Strategy for Improving Openness, Transparency, Collaboration and Accountability at the Department of Lands and Forestry

DAVIDSON GREENWOOD COMMUNICATIONS

the prhive

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Table of Contents

Introduction

The Department of Lands and Forestry ("the Department") has broad responsibilities relative to the management, development, conservation and protection of Nova Scotia's biodiversity, forest, and park resources and the administration of the province's Crown land. This Stakeholder Engagement and Communications Plan ("the Plan") provides recommendations for the Department to enhance its two-way communication with stakeholders, help build trust in decisions, identify opportunities for stakeholder engagement and collaboration and provide a framework for accountability around decision-making and work happening within the Department.

Communications Environment

The Department is embarking on the implementation of the recommendations in *An Independent Review of Forest Practices in Nova Scotia* ("the Lahey Report") and recognizes that stakeholder engagement and communication is critical to moving forward.

Overall, it is fair to characterize the communication environment between the Department and its stakeholders as being significantly strained. A cross-section of external stakeholders has identified a lack of trust in the department. One example that continuously surfaced in our research related to the online Harvest Map and the inability to obtain information with ease. Stakeholders also noted that approximately six months ago the language used to identify forestry practices on the map was changed in what they believed was an attempt to confuse or hide information. Internally, the map was seen as a positive step toward information sharing and the language change was meant to reflect terms that were actually used within the Department. The Harvest Map example is poignant in that it demonstrates that the while the intent was to make improvements, it had the opposite effect outside of the Department. Had stakeholders been engaged in the development of the map from the beginning, it could have been a more effective, and valued tool.

With a dispersed organizational structure that is composed of numerous invested stakeholders, the Department's ability to communicate internally and externally in clear, meaningful and understandable ways is crucial to the success of this strategy.

While this plan is meant to assist the entire department and the broad work it does, there is significant emphasis on forestry as a result of the Lahey Report.

"DNR should work transparently and collaboratively with interested parties, including representatives from the academic community, in making improvements to reporting on forests and forestry, including in the State of the Forest Report." (Page 62 Lahey Report)

Background

The Department of Lands and Forestry (the Department) has a broad mandate for the management, development, conservation, and protection of Nova Scotia's biodiversity, forest, and park resource and the administration of the province's Crown land.

In August 2017, Professor Bill Lahey was appointed by the Hon. Margaret Miller, the former Minister of Nova Scotia's Department of Natural Resources to conduct a review of forest practices on Crown land in the province. During the period of the review process, the name of the department was changed to Lands and Forestry, and the Hon. Iain Rankin was appointed to be the minister of the Department.

Throughout the duration of the review, Professor Lahey and his team conducted over 80 meetings across the province and received over 250 written submissions. After months of a consultative process and primary and secondary research, the *Independent Review of Forest Practices in Nova Scotia* was released in August 2018. The report outlined the need for a significant shift in how the Department manages its natural resources.

Lahey concluded that environmental, social, and economic values should be balanced by using forestry practices that give priority to protecting and enhancing ecosystems and biodiversity.

"I have concluded that protecting ecosystems and biodiversity should not be balanced against other objectives and values as if they were of equal weight or importance to those objectives or values. Instead, protecting and enhancing ecosystems should be the objective (not the outcome) of how we balance environmental, social, and economic objectives and values in practising forestry in Nova Scotia." (Page iii Lahey Report)

Work is underway to begin the transition, however, fully implementing the recommendations will be phased in over time. New approaches to engagement and communications will help mobilize support for this new direction but it will require a comprehensive strategy.

Lahey's report also stressed that there is a lack of public confidence in the Department to carry out its mandate. Central to this is the perceived conflict of interest as the Department has a dual responsibility as both a steward for the province's natural resources and a driver of economic development. Stakeholder groups perceive there is an overall lack of transparency in decision making and that there is limited external collaboration and engagement.

In December 2018, the Government released its response to the Independent Review of Forest Practices in Nova Scotia.

Government accepts the recommendation to improve and demonstrate a culture of openness, transparency, and accountability within the Department of Lands and Forestry. To further this commitment, Government will:

- *Within the next year, establish options for an independent process for environmental reviews for proposed long term forest management licenses that include the opportunity for public involvement;*

- *Report on progress and inform and involve stakeholders and the public as work moves forward. As part of this commitment, Professor Lahey has agreed to come back and lead an evaluation of Government's progress;*

- *Increase the use of academic partnerships, peer-review, and external scientific expertise in research and program development;*

- *Improve the Department's State of the Forest report, with input from the academic community.*

(Government Response to the Independent Review of Forest Practices in Nova Scotia)

The Department of Lands and Forestry released a Statement of Work in March 2019 in which the Department was seeking to engage a partner with relevant expertise (i.e. in areas such as corporate and public affairs, internal communications and processes, and stakeholder relations) to develop a strategy for engagement and communication. Understanding that there is a lot of work already underway on the implementation of Lahey's recommendations, this strategy includes recommended next steps for implementation to complement other activities across the Department.

DG Communications in collaboration with the PR Hive responded with the submission of a proposal in March 2019. The consultants were awarded the contract and work commenced the first week of April 2019.

Our Approach and Methodology

We have in-depth understanding of the challenges that are facing the Department, public perceptions of the lack of transparency, and the need for further external stakeholder collaboration and engagement. We understand the need to develop a communications plan and engagement strategy that recognizes a diverse set of interests as it relates to land use and in particular Crown lands in this province. As a result, we worked with the Department to identify the most approriate methods to engage these audiences and the following work was undertaken:

- Staff Survey
- Staff Interviews
- Stakeholder interviews
- Jurisdictional scan
- Secondary research that included department and external documents and articles, media scan, and publicly available Freedom of Information and Protection of Privacy Act (FOIPOP) requests (provided by the Department and external stakeholders)

An overview of findings from the the staff survey, staff interviews and stakeholder interviews is included as Appendix A. The jurisdictional scan is included as Appendix B.

The results of the staff survey and interviews as well as the stakeholder interviews revealed some clear themes around building openness, transparency, collaboration and accountability. It is worth noting that staff responses matched stakeholder responses in many areas:

1. Staff and stakeholders acknowledge the gap in engagement, whether it is one-on-one or larger group format, and are ready for a more proactive and consistent approach;

2. Most believe the Department could be more effective in its communication with internal and external stakeholders, with specific reference to progress that is being made on the Lahey Report, but also with sharing general information;

3. Staff take pride in the work they do and stakeholders recognize their expertise;

4. Some staff were hesitant to speak to media because of previous negative experience;

5. Stakeholders overwhelmingly want to be engaged in the development of long-term plans and have the results of those plans shared publicly;

6. Most external stakeholders find the process of requesting information from the Department frustrating, time-consuming and lengthy; and

7. External stakeholders want to understand the cumulative effect of harvesting on Crown land.

Based on these findings, a strategy has been developed to create a better understanding of the work of the Department, identify opportunities for partnership and collaboration and priority areas for communication. An evaluation plan is also included and aligns with selected indicators that include the Department's mission, vision, strategic priorities, commitments related to the Lahey report, and drivers of stakeholder and public perceptions and expectations of the Department.

