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Prepared under the Authority of the Crown Forest Sustainability Act, 1994

May 2020

Ministry of Natural Resources and Forestry

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1 **Foreward**

3 **The Policy Framework for Sustainable Forests**

5 The overall context for forest management in Ontario is the Policy Framework for Sustainable
6 Forests that was approved by Cabinet in 1994. The framework sets broad direction for forest policy
7 and makes forest sustainability the primary objective of forest management. It helps to address
8 climate change by ensuring Ontario’s forests contribute positively to the global environment. This
9 contribution is made through the application of the principles for sustaining forests.

11 **Overview of the *Crown Forest Sustainability Act***

13 The *Crown Forest Sustainability Act, 1994* (CFSA) came into effect on April 1, 1995. The Act is
14 enabling legislation, and provides for the regulation of forest planning, information, operations,
15 licensing, trust funds, processing facilities, remedies and enforcement, and transitional provisions.
16 The CFSA is designed to allow for the management of all forest-based values, while providing for
17 the sustainability of Crown forests. The CFSA defines sustainability as long-term Crown forest
18 health, and reflects the broad direction set out in the Policy Framework for Sustainable Forests.

20 **A Manual Approach to Implementation of the *Crown Forest Sustainability Act***

22 The CFSA requires the provision of four manuals to guide various aspects of forest management in
23 Ontario. These manuals are prepared in accordance with Section 68 of the Act and are regulated in
24 accordance with Section 69(1) 29:

- 26 1. The Forest Management Planning Manual (FMPPM);
- 27 2. The Forest Information Manual (FIM);
- 28 3. The Forest Operations and Silviculture Manual (FOSM); and
- 29 4. The Scaling Manual (SM).

31 The FMPPM is the pivotal document that provides direction for all aspects of forest management
32 planning for Crown lands in Ontario within management units designated under the CFSA, with the
33 exception of the southern Ontario management unit.

35 The FIM describes the information requirements the MNRF has to support forest management. The
36 FIM also provides for the sharing and exchange of forest-related information between the MNRF
37 and Ontario’s forest industry.

39 The FOSM sets out the over-arching principles and accepted approaches for forest
40 management, the standards for forest operations and silvicultural practices, the minimum
41 qualifications for forestry workers, and the procedures for the evaluation of forest
42 management in Ontario.

1 The SM contains instructions and standards for the measurement of Crown forest resources,
2 provides instructions for the authorized movement of Crown forest resources and sets out the
3 requirements for conducting scaling audits.

4 5 **Manual Revision**

6
7 The four manuals are revised, improved, and updated based on experiences in using the manuals,
8 and as new information becomes available. Revisions to the manuals will be made in accordance
9 with the CFSA regulation requiring public review and comment.

10 11 **Forest Management**

12
13 Forest Management is conducted in an adaptive management cycle. A FMP is prepared by a
14 plan author, who is assisted by an interdisciplinary planning team. The plan author must be a
15 registered professional forester, who certifies that the FMP has been prepared in accordance
16 with the FMPM. The FMP is implemented as scheduled in the annual work schedule and as
17 reported in the annual report. Following year five, the implementation of the FMP to date is
18 assessed and a determination is made as to whether the implementation of the FMP has
19 provided for the sustainability of the Crown forest and recommendations for future planning
20 are provided. The next FMP is prepared in consideration of recommendations from the year
21 five annual report; changes to the forest condition; updates to science and policy; and specific
22 efforts to confirm, update, or revise management objectives and practices.

