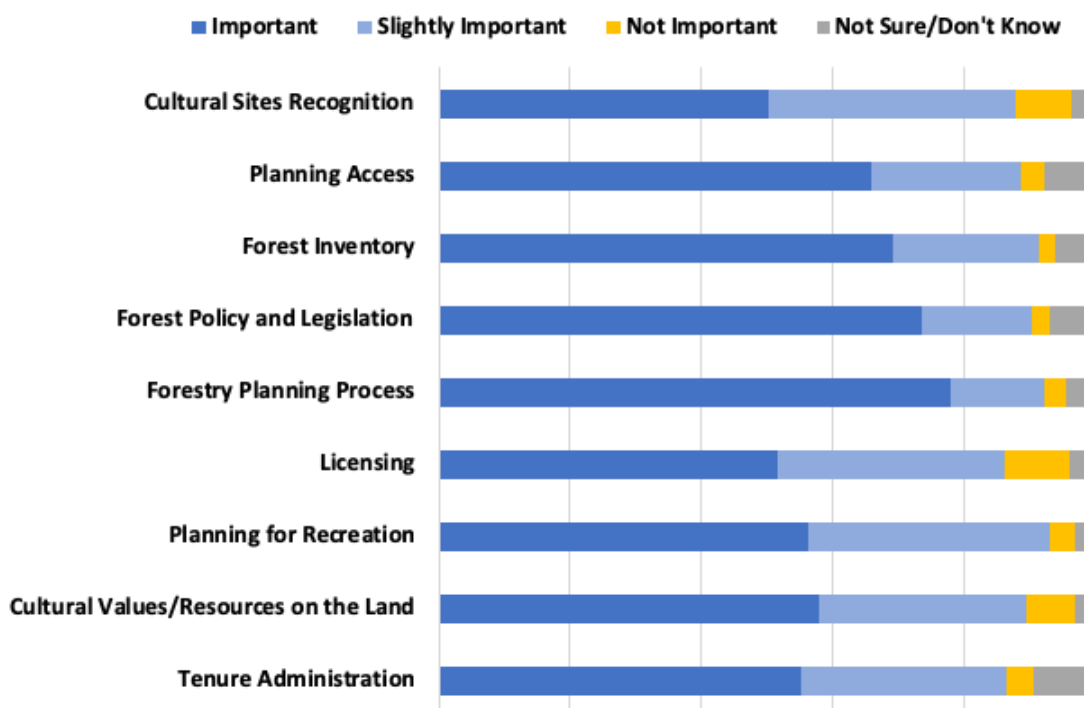
When being asked about the types of steps that should be taken to achieve strategies for management goals, participants in the technical session rated more workshops, formation of subcommittees, and following the guidance of independent experts as the top three measures. Organizing town halls, coordination of site specific committees, and consulting findings from existing research were mentioned in the 'other' category for identifying steps.



