



Engaging the Public in Sustainable Forest Management in Canada: Results from a National Survey of Advisory Committees

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ABSTRACT

This report provides an updated national overview of how the public has been engaged in forest-sector advisory committees (FACs) in Canada. These committees operate across a wide range of geographic, social and political environments and the study highlights a number of important similarities and differences among the provinces and regions where FACs operate. The first national survey of FACs was conducted in 2004 and a new round of data collection took place, via surveys, from April to September 2016. The results presented in this report are provided by chairs of advisory committees (n = 66) and the committee members (n = 343). More specifically, this study provides a basic profile of FACs and describes their activities; and participants' views of representation, inclusiveness, and effectiveness, including whether members were satisfied with their participation and influence in forest policy and decision-making. Overall, the results from 2016 aligned closely with the results from the 2004 national survey. The number of FACs has declined, but their demographic composition remains relatively stable. Committee members are growing older, with an average age of 58; the representation of women and Indigenous peoples has not changed appreciably since 2004. Almost 75 percent of members reported feeling satisfied with their participation. However, the highest levels of dissatisfaction about group process and effectiveness were expressed by women and Indigenous participants. Thus, while FACs have, since their inception, had some success in engaging public stakeholders and rights holders, problems of representation and influence identified in 2004 endure. The study recommends additional measures to ensure Canada meets "society's responsibility" for sustainable forest management.

RÉSUMÉ

Le présent rapport fournit une mise à jour du portrait national des comités consultatifs publics œuvrant dans le secteur forestier (CCF). Ces comités opèrent dans des environnements géographiques, sociaux et politiques très diversifiés et l'étude met en relief un nombre important de similarités et de différences entre les provinces et les régions où les CCF œuvrent. Un premier sondage national de CCF a été conduit en 2004 et une nouvelle ronde de collection de données a été réalisée, via sondages, d'avril à septembre 2016. Les résultats introduits dans ce rapport proviennent des responsables de comités (n = 66) et de membres des comités (n = 343). Plus particulièrement, cette étude fournit un profil de base des CCF, et décrit leurs activités; et les perceptions des participants à propos de la représentativité, l'inclusivité, l'efficacité, y compris si les membres sont satisfaits de leur participation et de leur influence sur la prise de décisions. En général, les résultats de 2016 correspondent étroitement aux résultats du sondage national conduit en 2004. Le nombre de CCF a décliné, mais leur profil démographique est demeuré plutôt stable. Les membres de comités sont plus âgés, avec une moyenne d'âge de 58 ans, la représentation des femmes et des autochtones n'a pas beaucoup changé depuis 2004. Près de 75% des membres ont mentionné être satisfait de leur participation. Toutefois, les plus haut taux d'insatisfaction quant au fonctionnement du groupe et son efficacité ont été exprimés par les répondants féminins et autochtones. Ainsi, alors que les CCF, depuis leur création, ont réussi à faire participer différents groupes du public et des ayants droit, les problèmes de représentation et d'influence identifiées en 2004 ont perduré. L'étude recommande des mesures additionnelles afin d'assurer que le Canada respecte son engagement envers la « responsabilité de la société » pour l'aménagement durable des forêts.

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INTRODUCTION

Public participation is considered a key aspect of forest planning and policy development in Canada. This is reflected in policy initiatives at national and provincial levels, and through multiple forms of interaction between the public and forestry professionals. Among the methods used to enhance public participation, forest-sector advisory committees (FACs) (also known as public advisory committees, local citizen committees, or stakeholder committees) have been established to contribute to forest-planning processes. They reflect the broader movement towards public participation in natural resource management (Reed 2008; Diduck et al. 2015), and are particularly relevant for Canada's forestry sector given that over 90% of the country's forests are publicly owned (Canadian Council of Forest Ministers 2006). For the past two decades, Sustainable Forest Management (SFM), as defined by the Canadian Council of Forest Ministers (CCFM) (2008), is an established forest management paradigm in Canada that considers social values as well as economic and environmental values (Rotherham and Armson 2016). Indeed, one of the indicators of SFM adopted by the CCFM includes "fair and effective decision-making" for the purposes of integrating social values into forest planning (CCFM 2006).

The general purpose of FACs is to enable forest stakeholders and rights holders (e.g., local forest users, people involved in the forest sector for their livelihood, representatives of local educational establishments and the business community, elected leaders, ENGOs, Indigenous peoples) to participate in discussions about forest management and provide input that can inform decision-making. Though FAC decisions are rarely binding, these committees are intended to provide guidance and public oversight to

decision-makers who are responsible for the management of public forest resources. Part of their perceived value is the belief that FAC participation can help to bring important local knowledge and values into forest planning processes and thereby contribute to fair and effective decision-making.

This report provides an overview of FACs and their activities in Canada. It is based on a national survey conducted from April to September 2016. Descriptive statistics were tabulated for two surveys: one directed to the chairs of advisory committees ($n = 66$), and the other to committee members ($n = 343$). The data collected provide a basic profile of FAC functions and activity, and allow for comparison with other studies of advisory committees in Canada. The survey covers a wide range of topics, with information about public representation and inclusiveness, the demographic characteristics of committee members, the mandate of each committee, the types of information that are accessed by each committee, the effectiveness of group processes, and recommendations for improving group processes.

The 2016 survey follows the first national survey of FACs conducted in 2004 (Parkins et al. 2006). As such, the 2016 data not only provide a basic profile of FACs in Canada as they operate in 2016, but also allow for the analysis of change in committee composition and function over a 12-year period, during which substantial change has taken place within the Canadian forest sector. While the main focus of this report is the 2016 survey data, comparisons were made between 2016 and 2004 datasets in cases where differences and similarities in the data are revealing or notable.

METHODS

Design of Survey Questionnaires

The Joint FAO/ECE/ILO Committee on Forestry Technology, Management and Training defines public participation in forestry as “various forms of direct public involvement where people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions or the outcome of specific forestry issues” (2000, p.7). There have been significant efforts to evaluate the influence of public participation in forest management in Canada, including several case studies in different provinces (e.g., Parkins and Davidson 2008; McGurk et al. 2006; Hunt 2015; Miller and Nadeau 2017). There are also numerous criteria identified in the literature for evaluating environmental public participation (Stewart and Sinclair 2007; Chess 2000; Conley and Moote 2003; Tuler and Webler 1999). With attention to these established criteria for evaluation, this national survey of Forestry Advisory Committees (FACs) was designed to investigate features of public participation such as group dynamics, satisfaction with committee processes and activities, information exchange, and the ability to influence changes in forest management practices. The study involved the design and administration of two questionnaires: one for members of each participating FAC and one for the chairperson of each participating FAC.

Member Questionnaire

The member questionnaire was divided into three main sections. The first section asked members their reasons for participation, who they represented, and to respond to statements about forest values. The questionnaire also asked whether they thought the committee to be representative of all interested and affected groups, as group representation is an area of considerable attention in public participation processes (Reed 2010; Reed and Varghese 2007). The second section focused on committee processes and procedures, encompassing

features of fairness and effectiveness believed to be important for group processes (Shindler and Neburka 1997; Lauber and Knuth 1999; Martineau-Delisle and Nadeau 2010), along with various aspects of group deliberation, such as sources of information, time constraints, complexity, and outside pressures, and various learning outcomes. The final section asked respondents to provide a summary assessment of committee performance and demographic data about themselves.

Chairpersons Questionnaire

The chairperson questionnaire had fewer questions and was designed to investigate basic areas such as member demographics, and committee purpose and process. Because of the low number of initial responses to the 2016 chairperson questionnaire, an abridged version of this questionnaire was subsequently developed in order to increase responses from chairpersons (hereafter referred to as chairs) who had not completed the unabridged version. The abridged version focused on the (11) most important questions about committee composition, committee structure, and turnover to allow for comparison with the 2004 survey on these key questions. This questionnaire was administered by telephone in fall 2016.

Key differences between the 2004 and 2016 questionnaires

The 2016 questionnaires were based upon questionnaires used for a similar survey in 2004 (see Parkins et al. 2006). To enable comparison between the 2004 and 2016 datasets, 22 of the 30 questions asked to FAC members in 2004 were reproduced verbatim in the 2016 version, with another 4 reproduced in a modified format. In terms of the chairpersons questionnaire, the 2016 version included 14 of the 16 questions (verbatim) asked in the 2004 questionnaire.

However, the 2016 survey instruments also underwent significant revision. New questions

and options were incorporated into the members' questionnaire to cover societal perspectives and issues not featured in the 2004 version. This included the role of climate change in forest management and new forms of media for accessing forestry-related information. Additional questions were also included on trust, the dynamics of committee discussion and deliberation, and learning outcomes for committee members. Questions about what members had learned from their participation were expanded in the 2016 version to include a number of new open-ended questions designed to generate more personalized qualitative data specific to learning outcomes. The chairperson questionnaire, meanwhile, included 17 new questions on recruitment and turnover of membership, committee structure, and committee evaluation methods.

In designing the new questionnaires, the team was posed with two main challenges. The first was to make the instruments generic enough to be applicable in all parts of the country and for different types of advisory committee settings, while specific enough to address key issues raised in the literature and build on lessons imparted through the 2004 survey data. A second challenge involved keeping the questionnaires, and particularly the members' questionnaire, to an acceptable length. This was problematic because it was necessary to maintain the majority of questions and statements used in the 2004 survey to allow for comparable datasets, while incorporating new lines of inquiry to reflect changes in the forest sector since 2004.

Piloting of the Questionnaires

In March 2016, pre-testing was carried out ahead of the main survey launch. The questionnaires were sent to a small number of individuals known to the research team that work with, or are members of, FACs. Their feedback was used to clarify the wording of questions.

Selection of Advisory Committees to be Surveyed

Although advisory committees are a major form of public participation in Canada's forest sector (Parkins et al. 2006; Beckley et al. 2006), the exact number of committees in the country is unknown. Because there is no central registry of advisory committees in Canada, and because these committees exist and function within a changing forest industry and evolving forest policy, it is not possible to achieve a complete census of committees nationally. In some provinces like Ontario, where FACs are sponsored by the provincial government, a census of all committees may be possible, but in most provinces, such information is not available.

In order to identify as many committees as possible in each jurisdiction, contacts were made with government and industry officials, as well as with other researchers working in the field of public consultation. In addition, an exhaustive web-based search of forest management plans and forestry operators was carried out, followed by an attempt to make contact with their associated FACs. In some cases, contact information for individual FACs was easily available online. In many instances, though, information was not accessible and individual forest managers or government officials had to be contacted and asked for committee contacts. The job of retrieving information about FACs was complicated by the fact that many forest companies do not maintain publicly-accessible information about the committees they establish, while in some provinces a restructuring of the forest industry or changes in forest policy have affected the functioning of, or shifted responsibilities for, FACs.

In Quebec, for example, new forest legislation in 2013 made FACs mandatory and placed them under the responsibility of regional government agencies. Two years later, in 2015, these regional agencies were abolished and the responsibility for FACs transferred to another level of regional government (Tardif et al. 2017.) This meant that the list of contacts provided for each

administrative region proved out-of-date in many cases. In such instances, the regional communications officer for the *Ministère de la Forêts, de la Faune et des Parcs* was asked to provide the missing information. In addition, this transition period has seen some FACs in Quebec maintain the structure that existed before, except for naming a new chair. In other parts of the province, however, more significant changes have been made, including a sharp decrease in the number of FACs and the reshuffling of committee memberships.

Table 1 shows, by provinces or region, the number of FACs identified in our national scan and the number that agreed to participate in the 2016 survey. In total, 132 FACs were identified nationwide, with just a handful of committees identified in the Atlantic and Prairie provinces, and over 30 identified in each of Ontario and Quebec. FACs were found in all Canadian provinces except Prince Edward Island, with none present in any of the territories. The number of possible FACs identified nationwide in 2016 (132) represents a significant decline from the 196 FACs identified in 2004. As noted above, this is largely attributed to restructuring of the sector in Quebec, where the number of identified FACs fell from 108 in 2004 to 38 in 2016. However, it is worth noting that many forest product companies also experienced shutdowns during this period in other provinces (e.g., Manitoba, Alberta).

Once a country-wide database was established, the chair, facilitator, or some other key individual associated with each of the 132 potential FACs was contacted by email or phone, provided information about the study, and asked to invite their members to participate. Of the 132 identified committees, a total of 79 responded to say that all or some of their members had agreed

to participate (Table 2). The lowest level of participation was in Alberta, where only 7 of 26 identified committees responded favourably, in British Columbia where 14 of 22 committees agreed to do so, and in Quebec where 24 of 38 committees participated. Across provinces, the most-often stated reasons for non-participation were (in order) “not currently functioning”, “just established and not ready”, or “not interested”. In Quebec, a major reason for committees not participating was the disruption they had experienced following change in their governance structure in 2015 (for more information about those changes see Tardif et al. 2017).

In some instances, no response was received from committee contacts despite repeated invitations. This was particularly acute in Alberta where 15 of the 19 non-participating committees did not respond at all to the research team’s repeated attempts to make contact. This suggests that some of the FACs that we believed we had identified in Alberta were either inactive or did not actually exist, and may include cases of forest product companies that still have an online presence but have closed their doors in Alberta in recent years. While we worked to determine status through web searches, many FAC committees have no web presence on company or provincial websites. It should also be noted that we depended a great deal on the enthusiasm and interest of the gatekeeper (chair, facilitator, other contact person) to help ensure that identified committees agreed to participate in the survey. Limited enthusiasm among these gatekeepers may have translated into members not being notified about the research, members themselves being less than enthused about taking part, and possibly indicative of poorly functioning committees.

Table 1. Number of FACs identified and surveyed in 2004 and 2016

Year of Survey	No. of committees identified	No. of committees participating	No. of members surveyed	No. of chairs surveyed
2004	196	102	1079	101
2016	132	79	343 ⁶	66

Table 2. Survey coverage of FAC committees and members (by province)

Province	No. of committees identified	No. of committees participating	% of all committees who responded	No. of respondents (Members)	% of all respondents (Members)
British Columbia	22	14	17.7	69	20.1
Alberta	26	7	8.7	48	14.0
Saskatchewan	3	3	3.8	23	6.7
Manitoba	2	2	2.5	13	3.8
Ontario	34	24	30.4	106	30.9
Quebec	38	24	30.4	50	14.6
New Brunswick	4	3	3.8	13	3.8
Nova Scotia	2	1	1.3	6	1.7
Newfoundland	1	1	1.3	15	4.4
Total	132	79	100%	343	100%

Administration of the Survey

The procedures for the questionnaire for both committee chairs and members followed the Tailored Design Method (Dillman 2000). Outside of Quebec, the survey was launched in early April 2016. For the FACs in Quebec, the survey had a staggered launch throughout May 2016 and into early June 2016, because of delays there in establishing a list of functioning committees.

Questionnaire for Advisory Committee Members

The FAC member online questionnaire (see Appendix 1) was distributed in one of two ways. A unique, individual link was sent directly to those committee members who we had been provided an email address for (n = 635). These 635 members represented 40 of the 79 participating

FACs. For members for whom we did not have an email address, a generic link was sent to the chair or other contact person to forward onto them. This was the case for some or all the members belonging to the remaining 39 committees. Because we do not know how many of these members received the link, we are not able to determine an 'n' value. In addition to an online version, the questionnaire was also made available in paper form, as a small number of members (n = 72), representing a small number of FACs, requested to receive hard copies by regular mail. They were provided with a postage-paid return envelope.

In order to enhance response rates, it was strongly preferred that both chairs and members would be provided their own, unique link to the

⁶ The number of members surveyed is much lower in 2016 than in 2004. This is not accounted for by the difference in number of participating committees between 2004 (102) and 2016 (79), since average committee size of full members (not including alternates) remained in the mid-teens during this period. Rather, the difference in members surveyed appears to be largely explained by a much lower response rate in 2016, indicative of difficulties in getting committee members to respond to an online questionnaire.

questionnaire. This would allow the ability to track individual and committee response rates, better coordinate follow-up communications, and allow for customized reminders if necessary. However, as noted above, this was not possible in many cases. Although this issue existed across all provinces, it was most apparent in Quebec, where 22 of 24 committees did not provide any or all of their members' email addresses. In this regard, we had to be conscious of our ethics requirements regarding the recruitment of individuals.

After the survey was launched, reminders were sent at regular intervals. Reminders were easier to administer for those responding online, because the survey platform *Qualtrics* enabled real-time tracking of questionnaires completed. For those provided with a unique online link, a reminder email was sent ten days and twenty days after the initial launch to anyone yet to complete the questionnaire. By early May, it was clear that response rates were lower than hoped for, and so a customized email reminder was sent to those who had not yet responded, or to their third party contact. This effort succeeded in stimulating an increase in response rates. For those who received a hard copy of the questionnaire to complete, a reminder letter with a second copy of the questionnaire was sent out to any member who had not returned the original questionnaire by the second week of May 2016.

Questionnaire for Advisory Committee Chairpersons

The FAC chairperson online questionnaire (see Appendix 2) was distributed the same way: a unique, individual link was sent to the committee chairs for whom we had been given an email address; or, in the case of 22 committees, an anonymous link was sent to a contact person to forward onto the chair. Given a lower than anticipated response rate, an abridged version of the chairperson questionnaire was also conducted by telephone in the fall of 2016. This resulted in responses from an additional 17 committees.

Limitations

The results of these surveys are subject to a number of important limitations. Because a list of FACs in Canada does not currently exist, it was not possible to accurately identify the target population or a complete sampling frame for this survey. A non-random sample means that this survey should not be viewed as representative of all FAC committee members and chairs. Rather, the survey results summarize the views of respondents from participating FACs only.

The low participation rates in some jurisdictions may influence the conclusions, since little is known about non-participants. The results of certain groups of members, such as women and Indigenous people, are included because they are noteworthy, but should be viewed with caution due to the small number of responses from these groups. An additional weakness of the survey is that it does not include former members who dropped out of committees for a variety of reasons, including the possibility of dissatisfaction. As such, the views captured may be skewed towards members who are relatively more satisfied with existing processes and more willing to complete the survey. For example, with our Quebec respondents, where committees were more recently established and members had, on average, served less time, they expressed less satisfaction with committee processes. This assessment of our respondents is consistent with the views of committee chairs who expected a majority of completed questionnaires to come from their more active members.

Data Analysis

For questionnaires completed online by committee chairs and members, data entry occurred automatically via the online platform *Qualtrics*. For any questionnaires that arrived as a hard copy, research team members entered the data manually into *Qualtrics*.

The *Qualtrics* system provided auto-generated snapshot reports that allowed for preliminary analysis of responses from those

chairs and members who accessed the questionnaires via a unique, online link. For subsequent national and regional analyses that captured the information provided by all those surveyed (including those who completed the questionnaire via online link provided by a third party), the datasets were merged and exported into SPSS statistical software. This happened at the end of June 2016, after the online survey officially closed for all regions other than Quebec.

Prior to data analysis, the data were cleaned and verified. Data were verified by comparing participants' self-reported region with the region of their associated committee. When there was a conflict between these data, the location provided by the committee Chair was used. Data were also cleaned to remove participants who did not answer any of the questions and to remove participants who were incorrectly surveyed (such as respondents to the chairpersons' questionnaire who stated that they were not the current chair). Additionally, obvious errors in coding or typing (such as a participant who claimed to have been a committee member for 118 years) and ambiguous answers that prevented analysis were recoded as missing values, and string values for quantitative questions were recoded as real numbers. When participants answered quantitative questions with a range of values, the value was recoded to show the average of that range. For example, if a participant reported that they had been on a committee for 10-15 years, this value was recoded as 12.5.

For all quantitative data, SPSS was used to generate descriptive statistics. For all qualitative data (e.g., open-ended questions and questions

requiring additional categorization), information was imported into NVivo Qualitative data analysis software to allow for data organization and thematic coding. This report focuses mainly on results from the descriptive statistics, but where appropriate, the results from several key open-ended questions are also discussed. It should be noted that the number of committees represented by responses to the survey of committee chairs ($n = 66$) was slightly different than the number of committees represented by responses to the survey of committee members ($n = 79$). This is because some committees participated in one survey and not the other. The distribution among regions also differed.

Describing the 2004 and 2016 datasets

Many of the questions from the 2004 survey were replicated verbatim in the 2016 survey, for both chairs and members, in order to identify possible changes within FACs during the past twelve years. The 2016 sample is considerably smaller and is composed of a different set of individuals than the 2004 sample, and so comparative statistical analysis between the two datasets is not the aim of this report. Throughout the report, however, we do make note of similarities and differences between the surveys. These comparisons are intended to be more 'informal' while acknowledging that further research may be required to test for statistically significant differences in some cases. With these caveats in mind, viewing the results of the 2016 survey together with the results of 2004 survey can be useful for describing differences observed within FACs and forest management over time.

RESULTS

Response Rates⁷

Chairperson Questionnaire

Response rate from chairpersons was lowest in Quebec, with 16 of 34 questionnaires completed, giving a response rate of 47.1%. Outside of Quebec, 50 of the 58 questionnaires were completed, resulting in a response rate of 86.2%. The greatest response came from chairs in Alberta (9/9 surveys completed), British Columbia (13/14 surveys completed) and Ontario (19/25 surveys completed).

For those sent the questionnaire directly (via unique, individual link) (n = 57), a total of 27 completes were recorded, or a response rate of 47.4%. For those chairpersons who received their link from a third party contact person (n = 34), 14 responded, a response rate of 41.2% (Table 3). Response rates were much improved for the abridged telephone survey, where 24 of 34 chairs (70.6%) completed the abridged questionnaire.

