



LESSON SUMMARY

Students will research and analyze the social, economic and environmental impacts of forest management activities and defend a forest management project by preparing for a mock environmental assessment.

Activity Information

Estimated Duration:	Three class periods (one for introduction and discussion; one for project work and presentations; one for remaining presentations; homework as required)
Materials:	Overhead acetates, markers, other presentation aids
Setting:	Indoors
Key Vocabulary:	Sustainability, forest ecosystems, crown forests, stakeholder

Teacher Background

Ontario's forests provide a wealth of values and opportunities for its citizens. They are managed for a broad range of uses, but to achieve sustainability, forest ecosystems must be maintained in a healthy state and the value of the forest to all users must be respected. These values include social, economic and environmental.

Ontario's forest management planning system for publicly owned Crown forests is based on a legal and policy framework that has sustainability, public participation, Aboriginal involvement and adaptive management as key elements. The **Crown Forest Sustainability Act (CFSA)** and the **Environmental Assessment Act (EA Act)** provide the legislative framework for forest management on Crown land in Ontario. The forest management planning requirements of the CFSA and the provisions of the Environmental Assessment approval under the EA Act are incorporated into the **Forest Management Planning Manual**, a regulation that is required under the CFSA. This manual provides the direction for preparing a forest management plan that is required to ensure a healthy, sustainable forest ecosystem. This means that all timber values, recreational values and social values within the planning area must be managed on a sustainable basis.

The province of Ontario has over 70 million hectares of forestland, of which approximately 49 million hectares are publicly owned Crown land. Approximately 29 million hectares of that Crown land is available for forest management activities. Crown land is the principal source of wood for Ontario's forest products industry. For management purposes, the Crown forest in Ontario is divided into management units. Individual forest companies holding a **Sustainable Forest License (SFL)** manage most of these units.

In order to begin operations on their license area, SFL holders must have forest management plan prepared and approved according to the sustainability criteria established by the **Ministry of Natural Resources (MNR)**. **Registered Professional Foresters (RPFs)** prepare forest management plans, with the help of a multi-disciplinary planning team, a local citizens committee and interested members of the public. RPFs are professionals who: carry out their duties in the public interest; are publicly accountable for their actions; maintain high standards of professional practice; and work within a legislated Code of Ethics. A forest management plan contains long term management direction covering 20 years or more, as well as detailed operations for the initial five year term of the plan. Under this approved plan, the SFL holder will be responsible for: forest management activities of road construction, harvest, renewal and maintenance to take place on the proposed area; monitoring and reporting, subject to MNR regulations; as well as providing for the sustainable management of all recreational and social values.

Public consultation, a key component of Ontario's forest management planning process, includes the following provisions:

- Stakeholder and interest group representation on a local citizens committee to assist the planning team with the preparation of a forest management plan
- A formal public consultation process, including direct consultation with stakeholders and interested and affected parties about the planning of forest operations
- Provisions for special consultation efforts with Indigenous peoples
- A formal process for the resolution of issues
- A final opportunity to request that the Minister of Environment order an individual Environmental Assessment of specific proposed forest management activities

As the forest management plan is implemented, MNR and the SFL holder routinely monitor the effectiveness of forest operations. This ensures that: the plan is being followed; reports on the results of management activities are produced; and the effectiveness of management decisions in achieving stated objectives and forest sustainability is assessed. The results of the monitoring program are used to make necessary adjustments to the long term management direction and the planning of operations in a subsequent plan.

About Ontario's Environmental Assessment (EA) Process

Under Ontario's **EA Act**, any major new public or designated private project that will have an impact on the environment must first obtain environmental approval to proceed. The organization proposing the project must conduct a thorough analysis of the environmental impact of that project, as well as submit a report with the analysis to the **Ministry of Environment (MOE)** for review. The EA process is designed to ensure that the environmental impacts of such projects are kept to a minimum. If the project and its potential impact are large, a formal public hearing may be required before an **EA Board**.

Public consultation is an integral part of Ontario's EA process. As well as providing guidance on how the public should be consulted, the EA Act addresses how public concerns and contentious issues should be resolved during the environmental planning and assessment process.

About Class EAs

For public sector activities that recur frequently, as well as smaller scale projects, Ontario has developed a somewhat different process. This special approach - called a **Class EA** - specifies the environmental protection measures that must be taken whenever such recurring activities are being carried out.

The **Class EA** process ensures environmental protection for a wide range of activities, including: widening and constructing roads and highways; installing water and sewage treatment facilities; building or improving transmission and distribution facilities for electricity and natural gas; and conducting forest management operations.

About the Timber Class EA

The **Timber Class EA** approval covers recurring forest management activities, such as: building forest access roads; harvesting trees; conducting forest maintenance; and renewing the forest, including tree planting. It also provides guidance on the preparation, review and approval of forest management plans.