Communication Goals

The Department in response to the Lahey report has identified priority action items that includes its acceptance of the recommendation to improve and demonstrate a culture openness, transparency, collaboration, and accountability. An effective communications strategy will help solidify this goal. However, it will be more than reporting on the progress of the implementation of the recommendations – it will require a cultural shift on how the Department currently shares information and engages with external stakeholder groups. This will be a significant change in direction for the Department.

The Department is at a critical juncture in the implementation of this aspect of the Lahey report. After conducting qualitative interviews with both internal and external stakeholders, there is a tremendous opportunity for the Department to engage with its stakeholders in a meaningful way and to send a message that the status quo is no longer acceptable. Stakeholders want to know what is happening on Crown land, they want to understand the justification for decisions made regarding policies and legislation, and they want to know what the long-term objectives are and how they will be implemented.

Based on the research, the following communication and engagement goals have been identified:

1. Adopt a proactive role in engaging and communicating with external stakeholders.

   All stakeholders expressed support for proactive outreach and engagement. Engaging stakeholders will allow for a more transparent process for information-sharing and decision-making.

2. Ensure that accurate information is delivered in an open, forthright, effective and timely manner outside of Freedom of Information and Protection of Privacy Act (FOIPOP) requests and Ministerial correspondence wherever possible.

   The Department has vast amounts of data – research reports, statistics, etc. – that could be shared proactively with all stakeholders, either directly when asked or on its website. It is not enough; however, to share massive technical reports and call it transparent. The Department can take steps to ensure that long technical reports are pared down into consumable and useful information that is written in plain language. Making information easily available will help improve transparency and provide the public and stakeholders with information that is useful to them. For example, the results of research conducted by the Department and in which stakeholders have participated, and the scientific data used for decision-making.

3. Ensure staff have appropriate information to share directly with stakeholders.

   The Department is one of the few government departments that has offices and staff in just about every community in the province. Members of the public are used to interacting with Department staff for many purposes. Empowering them with information that can be shared directly with the public or with stakeholders will enhance the face-to-face communication that both staff and stakeholders prefer. Many staff, however, indicated being unsure of what information can be shared and will escalate information requests to supervisors, which both act as barriers to being able to provide timely responses. As one staff member said, "we just want to know where the goal posts are."

Key Stakeholders

- Employees
- Environmental NGOs
- Forest Sector
- Private Land Owners
- Municipalities / Communities
- Other Provincial Government Departments
- Mi'kmaq First Nation
- Search and Rescue Groups
- Recreational Users of Crown Land

Strategic Approach

The Lahey Report indicated that there is a lack of trust in the Department and this was a recurrent theme in our research.

If one thing is clear as a result of the staff and stakeholder interviews, it is that everyone agrees that in order for the Department to demonstrate openness, transparency, collaboration and accountability, it is critical to bring down barriers to information sharing. As one interviewee stated, the Department should be "an open book."

Therefore, the strategic approach hinges on the Department being more proactive and transparent, which includes welcoming and responding to input. The following recommendations are based firmly in this approach.

Building trust and changing culture takes both time and resources and will not happen overnight. However, taking actions to demonstrate the department is committed to both in the short, medium and long term is also part of the strategic approach.

Recommendations

1. **Expedite Internal Information Handling – Designate staff person with access to Department subject matter experts**

Given the frustrations noted by stakeholders in obtaining information from the Department, it is recommended that a position be dedicated to and responsible for consulting, leading, managing and providing specialized expertise related to public and stakeholder communication and consultation. The position will develop processes and systems (i.e. staff training on public engagement and information sharing) and have access to internal experts that receive, prioritize, analyze, develop options and recommendations, respond, monitor, and report on public and stakeholder interests. The position will also work closely with Communications Nova Scotia and the Stakeholder Advisory Committee (as recommended below) to ensure messages are coordinated, consistent and in plain language (e.g. reinforcing the definition of ecological forestry).

The overarching purpose of the position is to provide a consistent and responsive channel for the public and other stakeholders to interact with the Minister and department. The public and stakeholders expect thoughtful, professional, and timely responses, and delivery of an effective correspondence program. Additionally, this position would be responsible for ensuring any information that can be shared outside of the FOIPOP process is done so wherever possible.

It is suggested that this position be looked at on a contract basis or from existing resources within the Department. In the implementation phase, this may require a full-time position. As processes are put in place and embedded within the Department's structure, the time requirement would evolve and be less demanding. It is for this reason that we propose a contract position or use existing resources within the Department.

"DNR must deeply and pervasively embrace a culture of transparency and accountability. It must institute the information management, sharing, and distribution systems needed to put that culture into routine operational practice. For example, the practice of giving written reasons for decisions on matters of public interest should, wherever practicable, become standard. Measures must also be taken to prevent the protection of privacy provisions of the Freedom of Information and Protection of Privacy Act, as well as bureaucratic systems or resistance to disclosure, from limiting

*the operation of the freedom of information provisions of the same legislation relating to matters of clear public interest. **In broad terms, such matters include decisions taken in relation to, or activities conducted on, land that belongs to Nova Scotians through their government.***" (Page 56 Lahey Report)

2. Create Stakeholder Advisory Group

There have been numerous reports over the past number of years in which expert stakeholder engagement was recommended. In many cases, this work was undertaken in the implementation of the reports (including the current implementation of the Lahey Report recommendations where external experts are working with staff), but to our knowledge, there has not been any external group created that would advise on the ongoing work of the Department, although such a group is mentioned as part of the Natural Resources Strategy.

Broadly, the Advisory Group would play a key role in providing input into the Department's work specific to the recommendations from the Lahey Report, including assisting with developing a process for engaging and communicating with stakeholders about the work of the Department so that it is transparent, consultative and collaborative.

It is our view that Bill Lahey is a good position to provide recommendations to the Department on eight to 12 stakeholders who would comprise the Advisory Group. Members will be selected from a cross-section of key interests of the Department and chaired by the Deputy Minister. The Advisory Group can expand and contract depending on the recommendations / topics being addressed. An additional two representatives from the Department will also be included to provide support.

While we expect the Advisory Group will work together to formalize a terms of reference with Mr. Lahey's assistance, generally the purpose of the Group is to:

- Provide input to the Department on the implementation of the Lahey Report recommendations;
- Provide constructive input on how the Department can better address and respond to stakeholder needs and concerns;
- Identifying opportunities for further dialogue and collaboration;
- Ongoing stakeholder forum for advice and feedback;

- Creating a vision and framework for structured engagement with a broader range of key stakeholders and community representatives on a more continuous basis.

It should be noted that Mr. Lahey intends to create a a separate independent committee on evaluation as outlined in his report.

This Advisory Group will at first focus on forestry practices but can later expand to include all areas of the Department's broad mandate.

Key to this group's success will be building on the work that has already been undertaken, including insights and values from the citizen engagement work that was completed in 2009 and documented in the report entitled *Our Common Ground* including the following values:

- **Sustainability.** Nova Scotians want a natural resources strategy that can provide for them today without negatively affecting the culture, society, environment, and economy of generations to come. They want more jobs in rural areas, jobs based on sound ecological principles.