In total, 42 of 82 (or 51.2%) of chairpersons completed the full questionnaire. Subsequently, 34 chairpersons – who did not respond to the full questionnaire – were contacted and a total of 24 (70.6%) completed an abridged telephone questionnaire (Table 4). When presenting the chairpersons' survey results, the n value for responses has been indicated for greater clarity.

Members Questionnaire

For the member questionnaire, an accurate response rate can only be calculated for those individual members sent a unique, individual link for completion online or a hard copy via regular mail. For questionnaires completed online, of the 635 questionnaires distributed to committee members nationwide, 253 were returned, for a response rate of 39.8%. Lowest response rates

were in Quebec (18.8%), New Brunswick (28.2%), and Saskatchewan (32.7%). Similarly to the chairs' survey, highest response rates were recorded in Ontario (53.5%), Alberta (46.8%), and British Columbia (44.5%). In Quebec, low response was attributed by committee chairs to the restructuring of forest management taking place in the province, while in New Brunswick one of the chairs noted that few members would feel incentivized to respond since they are all volunteers and only a slim majority attend committee meetings.

For 72 members who received a hard copy in the regular mail, 16 returned a completed questionnaire, for a response rate of 22.2%.

For members who were sent online questionnaires via a third party chair or other contact person it is much harder to calculate the response rate because we have not been able to ascertain in all cases how many members were sent the link or indeed whether all third parties followed instructions and forwarded the link onto their members. Of the 39 committees that requested the members questionnaire to be accessed online via a link sent through a third party, we did not receive a single member response to the online questionnaire for 15 of these committees. Given an average FAC membership size (nationally) of 26 in 2017, and an overall response rate of 39.8% for those committees we contacted directly, we suspect that for at least some (if not all) of these 15 cases, the survey was never sent to their respective memberships. For this reason, Table 5 provides an estimated response rate based on the 24 committees where at least one completed questionnaire (sent via indirect link) was recorded.

⁷ Because of their low number, and in order to maintain consistency with the 2004 survey report, regional responses are often grouped for the Prairies

(Manitoba and Saskatchewan) and the Atlantic provinces (New Brunswick, Nova Scotia and Newfoundland) in the tables and text that follows.

Combined, the members questionnaire was sent to an estimated 1123⁸ members nationwide⁹. A total of 343 questionnaires were completed, constituting an overall response rate of 30.5%. This compares to a response rate in 2004 of 47.8% (1079 of 2256 questionnaires) (Table 6)¹⁰. While the 2016 response rate (39.8%) for members contacted directly by email was comparable to the 2004 response rate, the response rate for members reached via regular

mail or via a third party was far lower and drove down the rate overall.

As noted, 343 FAC members completed the questionnaire, and Figure 1 provides their numbers by province. Ontario (106 respondents) accounts for almost a third (30.9%) of the total, with British Columbia, Quebec, and Alberta combined accounting for close to half (48.1%).

Table 3. Response rates for FAC chair survey

Survey Mode	Number of Chairs sent survey	Number of respondents	Response Rate
Direct Link	57	27	47.4%
Indirect Link	34*	14	41.2%
Paper Survey	1	1	100%

*Estimated number of chairs sent the survey through an indirect contact person

Table 4. Response rates for abridged chair survey

Survey Mode	Number of Chairs sent survey	Number of respondents	Response Rate
Abridged Telephone Survey	34	24	70.6%

Table 5. Response rates for FAC members by survey mode

Survey Mode	Number of Members sent survey	Number of respondents	Response Rate
Direct Link	635	253	39.8%
Indirect Link	416*	74	17.8%
Paper Survey	72	16	22.2%
Total	1123	343	30.5%

*Estimated number of members sent the survey through a third-party link

⁸ This number is an approximation based on the members that the researchers contacted directly either by email or regular mail (n = 707), plus the estimated number of members (n = 416) who we are confident received the survey by email via the chair or other contact person.

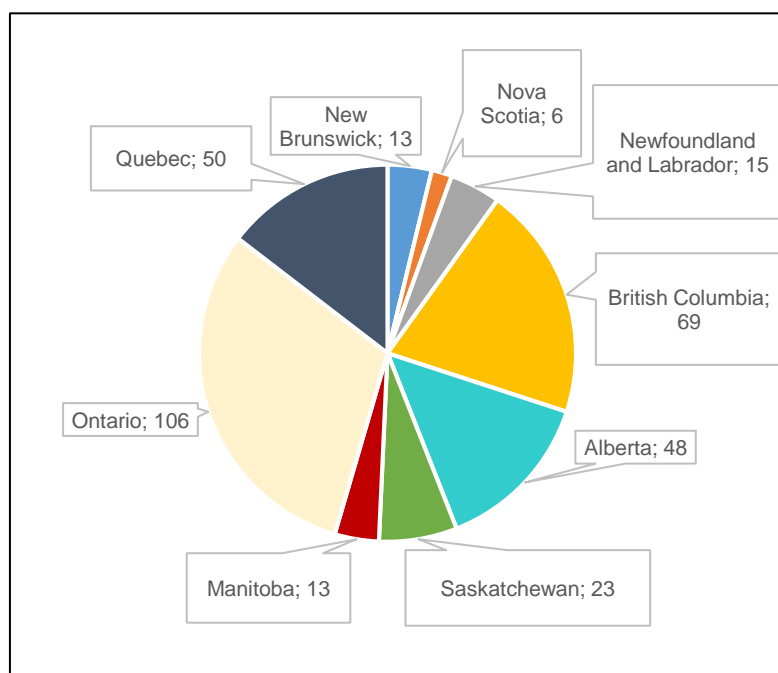
⁹ This is much lower than the 2256 members who were sent the questionnaire in 2004. A major reason for this difference is Quebec, where the 38 committees

identified for the 2016 survey was significantly lower than the 102 committees identified in 2004.

¹⁰ The online platform, *Qualtrics*, used to administer the survey may have affected response rates. As a US-based platform, this required notifying would-be respondents that any information they provided would be held on US rather than Canadian servers.

Table 6. Overall response rates of FAC members in 2004 and 2016

Year of survey	Number of members sent questionnaire	Number of completes	Response rate (%)
2016	1123	343	30.5%
2004	2256	1079	47.8%

**Figure 1. Number of Member Survey Responses by Province (n = 343).**

Results of Survey of Committee Chairs

The survey of committee chairs was designed to provide insights about committee attributes that could be better answered by the chair or sponsoring agency. Note that due to the abridged version of the chairs survey, responses to some questions were provided by a smaller number of respondents than others.

Chair background and demographic information

There were 66 respondents to the chairs survey in 2016. The average length of time that

respondents reported being chair was 7.5 years. Chairs were most frequently from the forest industry or independent foresters themselves, with others working for government, local industry, as academics, teachers, business leaders, for regional development organizations or non-governmental organizations (Figure 2, Table 7). The largest initial category of responses from Chairs about their background was “other”, so many responses were reallocated. For example, “admin assistant of forest company” was moved from “other” to “forest industry representative”. Approximately half (54.8%) of those surveyed had been a member of the committee before becoming the chair.

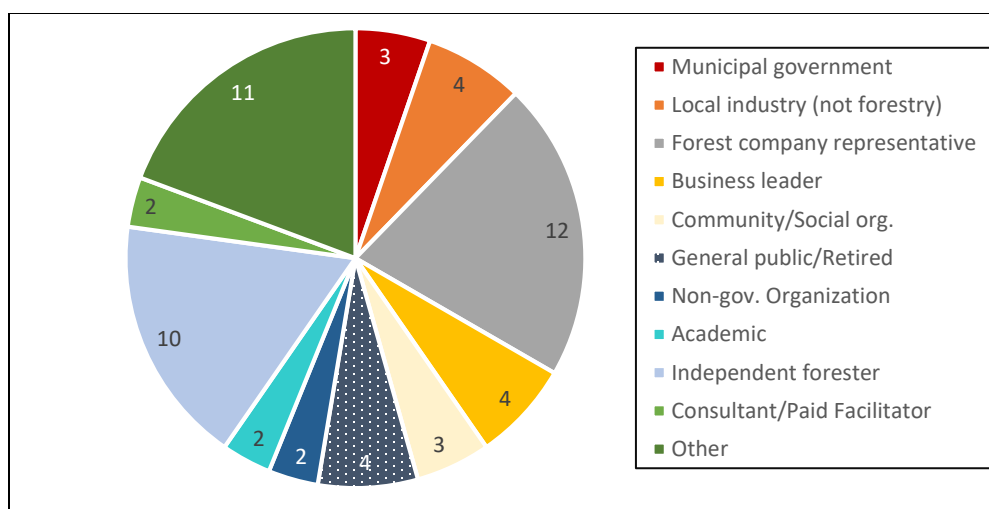


Figure 2. Background/professional affiliation of chairs, (n = 55).

Table 7. Background/professional affiliation of chair by province¹¹

	SK	ON	BC	NFL	NB	AB	QC	Total
Municipal government			1				3	4
Local industry rep (not forestry)		3					1	4
Forest company representative	1	1	1	1	2	4	2	12
Business leader	1	1	1				1	4
Community/ social service organization rep	1	2						3
General Public/retired		4						4
Non-governmental organization	1						1	2
Academic	1						1	2
Independent professional forester	1		6			1	2	10
Consultant/paid facilitator			2					2
Other		4	3			1	3	11

Committee sponsorship and facilitation

A slender majority (15 of 28, or 53%) of FACs surveyed in 2016 were sponsored by forestry companies (Figure 3), mirroring survey findings from 2004. Ontario and Quebec bucked this trend. In Ontario, all six committees that participated in the chairperson survey were sponsored by the Ontario Provincial Government. This was consistent with the findings from 2004, when Ontario had the largest number of provincially-sponsored FACs (24) and only two

sponsored by forest companies. In the case of Quebec, all FACs were sponsored by regional county municipalities, or MRCs (Municipalité régionale de comté), which represent a combination of local rural municipalities and territories.

In terms of meeting facilitation, one-third of the committees that responded (32.3%) had facilitators that ran their meetings independently of the chair. The types of independent facilitation listed most frequently were independent

¹¹ This table should be viewed with caution, as several responses were reallocated from the initial largest category of 'other' (n = 21). Also, chairs were instructed to select 'all that apply,' so some respondents have selected several backgrounds while others have selected only one.

professionals and independent foresters (see Appendix 3).

Committee size

In 2016, chairpersons were asked about the number of members, alternates and others on their FAC (Table 8). The average number of members was 16, but average committee size rose to 26 when taking into account numbers of “alternates” and “others”. It is not clear how this result compares to 2004, when FACs reported an average of 21 members on their mailing lists. This is because FACs were not asked at that time to provide a breakdown in terms of member categories. In terms of regional differences, it is worth noting that the Atlantic FACs (average size = 24) reported being considerably larger in size than those elsewhere in the country.

Member turnout and turnover

On average, committees across Canada held six meetings per year in 2016, a decrease from the eight meetings per year recorded in 2004. The frequency of meetings was highest in Ontario and lowest in the Prairies and British Columbia (Figure 4). On average, the number of years that

FACs reported being in existence increased from 6.2 years in 2004 to 14.3 years in 2016. The anomaly was Quebec, where FACs reported being much newer than elsewhere in Canada, with an average age of 5.7 years. Only a few of the committees that existed prior to 2013 were able to modify their governance structures to meet legal requirements without starting over.

Attendance was strong at most committees, with half of chairpersons reporting that 50-79% of their members would attend each meeting, and almost 40% of chairpersons reporting a turnout of 80-100% of members (Figure 5). These figures mirror findings in 2004, when, on average, 13 of 21 committee members would regularly attend meetings.

In 2016, chairs were asked about committee structure and turnover. Ninety percent (n = 37) of respondents said there was no fixed term for the chair (Table 9). Of the eight chairs who responded that there was a fixed term for members, all responded that the term was renewable. Eighty-one percent (n = 34) of FACs had no fixed term for members.

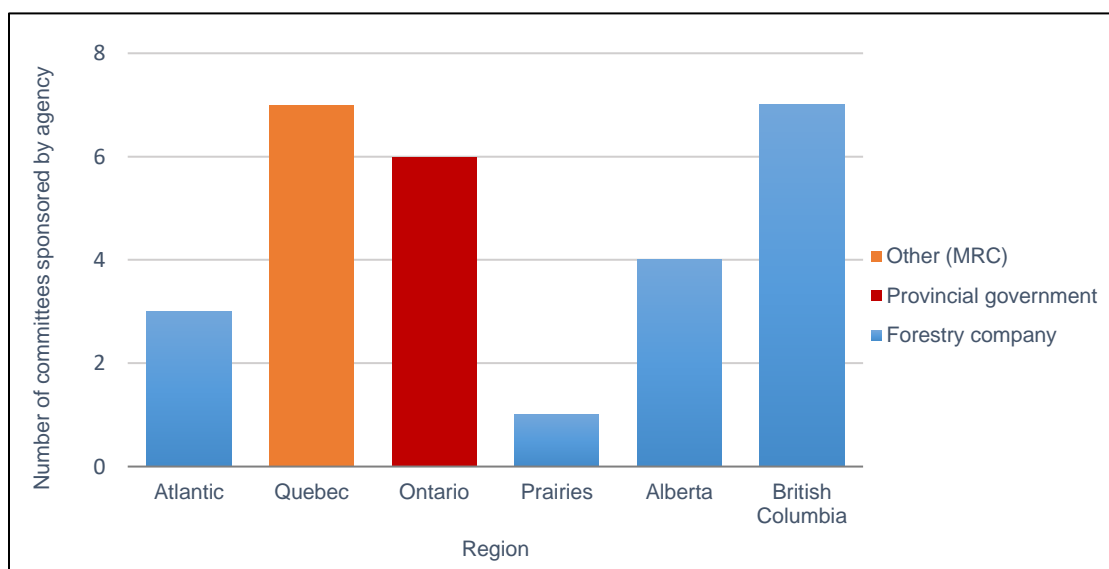


Figure 3. Sponsoring agencies for FACs (n = 28). Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland and Labrador; Prairies region comprises Manitoba and Saskatchewan.

Table 8. Size of FACs, by province

Region	Average No. of Committee Members (n = 65)	Average No. of Alternates (n = 52)	Average No. of others (n = 53)	Average size of committee including members, alternates, others
Atlantic ^a	24	13	0	37
Quebec	18	11	7	36
Ontario	13	3	2	18
Prairies ^b	16	6	4	26
Alberta	17	4	5	26
British Columbia	13	4	4	21
Total	16	6	4	26

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Averages have been rounded to the nearest whole number of committee members.

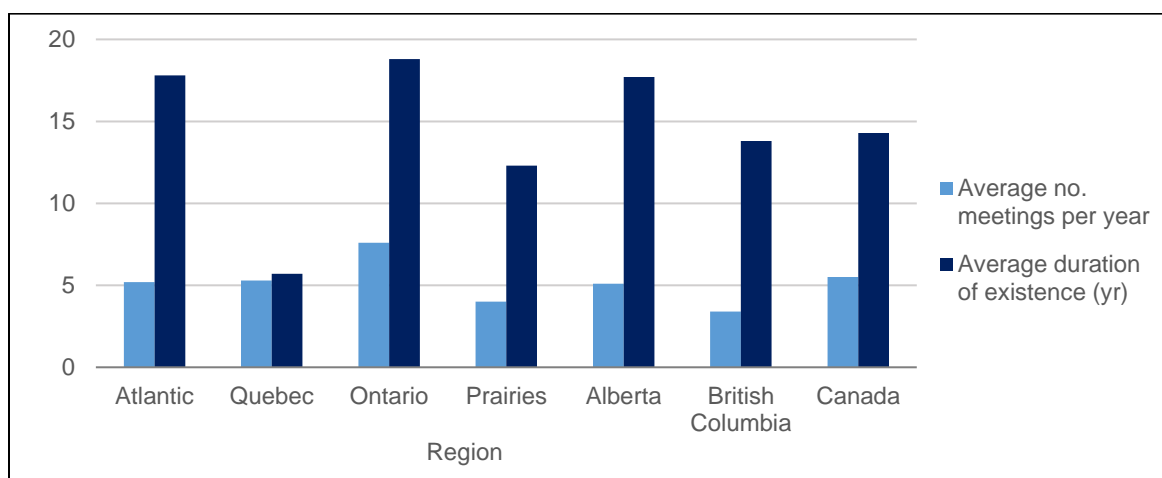


Figure 4. Average number of meetings per year and duration of existence. Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland and Labrador; Prairies region comprises Manitoba and Saskatchewan.

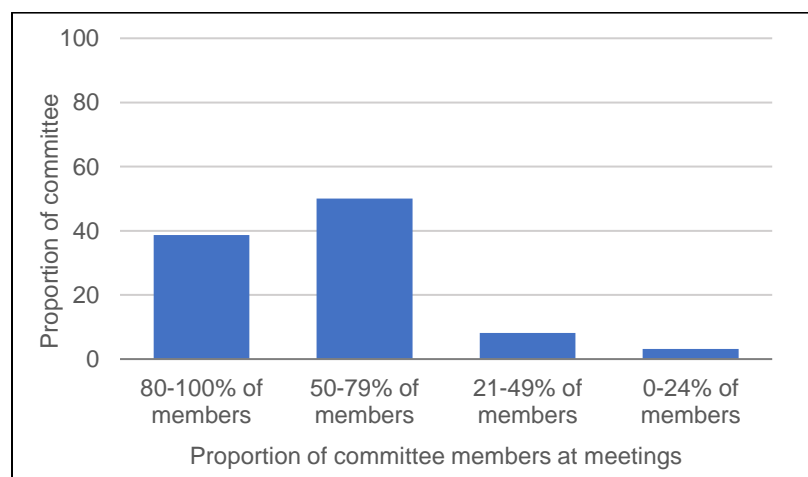


Figure 5. Proportion of committee members attending each meeting.

Table 9. Fixed terms and turnover of committee member composition

	Yes (n)	Percentage (%)	No (n)	Percentage (%)
Is there a fixed term for the chair?	4	9.8	37	90.2
Is there a fixed term for members?	8	19.0	34	81.0
Has the composition of committee members changed in the past 3 years?	8	19.0	34	81.0

In terms of turnover, most chairs (81%, n = 34) reported that the composition of committee members (in terms of background, age, ethnicity) had not changed in the past three years. Average turnover for FACs during the same period was 2.9 members leaving and 3.4 members joining. Turnover was higher in Quebec, with an average of 3.3 members leaving committees and 5.2 members joining in the past three years. The main reasons cited for members deciding to leave their committees were: “other commitments take precedence”, “term is up”, or “too far to drive”. Less commonly cited reasons included members having moved away, changed jobs or not been re-elected, or because of retirement or illness.

Decision-making and evaluation processes

Consistent with 2004 survey findings, most FACs surveyed in 2016 (31 of 42) used a consensus decision-making model (Table 10). Several chairs noted that although the committee strives for consensus most of the time, in some cases (based on the nature of the decision) votes may be cast. Other committees provided their recommendations and concerns to decision-makers such as the forest manager or district manager, or made decisions by consensus while keeping a record of dissenting opinions.

Chairs in 2016 reported transport expenses as the most common form of compensation that

committee members received for their participation (Table 11). This had not changed from 2004. Other forms of compensation included refreshments, meals and clothing featuring the logo of the sponsoring agency. More regions provided per diem expenses in 2016 than in 2004, although no committees provided child care or compensated for loss of income.

The questionnaire also asked about the degree to which FAC deliberations and outcomes are made accessible or available to the general public. Although nearly 60% (n = 25) of chairs indicated that meetings were open to the public to attend, only 48.0% of respondents (n = 12) said that meeting time and venue were made known publicly in advance (Table 12).

Seventy-one percent (n = 30) of chairs said that meeting outcomes were made publicly available, and this was most commonly achieved through the use of websites and online forums, or meetings with constituents. Sixty-eight percent (n = 28) of chairs responded that their FAC typically evaluates its own work. The most common forms of evaluation used were a general discussion following meetings at which decisions are made (n = 24), outside evaluations (n = 6), and internal membership surveys (n = 5).

Table 10. Types of decision-making processes used by forestry advisory committees

Type of decision-making	Atlantic ^a	Quebec	Ontario	Prairies ^b	Alberta	British Columbia	Total
Consensus	3	8	5	0	6	9	31
Vote	0	0	3	1	0	0	4
Other (e.g. depends on the decision)	0	1	4	1	0	1	7
Total	3	9	12	2	6	10	42

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

Table 11. Types of compensation for members of forestry advisory committees

Type of compensation	Atlantic ^a	Quebec	Ontario	Prairies ^b	Alberta	British Columbia	Total
Transport expenses	2	6	15	2	5	11	41
Per Diem	0	1	4	0	2	4	11
Child care expenses	0	0	0	0	0	0	0
Loss of income	0	0	0	0	0	0	0
Other	2	5	9	3	1	2	22

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

Table 12. Percentage of committees with public meetings, publicly available outcomes and self-evaluation

	n = Yes	Percentage (%)	n = No	Percentage (%)
Are the meetings open to the public to attend?	25	59.5	17	40.5
Is the meeting time and venue made public in advance?	12	48.0	13	52.0
Are the outcomes of each meeting publicly available?	30	71.4	12	28.6
Does the committee typically evaluate the results of its work?	28	68.3	13	31.7

Results of Survey of Committee Members

Member demographics and background

The average age of responding members rose from 50.1 years in 2004 to 57.6 years in 2016, with Quebec continuing to have the youngest membership across the country at an average age of 47.4 years (Table 13). The number of female respondents rose slightly from 18.7% in 2004 to 20.7% in 2016. The percentage of female respondents was highest in Quebec (34.0%) and British Columbia (29.0%), while the

proportion of female respondents in the Atlantic region dropped to just 5.9% in 2016. Female members were significantly younger than male members, with an average age of 50.8 years as compared to 59.1 years for men. The proportion of Indigenous respondents also rose marginally from 7.2% in 2004 to 9.0% in 2016 nationally. The Prairies region and Alberta once again reported the highest percentage of Indigenous membership (20.0% and 15.6%, respectively), while just 4.4% of Quebec members self-identified as Indigenous. In 2004, 2.9% of members in Quebec, 7.1% of members in

Alberta, and 20.8% of members in the Prairies had self-identified as Indigenous.