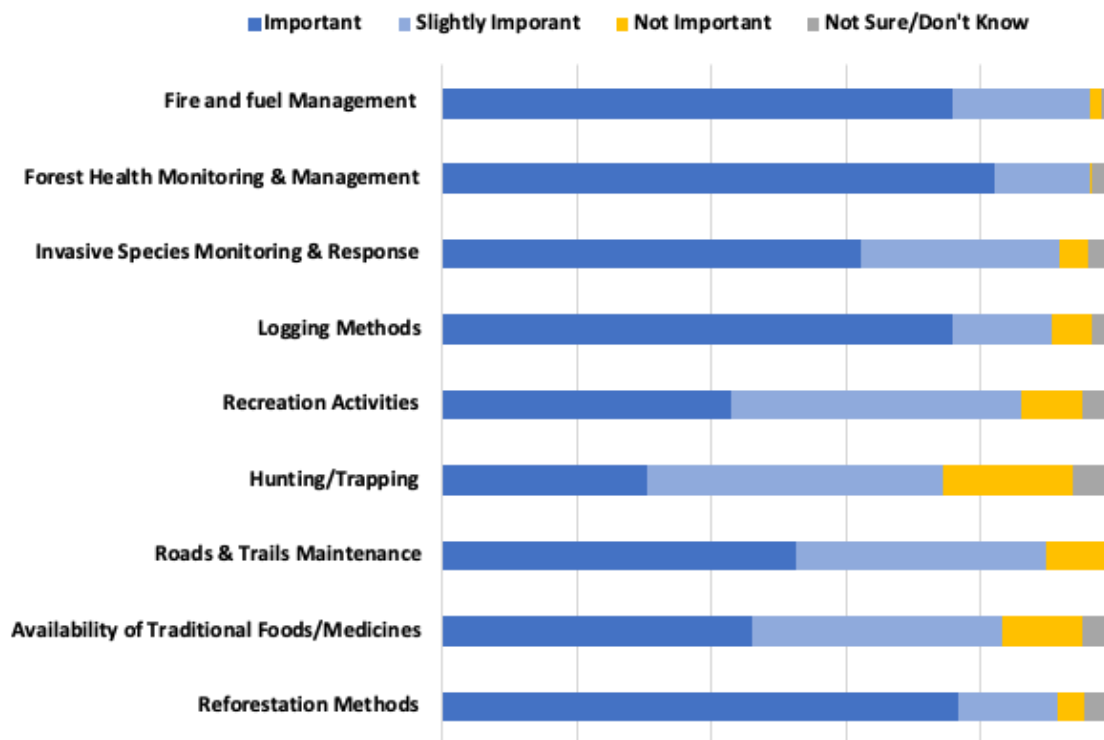
## 7. CHANGE IN TOOLS AND PRACTICES

In the survey, 'Forestry Planning Process' and 'Forestry Policy and Legislation' stood out as tools that respondents rated as 'Important' on a 4-point scale, followed by 'Forest Inventory' and 'Planning Access' as two tools that also received high ratings in the 'Important and 'Slightly Important' categories. With regards to practices that need changing in managing for the future of Dry-Belt Douglas-fir, 'Forest Health', 'Logging Methods', 'Reforestation Methods', and 'Field Management' stood out in the 'Important' category on the rating scale.

**Which of these tools need to be strengthened? (Percent of ≥ 245 survey responses)**

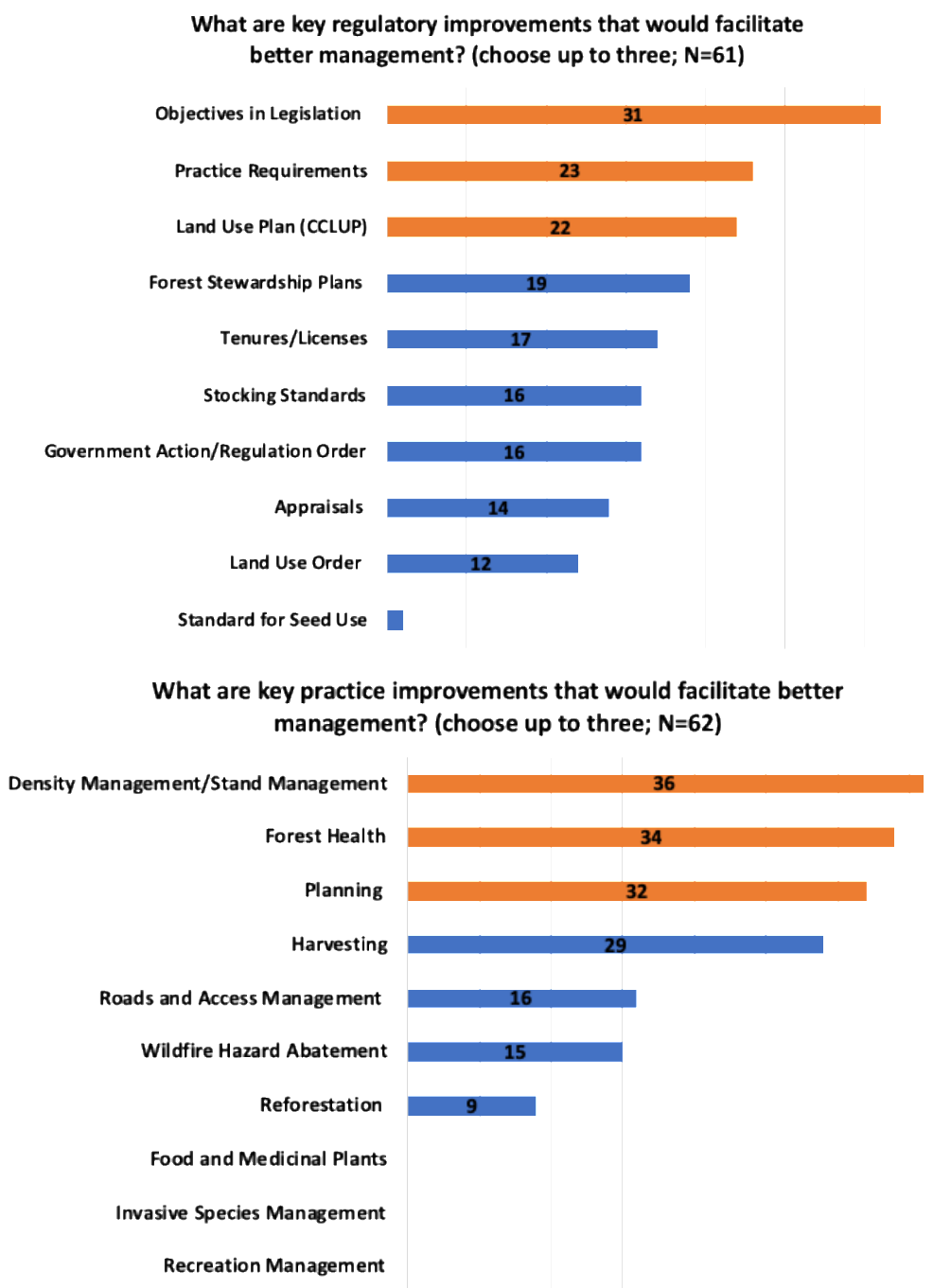


## Which of these practices need to change? (Percent of ≥ 245 survey responses)



In the survey and the public webinar people also identified ‘Other’ tools and practices they deem important. Notably, ‘Climate Adaptation’ and ‘Collaboration with First Nations’, as well as ‘Utilization of Residual Fibre’, stood out among the categories provided by participants.