- **Diversity.** Nova Scotians believe diversity is an essential element of a resilient economy, a vibrant ecology, thriving communities, and a healthy way of life.

- **Collaboration.** Nova Scotians want the Department of Natural Resources to play a leadership role in bringing together the different views about natural resource management. They also want to continue to be part of the decision-making process.

- **Transparency.** Nova Scotians value an open, clear, and easily understood decision making process. They want to know the rationale behind decisions.

- **Informed decision making.** Nova Scotians want the Department of Natural Resources to use the best available information pertaining to science, economics, citizen values, and community and traditional knowledge when making resource-management decisions. They also want to be kept informed so that they can better contribute to the decision-making process.

"Improvement of forest and forestry reporting should be done transparently and in collaboration with knowledgeable and interested parties, including industry, conservation organizations, landowners, academics, municipalities, and Mi'kmaq representatives. This will create opportunities for DNR to improve tracking and

reporting and therefore decision making, to increase trust and confidence in tracking and reporting, and to build collaborative relationships with and between interested constituencies. To enhance these benefits, consideration should be given to having forestry reporting independently reviewed." (Page 12, Lahey Report)

An Ecological Forestry Forum for stakeholders is currently scheduled in Truro on June 25, 2019. The Minister will share high level progress on the Lahey Report recommendations and the Deputy Minister will present the implementation progress. There will also be interactive sessions to elicit input and feedback on key projects underway to implement ecological forestry. This is an opportunity with the majority of stakeholders present to announce the Advisory Group and provide initial high-level thinking on the process.

Consistent with the Lahey Report, we heard from stakeholders that there is a disagreement on the science used by the Department. It is our understanding that using external experts as part of the implementation of the Lahey Report is already underway. As an example, sharing this information with stakeholders at this session is a good start in demonstrating transparency and openness.

"Judging by what I heard in this review, there is a general lack of trust and confidence in DNR shared by people who otherwise strongly disagree on forestry practices and other forestry issues. Those opposed to how forestry is currently conducted argue that the Department is beholden to industrial interests, pointing to its failure or refusal to implement the commitments contained in the natural resources strategy and the number of former Bowater employees who are now in senior DNR positions. Those in the forestry business complain of the politicization of the decision-making process, both in making policy that lacks scientific basis and economic realism and in making public opposition (or its absence) the litmus test for approving forestry operations on Crown lands. On both sides, there is sharp criticism for DNR's science and its tendency to do science in-house with limited resources, without engagement with external academic experts, including through the peer review process." (Page 54 Lahey Report)

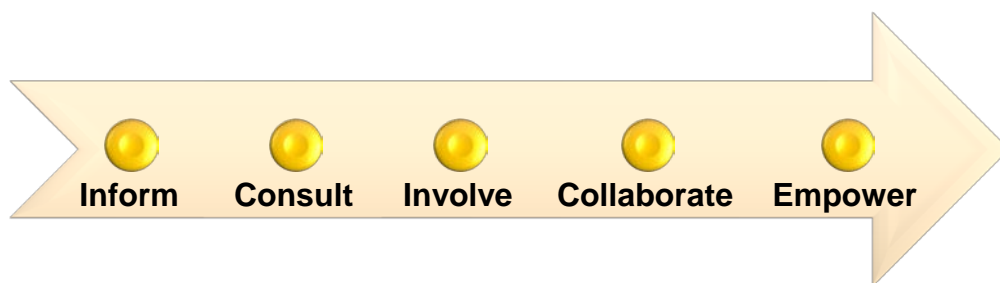### 3. Develop long-term stakeholder and public engagement plan

Like many organizations, the Department is grappling with how to engage stakeholders and the public.

The need for a long-term stakeholder engagement and public engagement plan was identified by staff and stakeholders, and by citizens in previous reports. The Department has begun this work with the creation of a staff guide for public participation; however, in order for stakeholder and public consultation to be operationalized in the Department's strategy and how it does business, a longer-term implementation plan is needed.

Improved decision making is the primary reason for engagement as a tool to inform the Department, its stakeholders and the public and build toward more broadly supported decisions. Clearly defined and understood roles, including how citizen and stakeholder input influences decisions, is key to advancing a quality public engagement process.

Reporting back to or closing the loop with stakeholders is a critical element of success, especially the ability to explain how stakeholder and citizen input influenced/or didn't influence decisions of the Department. For organizations that place public engagement prominently as a strategic outcome or objective and which undertake stakeholder and public engagement activity it is also important to be able to report progress cumulatively.

The International Association of Public Participation (IAP2) is the leading international body and standard for public participation practice and identifies a spectrum for engagement. The spectrum identifies five levels of participation when engaging with the stakeholders and the public on initiatives. The Department has begun the process of moving this structure forward. The Information Officer position can be a lead resource in operationalizing engagement with stakeholders and the public in the short, medium and the long terms (i.e. train the trainer; communicating the importance of engagement in the Department's work both internally/ externally).

Inform   Consult   Involve   Collaborate   Empower

Level of Engagement	Engagement Goal	Promise to the Stakeholder
1. Inform	To provide the stakeholder with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	We will keep you informed
2. Consult	To obtain stakeholder feedback on analysis, alternatives and/or decisions	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how stakeholder input influenced the decision
3. Involve	To work directly with the stakeholder throughout the process to ensure that stakeholder concerns and aspirations are consistently understood and considered	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how stakeholder input influenced the decision
4. Collaborate	To partner with the stakeholder in each aspect of the decision including development of alternatives and the identification of the preferred solution	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible
5. Empower	To place final decision-making in the hands of the stakeholder	We will implement what you decide

(Source: International Association of Public Participation)

Specifically, a long-term plan should consider the following:

- Community Liaison Committee (e.g. one committee per region)
- Round Table Discussions
- Targeted Stakeholder Meetings
- Community Dialogue
- Individual Contributions

4. Improve Harvest Map and Develop a Microsite for Report Progress

Technology is changing the way that governments share information and keeping citizens informed is an essential element of government transparency. Research suggests, although some information is made available on government websites, in general they have not been proactive in making information easily accessible to the public. Further, governments have not been perceived as making significant effort to embrace technology as a means to promote 'the values of transparency.' The jurisdictional scan included in *Appendix B* confirms this. It also confirms that Nova Scotia's Harvest Map contains a lot of information – more than most other jurisdictions; however, information is not easily understood or found, and it lacks some of the information stakeholders are looking for.

We recommend consulting with stakeholders to either revise the Harvest Map or make the information contained within the map easily accessible on the Department's website. It should also contain additional information that stakeholders have identified as important (e.g. long-term cumulative effect of harvesting).

While much work is already underway on the Lahey Report recommendations, stakeholders and staff expressed a strong interest in publicly reporting on progress. While the current Department website has been identified to be updated, there is a more immediate need to ensure information on the Lahey Report progress is easily accessible and available to stakeholders and the public. We recommend a microsite be created in the interim to share progress and gather feedback. An example of a current government microsite can be found at https://healthredevelopment.novascotia.ca.