Well over half of respondents (63.1%) reported belonging to a community or social service group (see Appendix 4). Female members were much more likely to belong to an environmental organization (49.1%) than male members (26.4%), and they were less likely to belong to hunting or fishing organizations (28.3% of female members as compared to 52.8% of male members). Just under half of members surveyed came from a household that is dependent on a resource industry or agency (47.9%), which is slightly lower than in 2004 (54.1%). As in 2004, this figure was lowest in Quebec (38.0%).

On average, FAC members in 2016 reported higher levels of formal education than in 2004, with just 2.9% of respondents indicating they had not completed high school as compared to 9.6% in 2004 (see Appendix 4). Over half of the

respondents had completed some post-secondary education in the form of a bachelor's degree, technical school or community college (58.4%), and 14.2% of members had completed a graduate degree. These numbers are slightly greater than in 2004, when 54.3% of members reported completing post-secondary education, and 13.3% reported holding a graduate degree. Higher levels of formal education were reported for female respondents. For example, 42.9% of women held bachelor degrees as compared to 30.5% of male respondents. Members from Quebec, again, reported the highest levels of formal education, with 38.0% holding a bachelor's degree and 18.0% holding a graduate degree (compared to 42.1% and 19.0% respectively in 2004). The Prairies region had the highest proportion of members who were high school graduates only (16.7%), and lowest proportion of members who held bachelor degrees (22.2%). In Ontario (30.8%) and Alberta (28.3%), more members had attended technical or community college than university.

Table 13. Average age, gender and Indigenous representation on FACs

Region	Average age ^a (yrs)	% self-identified as female	% self-identified as Indigenous
Atlantic ^b	54.3	5.9	11.8
Quebec	47.4 ^a	34.0	4.0
Ontario	60.8 ^b	13.6	6.9
Prairies ^c	58.1 ^b	25.0	20.0
Alberta	60.3 ^b	17.4	15.6
British Columbia	59.6 ^b	29.0	4.4
Canada	57.6	20.7	9.0

^a Any two means that are followed by different letters are significantly different ($p < 0.05$; Tukey's test)

^b Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^c Prairies region comprises Manitoba and Saskatchewan

Committee involvement and representation

The average length of time that respondents had been an FAC member was 8.8 years in 2016, up from 4.2 years in 2004. The 2016 average was greatest for Alberta (11.4 years) and least for Quebec (4.6 years) (Table 14). Quebec respondents also recorded the shortest duration of member involvement in 2004 at 2.7 years.

The top reason cited by members to explain their participation in an FAC was to contribute to Sustainable Forest Management (SFM) (49.9% of members), followed closely by concerns about the impact of forestry on the environment (42.3% of members, see Appendix 5). Concerns about forestry jobs in the area were important in Ontario (26.4%) and the Prairies (25.0%), with 26.4% of respondents in Ontario also participating to ensure that recreational opportunities in forest

areas were not diminished. Nationally, many respondents indicated they wanted to contribute to forest planning since the forest is a public resource (16.0%), with this most apparent in the Prairies (25.0%) and the Atlantic (23.5%) regions. Nationally, members (17.5%) also participated to learn more about forest management. A significantly greater percentage of female members were required to participate in FACs as part of their job (35.7%) as compared to male members (15.0%). As in 2004, Quebec had a significantly greater number of members who were required to attend as part of their job regardless of gender (54.0%, compared to a national average of 19.5%).

According to the chairpersons survey, the organizations and individuals most frequently represented on FACs were the forest industry and recreational organizations, followed by local, provincial and Indigenous governments, environmental organizations, and non-forestry industries (see Appendix 6). Members who responded to the survey said that they represented, through their participation on FACs, a variety of views (see Appendix 7), including the public at large (21.3%), their own views (19.6%) and the forest industry (17.0%). There were some notable regional differences, with around 30% of respondents from Ontario, Alberta and British Columbia stating that they represented the public at large, while close to 25% of respondents in the Atlantic and Prairie regions participating on behalf of the forest industry.

The majority of respondents who indicated that they represented a stakeholder group said they updated local community groups or other stakeholders occasionally (23.8%), often (39.9%) or after every meeting (29.0%) (Table 15).

The main methods used for updating local stakeholders were: updates at their organization's council or board meetings, or through email and phone conversations. Respondents also mentioned updating the local community through online forums, social media, newsletters and in person conversations.

Views on FAC representativeness

Three-quarters (74.6%) of respondents felt that their committee represented the values of all interested and affected groups (Table 16).

The least agreement with this statement was in British Columbia (66.7%), and the greatest agreement was found in Alberta (81.3%), and the Atlantic (82.4%) and Prairies (80.6%) regions. For FAC members who responded that they were "somewhat or completely satisfied with representativeness of the committee", the percentages were lowest in the Prairies (75% of members) and Quebec (78.0%), and highest in the Atlantic region (97.1%). Nationally, levels of member satisfaction in 2016 (82.8%) were very similar to those reported in 2004 (82.1%). In terms of change in responses at a regional level, satisfaction in British Columbia rose from 66.2% in 2004 to 79.4% in 2016.

Table 14. Duration of members' involvement with FACs

Region	Average number of years involved ^a
Atlantic ^b	9.1 ^a
Quebec	4.6 ^{a,b,c}
Ontario	10.5 ^{b,d}
Prairies ^c	8.4
Alberta	11.4 ^{c,e}
British Columbia	7.4 ^{d,e}
Canada	8.8

^a Any two means that are followed by the same letters are significantly different ($p < 0.05$; Tukey's test)

^b Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^c Prairies region comprises Manitoba and Saskatchewan

Table 15. Frequency of reporting to local community groups and other stakeholders

Frequency	N	%
Never	23	7.6
Occasionally (e.g. once a year)	72	23.8
Often (e.g. 2-4 times a year)	118	38.9
After every meeting	88	29.0

Table 16. Members views on the representativeness of committees

Region	% who agreed the committee represents interested and affected groups	% who are somewhat or completely satisfied with representativeness of the committee
Atlantic ^a	82.4	97.1
Quebec	74.0	78.0
Ontario	72.6	86.4
Prairies ^b	80.6	75.0
Alberta	81.3	80.9
British Columbia	66.7	79.4
Canada	74.6	82.8

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

The group that respondents felt was least represented by their FAC was Indigenous Peoples. Many respondents mentioned the difficulty in attracting and retaining local First Nations or Métis members. One member stated that *“First Nations groups are not represented because we can never find someone to fill the position”*, while another said that the *“committee format doesn’t seem comfortable enough to ensure continued representation of local aboriginal/First Nations groups”*. One Indigenous respondent called for *“more participation from aboriginal leaders, they should not only participate in politics. They should be more concerned about the forests, wildlife and climate change”*. It was notable that Indigenous members reported less frequent attendance at meetings than non-Indigenous members: 56.7% (n = 17) of those surveyed attended meetings 90-100% of the time, as compared to 71.2% (n = 213) of non-Indigenous members.

Other groups that members felt were not adequately represented included environmental groups and other non-governmental organizations, recreation or tourism associations,

women, and youth. Members mentioned the difficulty in attracting members because of the voluntary nature of committee membership, with a number sharing the sentiment of one participant who stated that *“people aren’t interested enough to donate their time”*. Also, members reported that most committee members already held some interest or knowledge about the forest industry, and so *“we may be missing people who have interests, but are not able to keep up with forestry jargon and concepts that are often presented at meetings”*.

Forest and environmental values

Respondents were presented with 16 statements representing four categories of forest values (existence, spiritual, inherent worth, and economic or utilitarian) and were asked to provide their level of agreement with each statement (see Appendices 8 to 11). These statements closely mirrored the same statements that were posed to FAC members in 2004. In 2016, however, respondents were also asked to rate their agreement with a statement about whether

climate change concerns should influence forest management.

As in 2004, there were strong levels of agreement, above 95% nationally, with the existence statements that “it is important to maintain forests for future generations” and “it is important for me to know that forests exist in my province”. There was also strong agreement among respondents that forests provide a sense of peace and well-being (94.1%) and that forests let people feel close to nature (92.0%). The statement that forests are sacred places produced the least agreement among respondents (51.1%), particularly in Quebec (38.3%) and the Prairies (39.4%).

Statements about the inherent worth of forests generated less agreement among respondents, and with some notable regional differences. For the statement that forests “*have the right to exist for their own sake*”, respondents from British Columbia and the Atlantic had greater agreement (78.3% and 76.5%, respectively) than respondents from the Prairies (60.0%). Respondents from the Atlantic region (76.5% of those surveyed there) agreed more strongly that “*wildlife, plants and humans should have equal rights to live and develop*” than respondents from Alberta (60.9%). The statement that forests “*should be left to grow and develop without being managed by humans*” produced the least agreement among respondents from all regions (24.9%). In 2004, this same statement had elicited a 22.9% level of agreement nationally.

The 2016 survey highlighted regional differences in level of agreement to statements about economic or utilitarian forest values. In

response to the statement: “*the primary function of forests should be for products and services that are useful to humans*”, only 14.5% of members in British Columbia reported being in agreement, but the number rose to 38.2% of members in the Atlantic region. Similarly, while 5.6% of respondents from the Prairies agreed with the statement that forests “*not used for human benefit are a waste of resources*”, 22.1% of respondents in Ontario and 20.0% of respondents in Quebec agreed with this statement. Similar regional differences were evident in the 2004 survey data.

Analysis of the 2016 survey data also compared statement responses between men and women (Figure 6), and found statistically significant differences around forest values, with women more likely to agree with statements about the inherent value of natural processes and men more likely to agree with statements on the utilitarian value of forest resources. Again, these findings largely reflect patterns in the 2004 dataset.

Similarly, the data were also analyzed from an Indigenous and non-Indigenous perspective. The results indicated that Indigenous members responded differently than non-Indigenous members to statements about a number of forest values (Figure 7).

For example, Indigenous members were less likely to agree that “*the primary function of forests should be for products and services that are useful to humans*”. Indigenous members also agreed less strongly with the statement that “*climate change should influence how forests are managed*”.

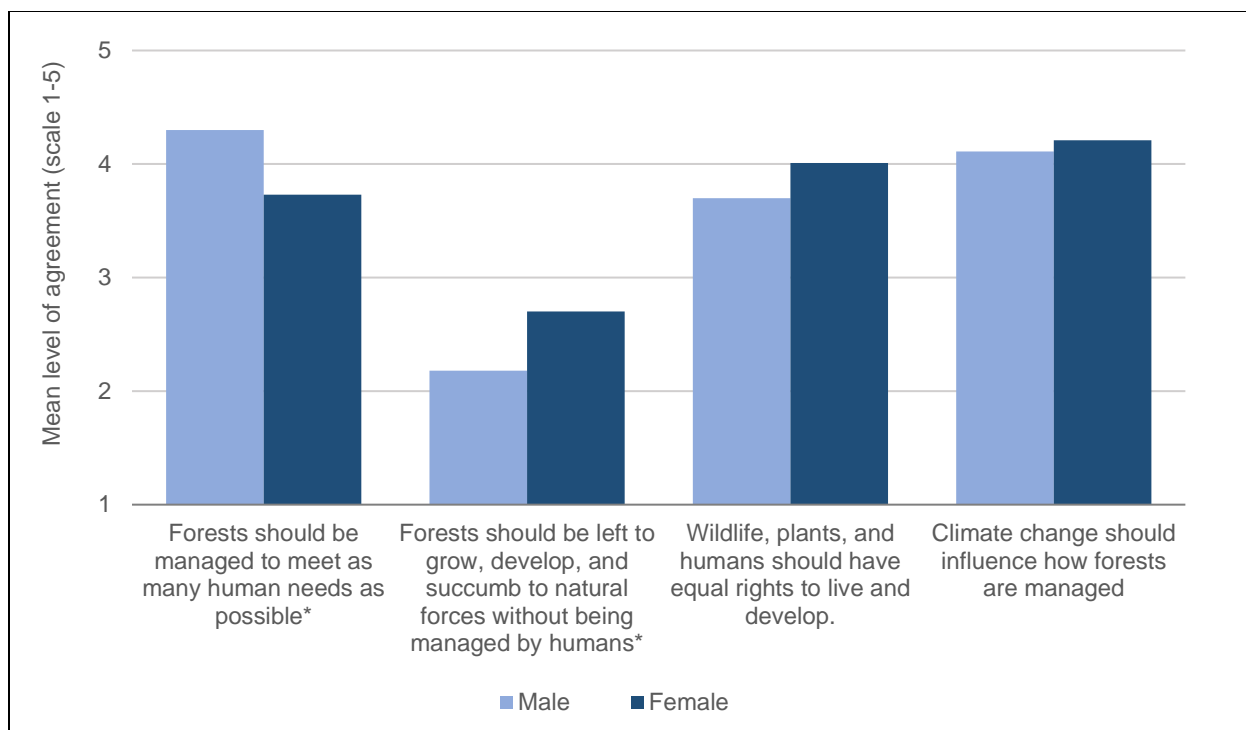


Figure 6. Member's responses by gender to statements about forest values.

* indicates difference is statistically significant ($p < 0.5$; T test). Based on a 5-point scale, where 1=strongly disagree and 5= strongly agree.

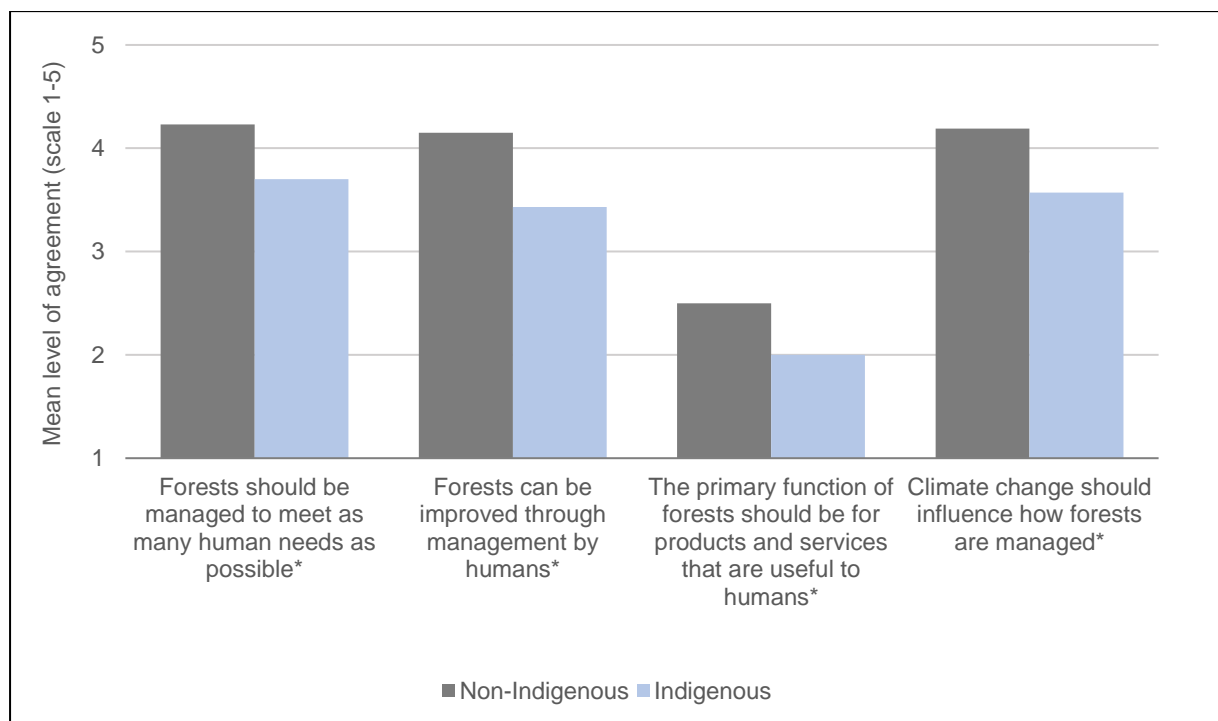


Figure 7. Indigenous and non-indigenous member's responses to statements about forest values.

*indicates difference is statistically significant ($p < 0.5$; T test). Based on a 5-point scale, where 1=strongly disagree and 5= strongly agree.

Committee purpose, pressures and agenda

Nationally, 92.1% of FAC members agreed that their committee's purpose was clear to them. This proportion was slightly greater than in 2004, when 87.4% of respondents agreed that the committee purpose was clear to them. In 2016, this percentage was slightly lower among Quebec (86.0%) respondents than for the rest of Canada.

Respondents indicated that they sometimes felt pressure to agree with committee decisions due to a variety of factors. As was the case in 2004, the source of pressure most frequently identified in the 2016 survey was the complexity of the issues at hand, followed by time constraints, and lack of information (Table 17).

Respondents from Quebec, Ontario, and Alberta more frequently expressed feeling pressured by time constraints than those respondents from other regions. Pressures from within the committee appear to have increased since 2004, particularly in Alberta where 13.3% of respondents said they felt group pressure to agree with committee decisions (as compared to the national average of 6.5%). Women also reported feeling more group pressure to agree with decisions than did male respondents (women reported a mean level of agreement of 2.38 with this statement as compared to 1.98 for male respondents). This also held true for Indigenous members, where the mean agreement for feeling group pressure more frequently was 2.31, compared to 2.04 for non-Indigenous people. Because of the lack of power associated with a limited sample size, this difference could not be deemed statistically significant.

In terms of setting the agenda for committee meetings, participants generally viewed the forest industry as being the most influential, followed by the chairperson¹², the committee members, Provincial government, committee facilitator, and

sponsor of the committee in order of influence (Figure 8).

Specific interest groups (such as trappers, hunters, anglers and snowmobile associations) were also mentioned by many members as having some influence on the committee's agenda. Federal and local governments and environmental and tourism groups were seen to be less influential with regards to setting the committee agenda.

Nationally, FACs in 2016 most frequently accessed information for discussions and deliberations from the forest industry (88.8%) or government agencies (68.8%)¹³ (Figure 9). The least accessed source of information was Indigenous government, although much higher in the Prairies region (34.3%) and Ontario (25.7%) than in Alberta (8.7%).

Quebec was the one province/region to buck most national trends. For example, Quebec FACs accessed information from academics and research scientists far less frequently than in Alberta or the Atlantic region and only 10.2% of respondents in Quebec reported that their FACs frequently accessed information through first-hand visits to the forest, considerably lower than in the Atlantic region (55.9%) or nationally (34.5%).

The internet was the most frequently used medium by which FACs accessed information about forests and forest management (Figure 10). The use of newspapers, television and radio was relatively more frequent in Ontario and Alberta than in the rest of Canada, particularly in Quebec where just 4.1% of members surveyed reported using them. Across all provinces and regions, respondents reported that social media were frequently used by only a very small portion of FAC members (4.2% nationally).

¹² In some cases, the committee chair is different from the committee facilitator. Approximately one-third of committees reported having a facilitator that runs meetings independently of the chair.

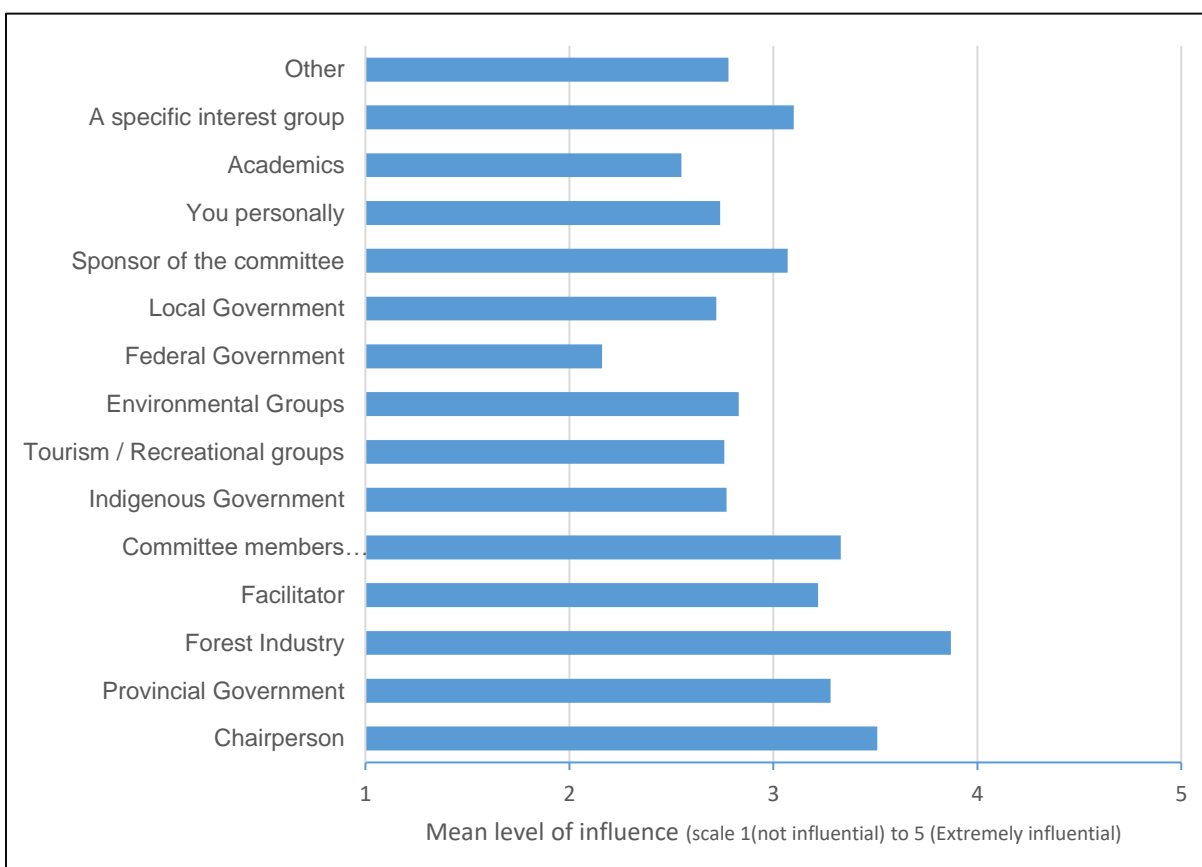
¹³ 2004 survey results are very similar with 85.7% of members accessing information often from the forest industry, and 76.3% of members accessing information often from government agencies.