The **Timber Class EA** approval became operational by law in May 1994. This approval came after four-and-a-half years of detailed public hearings and was granted for an initial period of nine years. It expired in May 2003; the MNR then submitted a request to the Ministry of Environment for its renewal. The request was approved by way of a Declaration Order, effective June 25, 2003.

Since the **Timber Class EA** came into effect in 1994, MNR has made significant progress in its efforts to enhance sustainable forest management in Ontario. The forest industry is one of Ontario's most important assets. It is an economic mainstay in the northern and eastern regions of the province, supporting dozens of communities and providing about 70,000 jobs. The renewal of the **Timber Class EA** approval was vital to the MNR's goals, objectives and core business. It help to ensure the future success of the forest industry, the economic health of the communities in northern and eastern Ontario, and the well being of the provincial economy.

In this activity, students will carry out research on a forest company, assuming that the company will be going through an **Environmental Assessment** on one of their **Sustainable Forest License (SFL)** areas. Students must research what needs to be addressed in the EA process and the SFL itself.

Teacher Preparation

Photocopy **Preparing the Local Environmental Assessment** form- one for each group.

ACTIVITY

Step 1 Begin a discussion with your class about forest management in Ontario. Do your students know who is responsible for caring for the forest? What is the forest management planning process? Explain that the challenge of managing a whole, dynamically changing forest has many parts and they are about to explore how these parts fit together to help ensure sustainable forests.

Inform the class about **Class Environmental Assessments** and explain that Ontario's Ministry of Natural Resources went through a large scale Class EA in the early 1990's.

Step 2 Divide the class into groups. The first group will serve as the **Environmental Assessment Panel**. This panel's responsibilities will include: researching the EA process as it relates to forests, forest management, the forest industry, etc. Panel members will consider public input, certification, education, geography, forest ecology, etc.

Each of the remaining groups will represent different forest companies in Ontario that are preparing for an Environmental Assessment on parts of their Sustainable Forest License. Possible forest companies include: Abitibi, Tembec, Bowater, Domtar, Weyerhaeuser. Each group will be responsible for researching one company and its forest management activities, including: planning, silviculture, road construction, environmental regulations and other standard operating procedures.

Step 3 Hand out copies of the **Preparing the Local Environmental Assessment** form and discuss the guidelines that need to be covered. This form outlines the different components of the required research and describes how the groups need to prepare for their EA hearings.

Step 4 Each of the groups representing forest companies will prepare presentations, which will include the following:

- A description of the forest ecology of the land base
- A description of the potential social, environmental and economic impacts of the planned forest management activities
- An outline of how they will mitigate any negative outcomes from their planned activities

The **EA Panel** group will prepare a series of focusing questions to determine whether or not the project will receive approval and then identify the Terms and Conditions of each project to ensure sustainability.

Students in all the groups will prepare a written evaluation of each of the presentations, assessing the efforts by individuals and groups to achieve solutions to environmental problems. Students should choose which group they thought made the best presentation and explain the reasons for their choice.

Evaluation

The quality of students' work will be assessed on the following basis:

- | | |
|--|--|
| 1. Knowledge and understanding (30 marks) | Content of the EA presentation, based on the students' depth of research |
| 2. Communication (30 marks) | Presentation includes required components; proper spelling, grammar and punctuation; detailed focusing; comprehensive responses to questions from EA Panel |
| 3. Application (20) | Analysis of social, environmental and economic impacts |
| 4. Thinking and inquiry (20 marks) | Quality of delivery and originality of presentation; all proposed outcomes are addressed effectively |

Preparing the Local Environmental Assessment

You and your group partners represent a team of forest company employees who are preparing for an **Environmental Assessment (EA)**. Your group includes a forester, biologist, ecologist, planner and other related resource specialists. You are responsible for doing background research on your company's **Sustainable Forest License (SFL)** area and preparing a presentation to the **EA Panel**.

The steps you and your team need to follow to prepare for your EA presentation are as follows:

Select an example forest company (e.g. Abitibi, Tembec, Bowater, Domtar, Weyerhaeuser). Conduct preliminary research on that company to better understand its SFLs in Ontario and its forest management activities. Make sure you research the following:

- Forest management planning
- Silviculture
- Road construction
- Environmental regulations
- Other standard operating procedures

Select a portion of the company's SFL area to serve as the one that will have the EA

- Research and describe the forest ecology of your selected area
- Describe your planned forest management activities
- Describe the potential social, environmental and economic impacts of the planned forest management activities
- Outline how you and your team will mitigate any negative outcomes from your planned activities

Develop a presentation to deliver to the EA Panel that provides it with all your researched information. The panel will then determine whether you can proceed with your forest management activities and what the Terms and Conditions of the Environmental Assessment will be.