Some of the immediate advantages of the microsite approach include:

- Ability to independently manage the site's contents;
- Separate and focus the brand identity to differentiate itself from the Department;
- Implement a more flexible structure geared directly to supporting users;
- Easier to communicate and locate resources online in a central location;
- Greater visibility of existing information and new developments; and
- Opportunity to gain specific insight and analytic data on its usage.

5. Create and Implement an Internal Communications Plan

We understand that some work on this front is underway; however, based on the staff survey and interviews, we felt this was an area that should be pursued in earnest. Many staff reported not understanding how decisions are made and their discomfort with sharing information that is not already public.

A key success factor to improving their confidence in sharing information is understanding the rationale behind decisions within the Department – and faith in the communications processes that deliver those decisions to employees throughout the Department. According to the *International Association for Business Communicators (IABC)*, generally, many employees view management decision-making with less than full understanding and therefore less than full support. Their studies show only four out of 10 employees consider management decisions appropriate and timely, and only three out of 10 consider their decisions well communicated.

The most compelling argument for focusing on internal communications comes from the results of the Department's own employee surveys. Results from government's "How's Work Going?" employee surveys show opportunities for improvement in effective flow of communication both to and from senior leaders, and to and from immediate supervisors to staff.

Built into the Internal Communications Plan should be quarterly round table sessions with the Deputy Minister and employees. Each quarter 15 employees from throughout the department could be invited to an informal session with the Deputy Minister at which they will have the opportunity to share their views on internal communications, external communication, what is going well and where the Department can improve. This approach can reveal opportunities to change course or address gaps as the Internal Communications Plan is rolled out.

6. Develop Strategy to Communicate the Triad Model

The Lahey Report identifies managing forests within a triad model. While this practice may be familiar to those within the industry, it is a complex model to explain and to place Department actions within the context of ecological forestry and the priority of biodiversity and ecosystems.

The Department could work with Communications Nova Scotia to develop a plan to raise awareness and understanding of the triad model so that the work of the

Department as it implements the recommendations of the Lahey Report can be better understood within this context.

Possible tactics could include:

- Ecological Forestry Guide / Infographic (Plain Language)
- Editorial Calendar
- Editorial Board Meetings
- Educational Field Trips (Natural Resources Education Centre, Shubenacadie Wildlife Park / Wetland Centre)
- School Presentations
- Content for various publications
- Demonstration Forest with academic partner(s)
- Open Houses
- Information booths at events across the province
- Vignettes for microsite

7. Create Social Media Strategy

Improving the content shared on social media was raised by a majority of staff as a way to raise awareness about the work of the Department. Stakeholders on the other hand expressed frustration with the Department's current website. The Department is interested in improving its communication using both of these digital channels. It is our understanding that the Department is working with Communications Nova Scotia to build a new, more user-friendly website. Conducting a digital media analysis of stakeholder engagement on social media channels first would be beneficial in the development of a comprehensive social media strategy.

The Department could take a deliberate and proactive approach to its social media based on its broad mandate and rich content. This content would be of interest to a broad audience and would help build public confidence by showcasing its people, their expertise and collaborative work. A proactive social media strategy can also help communicate the expertise of staff working throughout the Department through short profiles and sharing of scientific information, including peer-reviewed research.

8. Increase Share of Voice in Media Stories

Many staff indicated their desire for the Department to be part of media stories instead of responding reactively to negative feedback. While they acknowledge that some of the work they do can be sensitive and topics may be controversial, they believe there are numerous experts within the department who can share some of the positive work that is underway and where proactive communication with media could also take place.

There was an expression of frustration on the length of time it takes to obtain approval to respond, resulting in lost opportunities and the perception by media, and therefore stakeholders, that the Department is not available or unwilling to share information publicly.

Based on a review of media coverage, we recommend that staff receive training on how to conduct media interviews in a professional manner. We also recommend that an issues tracking system be put in place so smouldering issues can be identified and proactively resolved before they are escalated.

Just as relationships must be rebuilt with many stakeholders, trust with media must also be earned. This can be done by ensuring appropriate spokespeople are available and prepared to respond to relevant media requests. The process to receive approval should be streamlined so the Department has a voice in media stories or there is ample notice when a spokesperson is not available.

Evaluation

The following evaluation measures and activities should provide the Department with an indication of whether strategy has been successful:

Measures

- Turnaround time on information requests improves

- Reduced number of FOIPOP requests

- Reduction in Ministerial Correspondence

- Website and social media analytics (which will indicate views, engagement and time spent on site)

- Number and tone of media stories

Activities

- June 25 Ecological Forestry Forum post event participant survey

- Survey to external stakeholders interviewed for this strategy

- Staff survey

- Interviews with members of Stakeholder Advisory Group

- Evaluation Questions for staff involved with planning and implementing public participation projects

- Evaluation Questions for external participants in stakeholder and public engagement sessions

Appendix A
Staff Survey Responses

Q1. What information do you need to feel informed and empowered to communicate with stakeholders or members of the public?

The top three responses:

1. Understanding of what information can be shared externally (45%)
2. Clear guidelines when to contact Communications Nova Scotia (39%)
3. Updates on initiatives that are happening within the department (37%)

Q2. How would you like to receive this information?

The top three responses:

1. Email (46%)
2. Directly from Supervisor (29%)
3. Team meeting (27%)

Q3. Do you receive information requests from the public or particular stakeholders? If so, how do you follow up (e.g. answer directly, share with supervisor, etc.)?

The majority of respondents said:

- Yes, they do receive requests for information and most answer directly
- A large number of respondents mentioned seeking advice from supervisor before responding
- An equally high number indicated they will respond directly only information was in the public domain but would otherwise escalate to director or executive director

Q4. Thinking about the Department as a whole, identify the top three external stakeholders for communication and engagement.

The top three audiences are:

1. General public (46%)

2. Forestry sector (e.g. sawmills, contractors, etc.) (29%)

3. Small private woodlot owners (18%)

Q5. What do you think is the MOST important information external stakeholders need from the Department?

Responses to this question tended to vary based on the respondent's area of expertise or division; however, the most common broad responses include:

1. Updates, changes to policy or regulation

2. Policies

3. What the Department does (long-term sustainable forest use)

4. Science behind decision-making (e.g. responsibly managing Crown assets)

Q6. What opportunities are there for the Department to provide information to external stakeholders?

