

# Forestry Road Management



# **Manitoba Conservation Forest Practices Guidebook**

## **FORESTRY ROAD MANAGEMENT**

January 2005

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Manitoba Water Stewardship  
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<http://www.gov.mb.ca/conservation/forestry/forest-practices/practices/fpp-guideline-pdfs.html>

# PREFACE

## MANITOBA FOREST PRACTICES

This guidebook has been developed as part of the Forest Practices initiative of Manitoba Conservation. The Forest Practices initiative of Manitoba Conservation, led by the Forestry Branch, is intended to provide consistent operational direction for resource managers, timber operators, natural resource officers, and auditors to conduct or assess forestry activities.

One of the primary goals of the Forest Practices initiative is to advance “best” practices through guidelines and standards for sustainable forest management activities in Manitoba. Guidelines present alternative procedures or standards that can be applied to satisfy the principle upon which the guidelines are based. Guidelines are used to develop prescriptions in the Annual Operating Plan and are enforceable by a Work Permit. Forest Practice Guidebooks ensure all forest resource values are appropriately addressed during the full range of forest activities.

Forest Practices Guidebooks are one of several references available to resource managers, timber operators, natural resource officers, and auditors. References include provincial guidelines as well as Forest Management Plans (FMP), Annual Operating Plans (AOPs) and Standard Operating Procedures developed by each forest company.

Representatives from several branches of Manitoba Conservation (Forestry, Wildlife and Ecosystems Protection, Environmental Approvals, Parks and Natural Areas, etc.), Manitoba Water Stewardship (Fisheries), the three major Forest Management Licensees in Manitoba (Tembec Industries Inc., LP Canada Ltd., Tolko Industries Ltd.), and the Forest Industry Association of Manitoba (representing timber quota holders) cooperate in a consensus seeking manner to develop Forest Practice Guidebooks. Regional specialists participate when meetings are held in their respective regions.

All guidelines for a specific forest practice are contained in a single guidebook. Each guidebook also contains pertinent references to science, legislation, policy, agreements, and licences. Recommendations for the planning, implementation, monitoring, and enforcement of the specific forest practice in question are included.

As much as possible the recommendations within each Forest Practice Guidebook:

- are based on scientific evidence
- are measurable
- are practical
- are flexible and applicable in a variety of ecological conditions
- are clearly presented to enable consistent interpretation and application
- contain accepted terminology and definitions

Forestry practices within Manitoba will be continuously monitored and appropriately amended when necessary.

Guidebooks can be found at the Manitoba Conservation Forestry Branch web site at [www.gov.mb.ca/conservation/forestry/forest-practices/fpp-contents.html](http://www.gov.mb.ca/conservation/forestry/forest-practices/fpp-contents.html). The public is encouraged to submit comments and recommendations.

# TABLE OF CONTENTS

<b>Preface</b> .....	ii
<b>Manitoba Forestry Road Management</b> .....	1
Purpose .....	1
Application and Implementation of Forestry Road Management Guidelines .....	1
Background .....	1
<b>Forestry Road Management</b> .....	1
Goal .....	1
Objectives .....	2
<b>Forestry Road Classification</b> .....	2
<b>Forestry Road Management Planning Process</b> .....	3
Forestry Road Planning .....	3
Forest Management Plans .....	4
Forestry Road Development Plans .....	5
Annual Operating Plans .....	6
Provincial Guidelines .....	8
Work Permits .....	8
Stream Crossings .....	9
Provincial Roads and Highways .....	9
Hydro Line Right-of-Way .....	9
Forest Roads Outside of Forest Management Licence Agreements .....	9
<b>General Construction Guidelines</b> .....	10
Road Location .....	10
Visual Barriers .....	11
Stream Crossings .....	11
Clearing Roadway and Salvage .....	12
Impact on Productive Forest Land .....	12
Miscellaneous .....	12
<b>Access Management</b> .....	13
Road Use Restrictions .....	13
Temporary Closure .....	14
Decommissioning .....	15
<b>Relevant Legislation</b> .....	18
Provincial Legislation .....	18
Federal Legislation .....	18
Forest Management Licence Agreements and Timber Sale Agreements .....	18
Environment Act Licences .....	18

## Appendices

I.	Forest Management Licensee Road Classification System .....	19
II.	Other Provincial Guideline Documents With Road Related References .....	20
III.	Provincial Legislation .....	21
IV.	Federal Legislation .....	23
V.	Environment Act Licences .....	25
<b>Glossary</b> .....		26
<b>References</b> .....		28

## TABLES AND FIGURES

<b>Table 1.</b>	Forestry road classification .....	3
<b>Figure 1.</b>	Forest Management Plan map .....	4
<b>Figure 2.</b>	Annual Operating Plan map .....	7
<b>Figure 3</b>	Forestry road used for the transportation of wood .....	10
<b>Figure 4</b>	An example of a temporary road closure .....	14
<b>Figure 5</b>	Forestry road prior to decommissioning (1992) .....	17
<b>Figure 6</b>	Forestry road post decommissioning (1998) .....	17

# FORESTRY ROAD MANAGEMENT

## PURPOSE

The purpose of this guidebook is to provide general guidelines for the planning, construction, and access management of forestry roads. This guidebook has been developed for forestry operations and in some cases will be applicable for other forest access development.