Table 17. Frequency of feeling pressure to agree with committee decisions

Source of pressure	Percentage of respondents (of those who didn't select "not applicable")		
	Less Often ^a	Sometimes	More Often ^b
Time constraints	64.5	22.4	12.9
A lack of information	65.0	24.7	10.3
Group pressure	78.3	15.2	6.5
Outside pressure	79.3	14.4	6.3
The complexity of the issues	50.3	35.7	14.0

a Less Often = Never and Seldom

b More Often = Often and Always

**Figure 8. Level of influence actors have in setting the committee's agenda.**

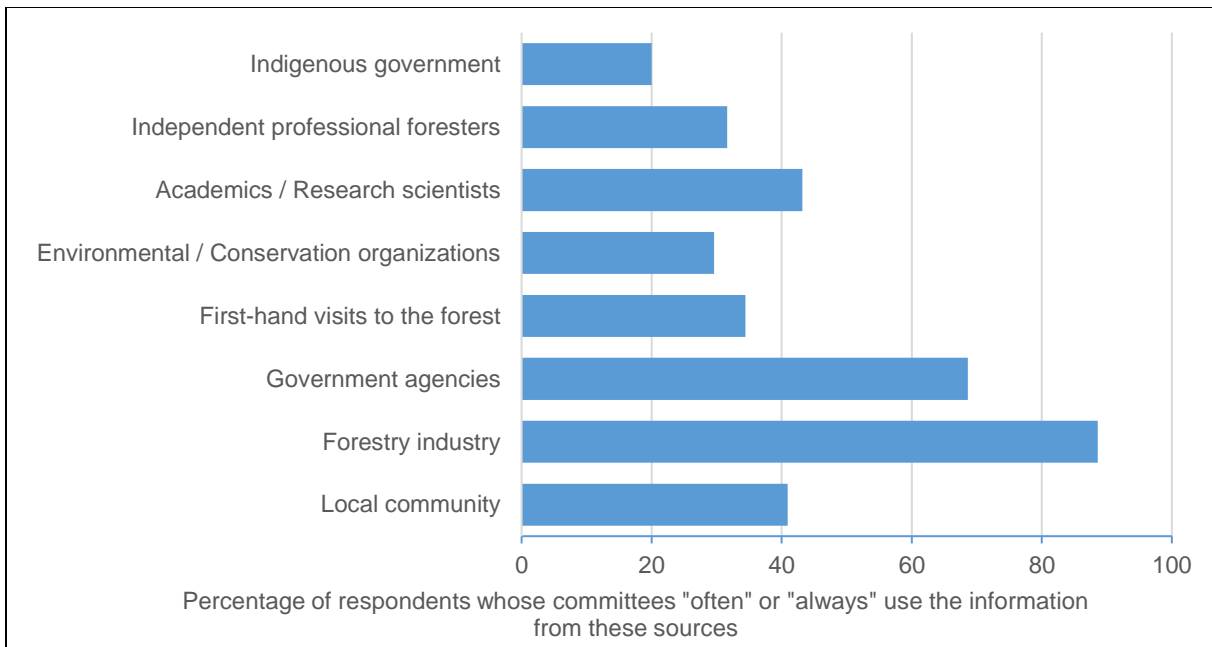


Figure 9. Percentage of members who says their committee always or often use the information from particular sources.

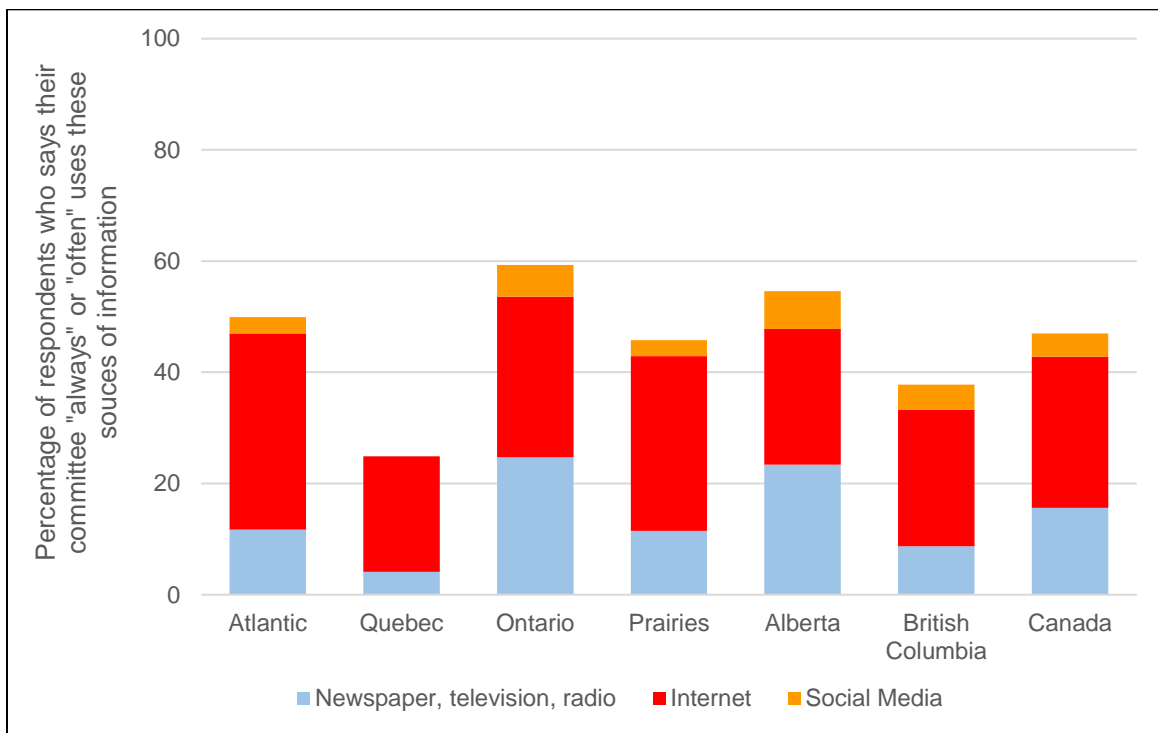


Figure 10. Percentage of respondents who says their committee always or often use various form of communication.

Learning outcomes

Members were asked to rate their level of agreement with 12 statements about what they had learned from participating on the committee. As in 2004, the majority of learning statements garnered strong agreement (Table 18).

For example, 95.9% of respondents across Canada agreed that they had learned the value of incorporating multiple perspectives into forest management processes (see Appendix 12 for detail). There was least agreement for the statement that said members had learned more about how climate change affects forest management in their region by participating in the FAC. This was most notable in Quebec, where 32.0% of respondents agreed with this statement as compared to 67.6% in the Prairies and 66.7% in British Columbia. Members from the Atlantic region agreed most often (85.3% of respondents) with the statement that they had gained insights about traditional knowledge as a result of participating in their local FAC, with committee members in Quebec reporting the least agreement (54.0%) with this statement.

In 2016, members were also asked new, open-ended questions about what they had learned as a result of their FAC participation. Many members expressed learning more about other committee members' perspectives and values, and gaining an appreciation for the views of other forest users. One respondent from the Prairies stated that *"we are all users of the forest but in different ways; outfitters, trappers, hunters, loggers, medicinal use, tourism, recreational, cultural, native lands, plant life, wildlife, bird life; but we all work together to respect the forests"*. Several respondents described learning more about Indigenous perspectives towards forest management by serving on the committee. Some respondents also identified tensions between

other committee members' perspectives and expressed concerns over the varying levels of education or expertise on the committee, as well as the unwillingness of some members to accept other viewpoints or evidence.

A majority of members also stated that they had gained knowledge about SFM by participating on the committee. Many members said they had increased knowledge about SFM, forest certification and planning processes, as well as applicable legislation and policies. Respondents mentioned learning more about the need to balance economic, social and environmental concerns in forest management planning. One respondent expressed appreciation for the complexities of forest management, saying that *"forest management involves so much more than just cutting and planting trees"*. Several members said they had learned more about specific management practices, new scientific findings, and the continuous evolution of best practices in forest management.

When asked to respond to open-ended questions about the most important learning outcomes resulting from FAC participation, many respondents mentioned learning about how to balance the multiple interests represented on the committee, in order to achieve consensus-based decision-making. Specific learnings related to forest management and biodiversity, local habitats, and species at risk were also noted by many members. Members commented on learning about the tensions between government, industry and the general public as a result of their participation. Table 19 provides a selection of quotations for three main areas of learning.

Table 18. Percentage of agreement with statements about learning from committee participation

Statement	% of respondents, by region						
	Atlantic ^a	Quebec	Ontario	Prairies ^b	Alberta	British Columbia	Canada
I have learned technical aspects of forest management as a result of participating on the committee	91.2	88.0	91.4	94.3	93.6	87.0	90.6
I have come to understand the need to incorporate many different perspectives into forest management processes	100	96	94.3	97.1	97.9	94.2	95.9
The information gained from participating on this committee does not significantly aid me in making decisions on forest management issues	14.7	10.2	23.1	20.0	21.3	18.8	18.9
I have learned to work productively with people who think differently than I do	97.1	86.0	88.3	91.4	91.3	95.6	91.1
I have gained new insights about traditional knowledge as a result of participating on the committee	85.3	54.0	69.9	74.3	73.9	66.2	69.3
I have learned about how climate change may affect forest management in the region	61.8	32.0	55.3	67.6	57.8	66.7	56.4

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

Table 19. Key areas of learning from participating in FACs

Importance of balancing stakeholder interests	<i>"Communication between different groups is important. Issues cannot be managed if they are not brought forward".</i>
	<i>"Differing views can co-exist and result in better management of the forest resource".</i>
	<i>"It is possible to achieve sustainable forest management which meets the basic needs of both environmentally oriented and economically motivated users of the forest".</i>
	<i>"Consensus is often difficult and awkward but ultimately satisfying".</i>
	<i>"Environmental groups are dangerous to the continued use of forests for all types of recreation and business".</i>
Knowledge of forest planning/ Sustainable Forest Management	<i>"Planning for a sustainable forest is incredibly complex".</i>
	<i>"I learned what a cut over area actually looks like".</i>
	<i>"How waterways and habitats are protected".</i>
	<i>"The amount of knowledge that is used to develop a forest management plan".</i>
Scepticism about committee's influence on forest management	<i>"The legal requirements are the only thing that affects management decisions".</i>
	<i>"Industry holds the power".</i>
	<i>"Forest licensee management do not really care about sustainable forest management but go through the motions to obtain and maintain certification. They want certification without actually having to do anything different or innovative".</i>

Opinions on committee process and effectiveness

Respondents were asked to express the extent of their agreement with several statements regarding committee activities and processes. Generally speaking, members responded positively to statements that the process was fair (76.2%), money was well spent (74.1%), and that the process was effective (71.0%) (see Appendix 13 for further details). These figures were up from 2004, when a slightly smaller proportion of members agreed that the process was fair (72.0%), money was well spent (64.2%), and that the process was effective (60.9%). As well, relatively fewer respondents in 2016 agreed that time was poorly spent in the process (14.2%) when compared to 2004 (22.7%).

On average, in 2016, members agreed they had been given adequate opportunity to voice their concerns (89.2%), and felt comfortable raising concerns, even if they were controversial (90.8%). There was less agreement with the statement that members trust forest managers to make the right choices about forest management (51.0%). This figure indicates a slight rise in the level of trust from 2004, when 43.3% of members agreed with this statement. As well, in 2016, 63.3% of responding members agreed that they feel they are able to influence the decisions made by the committee.

Notably, members from Quebec responded less positively to nearly all of the statements in this section. Quebec had the highest proportion of members disappointed with past outcomes (37.0%), and the least trust in forest managers' choices (36.7%). Only 51.0% of Quebec members responded that they felt the process was effective, compared to a national average of 71.0%. In contrast, members from the Atlantic region tended to respond the most positively (compared to the national average). For example, just 5.9% of Atlantic members were disappointed

with past outcomes, and more members agreed the process was fair (85.3%), effective (79.4%), and that money was well spent (81.3%) than in other regions.

Indigenous members were significantly less likely to agree with certain statements about committee activities. For example, they were less likely to agree that the process was fair, or that deliberations accommodate the full spectrum of public interests. Statements where Indigenous members' disagreement was significant are shown in Figure 11.

In the 2016 survey, members were asked to list those areas of forest management decision-making or policy that they felt the committee had been effective in influencing. Table 20 summarizes the most common opinions/viewpoints given in response to this question.

In 2016, as was also reported in 2004, FAC members reported spending more time in committee meetings receiving information from the sponsor of the committee (31.3%) than from other sources (21.0%) (see Table 21). In 2016, members from the Prairies and Atlantic regions reported spending the most time receiving information from this source (39.1% and 36.9%) (Appendix 14).

In 2016, members from Quebec and the Atlantic regions reported spending the most time on discussion and debate (31.0% and 29.0%). However, nationally, FAC members spent less time discussing and debating information in 2016 (25.8%) than in 2004 (37.4%). Responses did not reveal whether this decrease was a result of committees becoming more efficient and experienced, and thus requiring few lengthy discussions, or if this decrease meant that less time was being spent debating important issues.

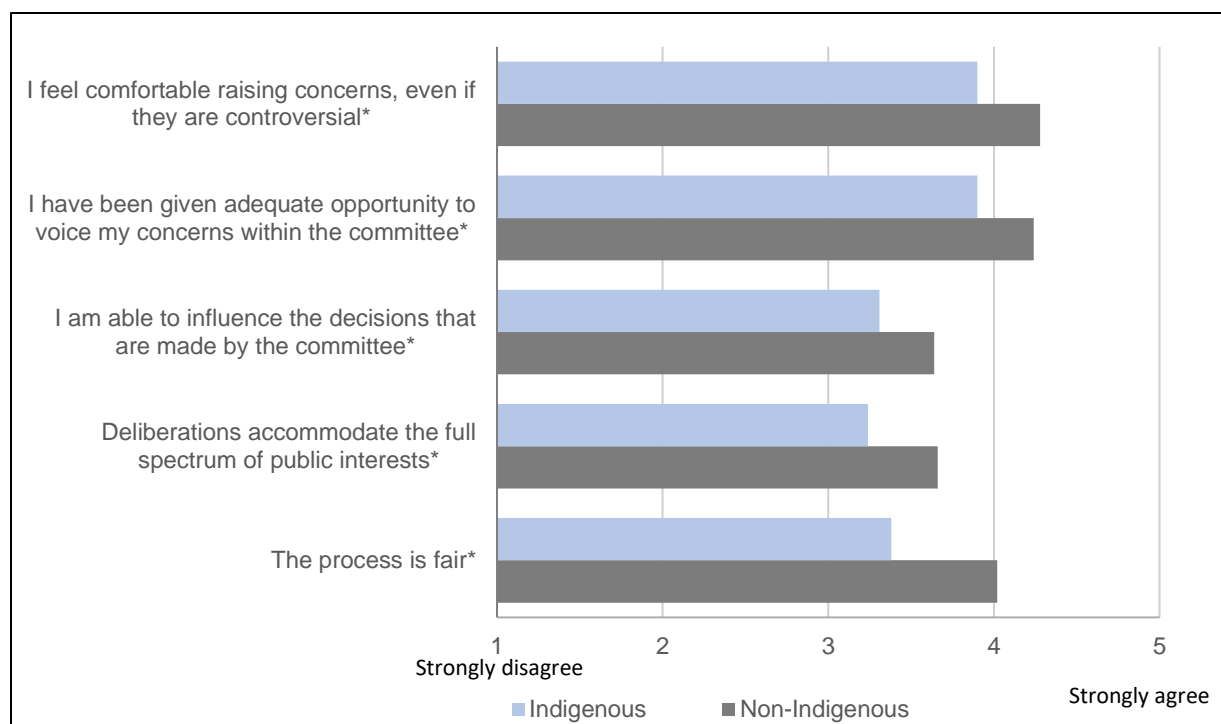


Figure 11. Indigenous and non-indigenous members' agreement with statements about committee activities.

*Difference is significant between Indigenous and non-Indigenous respondents ($p < 0.5$; T test). Based on a 5-point scale, where 1=strongly disagree and 5= strongly agree.

Table 20. Areas of policy or decision-making committees have effectively influenced

Accommodating other forest users such as trappers, grazers, snowmobiles, and berry pickers	Concerns about wildlife management, species at risk, and biodiversity	Input into forest management and land use planning, including SFM indicators and priorities
Road access and road remediation after harvesting	The size of cut blocks/annual allowable cut	Protected areas such as buffer zones and water crossings

Table 21. Percentage of time spent on various activities during committee meetings

Activities	%
Receiving information from the sponsor of the committee	31.3
Receiving information from other sources	21.0
Discussing and debating information	25.8
Making decisions	11.7
Dealing with administrative and financial matters	5.6
Dealing with other activities, please specify	4.7

Members were also asked about the quality and extent of committee discussion and deliberations. As in 2004, the majority of responding members agreed that the meetings were interactive and personal (87.2%, Appendix 15). Indigenous members were in less agreement with this statement, with a mean level of agreement of 3.76 as compared to 4.17 for non-Indigenous members. A majority of members (77.7%) also felt that controversial issues received genuine attention, and that new information or surprises were usually incorporated into subsequent decision-making (80.2%). However, Indigenous members had significantly less agreement with the statement *“decision-makers regularly attend and participate in the committee’s activities”* than did non-Indigenous members, with a mean level of agreement of 3.45 for Indigenous members as compared to 3.93 for non-Indigenous members.

Compared with 2004, relatively fewer members in 2016 agreed that “the addition of new members slows progress while they learn the fundamentals of forest management and planning” (17.6% in 2016, 33.8% in 2004) and that “attendance of regular members is sporadic which means we spend a lot of time re-covering old ground” (7.7% in 2016, 24.3% in 2004).

Nationally, 85.7% of respondents agreed that SFM featured strongly on their committee’s agenda. However, just 22.8% of respondents said the same regarding the issue of climate change. Quebec respondents disagreed most strongly with the statement that climate change features strongly in their committee’s discussions and deliberations (74.0% of members disagreed with this statement, as compared to 44.7% of members who disagreed nationally). Members from Quebec were also less supportive of the statement that controversial issues receive genuine attention (66.0%).

In 2016, 75% of members agreed that discussions and deliberations of the committee had become easier over time. Table 22 shows the main themes from members’ responses as to why deliberations had become easier over time.

The top three responses were: (i) increased trust and respect among members as relationships build over time; (ii) increased knowledge about forestry and the forest planning process; and, (iii) an increase in understanding of other stakeholders’ perspectives. Several members also mentioned the positive influence of the chair or facilitator in setting the tone for more effective decision-making.

Participants were also asked if they thought anything could be done to improve the effectiveness of their committee. Of those who answered this question, 191 (56.3%) responded “yes” and provided statements about how this could be achieved. The recommendations provided in 2016 varied widely but were grouped into a number of general themes (Table 23). These themes essentially echo the suggestions made by members in 2004 for more diverse inputs for group discussion, procedural changes aimed at increasing committee autonomy and influence, and broader representation on committees (Parkins et al. 2006, p.21).

Specific suggestions from Indigenous respondents on how to improve effectiveness included giving committees greater influence (i.e. increased uptake of committee decisions) over legislation and forest planning processes. Broader, more consistent representation from all groups, including Indigenous peoples, was another suggestion to help make FACs more effective, as was the need to compensate volunteers for the time and cost to attend meetings.

Interestingly, female respondents more frequently suggested the need to improve communication and the sharing of information among committee members as a way to improve effectiveness. One female respondent suggested committees *“have presenters prepare written reports prior to meetings and ensure that members get them before the meetings. Verbal reports are hard to follow and difficult to question”*.