Answer	Count	Percentage
Website	116	51%
Social media	101	44%
Email	59	26%
Small group meetings	70	31%
One on one meetings	44	19%
Public meetings	86	38%
Advisory Group	53	23%
Other	21	9%

Q7. **What opportunities are there for external stakeholders to communicate with the Department?**

Answer	Count	Percentage
Website	62	27%
Social media	56	24%
Email	100	45%
Small group meetings	62	27%
One on one meetings	60	26%
Public meetings	69	30%
Advisory Group	51	22%
Other	16	7%

Q8. **What would you like to see the Department do differently / more of to build relationships with external stakeholders?**

Top three responses:

1. Stakeholder outreach and public meetings / consistent proactive engagement with stakeholders

2. Proactively communicate good news through media (more than Shubenacadie Sam) / better support from CNS (refrain from responding to negative media and complaints)

3. Correct inaccuracies in a timely way via social media

Staff Interviews

1. **What do you think is the MOST important information the Department needs to share with its stakeholders?**

    - Effort and science that goes behind decision-making / how decisions are made / staff expertise

    - Who we are, what we do, how we do it

    - Data collected / reports – share before being asked, ensure it is consumable

2. **What opportunities are there for the Department to provide information to external stakeholders?**

    - Stakeholder outreach and engagement

    - Website

    - Proactive media relations and social media / challenge misinformation

3. **What opportunities are there for external stakeholders to communicate with the Department?**

    - Stakeholder engagement / consultation

    - Harvest map viewer

    - Email / in-person at regional offices

4. What would you like to see the Department do differently / more of to build relationships and collaborate with external stakeholders?

- Transparency / honesty / share more information

- Proactive outreach to stakeholders / face-to-face

- Share of voice in media stories / correct misinformation

- Welcome outside opinions from advocacy community

5. What ideas do you have about how the Department can better engage stakeholders?

- Reinstate outreach program and resource it

- Be more open with sharing information

- Public open houses and workshops

6. In your opinion, what is critical for the Department to do in order to demonstrate and improve transparency, openness, and accountability?

- Explain why and how decisions are made (e.g. policy changes)

- More timely responses to media (frustration with the current process)

- Provide as much information as possible outside of FOIPOP

- Involve stakeholders early / collaborate

- Communicate internally

7. **What do you think the Department should do to improve trust with stakeholders?**

- Communicate about what is being done to address recommendations in Lahey Report

- Be more transparent / clear, simple language

- Engage with stakeholders in a meaningful way (face-to-face)

8. **Have you been contacted by any stakeholder to provide information? What was it? What was your experience?**

- Staff see themselves as helpful, but are unsure about what they can say

- Will only provide information that is public, otherwise escalate to supervisor

- Staff aren't always aware of decisions within department

- Time it takes to get approvals to share information is frustrating

- Harvest area – people want to know how decisions are made

- Public don't like the "canned" answers

9. **In your opinion, is there any government department or organization that is doing a good job communicating with and engaging stakeholders?**

- Mersey Tobeatic Research Institute

- Ships Start Here

- Access Nova Scotia

- HRM

- NGOs

Stakeholder Interviews

1. **What do you think is the MOST important information the Department needs to share with its stakeholders?**

   - What is happening on Crown Land

   - Communicating what's happening at the landscape level and the cumulative effects of harvesting

   - Justification for decisions made re: policies / legislation

   - Identifying long-term objectives and how they will be implemented

2. **What opportunities are there for the Department to provide information to external stakeholders?**

   - A more robust public consultation process

   - Need to see feedback reflected in Department decisions

   - Workshops and Open houses

   - Avenues for face to face discussion – empower regional staff to engage

3. **What opportunities are there for external stakeholders to communicate with the Department?**

   - Harvest viewer – ineffective tool

   - Public consultation

   - Meetings / field visits

4. **What would you like to see the Department do differently / more of to build relationships and collaborate with external stakeholders?**

   - Be open and transparent – public consultation is perceived as a facade

   - They have excellent people – let them do their job

   - They need to change their attitudes about dealing with the public

5. **What ideas to you have about how the Department can better engage stakeholders?**

- More face to face – opportunities for meaningful engagement
- Need to be more communicative on the progress of implementing the recommendations of the Lahey Report
- Provide leadership and transparency to have a respectful dialogue

6. **In your opinion, what is critical for the Department to do in order to demonstrate and improve transparency, openness, and accountability?**

- Public consultation and engagement
- Communicate objectives and outcome being sought whether it's legislation or policies
- Develop long-term plans and share them – people don't trust information on harvest view map
- Peer-reviewed research

7. **Have you contacted the Department to request information? What was it? What was your experience?**

- Stopped contacting as it is a futile exercise
- Contacted and waited a year for issue to be resolved – still no understanding of why / how decision was made
- I contacted the Department and they did not get back to me

8. **In your opinion, are there other jurisdictions in Canada or beyond that the Department should look to when developing best practices in communications and engagement?**

- Sweden and Norway
- Department of Environment – Coastal Act
- City of Edmonton

External Stakeholders List

Stakeholder	Contact
Ecology Action Centre	Raymond Plourde, Wilderness Coordinator
Ducks Unlimited	Geoff Harding, Manager of Major Projects
Nature Nova Scotia	Bob Bancroft, President
Healthy Forest Coalition	Mike Lancaster, Stewardship Coordinator, St. Margaret's Bay Stewardship Association
Forest Nova Scotia	Jeff Bishop, Executive Director
Large Private Non-Industrial Landowner Group	Debbie Reeves, Co-Chair
Cape Breton Private Land Partnership	Kari Easthouse, Program Forester
Port Hawkesbury Paper	Bevan Lock, Fiber and Energy Mill Manager Allan Eddy, Director of Business Development
Registered Professional Foresters Association of Nova Scotia	Rob Young, Executive Director & Executive Team
Academia	Graham Forbes, Professor, Biodiversity and Wildlife
Federation of Anglers and Hunters	Mike Pollard, President
Nova Scotia Trails Federation	Vanda Jackson, Executive Director
Nova Scotia Road Builders Association	Gary Rudolph, Past President
Municipality (Annapolis)	Gregory Heming, District 5
Fire Service Association of NS	Jim Roper, President
Forest Ecologist/Author	Donna Crossland (resident)

Staff List

Staff Name/Position	Division/Branch
Sheldon Connolly, Resource Forester	Resource Management, Renewable Resources
Tracy Lenfesty, Head Librarian	Information Management and Support Services, Policy, Planning, and Support Services
Peter Geddes, Executive Director	Policy, Planning, and Support Services
Sandra Fraser, Parks Promotion and Development	Parks, Outreach, and Service Delivery, Regional Services
Lara Morris, Director	Organizational Strategy Renewal, Policy, Planning and Support Services
Allan Smith, Director	Resource Management, Renewable Resources
Tim Whynot, Outreach Manager	Parks, Outreach, and Service Delivery, Regional Services
Greg Slaney, Planning & Development	Organizational Strategy Renewal, Policy, Planning, and Support Services
Jo-Anne Anderson, Receptionist	Information Management and Support Services, Policy, Planning, and Support Services
Uli vom Hagen, Senior Corporate Strategist	Strategic Policy and Planning, Policy, Planning, and Support Services
Tom Soehl, Director	Aboriginal Policy, Policy, Planning, and Support Services
Randy Milton, Resources Manager	Wildlife, Renewable Resources
Reg Delorey, Area Manager (Cumberland)	Central Region, Regional Services
Mark MacPhail, Regional Forester	Eastern Region, Regional Services
Matthew O'Connor, Forest Resources Technician	Eastern Region, Regional Services
Sean Basquille, Provincial Biologist	Wildlife, Renewable Resources
Kim Huskins, Forestry Technician	Western Region, Regional Services
Deanna Nauss, Forestry Technician	Western Region, Regional Services