## APPLICATION AND IMPLEMENTATION OF FORESTRY ROAD MANAGEMENT GUIDELINES

Forest resource managers are expected to incorporate Manitoba Conservation Forestry Road Management Guidelines (2005) in timber harvest planning and operations. Manitoba contains a wide range of forest types, site conditions and other features. The Forestry Road Management Guidelines provide flexibility to accommodate the various resource values and site conditions in Manitoba. In reviewing and approving the Annual Operating Plans (AOP), Integrated Resource Management Teams (IRMTs) may vary the guidelines based on site-specific conditions.

Nothing in this document shall be construed so as to diminish, abrogate, infringe or derogate from existing Aboriginal or Treaty Rights as recognized and affirmed by section 35 of *The Constitution Act, 1982*.

## BACKGROUND

The need to consolidate and refine previous recommendations, resolve outstanding issues and address new issues in one forestry road management guidebook has been identified as one of the priorities of Manitoba Conservation. Many forestry road management recommendations and instructions have been introduced in a variety of provincial documents and during discussions in the past as well as during recent Forest Practice Committee meetings.

This guidebook consolidates requirements and references regarding forestry roads including:

1. guiding principles that are expressed through Goal and Objective statements
2. a classification system for forestry roads based upon function
3. the process of planning the development of forestry roads
4. general guidelines for forestry road construction
5. the management of access during or following forestry operations

## FORESTRY ROAD MANAGEMENT

### Goal

The goal of forestry road management is to manage access created for forestry while addressing the sustainability of other resource and social values.

## Objectives

1. To facilitate the sustainable harvest and renewal of timber resources.
2. To minimize the loss of productive forest land and area occupied by forest roads.
3. To minimize the number of years that non-permanent roads are in operation.
4. To address resource management values and issues during road development and management.
5. To minimize negative impacts on local fish and wildlife populations and habitat. To protect natural areas and habitats where rare and endangered flora or fauna have received designation and protection under either *The Endangered Species Act* or *The Species at Risk Act*.
6. To have companies effectively communicate with affected First Nation communities and other stakeholders in the process of planning and managing forestry roads.
7. To provide an acceptable level of access to Crown lands.

## FORESTRY ROAD CLASSIFICATION

To facilitate the communication of provincial guidelines for forestry roads, a common set of descriptive terms for forestry roads has been developed. Three road classifications (Table 1) will be used to describe forest roads within this guidebook and in the road planning review process. These classifications are based upon the basic function of the forest road. Forest companies in Manitoba have historically maintained their own classification system for forestry roads (Appendix I). Forest companies may maintain unique road classification systems for internal purposes.

Definitions and requirements of each forestry road must be as detailed as possible while enabling appropriate application in unique forest conditions. All secondary or tertiary forest roads are not alike. Two roads with the same description may differ with respect to requirements such as duration of operation, season of use, access requirements, road use restrictions, temporary closure, decommissioning and roadway revegetation which may be negotiated with regional Integrated Resource Management Teams.

**Table 1.** Forestry road classification.

	<b>PRIMARY</b>	<b>SECONDARY</b>	<b>TERTIARY</b>
<b>Description</b>	General access throughout the forest	Access to and within operating areas	Access to and within harvest blocks
<b>Duration</b>	Permanent	Three or more years	Generally short term
<b>Season of Use</b>	All weather or winter	All weather or winter	Usually seasonal or winter

## **FORESTRY ROAD MANAGEMENT PLANNING PROCESS**

The forestry road planning process involves three planning phases:

Forest Management Plans (FMP) describe in general the company’s strategies and activities for the duration of the long term plan including harvest operations, proposed road access and standard operating procedures.

Annual Operating Plans (AOP) describe in greater detail planned harvest operations and the forestry roads to be developed in association with these operations during the planning year.

Forestry Road Development Plans (FRDP) consist of maps, tables and text that describe all the existing and proposed roads within distinct geographic areas within a Forest Management Licence (FML). These plans will be referenced on a regular basis. Significant amendments to FRDP will be appended to existing plans.