Table 22. Reason why deliberations have become easier over time

Trust and respect develops between members	<p><i>"We gained respect and familiarity with one another. They are not just strangers with different opinions".</i></p> <p><i>"As members came to appreciate that varied points of view were expressed in good faith with the general interest of the community in mind trust was built. This made discussion more frank and effective, and compromise easier".</i></p>
Increased knowledge about forest management	<p><i>"Over time committee members have acquired better understandings of forest management issues, making deliberations easier and also more meaningful".</i></p> <p><i>"Terminology and background information are more common to the members and less time is lost in redefining and explaining background information".</i></p>
Increased understanding of others' perspectives and values	<p><i>"As members have come to understand each other's perspectives and needs, the decision process has been more inclusive of consideration of multiple perspectives".</i></p> <p><i>"We are a group of stakeholders. Some issues are inherent to our diversity".</i></p>
Chairperson or facilitator improves deliberations	<p><i>"[Our] Facilitator is excellent at keeping [the] group on task".</i></p> <p><i>"The chairperson is excellent at cutting off a person who will not give in or listen to others".</i></p>

Table 23. Recommendations from members on how to improve committee effectiveness

Inputs to group discussion (field trips, technical information from experts, increased discussion)	<p><i>"Continued education of members with respect to forest management planning".</i></p> <p><i>"Inviter plus souvent des experts autres que le ministère, par exemple universitaires, scientifiques pour aider aux prises de décisions".</i> <i>(Invite experts other than the Ministry more often, for example, academics and scientists to help make decisions)</i></p>
Processes & Procedures (frequent meetings, independent facilitator, compensation for members, autonomy in decision-making)	<p><i>"More regular meetings. Don't just go through the motions because it is legislated".</i></p> <p><i>"More help in terms of financial support could be provided to individuals and NGOs who volunteer their time to participate".</i></p> <p><i>"More autonomy for the committee without the politically based influence of the sponsoring body. Sometimes the committee feel our time is wasted when council decisions are overruled or vetoed without much explanation".</i></p> <p><i>"There is a disconnect between the committee and the forest management planning conducted by the sponsor. The sponsor supports the committee because it is a requirement of CSA certification but I am unsure the sponsor genuinely takes the committee's advice".</i></p>
Broader representation on committee (First Nations, interest groups, women, youth, general public)	<p><i>"We continue to work to achieve greater participation from First Nations within the forest area; we are also conscious that the majority of members are white, male & middle aged".</i></p> <p><i>"If this is truly a "public" advisory group, we should have more members of the public and less of academics and professional foresters. Industry needs to know more of the public's perception".</i></p>

Overall member satisfaction

Overall, respondents to the 2016 survey reported high levels of satisfaction with the committee process (81.1% national average in 2016, as compared to 72.4% in 2004). Satisfaction with the overall process was lowest in Quebec (68.0%) and highest in the Atlantic region (88.2%, see Appendix 16 for details).

In 2004, FAC members had indicated high levels of satisfaction with the representativeness of the committees (79.2%), the quality of discussion (79.7%) and the quality of information provided for discussion (82.7%). This finding was repeated in the 2016 survey. For example, most respondents were satisfied with committee representativeness (82.8%), with members from the Atlantic region the most highly satisfied (97.1%) and members from Quebec (78.0%) and the Prairies (75.0%) the least. Members from Quebec were also the least satisfied with the quality of discussion within the committee (72.0%) when compared to the national average (86.1%). The vast majority of members (nationally) were satisfied with the quality of information provided to the committee for discussion (87.9%) as well as the diversity of information available (82.8%).

Across provinces and regions, FAC members varied in their reporting of satisfaction levels tied to the committee decision-making process. For example, 62.0% of members from Quebec and 66.7% of members from the Prairies reported being somewhat or completely satisfied with the decision-making process. Members from the

Atlantic region were the most satisfied with the decision-making process (88.2%), followed by members from British Columbia (79.4%), as compared to the national average (72.5%).

Members were also generally satisfied with the contributions of other committee members (79.4%), the efforts of the committee's sponsor (79.8%), and opportunities to learn more about forests and forest management (89.4%). Members from Quebec were least satisfied with the level of trust among committee members (64.0%), compared to the national average (84.4%).

Female and Indigenous members expressed lower levels of satisfaction with some aspects of committee activities. Mean levels of satisfaction are summarized in Figure 12 and Figure 13 below.

For example, female respondents were less satisfied with the quality of discussion within the committee, as well as the quality of information provided to the committee. Indigenous members were significantly less satisfied than non-Indigenous members in regards to the decision-making process of the committee, the efforts of the committee sponsor, and the opportunities to learn new things about forests and forest management. Although the small sample size of female and Indigenous respondents within the survey makes generalizations difficult, these results are worth noting because they suggest lower levels of satisfaction for groups who are less well represented on FACs.

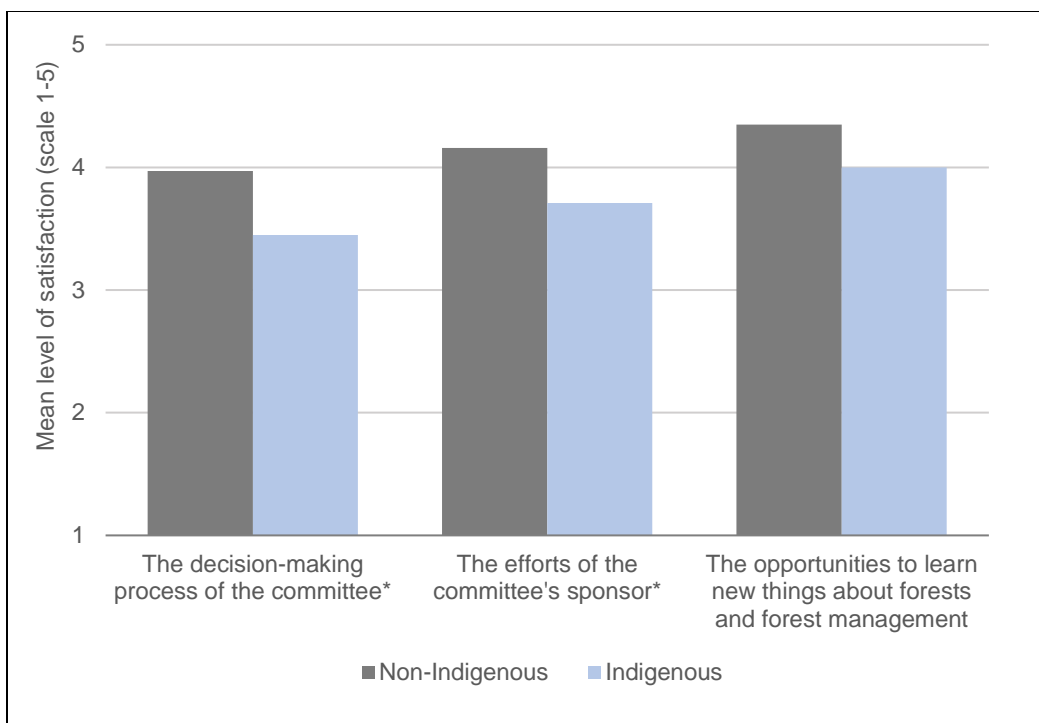


Figure 12. Indigenous and non-indigenous members' satisfaction with committee activities.

*Difference is significant between Indigenous and non-Indigenous respondents ($p < 0,5$; T test). Based on a 5-point scale, where 1=strongly disagree and 5= strongly agree.

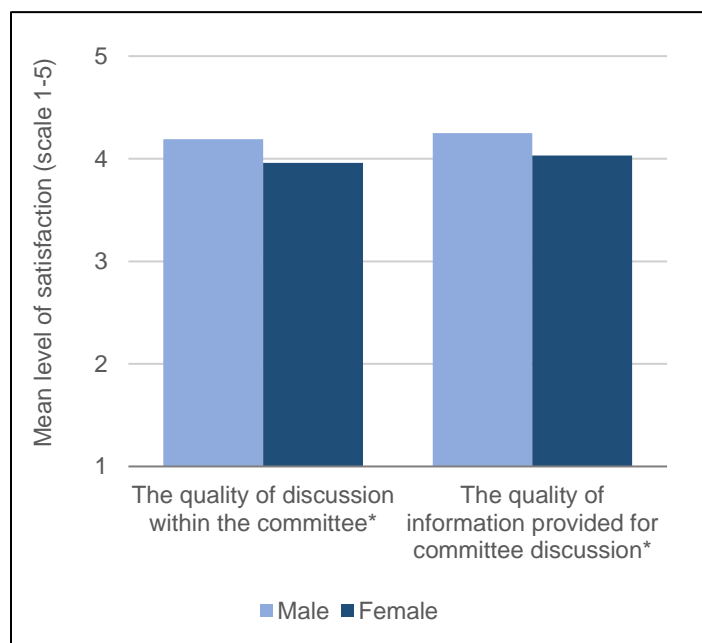


Figure 13. Member's satisfaction with committee activities by gender.

*Difference is significant between Indigenous and non-Indigenous respondents ($p < 0,5$; T test). Based on a 5-point scale, where 1=strongly disagree and 5= strongly agree.

DISCUSSION

Forest advisory committees (FACs) operate across a wide range of geographic, social, and political environments in Canada. Our discussion of survey results revolves around key themes related to (a) committee composition and rationale for participation; (b) satisfaction with committee processes and outcomes; and (c) group dynamics, characterized by representation and processes.

Committee Composition and Rationale for Participation

Socio-demographic composition of FAC memberships in 2016 remained fairly consistent with the 2004 survey in terms of gender and education, with most members being relatively more likely to be male and to be more formally educated than the general public. The results indicate that the average age of FAC members was higher in 2016 than in 2004, likely because most committees (outside of Quebec) had a number of longstanding members.

While most FACs in British Columbia, Alberta, the Prairies, and Atlantic regions reported being sponsored by forest companies, in Quebec and Ontario they reported being sponsored by provincial and local governments. Quebec's committees stood out as having the youngest, most educated members in the country, as well as the highest percentage of female members. It is notable that more than half of committee members in Quebec reported being required to attend as part of their employment, which was not the case elsewhere in Canada.

Nationally, members consistently reported wanting to contribute to SFM as a main reason for participating on the committee, followed closely by specific concerns about the impact of forestry on the environment. The need to mitigate and adapt to impacts from climate change has emerged as a significant issue in efforts to achieve SFM (Edwards et al. 2015). In a changing climate, characteristics of iconic ecosystems (such as boreal forests) are expected to change,

with major economic and environmental implications. Climate change will affect changes in other ecosystem conditions such as soil moisture, and species diversity, and will alter fire, flood and drought scenarios (Price et al. 2013; Schneider et al. 2009; Stralberg et al. 2018), affecting the socio-economic conditions of forestry and forest-based communities. Nevertheless, survey respondents consistently reported that climate change was not an issue that motivated participation or featured strongly in FAC discussions and deliberations.

Satisfaction with committee processes and outcomes

A large majority of members (81.1%) across Canada reported positive levels of satisfaction with the FAC process. Statements from members about their learning outcomes produced common themes such as increased knowledge of SFM practices, the value of consensus-based decision-making, and listening to others' perspectives. Learning to work together may come from long-standing membership. However, as described by Parkins and Sinclair (2014), committees can stagnate if they do not refresh through new members who ask new questions about forest management and operational procedures. It was also not clear from the data whether individuals or FAC learning had resulted in significant changes to forestry operations.

FAC members in the Atlantic region felt more positively about committee processes and effectiveness than did members from any other province or region. With respect to process, these committee members reported that they were also more likely to use first-hand visits to the forest to gain information. They also received information more frequently from academics and research scientists than participants in other regions. By contrast, Quebec members felt the most negatively about committee processes, and were the most disappointed with past outcomes from FAC processes, held the lowest levels of trust in

forest managers, and were the least likely to agree that the committee process was effective.

The 2016 survey of FACs investigated levels of participants' satisfaction with various aspects of committee deliberation and decision-making processes across regions (see results above and Appendix 15). Overall satisfaction was high across provinces and regions, with the exception of the aforementioned Quebec. Indeed, satisfaction levels were greatest in the regions where committees had been in existence longest (Atlantic, Alberta, and Ontario) and where members had, on average, been involved with committees longer. This result contrasts with findings from the 2004 survey, when FAC members in British Columbia were the least satisfied with the process when compared to other regions. Members from British Columbia rated overall satisfaction with the process much higher in 2016 (82.6%) than they did in 2004 (60.3%), while 68.0% of members in Quebec in 2016 said they were somewhat or completely satisfied with the overall process. The shift in Quebec is probably partly explained by the recent restructuring of the forest governance landscape in that province, where a multitude of changes affecting FAC structure and mandate (territory covered, sponsoring agency, and membership) may explain lower levels of satisfaction compared to other regions where FAC governance and roles have remained more stable. Also, the new generation of FACs in Quebec have yet to yield much in the way of outcomes, and so it may be harder for members to properly assess their relative satisfaction with committee process.

The divergence in scores related to satisfaction between Quebec and other jurisdictions raises an important point. Satisfaction does not necessarily equate to effectiveness as public participation requires providing a platform for including divergent voices and interests. A healthy level of discord can be positive to discuss and address challenging issues. Hence, healthy FACs should reflect broad debates on forest management that exist both regionally and nationally if they hope to move towards SFM. From this perspective, the relative

stasis in FAC memberships over the past 12 years may mean that committees are in fact *less* participatory (in a public participation sense) and thereby *less* effective because of an absence of diverse voices. Narrow membership characteristics with longstanding members also increase the potential for “group think” to emerge as the same individuals interact during years of group discussion. In some cases, dissatisfied members, or those with divergent perspectives, may have drifted away, to the point where consensus is (relatively) easily achieved because remaining members' views are largely homogenous. Although survey data could not corroborate this, in-depth case studies of community forests in Canada have revealed this pattern (e.g., Egnyu and Reed 2015; McGurk et al. 2006). This possibility points to a need and a challenge: how can FACs attract a broader range of participants from diverse demographic groups to generate healthy debate, and ensure FACs reflect how the Canadian public understands, values, and perceive the most pressing forest management issues?

Quebec is thus an interesting case to consider. Most committees are relatively new – an average of 5.7 years in existence as compared to 14.3 years in other regions, with members having participated in committees for a much shorter time than in other regions (4.6 years as compared to a national average of 8.8 years). Quebec also has the highest proportion of female members (34.0%), and the youngest membership in the country (47.4 years). Quebec members were the least likely in the country to agree that the FAC process is effective, with the lowest level of satisfaction with the overall FAC process. It would be interesting to examine whether these lower ratings are related to diverse and conflicting perspectives making it more difficult to achieve consensus or if other procedural issues exist in Quebec that are not present in other FACs in Canada. In addition, the recent transition in forest management in Quebec may affect group processes in ways that are unique to the region. As pointed out by Tardif et al. (2017), despite improvements in public participation related to forestry, the provincial government has still not

moved beyond consultation towards collaboration in Quebec. Some of the dissatisfaction voiced by Quebec's FAC members might be from a perceived lag between the public participation goals stated in the province's SFM Strategy (Ministère des forêts, de la Faune et des Parcs, 2015) and their experience as FAC members so far.

Group Dynamics

Two critical aspects of group dynamics raised by respondents that are important to our discussion relate to "group representation" and "group process".

Given that the range of members represented on a committee is likely linked to other elements of group process, we begin with group representation. Nationally, most members (82.8%) reported being satisfied with the representativeness of their committee. Members from the Prairies were the least satisfied with the representativeness of their committee (75.0%), and these were the FACs with the highest proportion of Indigenous members (20.0%) and the third highest proportion of female members (25.0%). By contrast, 66.7% of members from BC agreed that all interested and affected groups were represented.

Group representation

The data on group representation presented in the results above describe the diversity of voices represented on FACs and the extent to which these voices are involved in committees. Representation of certain groups, such as women and Indigenous people, increased marginally between 2004 and 2016, from 18.7% to 20.7% in the case of women and from 7.2% to 9.0% in the case members who self-identified as Indigenous.

These findings suggest that public participation in forest management continues to lack meaningful and influential involvement from these groups (Reed and Varghese 2007). Female representation on committees was highest in Quebec (34.0%), where over half of members were required to attend as part of their job, and

lowest in the Atlantic provinces (5.9%) – the region/province where the highest proportion of members (32.3%) are selected to represent the views of the forest industry. Women may be particularly constrained from participating because of the voluntary nature of FAC membership in most places, with limited financial support (e.g., lack of funding to cover childcare expenses) possibly precluding more women from getting involved. Differences between men and women in forest values, particularly in response to statements regarding the inherent worth and economic value of forests, suggest that women may have unique perspectives to contribute to forest management that continue to be underrepresented on many committees – a finding noted in the literature that still does not seem to have gained traction (Khanal 2018; Reed and Varghese 2007).

Although the overall numbers are low within the survey, Indigenous representation was highest in the Prairies (20.0%) and Alberta (15.6%), and lowest in British Columbia (4.4%) and Quebec (4.0%). Members identified Indigenous peoples as one of the main groups not represented on committees currently, and increased Indigenous representation was noted by many members as a way to improve committee effectiveness. While most committees reported having made at least some effort to invite more Indigenous participation, they have had only limited success. Indigenous representation on committees has not increased by any substantial amount over the past 12 years. This suggests much more work is needed to properly understand the reasons for non-participation among Indigenous constituencies, and what structural changes and innovative co-governance approaches might work to ensure that Indigenous voices and knowledge systems are meaningfully and appropriately engaged in FAC's (Nenko et al. 2019). It is quite possible that the FAC governance model alone, as currently configured, is not sufficient to meaningfully include Indigenous people and knowledge. It may be that a wider range of tools outside of the FAC process needs to be considered in order to ensure that diverse voices and interests are

heard and addressed in forest management processes (Beckley et al. 2006).

Group process

Overall, members appear to be generally satisfied with the fairness and effectiveness of the committee discussion and decision-making processes in which they are involved. The 2016 results indicate that 76.2% of members agreed such processes were fair. Seventy-one percent agreed that they were effective, up from 60.9% in 2004.

Having professional or independent facilitation for committee meetings can have a positive contribution to both the fairness and effectiveness of committee processes, by ensuring all members have a chance to speak and promoting techniques to enhance dialogue (after McGurk et al. 2006). About one-third of FACs reported using facilitators to run meetings independently of the Chairperson, and several members mentioned the positive role that facilitators played in allowing all members to be heard.

The results of several process-related questions suggest that less time is being spent on group discussion and debate within committees (25.8% in 2016 versus 37.4% in 2004), while some members – particularly women and Indigenous peoples – continued to feel distinctly burdened by the constraints of group decision-making. Decline in the amount of discussion and debate during meetings can have a negative impact on the fairness and effectiveness of the committee processes and in building the consensus decisions that so many of the FACs said they sought. The complexity of issues to be discussed and time constraints were cited by participants as the main pressures that can hinder effective and satisfactory group decision-making. Twice as many members from Alberta reported feeling group pressure to agree with decisions than members in other regions. As in 2004, more time was spent receiving information from the sponsoring agency than from other sources in 2016.

Results also suggest that Indigenous members are less satisfied with committee activities and processes than non-Indigenous members. This echoes research findings from New Brunswick that First Nations communities are not satisfied with current governance mechanisms in the forestry sector (Wyatt et al. 2015). Indigenous government was also the source of information least likely to be used by FACs in their discussions and deliberations, and perhaps reflects the lack of Indigenous representation on committees.

Members made several suggestions to improve group process: more frequent meetings; more time to prepare in advance of meetings; and, more emphasis to be placed on informing and educating members about forest management issues. While these might all be considered ways to alleviate decision-making pressures, our data show that the average number of committee meetings had in fact fallen by two meetings a year between 2004 and 2016.

Consensus building

Almost three-quarters (73.8%) of members agreed or strongly agreed that committee deliberations and discussions had become easier over time. This suggests a greater cohesiveness among FACs in 2016 than in 2004 as committees find it easier to achieve consensus over time.

However, across Canada, FAC member turnover is low; many members have served on the same FAC for several terms. Such stability in member profiles can be a positive. Members reported, for example, increased trust and relationship-building as major reasons why committee deliberations have become easier, as well as a greater appreciation and understanding of other stakeholders' viewpoints. Members also noted that lengthy participation on a committee can improve understanding of different stakeholder interests and provide for important learning outcomes. It is worth considering the above findings in light of concerns held by a number of FAC members about actual committee impact on forest management and forest policy. Literature related to public engagement in natural

resource management notes that the relationships built over time on such committees leads to stagnation rather than the critical reflection and questioning that are needed to move sustainability yardsticks (e.g., Parkins and Sinclair 2014; Mitchell 2015; Parkins 2010; George and Reed 2016)

Despite decision-making being easier there is evidence in the data that achieving consensus on committee decisions can still remain a challenge for FACs in 2016. As in 2004, member satisfaction levels were lowest when it came to the process of actually making decisions (Appendix 16). There may be several reasons for this. Thirty-two percent of FAC members surveyed agreed that “discussion and deliberation is dominated by particular stakeholder groups”. Some members questioned the trustworthiness of the information that their FAC based its decisions on”, with 22.7% of members disagreeing with the statement: “I trust forest managers to make the right choices about forest management”. Others felt that decisions were made prior to committee meetings taking place, which were then organized as a “rubber-stamping” exercise (Table 23). Given calls for broader representation in forest governance in Canada, the challenge that many FACs continue to face to meaningfully incorporate multiple viewpoints into public participation processes remains significant. As one member remarked, *“consensus based decision-making is not easy but anything worth having never is”*.

Current trends and future directions

When it came to impact, members from nearly every region expressed concerns about the relatively weak influence of FACs on forest companies and government policies. These findings mirrored those of the FAC survey in 2004 (Parkins et al. 2006), suggesting that committees continue to have limited influence on the country’s forest sector. These findings suggest an enduring need to identify mechanisms to strengthen the influence of committees on decisions related to forest management.

One of this report’s key findings is how closely the 2016 survey results align with the survey results from 2004. In many respects – such as demographic composition, overall satisfaction and membership turnover – it seems that FACs in Canada have remained relatively stable over the past decade. Members continue to report high levels of satisfaction with group processes and activities. Concerns about effective consensus-building still exist, and some members continue to express frustration over the lack of meaningful influence on forest management decisions. Participation from groups that were underrepresented in 2004, such as Indigenous people and women, remains low in most regions.