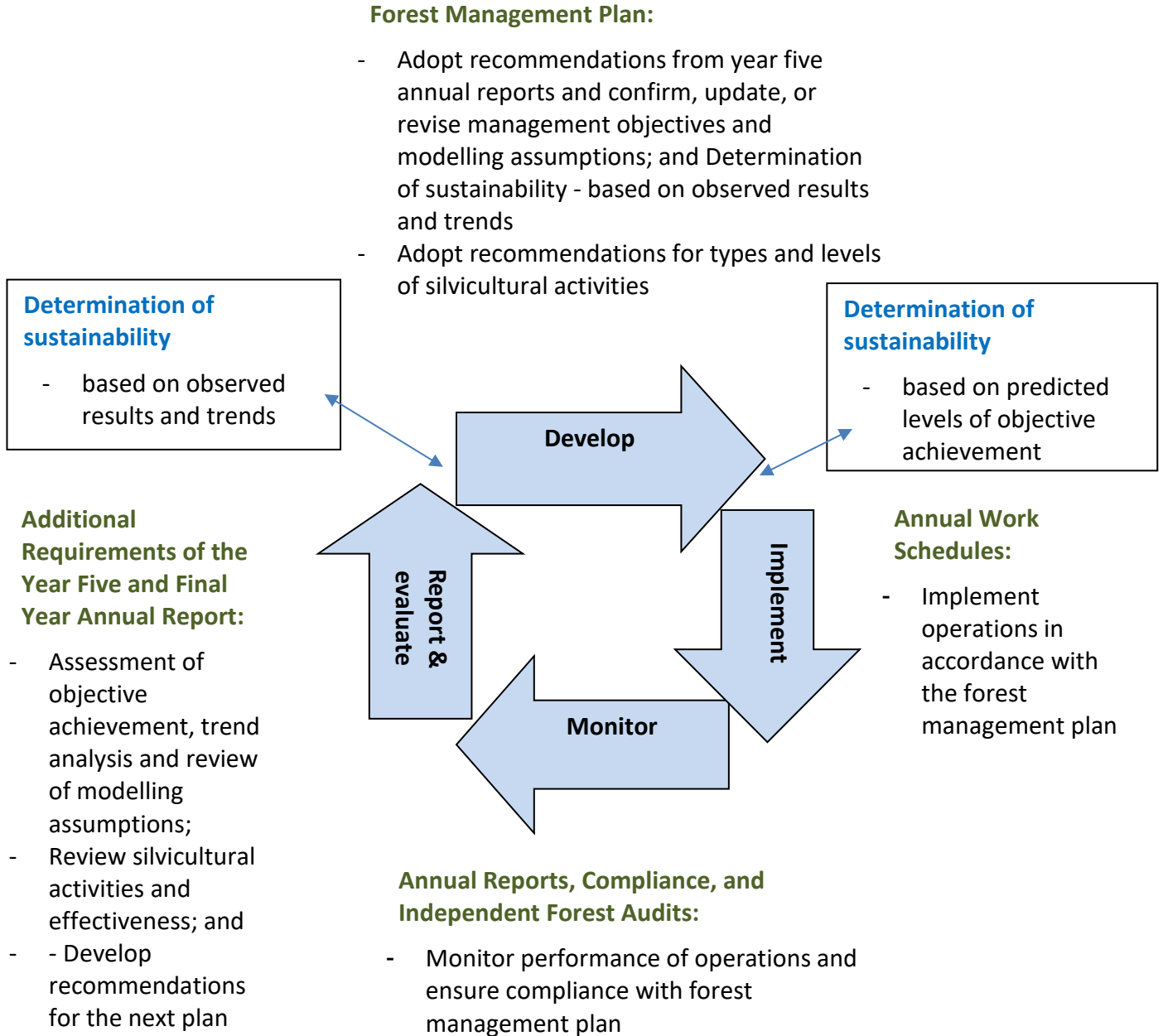
23
24 The MNRF and forest licensees who prepare and implement forest management plans are
25 highly trained and hold credentials (i.e., certification and professional licenses). To enable a
26 more competitive and efficient forest management planning process MNRF and the forest
27 industry must be risk-tolerant, results oriented, and recognize professional accountability.

28
29 MNRF will ensure that professional and technical training programs related to the preparation
30 and implementation of forest management plans are maintained and delivered so that the
31 knowledge of persons involved in the application of this manual is current.

32
33 Figure 1 provides an overview of the adaptive management cycle as it pertains to the provision of
34 forest sustainability in FMPs.