### **Forestry Road Planning**

During the planning process all available resource values, which may require protection, must be identified and the concerns of First Nation communities and other communities addressed. The consequences of road development, positive or negative, should be identified during discussions. Other potential users of each road should be considered in order to satisfy more than one purpose, identify safety concerns and potentially consider fees for other commercial users.

During the planning process other issues should be addressed including:

1. access management, including retirement strategies with details of road decommissioning
2. the timing and sequencing of harvest
3. the pace and volume of harvest operations within the road network
4. future forest management responsibilities (ex: reforestation, surveys, fire protection)
5. options to mitigate potential negative impacts





8. maps of road networks to and within each operating area
9. maps of existing all weather and main access roads in the FML
10. the proposed duration and season of use of each forestry road system
11. the strategy for maintenance, temporary closure and/or decommissioning of forestry roads
12. locations and strategies for wood storage and processing areas within the FML

Guidelines for the development of FMP are provided by Manitoba Conservation Forestry Branch. Each company's standard operating procedures must be submitted with their FMP. The standard operating procedures related to forestry road development will describe the following:

1. center line clearing methods
2. right-of-way (ROW) clearing methods
3. debris disposal plans
4. construction standards
5. construction methods for water crossings
6. erosion control measures
7. visual buffer plans
8. borrow pit rehabilitation plans
9. monitoring and maintenance activities

If amendments to a FMP are required, application must be submitted to the Forestry and Environment Approvals branches of Manitoba Conservation.

### **Forestry Road Development Plans**

A FRDP is an effective tool for communicating road development and mitigating negative impacts on resource values in a given operating area. The plan takes into consideration the network of existing and proposed roads.

The distinction between a FRDP and a FMP is that a FRDP provides more detail for a specific operating area. FRDPs will cover the active period of timber harvesting until temporary road closure or road decommissioning are complete. Each FRDP will include:

1. a general description of the road development and timber harvest strategy
2. a description of the company's discussions with First Nations and local communities
3. the proposed periods of activity within the operating area (ex: 2015 – 2025)
4. a map showing the road system and indicating the designation of each primary, secondary and long term winter forestry road, as well as each water crossing
5. an indication of the active period for each road
6. an inventory of all stream crossings
7. a table identifying the amount of all classes of forestry road to be constructed
8. the access management strategy of the operating area and specific roads, including plans for road decommissioning
9. existing forestry roads
10. known resource values within the operating area

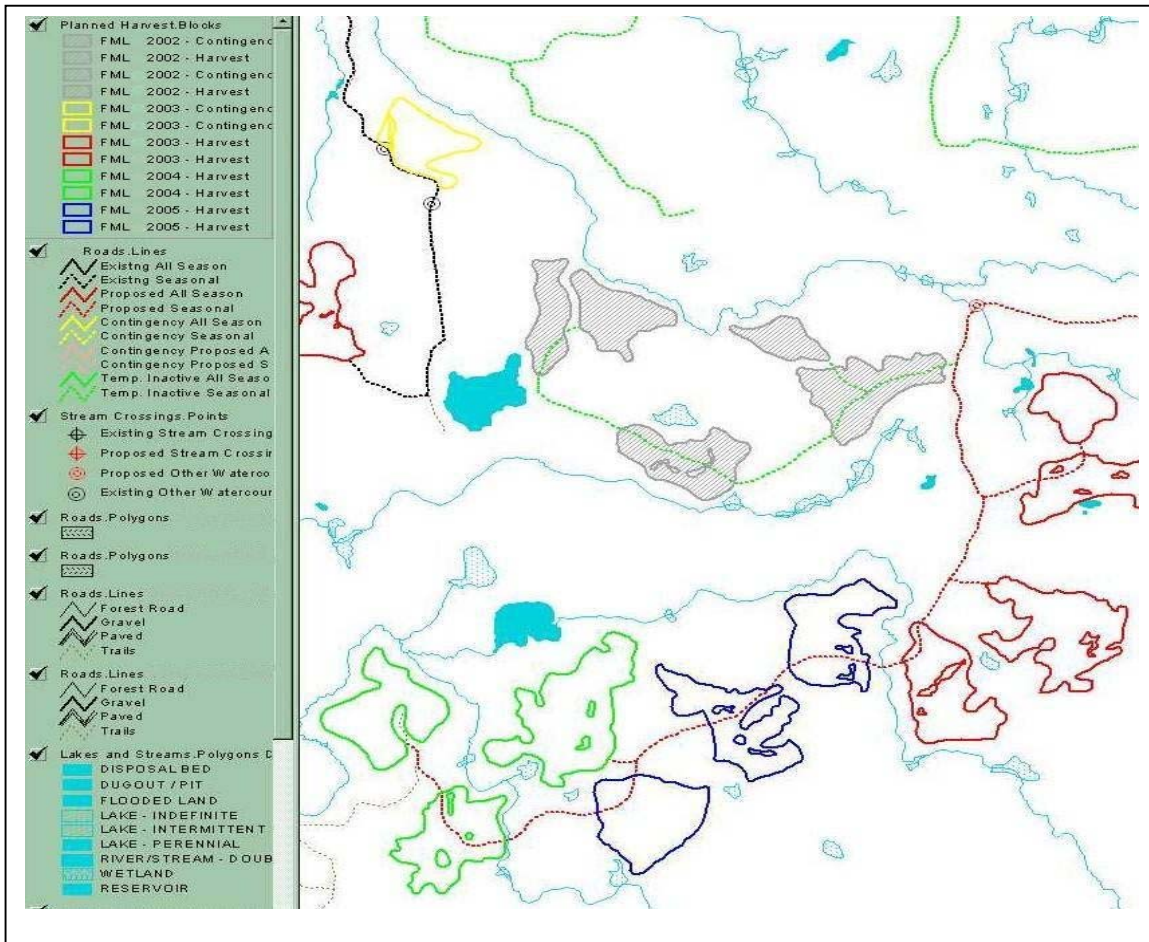
FRDPs are required for all new operating areas. Development of other FRDPs should be