However, many members did state that they had learned to better appreciate multiple perspectives over time, and a clear majority believed discussion and deliberations within the committees had become easier. Nearly all members (95.9%) had come to understand the need to incorporate multiple perspectives into forest management processes as a result of participating in an FAC.

Finally, our research team was surprised by the limited consideration and influence of climate change on committee agendas, despite the response from most members (79.2%) that climate change should influence how forests are managed. Members from most regions reported learning about how climate change might affect forest management in their region, but only 22.8% of members said that the issue features strongly in FAC discussions. This suggests that one area of growth for FACs in Canada is to explore the links between environmental change and forest management decision-making and practice, and to increase learning opportunities for members on this topic.

CONCLUSIONS AND RECOMMENDATIONS

This study replicates and extends the baseline assessment of Canadian FACs conducted in 2004. In addition to reproducing many questions asked in 2004, the 2016 survey gained more information about FAC chairs, committee structure, forest values, membership turnover, learning outcomes, and the ways in which committee composition had changed (or not) in the past decade. New questions were also asked about the role that climate change and challenges of SFM play in shaping FAC agendas and activities. We also investigated participants' views on the effectiveness of FACs, including the areas of forest policy and decision-making that these committees have an influence on, as well as opportunities for improving these processes.

While FACs have, since their inception, had some success in engaging public stakeholders and building capacity in relation to consensus-building and somewhat broadening the scope of the decision-making done by large forest management companies, the 2016 survey data points to several ongoing challenges, including: limited change in FACs since 2004 in terms of representativeness, insufficient public outreach and transparency, and indeterminate effectiveness in influencing forest management. These observations and the data above point to a lack of rejuvenation of FACs outside of Quebec, suggesting that many FACs are not likely to deliver on many of the complex issues facing forest managers such as consideration of the impacts of and adaptation to climate change, reconciliation with Indigenous people, and meaningful consideration of gender and other diversity factors in decision-making. These concerns are evident in committee composition and/ or because respondents indicated issues such as these do not figure markedly in their discussions. Also, beyond our work and FAC self-evaluation, there remains limited consideration of the effectiveness, efficiency and fairness of these committee processes. In a sense, the FAC has become a longstanding “workhorse” for public engagement in forest management, but one that,

at minimum, requires considerable reform. Forest management companies and provincial forest regulators more generally may therefore need to diversify the processes employed to meaningfully engage the public on matters of forest governance in Canada.

Based on consideration of 2016 survey insights and additional reflection, we offer the following recommendations and possible strategies for their implementation. We have suggested some of these in our earlier report (Parkins et al. 2006), but could not find evidence to suggest any broad adoption. If FACs are to offer their intended benefits, we feel that our results point to the need for serious consideration of these recommendations as part of a concerted effort to realign and refocus the work of FACs. At minimum, we recommend the following:

Encourage using an independent or professional facilitator for each committee. Committees with external facilitators expressed greater satisfaction with the processes and outcomes of their work. Facilitators who work independently of the sponsoring agency can provide neutrality and consistency in committee proceedings. Trained facilitators can also help to ensure minority voices are heard, and promote healthy deliberative committee-directed discussion to encourage and broaden learning outcomes (Reed and Abernethy 2018).

Work with Indigenous peoples to determine meaningful approaches to forest governance. Invite input regarding alternative meeting formats, locations, or other measures that might create a welcoming environment for Indigenous participants and opportunities for meaningful and influential inclusion of the Indigenous knowledge they wish to share (Lawler and Bullock 2017). Recognizing rights and responsibilities for land, co-consider what co-governance might mean in the FAC context. Movement in this direction is consistent with Canada's commitment to reconciliation with

Indigenous people respectively through dialogue on our shared future.

Diversify representation on FACs. Examine and implement approaches for meaningfully including women, youth, and others who are not necessarily directly reliant on the forest sector. This might be achieved through alternative recruitment techniques, additional training for new members, or mentorship programs. Establish periodic renewal of committee members to add new people and ideas into the planning process. Several logistical barriers have been found that limit participation by women, younger community members, and Indigenous peoples (Khanal 2018; Martz et al. 2006). Consideration of meeting times and financial or logistical support for community members with young families may enhance recruitment and retention of fresh members.

Engage in dialogue with the local community and other stakeholders beyond the advisory committee. This will enhance broader public awareness and transparency of committee work and improve forest management. Possible strategies include ensuring that FAC members have the capacity to share information and gain feedback from their own groups, inviting external partners to give public presentations, sponsoring guided forest walks, and increasing public awareness of meetings, by using social media (including a committee website) to notify the public of meeting venues, meeting minutes and outcomes.

Create a strategy to build capacity within FACs to consider emerging and vexing issues such as climate change adaptation. As climate change affects the forest sector across the country, with both ecological and socio-economic consequences for rural regions, FACs can help raise awareness of possible effects and help the forest sector determine locally-appropriate adaptation strategies. Consider enhancing opportunities for committee members to learn about climate change and other issues affecting forest management in their region.

Ensure that FAC sponsors explain to committee members and the general public how advice from FACs has been used in forest management planning. Developing a transparent accountability structure will enhance the credibility and legitimacy of the work undertaken by volunteers and may encourage more members of the public to participate (Head 2007).

Establish national or provincial registries of FACs including contact information. The lack of publicly-available information about FACs hinders the capacity to determine their effectiveness in addressing SFM. In fact, FACs have little public presences at all. Lack of basic data relating to committee existence and composition perpetuate unconscious biases and assumptions about the forest sector and limits legitimacy and accountability (Reed 2008). This initiative could be led by the offices of the provincial ministers responsible for forest management, especially since these ministries likely already have the information.

Establish a national network of FACs. A network, if coupled with learning platforms (virtual and face-to-face), will assist committees to learn and exchange information between committees that are currently decentralized across the country. This was a recommendation made in the 2004 survey report (Parkins et al. 2006) and has been recommended for community forests across Canada as well (Bullock and Reed 2016). Provincial ministers responsible for forest management could also champion this recommendation and support the basic coordination function for such a network.

Consider other structures that can complement the work of present-day FACs. We cannot deny that for many participants, the FAC structure is a positive one. However, given the gaps in representation and deliberations we recommend consideration of other forums for public discussion that may be used to complement the work of FACs. These are not new, but they have not been widely tested in the forest sector. They include, but are not limited to: citizen juries; deliberative polling public multi-

criteria analysis and focus groups (Beckley et al. 2006; Diduck et al. 2015).

Finally, in addition to the above recommendations, there are gaps for future research to address, including: improving understanding the experiences of minority voices, including women and Indigenous participants, including the reasons for their overall lower levels of satisfaction with some aspects of committee activities; recognizing Indigenous rights and

responsibilities; determining how different methods of group facilitation and deliberative techniques might enhance group discussion, strengthen learning outcomes, or lead to greater participation by minority voices; identifying mechanisms to strengthen accountability of sponsors to committees and of committees to their local communities; and determining factors that enable or hinder the ability of FACs to influence decision-making and forest management practices.

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APPENDICES

Appendix 1. Questionnaire for committee members (copy of internet questionnaire)

Q1 What is the name of this advisory committee?

Q2 How long have you been involved with this particular committee?

Years: (1)

Q3 Since you became a member, how often do you attend committee meetings? Please check one of the boxes below:

- ☐ 90-100% of the time (1)
- ☐ 50-89% of the time (2)
- ☐ 20-49% of the time (3)
- ☐ Less than 20% of the time (4)

Q4 Why did you agree to participate on the committee? From the list below, please select **up to 3** key reasons for participating on the committee

- ☐ I am concerned about forestry jobs in the area (1)
- ☐ I am concerned about other jobs in the area (2)
- ☐ I am concerned about the impact of the forest industry on the environment (3)
- ☐ I want to contribute to achieving sustainable forest management (4)
- ☐ I am required to attend as part of my job (5)
- ☐ The agency that sponsors the committee asked me to join (6)
- ☐ I want to ensure that science perspectives are included in the process (7)
- ☐ I want to learn more about forest management in the area (8)
- ☐ I want to learn more about other industries in the area (9)
- ☐ I want to ensure that recreational opportunities are not diminished (10)
- ☐ I am concerned about resource-based tourism in the area (11)
- ☐ I have business interests that may be affected by the outcome of the process (12)
- ☐ I want to learn more about land use and forestry planning (13)
- ☐ I want to learn more about the issues that people have in the area (14)
- ☐ I want to contribute to planning since the forest is a public resource (15)
- ☐ I want to contribute to my community (16)
- ☐ I am concerned about the impact of forestry on non-timber forest products and resources (17)
- ☐ I want to protect the intrinsic values of forests (18)
- ☐ Other, please specify: (19) _____

Q5 As a member of the committee, whose views were you selected to represent? Please check all applicable boxes:

- ☐ Chamber of Commerce (1)
- ☐ Recreational group (2)
- ☐ Municipal government (3)
- ☐ Provincial government (4)
- ☐ Federal government (5)
- ☐ Forest industry (6)
- ☐ Educational institutions (Universities, Colleges, etc.) (7)
- ☐ Environmental group (8)
- ☐ Indigenous government / organization (9)
- ☐ The public at large (10)
- ☐ My own views (11)
- ☐ Community or Social Service organization, please specify: (12) _____
- ☐ Other resource industry, please specify: (13) _____
- ☐ Other group, please specify: (14) _____

Q5A You indicated that you represent certain stakeholders or rights holders, how often do you update these group(s) about the activities of the committee?

- ☐ Never (1)
- ☐ Occasionally (e.g. once a year) (2)
- ☐ Often (e.g. 2-4 times a year) (3)
- ☐ After every meeting (4)

Q5B You indicated that you represent certain stakeholders or rights holders. How do you reach out to these groups to get their input? Type your answer in the space below.

Q6 In your opinion, does this committee represent the values of all interested and affected groups (i.e. affected by forestry operations)?

- ☐ Yes (1)
- ☐ No (2)

Answer If In your opinion, does this committee represent the values of all interested and affected groups

Q6A Please indicate the group(s) who, in your opinion, is (are) not represented and why you believe this is so. Type your answer in the space below.

Q7 One aspect of our study is to understand how people feel about forests. For each of the following statements, please select the number that best reflects your opinion.

	Totally Disagree (1)	Partly Disagree (2)	Neither Agree nor Disagree (3)	Partly Agree (4)	Totally Agree (5)	No Opinion (6)
It is important for me to know that forests exist in my province. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests should be managed to meet as many human needs as possible. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests should have the right to exist for their own sake, regardless of human concerns and uses. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests give us a sense of peace and wellbeing. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests should exist mainly to serve human needs. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests are sacred places. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to maintain the forests for future generations. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests should be left to grow, develop, and succumb to natural forces without being managed by humans. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests that are not used for the benefit of humans are a waste of our natural resources. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Humans should have more respect and admiration for forests. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests let us feel close to nature. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If forests are not threatened by human actions, we should use them to add to the quality of human life. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests rejuvenate the human spirit. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forests can be improved through management by humans. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wildlife, plants, and humans should have equal rights to live and develop. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The primary function of forests should be for products and services that are useful to humans. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate change should influence how forests are managed. (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Is the purpose of this committee clear to you?

- ☐ Yes (1)
☐ No (2)

Answer If Is the purpose of this committee clear to you? Yes Is Selected

Q8A Please provide your understanding of the committee's purpose. Type your answer in the space below.

Answer If Is the purpose of this committee clear to you? No Is Selected

Q8B Please state why the committee's purpose is unclear. Type your answer in the space below.

Q9 In your view, how much influence do the following actors hold in setting the agenda for committee meetings? Please select the number that best indicates degree of influence.

	Not at all influential (1)	Slightly influential (2)	Moderately influential (3)	Very influential (4)	Extremely influential (5)	Not applicable (6)
Chairperson (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provincial government (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest industry (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilitator (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Committee members themselves (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indigenous government / organization (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tourism / recreational groups (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Environmental groups (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Federal government (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local government (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Committee sponsor (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You personally (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academics (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A specific interest group, please specify: (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other, please specify: (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10A In its discussion and deliberations, how frequently does the committee use information about forests and forest management from the following sources? Please select the number that best reflects your opinion.

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
Local community (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest industry (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government agencies (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
First-hand visits to the forest (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental /conservation organizations (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academics/ research scientists (i.e., biologists, ecologists) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Independent professional foresters (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indigenous government /organization (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other, please specify: (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10B In its discussion and deliberations, how frequently does the committee use information about forests and forest management via the following forms of communication? Please select the number that best reflects your opinion.

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
Newspapers, television, radio (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social media (i.e. Facebook, Twitter) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other, please specify: (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 Regarding what you have learned from participating on the committee, do you agree or disagree with the following statements?

	Agree (1)	Disagree (2)
I have learned technical aspects of forest management as a result of participating on the committee (1)	<input type="radio"/>	<input type="radio"/>
I have come to understand the need to incorporate many different perspectives into forest management processes. (2)	<input type="radio"/>	<input type="radio"/>
The information gained from participating on this committee does not significantly aid me in making decisions on forest management issues. (3)	<input type="radio"/>	<input type="radio"/>

I have learned to work productively with people who think differently than I do. (4)	<input type="radio"/>	<input type="radio"/>
The committee has learned how to incorporate multiple perspectives into its decisions. (5)	<input type="radio"/>	<input type="radio"/>
I am more patient with people who do not share my point of view since serving on this committee. (6)	<input type="radio"/>	<input type="radio"/>
I have gained new insights about traditional knowledge as a result of participating on the committee. (7)	<input type="radio"/>	<input type="radio"/>
I have learned about Provincial regulations/policies guiding forest management as a result of participating on this committee. (8)	<input type="radio"/>	<input type="radio"/>
I have learned about forest certification programs (e.g., Forest Stewardship Council (FSC)) as a result of participating on the committee. (9)	<input type="radio"/>	<input type="radio"/>
I have gained new scientific knowledge as a result of participating on the committee. (10)	<input type="radio"/>	<input type="radio"/>
I have learned about how climate change may affect forest management in the region. (11)	<input type="radio"/>	<input type="radio"/>
I have learned more about ecological stewardship as a result of participating on this committee. (12)	<input type="radio"/>	<input type="radio"/>
Other, please specify: (13)	<input type="radio"/>	<input type="radio"/>

Q12 Please tell us what you have learned about the perspectives of other committee members. Type your answer in the space below.

Q13 Has participating on this committee enhanced your knowledge of sustainable forest management?

- ☐ Yes (1)
- ☐ No (2)

Answer If Has participating on this committee enhanced your knowledge of sustainable forest management? Yes Is Selected

Q13A Please describe this new or enhanced knowledge of sustainable forest management. Type your answer in the space below.

Q14 List **up to 3** of the most important things you have learned as a result of participating on this committee? Type your answer in the space below.

Learning 1: (1)

Learning 2: (2)

Learning 3: (3)

Q15 How frequently do you feel pressured to agree with committee decisions, due to the following factors? Please select the number that best indicates how frequently these statements apply to your situation.

	Never (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)	Not applicable (6)
Time constraints (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A lack of information (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group pressure (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outside pressure (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The complexity of the issue (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some other constraint, please specify: (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 Regarding the committee's activities, please indicate your level of agreement or disagreement with the following statements. Select the number that best reflects your opinion.

	Strongly Disagree (1)	Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)	No Opinion (6)
The process is fair (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Money is well spent in the process (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time is poorly spent in the process (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The process is effective (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberations accommodate the full spectrum of public interests (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to influence the decisions that are made by the committee (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have been given adequate opportunity to voice my concerns within the committee (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am disappointed with past outcomes from this process (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that forest management decision-makers consider all viewpoints (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust forest managers to make the right choices about forest management (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust the information presented to me about the impacts of forest management plans (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable raising concerns, even if they are controversial (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The group is effective in resolving conflict if it arises (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The community at large is more informed about forestry than before the committee was established. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think forests are managed better because of the existence of the committee (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The general level of trust between forest stakeholders has improved since the committee was established (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our recommendations have guided forest managers (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 List the one or two areas of forest management decision-making or policy that the committee has been effective in influencing, and the reasons why. Type your answer in the space below.

Q18 During an average meeting, what percentage of the committee's time is spent: (Please ensure your answers total 100%)

- Receiving information from the sponsor of the committee (1)
 Receiving information from other sources (2)
 Discussing and debating information (3)
 Making decisions (4)
 Dealing with administrative and financial matters (5)
 Dealing with other activities, please specify: (6)

Q19 Regarding the quality and extent of committee discussions and deliberations, please indicate your level of agreement or disagreement with the following statements. Please select the number that best reflects your opinion.

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)	Don't Know (6)
Committee meetings are interactive and personal (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The committee deals with issues in the early stages of decision-making about forest management issues (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Controversial issues receive genuine attention and a sufficient response by the committee sponsor(s) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decision-makers regularly attend and participate in the committee's activities (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When new information arises or a surprise occurs, it is usually incorporated into subsequent decisions (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The issue of climate change features strongly in the committee's agenda (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The issue of sustainable forest management features strongly on the committee's agenda (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The addition of new members slows progress while they learn the fundamentals of forest management and planning (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attendance of regular members is sporadic which means we spend a lot of time re-covering old ground (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deliberation and discussion is dominated by particular stakeholder groups (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Deliberation and discussion got easier the longer we worked together (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Q20 In regards to the statement, discussion and deliberations got easier the longer we worked together, you selected: Briefly explain how and why committee discussions and deliberations have become easier or more challenging over time. Please record your answer below.

Q21 Do you think anything could be done to improve the effectiveness of the committee?

- ☐ Yes (1)
☐ No (2)

Answer If Do you think anything could be done to improve the effectiveness of the committee? Yes Is Selected

Q21A Please state below what you believe could be done to improve the effectiveness of the committee.

Q22 In summary, we would like to know how satisfied or dissatisfied you are with the following aspects of the committee's work: Please select the number that best reflects your opinion.

	Completely Dissatisfied (1)	Somewhat Dissatisfied (2)	Neither Satisfied nor Dissatisfied (3)	Somewhat Satisfied (4)	Completely Satisfied (5)
The representativeness of the committee (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of discussion within the committee (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of information provided for committee discussion (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The diversity of information available to the committee (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The decision-making process in the committee (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The contributions of other committee members (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The efforts of the committee's sponsor (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The level of trust among committee members (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The opportunities to learn new things about forests and forest management (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The overall process in which you are involved (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Finally, we would like to ask for some basic information about you. This information will only be used when combined with others. It will NOT be used to identify anyone who completes the questionnaire.

Q23 What is your professional affiliation/background? Please select all applicable options.

- ☐ A local industry representative (outside of forestry) (1)
☐ A provincial government representative (2)
☐ A local government representative (3)
☐ An Indigenous leader or representative (4)
☐ A business leader (5)

- ☐ An academic (6)
- ☐ A forest company representative (7)
- ☐ A government forestry scientist (8)
- ☐ An independent professional forester (9)
- ☐ A representative of a community or social service organization (10)
- ☐ Other, please specify: (11) _____

Q24 Which gender do you most identify with?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Other (3)

Q25 What was your age on your last birthday?

Years: (1)

Q26 How long have you lived in the region?

- ☐ 0-4 years (1)
- ☐ 5-9 years (2)
- ☐ 10+ years (3)

Q27 Do you consider yourself to be an Indigenous person? (Status Indian, Non-status Indian, Inuit, Métis)

- ☐ Yes (1)
- ☐ No (2)

Q28 Do you belong to any of the following organizations? Please select all that apply.

- ☐ A natural history or bird-watching club (1)
- ☐ A hunting or fishing organization (2)
- ☐ An environmental organization (3)
- ☐ A community or social service organization (4)

Q29 Does anyone in your household engage in fishing, forestry, mining, work in the oil and gas industries, or work for a natural resource agency with either the provincial or federal government, for their economic livelihood?

- ☐ Yes (1)
- ☐ No (2)

Q30 What is the highest level of education that you have completed?

- ☐ Grade 9 or Less (1)
- ☐ Some High School (2)
- ☐ High School Graduate (3)
- ☐ Technical School or Community College (4)
- ☐ Some University (5)
- ☐ University Degree (Bachelors) (6)
- ☐ Some Graduate Study (7)
- ☐ Graduate University Degree (8)

Appendix 2. Questionnaire for advisory committee chairs (copy of internet questionnaire)

Q1 What is the name of the advisory committee that you chair? Type your answer in the space below.

Q2 Where does the committee meet? Type your answers in the spaces below.

Town/city: (1)

Province: (2)

Other, please specify: (3)

Q3 How long has the committee been in existence?

Years: (1)

Q4 Does the committee have a sponsoring agency?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Other, please specify: (3) _____

Answer If Does the committee have a sponsoring agency? If Yes Is Selected

Q4A You indicated the committee has a sponsoring agency. Please indicate who the sponsoring agency is:

- ☐ Forest company/enterprise (1)
- ☐ Local industry (not forestry) (2)
- ☐ The provincial government (3)
- ☐ Local community (4)
- ☐ A municipal government (5)
- ☐ Indigenous government / organization (6)
- ☐ Community or social service organization (7)
- ☐ Other, please specify: (8) _____

Q5 Which of the following organizations and individuals are represented on the committee? Please check all applicable boxes.

- ☐ Forest company/enterprise (1)
- ☐ Local industry (not forestry) (2)
- ☐ The provincial government (3)
- ☐ Local community (individuals) (4)
- ☐ Local community (organizations) (5)
- ☐ A municipal government (6)
- ☐ Indigenous government / organization (7)
- ☐ Recreational organizations (8)
- ☐ Environmental organizations (9)
- ☐ Educational organizations (10)
- ☐ Community or social service organizations (11)
- ☐ Other, please specify: (12) _____
- ☐ Other, please specify: (13) _____

Q6 Briefly, what is the committee's purpose? Type your answer in the space below.