Staff Name/Position	Division/Branch
Peter Austin-Smith, Stewardship Coordinator	Wildlife, Renewable Resources
Don Cameron, Forester	Central Region, Regional Services
Chris Bailey, Manager, Forest Inventory	Forestry, Renewable Resources
Ryan McIntyre, Manager, Forest Management Planning	Forestry, Renewable Resources
Bruce Stewart, Manager, Forest Research and Planning	Forestry, Renewable Resources
Matt Parker, Director	Parks, Outreach, and Service Delivery, Regional Services
John Ross, Director	Fleet and Forest Protection, Regional Services
Tim McGrath, Forester	Forestry, Renewable Resources
Jane Kent, Forester	Forestry, Renewable Resources
Rob O'Keefe, Forest Resource Analyst	Forestry, Renewable Resources
Wayne Stillman, Acting Director	Surveys, Land Services
Erin Jones, Land Administration Officer	Land Administration, Land Services
Mark Pulsifer, Project Team Lead	Projects: Old Forests, Natural Disturbance Regimes, Forest Management Guide
Gerald Post, Director	Forestry, Renewable Resources
Tim O'Brien, Forester	Central Region, Regional Services
Jon Porter, Executive Director	Renewable Resources
Leslie Hickman, Executive Director	Land Services
Dan Davis, Director	Communications Nova Scotia
Mark McGarrigle, Regional Biologist	Central Region, Regional Services

Appendix B

Jurisdictional Review

Information Available	Nova Scotia	New Brunswick	Ontario	British Columbia	Maine	Victoria, Australia	New Zealand	Sweden
Map	Yes[1]	Yes[2]	No	Yes[3]	Yes	Yes	Yes	No[4]
Information Available in Harvest Map								
Areas of land with different licenses	No	No	No map available	Yes	No	No	Map requires login	No map available
National Parks	Yes	Yes		Yes	No	No		
Recreation Areas	No	No		Yes	No	No		
Provincial Parks	No	Yes		Yes	No	No		
Deer Wintering Areas	No	Yes		No	No	No		
Protected Natural Areas	Yes	Yes		Yes	No	No		
Wilderness	Yes	Yes		No	No	No		
Nature Reserve	Yes	Yes		Yes	Yes	No		
Formerly Designated Conservation Forest	No	Yes		Yes	Yes	No		
Forest Land Reserve	No	No		Yes	No	Yes		
Indian Reserves	No	No		Yes	No	No		
Special Management Areas	No	Yes		No	No	No		
Information on the different forest area licences	No	Yes		No	No	No		
Layers at the national level	No	No		No	No	No		
Layers at the regional level	Yes	Yes		Yes	Yes	Yes		
Age, height, species of woodlands	No	No		No	No	No		
Information on volume of land	Yes	Yes		No	No	Yes		
Crown Land and Parks	No	No		Yes	No	No		
Additional Notes	Note[5]	Note[6]				Note[7]		

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[1] Map visible on main page. Zoom in option lets users zoom in on their location in the map. Unclear as to how updated the map is.

[2] Map visible on main page. Zoom in option lets users zoom in on their location in the map. Unclear as to how updated the map is.

[3] Includes information for conservation lands, First Nation Interests (Indian Reserves), Forest Tenures (Christmas Tree Permit, Community Forest Agreement, Community Salvage Licence, First Nations Woodlands Licence, Forest Land Reserve, Forest Licence, Forest Recreation Site, Forest Recreation Trail, Forest Service Road, Forest Tenure Communication Sites, Forest Tenure Map Notation - Poly, Forestry Licence to Cut, Free Use Permit, Growth and Yield Permanent Sample Plots - Active, Occupant Licence to Cut, Oil and Gas Timber Licence to Cut, Pulp Licence, Real Property Project, Road Permit, Special Use Permit, Timber Licence, Timber Sale Licence, Woodlot Licence), Land Tenures (Crowd Land Lease, Crown Land Licence, Crown Land Reserves and Notations), Land use plans, Parks (Conservancy Areas, Ecological Resources, National Parks, Protected Areas, Provincial Parks, Recreation Areas, Conservation Study Area, Range Interests, Resource Stewardship.

[4] http://pxweb.skogsstyrelsen.se/pxweb/en/Skogsstyrelsens%20statistikdatabas/?rxid=03eb67a3-87d7-486d-acce-92fc8082735d

[5] Doesn't give users the option to view only each land type. Doesn't provide definition or explanation as to what the different categories mean.

[6] Provides definition and explanation of everything in the legend. Gives user the option to specify what kind of land they want to view. The user guide is available in the map.

[7] Shows approved timber release plan boundaries for current, current regeneration and log storage facility. Shows Vic Forest Regions, Local Government Shire, and Defined Forest Areas.

Communications and Engagement Strategy, prepared by DG Communications for the Department of Lands and Forestry

Information Available	Nova Scotia	New Brunswick	Ontario	British Columbia	Maine	Victoria, Australia	New Zealand	Sweden
Silviculture Systems Included on Harvest Map								
Commercial Thinning	Yes	Yes, as of Feb 2015	No map available	No	No	No	Map requires login	No map available
Group Selection	Yes	No		No				
Individual Tree Selection	Yes	No		No				
Overstory Removal	Yes	No		No				
Partial Harvest/Other	Yes	No		No				
Salvage Harvest	Yes	No		No				
Variable Retention	Yes	No		No				
Shelterwood	Yes	No		No				
Additional Notes	Note[8]	Note[9]	Note[10]	Note[11]	Note[12]			
Functions on Harvest Map								
Option to request for information	Yes	No	No map available	Yes	Yes	No	Map requires login	No map available
Option of different map base layers	No	Yes		Yes	No	Yes		
Ability to print map	Yes	No		Yes	Yes	No		
Input address for more targeted location	Yes	Yes		Yes	Yes	Yes		
Input Coordinates for more targeted location	Yes	No		No	No	No		
Draw and Measure	Yes	Yes		Yes	Measure only	No		
Video Tutorial	No	No		Yes	No	Yes		
Zoom in/Zoom out	Yes	Yes		Yes	Yes	Yes		
Option to Digitally Send information	No	No		No	No	Yes		
Submit information for map	Yes	No		No	No	No	Yes	

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[8] Does not give users to the option to view only one harvest type. Also some areas have no information while others only provide the following: Protected areas: PGPI: 08-35-00035, FCODE: 163, Hectares: 8,406.57, Acres: 20,773.08.

[9] Information about how the forests are harvested isn't included. When an area is clicked it shows the name of the area and the hectares.

[10] Provides yearly graph with information on clearcut selection and shelterwood. Information is also provided that explains the different types of harvesting systems.

[11] Doesn't provide information on where the silviculture systems are but provide an explanation for the different types of silviculture, https://www.for.gov.bc.ca/hre/stems/silvic.htm

[12] Silviculture system information isn't included in the map.