1 **Figure 1: Adaptive Management Cycle**

2
3
4



5
6 **Climate Change Considerations**

7

1 Healthy, resilient forests are best able to resist and adapt to climate change impacts. Ontario's
2 sustainable forest management framework has been designed to ensure a healthy, and
3 therefore, resilient forest. At the foundation of that framework is the CFSA that directs the
4 conservation of large, healthy, and diverse forests and their associated ecological processes and
5 biological diversity. Building from this foundation, the forest management guides - which are
6 required to be used by each planning team when they develop a FMP - describe in more detail
7 the objectives (e.g., diverse range of forest types and ages) and practices (e.g., conserve soil
8 and water resources) that are consistent with a healthy, resilient forest. The FOSM then
9 describes the standards used to incorporate Ontario's sustainable forest management
10 framework into local decision making. All of this direction provides the flexibility to adapt local
11 forest management actions to both resist and respond to potential climate change impacts.
12 Regular monitoring, including that specified in this FOSM, provides the necessary feedback to
13 evaluate the effectiveness of local decisions and Ontario's overall sustainable forest
14 management framework in achieving healthy and resilient forests.

15
16 The MNRF undertakes a program of effectiveness monitoring for the forest management guides
17 to ensure that the direction in the guides is effective. The MNRF also considers the latest
18 science during the reviews of forest management guides, including climate change research.
19 Ontario's State of Natural Resources reporting supports the government's efforts towards
20 climate change mitigation through the sharing of information and reporting on forest carbon
21 balances.

22
23 In addition, the way Ontario's Crown forests are managed can influence the amount of carbon
24 that is released into the atmosphere and stored in trees and harvested wood products – i.e.
25 mitigation. Sustainable forest management, supported by the framework described in this
26 FOSM, can help mitigate climate change.

27
28 The MNRF continues to improve the understanding of climate change and its effect on
29 Ontario's Crown forests working with other agencies and partners on research studies and
30 sharing information. The sustainable forest management framework will be adapted to reflect
31 this improved understanding over time to ensure the long-term health of Ontario's Crown
32 forests.

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1
2 As part of an adaptive management approach, Ontario supports and undertakes scientific
3 research (e.g. forest genetics, aquatic and terrestrial ecosystems, nutrient dynamics, ecosystem
4 classification, forest inventories, climate change, silviculture, etc.) and monitoring (e.g. forest
5 health, silviculture effectiveness, fish and wildlife, growth and yield, etc.) in order to continually
6 improve its understanding and implementation of the forest management system, and to
7 ensure evidence-based policies are informed by the best available science.

8
9 Effectiveness Monitoring

10
11 The effectiveness of all of FOSM’s associated policies will be monitored (e.g. compliance,
12 silviculture monitoring, IFA’s, etc.). New or revised Forest Management Guides will include a
13 description of the approach to effectiveness monitoring.

14
15 The Forest Management Guide effectiveness monitoring program evaluates outcomes and
16 relies on hypothesis-based monitoring to test how well direction in the guides produces
17 intended results. Guide effectiveness monitoring is often designed, led, and implemented by
18 MNRF science staff with direction regarding the principles of study design, study area selection,
19 and areas of critical uncertainty provided by the Effectiveness Monitoring of Forest
20 Management Guides Strategic Direction (Rempel et al 2011). Guide effectiveness monitoring
21 studies may also be conducted by other research organizations or scientists such as the federal
22 government and universities and often relies heavily on monitoring and other information
23 collected by forest industry.

24
25 Effects Monitoring

26
27 While effectiveness monitoring is testing a policy’s ability to achieve stated objectives, effects
28 monitoring includes more general outcomes in both natural (e.g. conservation of soil and water
29 resources) and human (e.g. continuity of angling opportunities) systems. Effects monitoring
30 includes both unanticipated effects and anticipated effects not related to the objective of the
31 policy.

32
33 Effects monitoring is done, as needed and where appropriate, through monitoring and scientific
34 studies to survey and record the effects of certain operations. The knowledge gained is then
35 incorporated into the relevant policy document. Such monitoring and scientific studies may be
36 conducted by MNRF or by other organizations (e.g., federal government, universities, forest
37 industry, or other forest research organizations).