Q7 In your opinion, what are the most important issues that the committee has pursued or deliberated upon over the past 3 years? Type your answer in the space below.

Q8 In your meetings, do you have a facilitator who runs the committee's meetings independent of the Chair?

- ☐ Yes (1)
- ☐ No (2)

Answer If In your meetings, do you have a facilitator that works independently of the Chair?
If Yes Is Selected

Q8A What is the facilitator's background? Please select all applicable options.

- ☐ An independent professional facilitator (1)
- ☐ A representative from forest industry (2)
- ☐ A representative from local industry (not forestry) (3)
- ☐ A provincial government representative (4)
- ☐ A municipal government representative (5)
- ☐ An Indigenous leader (6)
- ☐ A business leader (7)
- ☐ An academic (8)
- ☐ A government forestry scientist (9)
- ☐ An independent professional forester (10)
- ☐ A representative of a community or social service organization (11)
- ☐ Other, please specify: (12) _____

Q9 How long have you been Chair? Please select or complete from the options below.

- ☐ Less than one year (1)
- OR
- ☐ Years: (2) _____

Q10 What is your professional background/affiliation? Please select all applicable options.

- ☐ A representative from local industry (not forestry) (1)
- ☐ A provincial government representative (2)
- ☐ A municipal government representative (3)
- ☐ An Indigenous leader (4)
- ☐ A business leader (5)
- ☐ An academic (6)
- ☐ A forest company representative (7)
- ☐ A government forestry scientist (8)
- ☐ An independent professional forester (9)
- ☐ A representative of a community or social service organization (10)
- ☐ Other, please specify: (11) _____

Q11 Is there a fixed term for the Chair?

- ☐ Yes (1)
- ☐ No (2)

Q12 Were you a member of the committee before you became Chair?

- ☐ Yes (1)
- ☐ No (2)

We are interested in knowing a little about the people who are on the committee.

Q13 Please indicate below the number of full members, alternates, and 'others' (e.g. official observers) currently serving on the committee.

Number of full members: (1)

Number of alternates: (2)

Number of others: (3)

Answer If We are interested in knowing a little about the people who are on the committee. Please if Number of full members: Is Greater Than or Equal to 1

Q13A You indicated there are full members on the committee. Please indicate how many of these full members are:

Men: (1)

Women: (2)

Indigenous: (3)

Under 40 years of age: (4)

40-65 years of age: (5)

Over 65 years of age: (6)

From local region: (7)

Answer If We are interested in knowing a little about the people who are on the committee. Please if Number of alternates: Is Greater Than or Equal to 1

Q13B You indicated there are alternate members on the committee. Please indicate how many of these alternate members are:

Men: (1)

Women: (2)

Indigenous: (3)

Under 40 years of age: (4)

40-65 years of age: (5)

Over 65 years of age: (6)

From local region: (7)

Answer If We are interested in knowing a little about the people who are on the committee. Please indicate below the number of full members, alternates, and 'others' (e.g. official obs... Number of others: Is Greater Than or Equal to 1

Q13C You indicated there are 'others' on the committee. Please specify in what capacity these 'others' participate (for example, as official observers).

Answer If We are interested in knowing a little about the people who are on the committee. Please indicate below the number of full members, and 'others' (e.g. official obs... Number of others: Is Greater Than or Equal to 1

Q13D You indicated there are 'others' on the committee. Please indicate how many of these are:

Men: (1)

Women: (2)

Indigenous: (3)

Under 40 years of age: (4)

40-65 years of age: (5)

Over 65 years of age: (6)

From local region: (7)

Q14 How are members of the committee recruited? Type your answer in the space below.

Q15 Do potential members have to meet certain requirements?

- ☐ Yes (1)
- ☐ No (2)

Answer If Do potential members have to meet certain requirements? Yes Is Selected

Q15A You indicated that potential members have to meet certain requirements, please describe what these requirements are. Type your answer in the space below.

Q16 Approximately, what proportion of committee members attends each meeting?

- ☐ 80-100% of members (1)
- ☐ 50-79% of members (2)
- ☐ 21-49% of members (3)
- ☐ 0-24% of members (4)

The following questions concern member turnover.

Q17 Is there a fixed term for members?

- ☐ Yes (1)
- ☐ No (2)

Answer If The following questions concern member turnover. Is there a fixed term for members? Yes Is Selected

Q17A What is the fixed term for members?

Years: (1)

Answer If The following questions concern member turnover. Is there a fixed term for members? Yes Is Selected

Q17B Is the term renewable?

- ☐ Yes (1)
- ☐ No (2)

Q18 How many members have left or joined the committee in the past 3 years?

Number who have left: (1)

Number who have joined: (2)

Q19 From the list below, what are the most common reasons members cite for leaving the committee? Please select all that apply.

- ☐ Term is up (1)
- ☐ Too much time required (2)
- ☐ Felt their time was not well spent (3)
- ☐ Too far to drive (4)
- ☐ Other commitments take precedence (5)
- ☐ Conflicts with other members (6)
- ☐ Disagreement with the direction the committee is pursuing (7)
- ☐ Other, please specify: (8) _____

Q20 Has the composition (e.g. background, age, ethnicity) of committee members changed in the past 3 years?

- ☐ Yes (1)
- ☐ No (2)

Answer If Has the composition (e.g. background, age, ethnicity) of committee members changed in the past 3 years? Yes Is Selected

Q20A Please describe how the composition of committee members has changed. Type your answer in the space below.

Q21 Do alternates only attend if a regular member is absent?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not applicable (3)

Q22 How many times does the committee meet over the course of a calendar year?

Number of times per year: (1)

Q23 Are the meetings open to the public to attend?

- ☐ Yes (1)
- ☐ No (2)

Answer If Are the meetings open to the public to attend? Yes Is Selected

Q23A You indicated that the meetings are open to the public to attend. Is the meeting time and venue made public in advance?

- ☐ Yes (1)
- ☐ No (2)

Q24 Are the outcomes of each meeting publically available?

- ☐ Yes (1)
- ☐ No (2)

Answer If Are the outcomes of each meeting publically available? Yes Is Selected

Q24A You indicated that the outcomes of each meeting are publically available. Please explain how they are made available. Select all that apply from the list below.

- ☐ On website or online forum (1)
- ☐ Local newspaper (2)
- ☐ Monthly bulletin (3)
- ☐ Word of mouth (4)
- ☐ Central depository (library) (5)
- ☐ Provided at meetings of constituents (6)
- ☐ Other, please specify: (7) _____

Q25 Does the committee have a defined quorum?

- ☐ Yes (1)
- ☐ No (2)

Answer If Does the committee have a defined quorum? Yes Is Selected

Q25A Explain briefly how quorum is defined. Type your answer in the space below.

Q26 How are decisions made by the committee?

- ☐ Consensus (1)
- ☐ Majority Vote (2)
- ☐ Other, please explain (e.g. it's decision-dependent): (3) _____

Answer If How are decisions made by the committee? Consensus Is Selected

Q26A If decisions are made by consensus, what does consensus mean in practice for your committee? Type your answer in the space below.

Q27 Based on your experience, does the committee typically evaluate the results of its work?

- ☐ Yes (1)
- ☐ No (2)

Answer If Based on your experience, does the committee typically evaluate the results of its work? Yes Is Selected

Q27A What does evaluation entail? Please select all that apply.

- ☐ We have a general discussion at a committee meeting (1)
- ☐ We usually have outside evaluators identify the strengths and weaknesses of committee work (2)
- ☐ We typically establish our own evaluation criteria and apply them during discussions and deliberations, if required (3)
- ☐ We typically establish our own evaluation criteria and apply them after a specific issue or project so we can learn lessons for work that follows (4)
- ☐ Other, please specify: (5) _____

Q28 Are the following sources of reimbursement available to committee members?

Transport costs (1)	<input type="radio"/>	<input type="radio"/>
Per Diem (2)	<input type="radio"/>	<input type="radio"/>
Childcare expenses (3)	<input type="radio"/>	<input type="radio"/>
Loss of income (4)	<input type="radio"/>	<input type="radio"/>
Other, please specify: (5)	<input type="radio"/>	<input type="radio"/>

Q29 Does your committee have a 'terms of reference'?

- ☐ Yes (1)
- ☐ No (2)

Answer If Does your committee have a 'terms of reference'? Yes Is Selected

Q29A Can we contact you by email to ask for a copy of the terms of reference?

- ☐ Yes (1)
- ☐ No (2)

Q30 Can we email you to ask for contact information of past members?

- ☐ Yes (1)
- ☐ No (2)

Answer If Can we contact you by email to ask for a copy of the terms of reference? Yes Is Selected Or Can we contact you by email to ask for contact information of past members? Yes Is Selected

Q31 Please provide the email address we can contact you at:

Appendix 3 Types of independent facilitation for forestry advisory committee meetings

Type of facilitation	Atlantic ^a	Quebec	Ontario	Prairies ^b	Alberta	British Columbia	Total
Independent Professional	1	1	0	0	1	2	5
Forest Industry	1	0	0	0	0	0	1
Provincial Government	0	1	1	0	0	0	2
Municipal Government	0	1	0	0	0	0	1
Indigenous Leader	0	0	0	1	0	0	1
Business Leader	0	0	0	1	0	0	1
Independent Forester	0	0	0	0	0	4	4
Community/Social Org.	0	0	0	1	0	0	1
Other	0	0	1	0	0	0	1
Total	2	3	2	3	1	6	17

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

Appendix 4. Demographic characteristics of respondents to survey of members of FACs

	% of respondents, by region						
Characteristic	Atlantic ^a	Quebec	Ontario	Prairies ^b	Alberta	British Columbia	Total
Membership in clubs or organizations							
Natural history or bird-watching club	4.2	5.9	15.9	3.8	8.8	17.3	11.5
Hunting or fishing organization ^c	41.7	61.8	59.8	38.5	38.2	32.7	47.6
Environmental organization	16.7	44.1	26.8	34.6	35.3	30.8	31.0
Community or social services organization ^c	58.3	41.1	63.4	57.7	76.5	73.1	63.1
Resource industry or agency dependent household	50.0	38.0	50.5	42.9	54.3	48.5	47.9
Highest level of education^c:							
No high school diploma	0.0	0.0	5.8	2.8	6.5	0.0	2.9
High school graduate	2.9	0.0	9.6	16.7	8.7	8.7	8.0
Technical school or community college	23.5	24.0	30.8	16.7	28.3	23.2	25.7
Some university	5.9	8.0	7.7	22.2	4.3	10.1	9.1
Bachelor's degree	52.9	38.0	26.0	22.2	30.4	36.2	32.7
Some graduate study	2.9	12.0	5.8	5.6	8.7	5.8	6.8
Graduate degree	11.8	18.0	14.4	13.8	8.7	15.9	14.2

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Characteristics for which there was a significant difference in responses among groups ($p < 0.05$; Pearson's chi square test)

Appendix 5. Reasons for participating on FACs

Reason for participation	% of respondents, by region						Total
	Atlantic ^a	Quebec	Ontario	Prairies ^b	Alberta	British Columbia	
I am concerned about forestry jobs in the area	8.8	8.0	26.4	25.0	10.4	14.5	17.2
I am concerned about other jobs in the area	0.0	8.0	4.7	2.8	2.1	0.0	3.2
I am concerned about the impact of forestry on the environment	47.1	34.0	37.7	36.1	54.2	47.8	42.3
I want to contribute to achieving sustainable forest management	58.9	54.0	44.3	52.8	41.7	55.1	49.9
I am required to attend as part of my job	20.6	54.0	5.7	22.2	16.7	15.9	19.5
The agency/organization that sponsors the committee asked me to join	11.8	6.0	5.7	8.3	2.1	5.8	6.1
I want to ensure that science perspectives are included in forestry	8.8	6.0	9.4	11.1	18.8	8.7	10.2
I want to learn more about forest management in the area	5.9	10.0	17.9	25.0	27.1	17.4	17.5
I want to learn more about other industries in the area	2.9	0.0	0.0	0.0	0.0	1.4	0.1
I want to ensure that recreational opportunities are not diminished	17.6	14.0	26.4	8.3	16.7	17.4	18.7
I am concerned about the impact of forestry on tourism in the area	11.8	24.0	11.3	5.6	4.2	4.3	10.2
I have business interests that may be affected by the outcome of the process	14.7	0.0	10.4	5.6	4.2	5.8	7.0
I want to learn more about land use and forestry	11.8	22.0	8.5	13.9	12.5	10.1	12.2
I want to learn more about the issues that people have in the area	14.7	6.0	7.5	8.3	4.2	7.2	7.6
I want to contribute to planning since the forest is a public resource	23.5	2.0	17.9	25.0	10.4	18.8	16.0
I want to contribute to my community	8.8	0.0	14.2	8.3	18.8	13.0	11.4
I am concerned about the impact of forestry on non-timber forest products and resources	2.9	10.0	13.2	8.3	8.3	15.9	11.1
I want to protect the intrinsic values of forests	2.9	4.0	17.0	8.3	10.4	13.0	11.1

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Characteristics for which there was a significant difference in responses among groups ($p < 0.05$; Pearson's chi square test)

Appendix 6. Organizations and individuals represented on the committees, Chairpersons survey

Type of organization/individual	n	% of respondents
Forest company/enterprise	60	90.9
Local Industry (not forestry)	47	71.2
Provincial Government	52	78.8
Local community (Individuals)	49	74.2
Local community (Organizations.)	51	77.3
Municipal Government	51	77.3
Indigenous Government	47	71.2
Recreational Organizations	61	92.4
Environmental Organizations	51	77.3
Educational Organization	25	37.9
Community/Social Organizations	17	25.8
Other, please specify	32	48.5
Other, please specify	21	31.8

Appendix 7. Representation of specific views by FAC members

Views Represented	% of respondents, by region						Total
	Atlantic ^a	Quebec	Ontario	Prairies ^b	Alberta	British Columbia	
Chamber of Commerce	0	0	3.8	0	2.1	0	1.5
Recreational Group	14.7	6.1	22.6	13.9	12.5	18.8	16.4
Municipal government	0	18.4	8.5	22.2	20.8	8.7	12.3
Provincial government	8.8	4.1	4.7	11.1	6.3	4.3	5.8
Federal government	0	0	0	0	0	1.4	0.3
Forestry industry	32.3	10.2	14.1	25	10.4	18.8	17.0
Educational institutions	11.8	0	2.8	0	4.2	2.9	3.2
Environmental groups	8.8	12.2	8.5	11.1	12.5	11.6	10.5
Indigenous government	2.9	4.1	3.8	2.8	8.3	5.8	4.7
The public at large	11.8	0	28.3	16.7	29.2	27.5	21.3
My own views	17.6	4.1	19.8	19.4	20.8	30.4	19.6
Community Service Orgs	0	6.1	8.5	5.6	8.3	5.8	6.4
Other resource industry	17.6	16.3	13.2	0	14.6	7.2	11.7
Other group	5.9	28.6	24.5	13.9	12.5	18.8	19.3

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

Appendix 8. Degree of agreement with statements related to existence values

Statement	% agreement ^c , by region (without "no opinion")			No opinion
	Disagree	Neither	Agree	
It is important to maintain the forests for future generations.				
Atlantic ^a	97.1	0.0	2.9	0.0
Quebec	100	0.0	0.0	0.0
Ontario	100	0.0	0.0	0.0
Prairies ^b	100	0.0	0.0	0.0
Alberta	100	0.0	0.0	2.1
British Columbia	100	0.0	0.0	0.0
Canada	99.7	0.0	0.0	0.3
It is important for me to know that forests exist in my province.				
Atlantica	97.0	0.0	3.0	2.9
Quebec	93.5	4.3	2.2	8.0
Ontario	95.2	3.8	1.0	0.0
Prairies ^b	91.6	5.6	2.8	0.0
Alberta	97.9	2.1	0.0	0.0
British Columbia	98.5	1.5	0.0	2.9
Canada	95.8	3.0	1.2	2.0

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Based on a 5 point-scale, where 1=strongly disagree and 5=strongly agree. To facilitate presentation, the scale was collapsed into three categories.

Appendix 9. Degree of agreement with statements related to spiritual values

Statement	% agreement ^c , by region (without "no opinion")			No opinion
	Atlantic ^a	Disagree	Neither	Agree
Humans should have more respect and admiration for the forests.				
Atlantic ^a	8.8	11.8	79.4	0.0
Quebec	0.0	10.6	89.4	2.0
Ontario	2.9	10.8	86.3	2.9
Prairies ^b	8.3	22.2	69.4	0.0
Alberta	4.3	8.5	87.2	2.1
British Columbia	1.4	13.0	85.5	0.0
Canada	3.6	12.8	83.7	1.5
Forests let us feel close to nature				
Atlantic ^a	2.9	5.9	91.1	0.0
Quebec	2.0	2.0	96.0	0.0
Ontario	1.9	7.6	90.5	0.0
Prairies ^b	2.9	5.7	91.4	2.8
Alberta	0	10.6	89.4	2.1
British Columbia	0	5.9	94.1	1.4
Canada	1.5	6.5	92.0	0.9
Forests rejuvenate the human spirit				
Atlantic ^a	3.0	9.1	87.9	2.9
Quebec	0	8.0	92.0	0.0
Ontario	3.0	10.1	86.9	5.7
Prairies ^b	6.1	9.1	84.8	8.3
Alberta	0.0	13.6	81.8	8.3
British Columbia	0.0	13.2	86.8	1.4
Canada	1.8	10.7	87.5	4.4
Forests give us a sense of peace and well-being				
Atlantic ^a	2.9	0.0	97.1	0.0
Quebec	0.0	6.1	93.9	2.0
Ontario	1.0	5.8	93.2	2.8
Prairies ^b	0.0	11.1	88.9	0.0
Alberta	0.0	4.3	95.6	4.2
British Columbia	1.4	2.9	95.6	0.0
Canada	0.9	5.0	94.1	1.7
Forests are sacred places				
Atlantic ^a	27.3	18.2	54.5	2.9
Quebec	29.8	31.9	38.3	6.0
Ontario	16.2	26.3	57.6	5.7
Prairies ^b	24.2	36.4	39.4	8.3
Alberta	23.9	21.7	54.3	4.2
British Columbia	20.9	26.9	52.2	2.9
Canada	22.2	26.8	51.1	5.0

^a Atlantic region comprises New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Based on a 5 point-scale, where 1=strongly disagree and 5=strongly agree. To facilitate presentation, the scale was collapsed into three categories.

Appendix 10. Degree of agreement with statements related to inherent worth values

Statement	% agreement ^c , by region (without "no opinion")			No opinion
	Disagree	Neither	Agree	
Forests have the right to exist for their own sake, regardless of human concerns and uses.				
Atlantic ^a	17.6	5.9	76.5	0.0
Quebec	30.0	8.0	62.0	0.0
Ontario	23.3	11.7	65.0	2.8
Prairies ^b	20.0	20.0	60.0	2.8
Alberta	16.7	8.3	75.0	0.0
British Columbia	10.1	11.6	78.3	0.0
Canada	19.8	10.9	69.3	1.2
Wildlife, plants and humans should have equal rights to live.				
Atlantic ^a	11.8	11.8	76.5	0.0
Quebec	24.5	10.2	65.3	2.0
Ontario	14.9	20.8	64.4	3.8
Prairies ^b	16.7	11.1	72.2	0.0
Alberta	21.7	17.4	60.9	4.2
British Columbia	23.5	10.3	66.2	1.4
Canada	18.9	14.7	66.5	2.3
Forests should be left to grow, develop, and succumb to natural forces without being managed by humans				
Atlantic ^a	70.6	8.8	20.6	0.0
Quebec	58.0	16.0	26.0	0.0
Ontario	70.5	5.7	23.8	0.9
Prairies ^b	63.9	2.8	33.3	0.0
Alberta	66.7	12.5	20.8	0.0
British Columbia	63.8	10.1	26.1	0.0
Canada	66.1	9.1	24.9	0.3

^a Atlantic region comprises New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Based on a 5 point-scale, where 1=strongly disagree and 5=strongly agree. To facilitate presentation, the scale was collapsed into three categories.