In the technical session, participants were asked to rate the top-three regulatory improvements that can help plan for the future of Dry-Belt Douglas-fir. ‘Objectives in Legislation’, ‘Practice Requirements’, and ‘Land Use Plan’ were the top three choices ranked by participants in the session, using the live poll feature in Zoom video conference platform. When asked about practice improvements, participants in the technical session voted ‘Density Management’, ‘Forest Health’, and ‘Planning’ as top three priorities, using the polling function in Zoom.

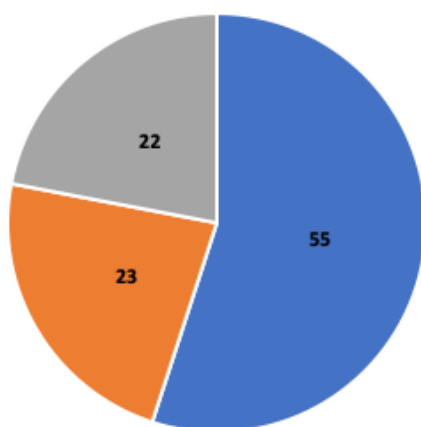


## 8. CONCLUSION

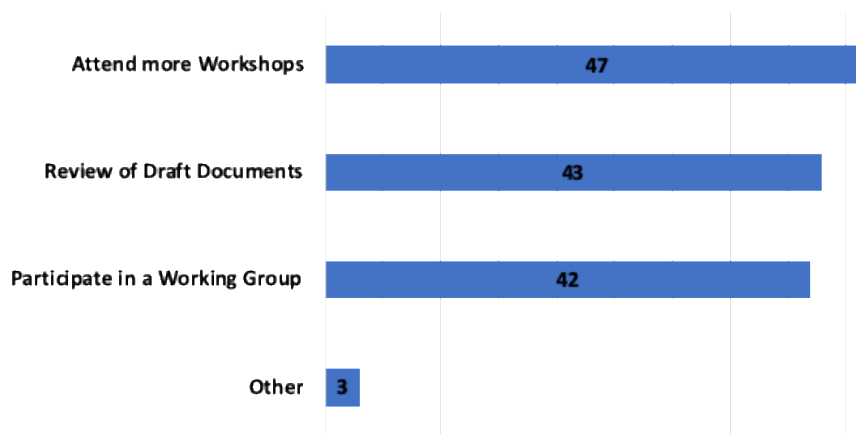
The series of engagement activities that the Dry-Belt Douglas-fir Planning Initiative conducted between May and June 2021 shows that people take high interest in these forests and want to be part of the planning process in managing for their future. High participation rates, range of topics covered, along with the additional input that was received throughout the engagement process serve as valuable steps in moving forward with the planning initiative. Many participants indicated that they are available for further engagement to ensure a collaborative process that accounts for the range of interests and values in setting goals, and planning for the long-term sustainability of the Dry-Belt forest ecosystem. In terms of type of engagement activities, people like to see more webinars and technical sessions, with e-mail updates being the preferred mode of communication to receive information about these opportunities and resulting updates.

**How do you want stay informed about opportunities to participate in public workshops? (Percent of 255 responses)**

■ Email ■ Newsletter ■ Virtual Invite



**How would you like to be involved? (select all that apply; N=55)**



## Appendix I: Survey Methods

The survey was conducted in May of 2021 using LimeSurvey software. The objective of the survey was to better understand the views of the public about managing for the future of Dry-Belt Douglas-fir, and to receive input in planning for the public webinar and technical session which were held in June 2021. Accordingly, our sample was selected from the public in British Columbia via [govTogetherBC](#) platform. The link to the online survey was distributed via multiple, current directories, listservs, and newsletters of partnering organizations. The survey was online from May 10 – May 31. Earlier drafts of the survey were reviewed and revised in response to feedback from an expert advisory panel, including Indigenous communities, recreationist, and experts in forestry management, wildlife ecology, and resource conservation. To protect respondents' privacy, the survey was confidential. Meaning, the data is only analyzed at the group where individual responses are strictly de-identified. Two-hundred and fifty-five valid responses to the survey were completed; valid surveys are defined as ones where the respondent completed at least the first five questions. Where percentages are displayed, values may not sum to 100% due to rounding. Microsoft Excel was used to analyze the survey data.