Information Available	Nova Scotia	New Brunswick	Ontario	British Columbia	Maine	Victoria, Australia	New Zealand	Sweden
Forest Ecosystem Classification								
Soil Types Information	Yes[13]	No[14]	Yes[15]	Yes[16]	Yes[17]	No	No	No
Soil Type Diagnostic Tool	No	No	Yes	No	Yes	No	No	No
Ecosites Information	Yes[18]	No	Yes[19]	Yes[20]	Yes[21]	No	No	No
Vegetation Types Information	Yes[22]	No	No	Yes[23]	No[24]	No	No	No
Using Vegetation Types Guide	Yes[25]	No[26]	No	No[27]	No	No	No	No
Choose by Forest Group Tool	Yes[28]	No	No	No	Yes[29]	No	No	No
Successional Development	Yes[30]	No	Yes	No	Yes[31]	No	No	No
Coarse Woody Debris and Snags	Yes[32]	Yes[33]	Yes[34]	Yes[35]	No	No	No	Yes[36]

[13] In 2000 the Nova Scotia Department of Natural Resources (NSDNR) began a long-term project to systematically identify and describe stand-level forest ecosystems in Nova Scotia – known as the Forest Ecosystem Classification (FEC) project. Soil types is part of the publication.

[14] There is limited information on the different soil types and their uses.

[15] Provides a soil testing site and soil diagnostics page under Ontario Ministry of Agriculture Food and Rural Affairs.

[16] Provides overview on soil types. Information provided on external site. https://governmentofbc.maps.arcgis.com/apps/MapSeries/index.html?appid=cc25e43525c5471ca7b13d639bbcd7aa

[17] Provides questionnaire to help determine different soil types. Also provides specific soil information on the specific tree species.

[18] The information is available but it is through PDF link that can be lost with the text. The information itself also isn't very easy to process.

[19] Only provides information on some ecosites not of the ecosites all in Ontario. The latest version found was created in 1997.

[20] Provides overview on ecosites classification. Information provided on external site.

[21] Doesn't provide general information only provides site characteristics of the specific species.

[22] Provides terminology for the various forest groups.

[23] Yes provides information on vegetation but not the specific sites. Information provided in external website. https://www.for.gov.bc.ca

[24] Information is specific to the tree species. Information is found under Natural Community Factsheets. (Link: https://www.maine.gov/dacf/////mnap/features/commsheets.htm).

[25] Instructions on how to use guide. Provides terminology glossary and vegetation type fact sheet.

[26] Does not provide instructions on how to use guide.

[27] Does not provide general information on how to use the vegetation guide.

[28] This page provides information on the different forest groups in Nova Scotia. When a specific forest group is selected it provides information on the concept, vegetation, environment setting, successional dynamics and ecological features.

[29] Information is specific to the tree species. Information is found under Natural Community Factsheets. (Link: https://www.maine.gov/dacf/////mnap/features/commsheets.htm).

[30] Provides successional development information for various forest groups, but unsure as to how updated the information is.

[31] Only an overview of early successional development characteristics are provided in a PDF document. (Link: https://www.maine.gov/dacf/mnap/features/communities/aspenbirch.htm)

[32] Provides data of deadwood for the various forest groups in Nova Scotia. No date as to when this information is updated.

[33] Yes, information is provided about the management of woody debris but no data is provided on woody debris by forest groups.

[34] This indicator provides information on the amount of fallen woody plant material in managed and unmanaged forests. (2009 - 2013) https://www.ontario.ca/page/downed-woody-material

[35] PDF that provides guidance for managing coarse woody debris (CWD) on crown forest land in British Columbia. This guidance is intended to inform resource professionals and is not binding on licensees or practitioners. It does not constitute legal advice.

[36] Only statistical data is available.

Glossary	Yes	No[37]	No	Yes[38]	Yes	No[39]	Yes	No
Information Available	**Nova Scotia**	**New Brunswick**	**Ontario**	**British Columbia**	**Maine**	**Victoria, Australia**	**New Zealand**	**Sweden**
Timber Management								
Harvesting Information	Yes[40]	Yes[41]	Yes[42]	Yes[43]	Yes[44]	Yes[45]	Yes	Yes
Videos on Harvesting Process	No[46]	No	No	No	Yes	Yes	No	No
Provides information on forestry management and selection	Yes	Yes	Yes	Yes	Yes	Yes	Yes[47]	Yes
Information on importing and exporting forestry products	No	No	Yes[48]	Yes	No	No	Yes	No
Information on Harvesting Licenses	No	Yes	No	Yes	No	No	No	No
Forestry Annual Report	No	Yes, last one was in 2016	Yes, last one was in 2013	No	Yes	Yes	No	No
Forestry Audit	No[49]	Yes[50]	Yes[51]	Yes[52]	No	Yes	No	Yes[53]
Data that shows allowable harvest area and areas harvested by silviculture system	Yes[54]	No	Yes[55]	No	No	Yes[56]	Yes	No

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[37] No glossary specific to forestry.

[38] Updated in 2008 Link: https://www.for.gov.bc.ca/hfd/library/documents/glossary/

[39] But most of the website is in plain-language and easy to understand.

[40] Provides information for uneven-aged management, selection management, tolerant hardwood selection, even-aged management, softwood commercial thinning trial/surveys

[41] Provides information on licenses, evaluation, links to Harvest Map, also include information about forest audits.

[42] Table showing the allowable harvest area and the total area harvested by silviculture system including clearcut, selection and shelterwood. https://www.ontario.ca/page/harvest-area

[43] Only provides general information that informs public about the different types of harvesting practices. Link: https://www.for.gov.bc.ca/hfp/publications/00062/page2.htm

[44] Information provided as resources to forest managers. https://www.maine.gov/dacf/mfs/policy_management/information_sheets.html

[45] Information about the different silviculture system is covered, includes information on Vic Forestry process to sustainable management - the planning process, proposed timber release plan, public consultations, review of stakeholder feedback, approval of plan, and coupe plan.

[46] Only for softwood commercial thinking.

[47] Getting started in Farm Forestry guide and taking care of your forest.

[48] Only for exporting.

[49] Only includes Forest Health Report (2004).

[50] Forest operations compliance audit performance indicators.

[51] Forest audit review and performance indicators.

[52] Forest audit review on timber sales and forest conditions.

[53] Cost for measure in forestry.

[54] Information is in harvest map.

[55] Table showing the allowable harvest area and the total area harvested by silviculture system including clearcut, selection and shelterwood. https://www.ontario.ca/page/harvest-area

[56] Information of approved harvest areas is included in Timber Release Plan 2019.

Information Available	Nova Scotia	New Brunswick	Ontario	British Columbia	Maine	Victoria, Australia	New Zealand	Sweden
Timber Management (continued)								
Silviculture Information	Yes[57]	Yes[58]	Yes[59]	Yes[60]	Yes[61]	Yes[62]	Yes	Yes[63]
Selection Management / Forest Management Guide	Yes[64]	Yes[65]	Yes[66]	Yes	Yes	Yes[67]	Yes	Yes
Growth and Yield Model	Yes[68]	No software, but there is information[69]	Yes[70]	Yes[71]	No	No	Yes	Yes[72]
Policy/ Code of Forest Practice Information	Yes[73]	Yes[74]	Yes[75]	Yes[76]	Yes	Yes	Yes	Yes

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[57] Provides a couple of Silviculture guides and reports.