Appendix 11. Degree of agreement with statements related to economic or utilitarian values

Statement	% agreement ^c , by region (without "no opinion")			No opinion
	Disagree	Neither	Agree	
Forests should be managed to meet as many human needs as possible.				
Atlantic ^a	8.8	0.0	91.2	0.0
Quebec	10.0	8.0	82.0	0.0
Ontario	11.3	7.5	81.1	0.0
Prairies ^b	16.7	5.6	77.8	0.0
Alberta	18.8	6.3	75.0	0.0
British Columbia	8.7	10.1	81.2	0.0
Canada	12.0	7.0	81.0	0.0
Forests can be improved through management by humans.				
Atlantic ^a	8.8	2.9	88.2	0.0
Quebec	8.2	10.2	81.6	2.0
Ontario	9.5	5.7	84.8	0.9
Prairies ^b	11.1	0.0	88.9	0.0
Alberta	12.5	10.4	77.1	0.0
British Columbia	10.1	15.9	73.9	0.0
Canada	10.0	8.2	81.8	0.6
If forests are not threatened by human actions, we should use them to add to the quality of human life				
Atlantic ^a	3.0	9.1	87.9	2.9
Quebec	6.4	12.8	80.9	6.0
Ontario	6.9	6.9	86.1	3.8
Prairies ^b	8.8	8.8	82.4	5.6
Alberta	8.7	15.2	76.1	4.2
British Columbia	6.2	7.7	86.2	5.8
Canada	6.7	9.5	83.7	4.7
The primary function of forests should be for products and services that are useful to humans				
Atlantic ^a	41.2	20.6	38.2	0.0
Quebec	40.0	26.0	34.0	0.0
Ontario	58.7	16.3	25.0	1.9
Prairies ^b	63.9	13.9	22.2	0.0
Alberta	62.5	12.5	25.0	0.0
British Columbia	69.6	15.9	14.5	0.0
Canada	57.5	17.3	25.2	0.6
Forests should exist mainly to serve human needs.				
Atlantic ^a	61.8	20.6	17.6	0.0
Quebec	55.1	16.3	28.6	2.0
Ontario	55.8	16.3	27.9	1.0
Prairies ^b	55.6	16.7	27.8	0.0
Alberta	61.7	17.0	21.3	2.1
British Columbia	58.8	20.6	20.6	1.4
Canada	57.7	17.8	24.6	1.2

Appendix 11. Concluded

Appendix 1A. Continued

Statement	% agreement ^c , by region (without "no opinion")			No opinion
	Disagree	Neither	Agree	
Forests that are not used by humans are a waste of our natural resources.				
Atlantic ^a	76.5	8.8	14.7	0.0
Quebec	70.0	10.0	20.0	0.0
Ontario	73.1	4.8	22.1	1.0
Prairies ^b	86.1	8.3	5.6	0.0
Alberta	83.3	4.2	12.5	0.0
British Columbia	72.5	11.6	15.9	0.0
Canada	75.7	7.6	16.7	0.3

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Based on a 5 point-scale, where 1=strongly disagree and 5=strongly agree. To facilitate presentation, the scale was collapsed into three categories.

Appendix 12. Percentage agreement with statements regarding learning from participating on the committee

Statement	% agreement ^c of respondents, by region						Total
	Atlantic ^a	Quebec	Ontario	Prairies ^b	Alberta	British Columbia	
I have learned technical aspects of forest management as a result of participating on the committee	91.2	88.0	91.4	94.3	93.6	87.0	90.6
I have come to understand the need to incorporate many different perspectives into forest management processes	100	96	94.3	97.1	97.9	94.2	95.9
The information gained from participating on this board does not significantly aid me in making decisions on forest management issues	14.7	10.2	23.1	20.0	21.3	18.8	18.9
I have learned to work productively with people who think differently than I do	97.1	86.0	88.3	91.4	91.3	95.6	91.1
The committee has learned how to incorporate multiple perspectives into its decision-making	97.1	81.6	84.8	88.2	91.3	91.3	88.1
I am more patient with people who do not share my point of view since serving on this committee	91.2	80.0	70.9	68.6	69.6	78.3	75.4
I have gained new insights about traditional knowledge as a result of participating on the committee	85.3	54.0	69.9	74.3	73.9	66.2	69.3
I have learned about Provincial regulations/policies guiding forest management as a result of participating on this committee	79.4	76.0	89.5	100.0	89.1	87.0	87.0
I have learned about forest certification programs (e.g., Forest Stewardship Council (FSC)) as a result of participating on the committee	85.3	74.0	77.9	82.9	89.1	91.3	82.8
I have gained new scientific or technical knowledge as a result of participating on the committee	94.1	90.0	89.4	94.1	91.3	88.2	90.5
I have learned about how climate change may affect forest management in the region	61.8	32.0	55.3	67.6	57.8	66.7	56.4
I have learned more about ecological stewardship as a result of participating on this committee	85.3	52.0	76.7	82.4	86.7	85.5	77.6

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Based on a 5 point-scale, where 1=strongly disagree and 5=strongly agree. To facilitate presentation, the scale was collapsed into three categories.

Appendix 13. Percentage who agree or disagree with statements related to the committee's process

Statement	% agreement ^c , by region (without "no opinion")			No opinion
	Disagree	Neither	Agree	
The process is fair				
Atlantic ^a	5.9	8.8	85.3	0.0
Quebec	22.0	10.0	68.0	0.0
Ontario	7.8	16.5	75.7	1.0
Prairies ^b	11.4	20.0	68.6	2.8
Alberta	2.2	15.2	82.6	2.1
British Columbia	7.4	14.7	77.9	0.0
Canada	9.2	14.6	76.2	0.9
Money is well spent in the process				
Atlantic ^a	9.4	9.4	81.3	5.9
Quebec	8.9	28.9	62.2	10.0
Ontario	8.9	16.8	74.3	3.8
Prairies ^b	11.8	11.8	76.5	5.6
Alberta	2.4	16.7	81.0	10.6
British Columbia	1.6	25.4	73.0	7.4
Canada	6.9	18.9	74.1	6.8
Time is poorly spent in the process				
Atlantic ^a	78.8	18.2	3.0	2.9
Quebec	55.1	24.5	20.4	2.0
Ontario	64.8	18.1	17.1	0.0
Prairies ^b	70.6	8.8	20.6	5.6
Alberta	70.5	18.2	11.4	6.4
British Columbia	78.8	12.1	9.1	1.5
Canada	68.9	16.9	14.2	2.4
The process is effective				
Atlantic ^a	2.9	17.6	79.4	0.0
Quebec	24.5	24.5	51.0	2.0
Ontario	9.6	23.1	67.3	0.0
Prairies ^b	11.1	13.9	75.0	0.0
Alberta	6.8	6.8	86.4	4.3
British Columbia	9.0	16.4	74.6	1.5
Canada	10.8	18.3	71.0	1.2
Deliberations accommodate the full spectrum of public interests				
Atlantic ^a	5.9	14.7	79.4	0.0
Quebec	22.0	18.0	60.0	0.0
Ontario	18.1	17.1	64.8	0.0
Prairies ^b	17.6	17.6	64.7	5.6
Alberta	15.2	15.2	69.6	2.1
British Columbia	20.6	16.2	63.2	1.4
Canada	17.5	16.6	65.9	1.2
I am able to influence the decisions that are made by the committee				
Atlantic ^a	3.1	43.8	53.1	5.9
Quebec	12.0	22.0	66.0	0.0
Ontario	11.5	27.9	60.6	1.0
Prairies ^b	14.3	28.6	57.1	2.8
Alberta	15.6	17.8	66.7	4.3
British Columbia	4.5	24.2	71.2	2.9
Canada	10.2	26.5	63.3	2.4
I have been given adequate opportunity to voice my concerns within the committee				
Atlantic ^a	0.0	8.8	91.2	0.0
Quebec	8.3	8.3	83.3	4.0
Ontario	4.9	4.9	90.2	1.9
Prairies ^b	13.9	2.8	83.3	0.0
Alberta	0.0	12.8	87.2	0.0
British Columbia	1.5	3.0	95.5	1.5
Canada	4.5	6.3	89.2	1.5

Appendix 13. Continued

Statement	% agreement ^c , by region (without "no opinion")			No opinion
	Disagree	Neither	Agree	
I am disappointed with the past outcomes from this process				
Atlantic ^a	76.5	17.6	5.9	0.0
Quebec	28.3	34.8	37.0	8.0
Ontario	53.8	25.0	21.2	0.0
Prairies ^b	58.8	20.6	20.6	5.6
Alberta	70.2	19.1	10.6	0.0
British Columbia	68.7	22.4	9.0	1.5
Canada	58.4	23.8	17.8	2.1
I believe that forest management decision-makers consider all viewpoint				
Atlantic ^a	14.7	14.7	70.6	0.0
Quebec	40.0	18.0	42.0	0.0
Ontario	19.4	18.4	62.1	1.0
Prairies ^b	17.6	17.6	64.7	5.6
Alberta	6.5	28.3	65.2	2.1
British Columbia	16.7	13.6	69.7	2.9
Canada	19.5	18.3	62.2	1.8
I trust forest managers to make the right choices about forest management				
Atlantic ^a	20.6	17.6	61.8	0.0
Quebec	36.7	26.5	36.7	2.0
Ontario	24.0	29.8	46.2	0.0
Prairies ^b	11.1	27.8	61.1	0.0
Alberta	17.8	15.6	66.7	4.3
British Columbia	22.4	29.9	47.8	1.5
Canada	23.0	26.0	51.0	1.2
I trust the information presented to me about the impacts of forest management plans				
Atlantic ^a	8.8	11.8	79.4	0.0
Quebec	24.5	20.4	55.1	2.0
Ontario	12.5	21.2	66.3	0.0
Prairies ^b	8.3	8.3	83.3	0.0
Alberta	10.6	8.5	80.9	0.0
British Columbia	14.9	16.4	68.7	1.5
Canada	13.6	16.0	70.3	0.6
I feel comfortable raising concerns, even if they are controversial				
Atlantic ^a	2.9	8.8	88.2	0.0
Quebec	10.4	10.4	79.2	4.0
Ontario	2.9	3.8	93.3	0.0
Prairies ^b	2.8	8.3	88.9	0.0
Alberta	4.3	2.1	93.6	0.0
British Columbia	1.5	3.0	95.5	1.5
Canada	3.9	5.4	90.8	0.9
The group is effective in resolving conflict if it arises				
Atlantic ^a	0.0	15.2	84.8	2.9
Quebec	19.1	21.3	59.6	6.0
Ontario	7.8	9.7	82.5	1.0
Prairies ^b	3.0	18.2	78.8	8.3
Alberta	4.4	22.2	73.3	4.3
British Columbia	1.5	22.4	76.1	1.5
Canada	6.4	17.1	76.5	3.2

Appendix 13. Concluded

Appendix 10: Continued

Statement	% agreement ^c , by region (without "no opinion")			No opinion
	Disagree	Neither	Agree	
The community at large is more informed about forestry than before the committee was established				
Atlantic ^a	11.8	20.6	67.6	0.0
Quebec	8.7	34.8	56.5	8.0
Ontario	10.0	27.0	63.0	3.8
Prairies ^b	5.7	11.4	82.9	2.8
Alberta	11.4	20.5	68.2	6.4
British Columbia	11.3	19.4	69.4	8.8
Canada	10.0	23.4	66.7	5.3
The general level of trust between forest stakeholders has improved since the committee was established				
Atlantic ^a	0.0	14.7	85.3	0.0
Quebec	6.7	22.2	71.1	10.0
Ontario	11.2	21.4	67.3	5.8
Prairies ^b	5.7	25.7	68.6	2.8
Alberta	4.7	18.6	76.7	8.5
British Columbia	11.8	16.2	72.1	1.4
Canada	8.0	19.8	72.1	5.0
I think the forest is managed better because of the existence of the committee				
Atlantic ^a	2.9	20.6	76.5	0.0
Quebec	20.8	18.8	60.4	4.0
Ontario	10.6	17.3	72.1	0.0
Prairies ^b	20.0	14.3	65.7	2.8
Alberta	6.4	17.0	76.6	0.0
British Columbia	12.3	16.9	70.8	4.4
Canada	12.0	17.4	70.6	1.8

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Based on a 5 point-scale, where 1=strongly disagree and 5=strongly agree. To facilitate presentation, the scale was collapsed into three categories.

Appendix 14. Average percentage of time spent on various activities during committee meetings, by region

Activities	Mean ^d
Receiving information from the sponsor of the committee ^c	
Atlantic ^a	27.21
Quebec	26.68
Ontario	28.75
Prairies ^b	39.07
Alberta	36.91
British Columbia	33.29
Canada	31.41
Receiving information from other sources	
Atlantic ^a	22.94
Quebec	21.70
Ontario	20.96
Prairies ^b	17.11
Alberta	24.57
British Columbia	19.03
Canada	20.98
Discussing and debating information ^c	
Atlantic ^a	29.03
Quebec	31.04
Ontario	24.79
Prairies ^b	22.50
Alberta	22.09
British Columbia	26.04
Canada	25.78
Making decisions about the management of the forest	
Atlantic ^a	11.62
Quebec	12.16
Ontario	12.24
Prairies ^b	12.20
Alberta	10.04
British Columbia	11.13
Canada	11.63
Dealing with administrative and financial matters ^c	
Atlantic ^a	4.03
Quebec	5.46
Ontario	7.65
Prairies ^b	4.17
Alberta	2.68
British Columbia	5.84
Canada	5.55
Dealing with other activities, please specify	
Atlantic ^a	5.29
Quebec	2.96
Ontario	5.66
Prairies ^b	4.94
Alberta	3.70
British Columbia	4.82
Canada	4.71

^a Atlantic region comprises New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Significant difference in mean responses among groups ($p < 0.05$; Fisher's analysis of variance)

^d Based on a 5-point scale where, 1 = strongly disagree and 5 = strongly agree.

Appendix 15. Percentage who agree or disagree with statements related to committee discussions and deliberations

Statement	% agreement ^c , by region (without "don't know")			Don't know
	Disagree	Neither	Agree	
Committee meetings are interactive and personal				
Atlantic ^a	0.0	11.8	88.2	0.0
Quebec	4.0	14.0	82.0	0.0
Ontario	1.0	10.7	88.3	1.0
5.7Prairies ^b	12.1	9.1	78.8	5.7
Alberta	2.1	6.4	91.5	0.0
British Columbia	4.3	5.8	89.9	0.0
Canada	3.3	9.5	87.2	0.9
The committee deals with issues in the early stages of decision-making about forest management				
Atlantic ^a	2.9	32.4	64.7	0.0
Quebec	18.4	20.4	61.2	2.0
Ontario	13.6	16.5	69.9	1.0
Prairies ^b	20.6	17.6	61.8	2.9
Alberta	8.5	10.6	80.9	2.1
British Columbia	4.3	27.5	68.1	0.0
Canada	11.3	20.2	68.5	0.9
Controversial issues receive genuine attention and a sufficient response by the committee sponsor(s)				
Atlantic ^a	2.9	2.9	94.1	0.0
Quebec	10.0	24.0	66.0	0.0
Ontario	10.6	12.5	76.9	0.0
Prairies ^b	12.5	9.4	78.1	8.6
Alberta	6.7	11.1	82.2	4.3
British Columbia	7.5	16.4	76.1	2.9
Canada	8.7	13.6	77.7	2.1
Decision-makers regularly attend and participate in the committee's activities				
Atlantic ^a	5.9	17.6	76.5	0.0
Quebec	10.2	14.3	75.5	2.0
Ontario	12.5	12.5	75.0	0.0
Prairies ^b	11.8	14.7	73.5	2.9
Alberta	11.4	11.4	77.3	6.4
British Columbia	11.8	14.7	73.5	1.4
Canada	11.1	13.8	75.1	1.8
When new information arises or a surprise occurs, it is usually incorporated into subsequent decisions				
Atlantic ^a	0.0	23.5	76.5	0.0
Quebec	2.2	11.1	86.7	10.0
Ontario	9.6	14.4	76.0	0.0
Prairies ^b	6.1	21.2	72.7	5.7
Alberta	2.1	8.5	89.4	0.0
British Columbia	1.5	16.7	81.8	4.3
Canada	4.6	15.2	80.2	2.9
The issue of climate change features strongly in the committee's agenda				
Atlantic ^a	44.1	38.2	17.6	0.0
Quebec	74.0	18.0	8.0	0.0
Ontario	48.5	33.7	17.8	2.9
Prairies ^b	30.3	36.4	33.3	5.7
Alberta	32.6	32.6	34.8	2.1
British Columbia	33.3	36.2	30.4	0.0
Canada	44.7	32.4	22.8	1.8

Appendix 15. Concluded

Appendix 1: For Generalists		% agreement ^c , by region (without "don't know")			Don't know
Statement	Disagree	Neither	Agree		
The issue of sustainable forest management features strongly in the management of our forest					
Atlantic ^a	0.0	5.9	94.1	0.0	
Quebec	16.3	16.3	67.3	2.0	
Ontario	6.8	10.7	82.5	0.0	
Prairies ^b	2.9	5.9	91.2	2.9	
Alberta	4.3	2.1	93.6	0.0	
British Columbia	7.2	1.4	91.3	0.0	
Canada	6.8	7.4	85.7	0.6	
The addition of new members slows progress while they learn the fundamentals of forest management, forestry, and planning					
Atlantic ^a	63.6	27.3	9.1	2.9	
Quebec	25.5	44.7	29.8	6.0	
Ontario	44.6	37.6	17.8	2.9	
Prairies ^b	47.1	32.4	20.6	2.9	
Alberta	44.7	34.0	21.3	0.0	
British Columbia	47.1	44.1	8.8	1.4	
Canada	44.5	37.9	17.6	2.7	
Attendance of regular members is sporadic which means we spend a lot of time re-covering old ground					
Atlantic ^a	79.4	14.7	5.9	0.0	
Quebec	53.1	26.5	20.4	2.0	
Ontario	71.2	26.9	1.9	0.0	
Prairies ^b	52.9	32.4	14.7	2.9	
Alberta	70.2	21.3	8.5	0.0	
British Columbia	79.4	16.2	4.4	1.4	
Canada	69.0	23.2	7.7	0.9	
Deliberation and discussion is dominated by particular stakeholder groups					
Atlantic ^a	47.1	23.5	29.4	0.0	
Quebec	14.0	18.0	68.0	0.0	
Ontario	42.7	27.2	30.1	0.0	
Prairies ^b	41.2	23.5	35.3	2.9	
Alberta	46.8	23.4	29.8	0.0	
British Columbia	66.7	21.7	11.6	0.0	
Canada	44.2	23.4	32.3	0.3	
Deliberations and discussion got easier the longer we worked together					
Atlantic ^a		20.6	79.4	0.0	
Quebec	4.2	22.9	72.9	4.0	
Ontario	1.0	22.5	76.4	1.0	
Prairies ^b	2.9	17.6	79.4	2.9	
Alberta		28.3	71.8	2.1	
British Columbia	2.9	25.0	72.0	1.4	
Canada	1.8	23.2	75.0	1.8	

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Based on a 5 point-scale, where 1=strongly disagree and 5=strongly agree. To facilitate presentation, the scale was collapsed into three categories

Appendix 16. Percentage who are satisfied or dissatisfied with statements about the committee's work

Aspect	% agreement ^c , by region		
	Disagree	Neither	Agree
The representativeness of the committee			
Atlantic ^a	0.0	2.9	97.1
Quebec	12.0	10.0	78.0
Ontario	7.8	5.8	86.4
Prairies ^b	13.9	11.1	75.0
Alberta	10.6	8.5	80.9
British Columbia	10.3	10.3	79.4
Canada	9.2	8.0	82.8
The quality of discussion within the committee			
Atlantic ^a	0.0	11.8	88.2
Quebec	12.0	16.0	72.0
Ontario	1.9	7.8	90.3
Prairies ^b	8.3	11.1	80.6
Alberta	8.5	2.1	89.4
British Columbia	0.0	10.3	89.7
Canada	4.4	9.5	86.1
The quality of information provided for committee discussion			
Atlantic ^a	2.9	2.9	94.1
Quebec	8.0	10.0	82.0
Ontario	5.8	6.8	87.4
Prairies ^b	8.3	11.1	80.6
Alberta	6.4	0.0	93.6
British Columbia	2.9	7.4	89.7
Canada	5.6	6.5	87.9
The diversity of information available to the committee			
Atlantic ^a	5.9	5.9	88.2
Quebec	12.0	18.0	70.0
Ontario	9.7	6.8	83.5
Prairies ^b	8.3	11.1	80.6
Alberta	6.4	2.1	91.5
British Columbia	8.8	7.4	83.8
Canada	8.9	8.3	82.8
The decision-making process of the committee			
Atlantic ^a	2.9	8.8	88.2
Quebec	14.0	24.0	62.0
Ontario	14.6	14.6	70.9
Prairies ^b	11.1	22.2	66.7
Alberta	8.5	21.3	70.2
British Columbia	8.8	11.8	79.4
Canada	10.9	16.6	72.5
The contributions of other committee members			
Atlantic ^a	8.8	5.9	85.3
Quebec	14.0	26.0	60.0
Ontario	6.8	10.7	82.5
Prairies ^b	11.1	16.7	72.2
Alberta	8.5	8.5	83.0
British Columbia	4.3	8.7	87.0
Canada	8.3	12.4	79.4
The efforts of the committee's sponsor			
Atlantic ^a	2.9	8.8	88.2
Quebec	6.0	18.0	76.0
Ontario	7.8	14.6	77.7
Prairies ^b	5.9	17.6	76.5
Alberta	2.1	19.1	78.7
British Columbia	2.9	13.0	84.1
Canada	5.0	15.1	79.8

Appendix 16. Concluded

Aspect	% agreement ^c , by region		
	Disagree	Neither	Agree
The level of trust among committee members			
Atlantic ^a	2.9	2.9	94.1
Quebec	12.0	24.0	64.0
Ontario	4.8	9.6	85.6
Prairies ^b	11.1	8.3	80.6
Alberta	6.4	6.4	87.2
British Columbia	4.3	2.9	92.8
Canada	6.5	9.1	84.4
The opportunities to learn new things about forests and forest management			
Atlantic ^a	2.9	5.9	91.2
Quebec	6.0	16.0	78.0
Ontario	3.9	3.9	92.2
Prairies ^b	2.8	2.8	94.4
Alberta	2.1	6.4	91.5
British Columbia	5.8	5.8	88.4
Canada	4.1	6.5	89.4
The overall process in which you are involved			
Atlantic ^a	2.9	8.8	88.2
Quebec	16.0	16.0	68.0
Ontario	7.8	8.7	83.5
Prairies ^b	11.1	11.1	77.8
Alberta	6.4	8.5	85.1
British Columbia	11.6	5.8	82.6
Canada	9.4	9.4	81.1

^a Atlantic region comprises New Brunswick, Nova Scotia, and Newfoundland

^b Prairies region comprises Manitoba and Saskatchewan

^c Based on a 5 point-scale, where 1=strongly disagree and 5=strongly agree. To facilitate presentation, the scale was collapsed into three categories.