[58] Provides stats on growing trees (2007), crown forest (2007), statistics (2007 - 2008).

[59] Manual outlines Ontario's silvicultural effectiveness monitoring system. It includes 2 examples of methodologies that can be used to determine when a stand can be declared free-to-grow.

[60] Resources that provide an overview of silviculture. Covers silviculture strategies, sustainable forest and timber management goals and objectives, stocking standards, tree species selection project, tree species selection tool, silviculture surveys in BC, silviculture systems in BC, Silviculture Statistics, Summary of Harvesting, Planting and Regeneration Trends for Western Redcedar in Coastal TFLS and TSAS 1991 to 200 PDF. Tree planting and procedures.

[61] Provides explanation on the different silviculture systems.

[62] Only provides overview of the different silviculture systems and how they are used.

[63] In forestry statistics report.

[64] Provides information on trials initiated, treatment options and links to different forest management guides. Updated 2018.

[65] Information is provided as part of the Forest Manage guide created in 2004.

[66] Yes information is included in PDF. Forest Management Planning Manual updated in 2017, PDF. Forest Operations and Silviculture Manual 2017.

[67] Yes, covers policies, procedures, and instructions.

[68] The model predicts the yields of forest stands when managed. It can be used to develop silvicultural treatment guidelines and to determine the sustainability of forest management programs by incorporating into forest level analyses. The model has been updated to include hardwood species and commercial thinning of softwoods that have previously been commercially-thinned.

[69] No software. Growth and yield information on 2012-21 Forest Management Plan for Crown License 7.

[70] Provides information through forest indicator program. Indicators to help keep track of progress towards sustainable forest goals. Goals: Conserving biological diversity, Maintaining forest productivity and resilience, Conserving forest soil and water resources, Monitoring forest contributions to global ecological cycles, Providing economic and social benefits from forests, Accepting social responsibilities for sustainable forest development, Enhancing the framework for sustainable forest management. Link: https://www.ontario.ca/page/state-ontarios-natural-resources-forests-indicators.

[71] The Government of British Columbia develops and maintains a suite of stand-level models and tools to predict the growth and yield of the province's future forests. These predictions play a key role in supporting sustainable forest management decision making by government and its forest licensees in many areas, including: Forest and timber-supply analysis, Forest inventory, Silviculture planning. Tools (Tree and Stand Simulator, Table Interpolation Program for Stand Yields, Variable Density Yield Projection, Financial Analysis of Silviculture Investment and Economic Return, Site Index Tools for BC Tree Species).

[72] Information in quality of growth report.

[73] Includes Code of Forest Practice (2012) document, links to various silviculture management guides.

[74] Harvest policies included in forest management manual for NB crown lands. Most updated 2014.

[75] Information included in the following documents: Ontario's forest policies support provincial and national commitments to sustainable forest management and biodiversity conservation. Policy Framework for Sustainable Forests, Forest Resource Assessment Policy, Old Growth Policy for Ontario's Crown Forests, Forest Compliance Handbook (includes Forest Compliance Strategy), Forest management guides.

[76] Includes an operational planning regulation docx, Pruning Guidebook, Spacing Guidebook and Special Management Strategies documents.

Information Available	Nova Scotia	New Brunswick	Ontario	British Columbia	Maine	Victoria, Australia	New Zealand	Sweden
Timber Management (continued)								
Publications and Presentations (Resources page)	Yes[77]	Yes[78]	Yes[79]	Yes[80]	Yes	Yes[81]	Yes	Yes
Indigenous Forestry	Yes		Yes	Yes	No	Yes, limited details	Yes	No
Pre-treatment assessment software	Yes[82]	No	No	No, but pre-commercial thinning guidelines	No	No, but pre-harvest surveys	No	No
Wind exposure report	Yes	No	No	No	No	No	No	No
Soil type data on map (Surficial Geology)	Yes	No	No	Yes	No	No	No	No
Wind exposure data on map	Yes	No	No	No	Yes	No	No	No
Contact Information	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Others								
Cost of stumpage and timber	Yes	No	Yes[83]	Yes	Yes, in Stumpage Costs report	Yes	Yes, but only for exporting	No

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[77] Information here includes forest research reports, handbook guides, models, workshops, conferences, field tours and consultations. The information here is targeted towards Nova Scotia's forest managers, including those responsible for private and crown land.

[78] Full list here https://www2.gnb.ca/content/gnb/en/departments/erd/Publications.html

[79] Not everything is listed on one page. Unable to list all but it covers Forestry reports from the Ministry of Natural Resources and Forestry. These reports are related to forest health, management, resources, wood supply and other topics. Guides for forest managers.

[80] Guide, reports, research are all listed. Full list here: https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/visual-resource-management/visual-resource-research-publications?keyword=forestry&keyword=publications

[81] Yes various resources are available to forest managers.

[82] Language can be clearer. If it is pre-commercial thinning say that it is.

[83] https://www.ontario.ca/data/crown-timber-charges-forestry-companies

Communications and Engagement Strategy, prepared by DG Communications for the Department of Lands and Forestry

Social Media Scan

Information Available	Nova Scotia	New Brunswick	Quebec	British Columbia	Maine	Victoria, Australia	New Zealand	Sweden
Facebook	Only for woodlands management program	Yes	Yes	Only covers BC forest fires	Yes	No	Not specific to Forestry[84]	Yes
Twitter	Yes	Yes	Yes	Only covers BC forest fires	Yes	Yes	-	Yes
Instagram	No	No	No	No	Yes	No	-	Yes
LinkedIn	No	No	Yes	No	No	Yes	-	No
Youtube	No	No	Yes	No	Yes	Yes	-	No
Educational	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
Informational	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
Frequency	Yes	Yes	Yes	No	Yes	No	-	Yes
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
Visually Appealing	No	No	Yes	No	No	Yes	-	Yes
Engaging (Low/Medium/High)	Low	Low	Medium	Medium	Low	Medium	-	Medium
Notes on social media content	Note[85]	Note[86]	Note[87]	Note[88]	Note[89]	Note[90]	-	Note[91]

[84] Falls under primary industries which covers aquaculture, forestry, land care and farm management, honey and bees, livestock and animal care, wild food, game and home kill, wine, dairy, plant products and fisheries.

[85] Largely informative featuring mostly burn maps and posts about camping and parks.

[86] Provides infographics and re-shares information from other sources on environmental sustainability. Also uses social media to promote workshops and infographics related to forestry.

[87] Provides behind-the-scenes posts on the employees and the events the department is taking part in, re-share articles about the species in Quebec and the rules (e.g. regulatory information surrounding fishing, and posts about diseases affecting the species in Quebec).

[88] BC has a page specifically dedicated for providing both educational and informational content for its audience. Compared to NS their posts are more appealing and receive higher engagement.

[89] Is part of the agriculture, conservation and forestry department. Shares events related to their department, and PSAs on wildfires.

[90] Information about fire safety, posts about participation in events, re-shared posts about construction, facts about sustainable forest management.

[91] Shares job postings, news related to the forestry industry in Sweden, informational posts on any advancement in the forestry industry.