prioritized to address areas of particular concern. Priority should be given to operating areas where a significant amount of new roads are being constructed, operating areas where significant values are at risk, or other operating areas as identified by Manitoba Conservation. Manitoba Conservation, in discussion with forest companies, will identify target dates for the submission of FRDPs.

Manitoba Conservation will provide comments to each company on the proposed activity within each FRDP. The establishment of an acceptable FRDP provides an expectation of the extent of forestry road development in a specific operating area.

### **Annual Operating Plans**

AOPs will indicate the location of all primary and secondary forestry roads to be constructed or improved during the operating year and projected during the next two years. The proposed location of all forestry roads between blocks should be indicated in an AOP at least one year prior to construction. Guidelines for the development of AOPs are provided by the Manitoba Conservation Forestry Branch. An example of an AOP map appears in Figure 2.



**Figure 2.** An example of an Annual Operating Plan map

For each primary and secondary road to be constructed, modified, or closed the AOP will indicate:

1. the specific location of roads proposed for construction within previously determined access corridors
2. the names and classifications of each road
3. the timing of construction
4. where possible in advance of operations, the specific location of major rock quarries, gravel and borrow pits
5. the location and construction methods and erosion control measures for watercourse crossings
6. the proposed operating period (years and seasons)
7. access management plans including signage
8. proposed closure dates and methods
9. how discussions on road development will continue where appropriate
10. where access for renewal will be required

IRMTs may also request some or all of the following details for specific roads:

1. the reasons a selected road location was chosen when more than one alternative is considered

2. center line clearing methods
3. ROW clearing methods and width
4. proposed merchantable timber utilization method for ROW clearing
5. debris disposal plans
6. visual buffer plans
7. erosion control measures
8. borrow pit rehabilitation plans
9. decommissioning and rehabilitation plan and schedule

IRMTs will provide specific comments to each company on forestry roads to be constructed or improved during the operating year, and in general, for those projected during the next two years. IRMTs will also identify roads and operating areas where special road management conditions will be required (ex: caribou wintering areas).

Manitoba Conservation Work Permits may contain specific conditions for road construction and/or access management proposed in the operating year. Timber inspections will determine if Work Permit conditions have been fulfilled on forestry roads.

Occasionally, situations develop or resource values are discovered after plans have been approved necessitating a change in an AOP. All amendment requests should be submitted to the IRMT. The IRMT or Manitoba Conservation Forestry Branch will grant approval depending upon the scope of change requested.

The forest resource inventory will be updated periodically to reflect the construction of primary and secondary roads.

### **Provincial Guidelines**

As part of the development of this Forestry Road Management guidebook, road related references found in other guideline documents have been reviewed and applicable references have been incorporated into this document. Other provincial guidelines documents with road related references are listed in Appendix II.

The Consolidated Buffer Management Guidelines (1996) and Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat (1996) are more comprehensive and have many road related guidelines. Forest road developers should continue to refer to these documents as required. These documents can be found on the Manitoba Conservation Forestry Branch web site at: <http://www.gov.mb.ca/conservation/forestry/forest-practices/practices/fpp-guideline-pdfs.html>

### **Work Permits**

Work Permits are issued by Manitoba Conservation IRMTs or district Manitoba Conservation offices for each harvest area and the roads and watercourse crossings associated with it. Work Permits are also issued for major crossings, road improvement and maintenance work not associated with specific harvest areas. Specific conditions are identified on each Work Permit.

**Stream Crossings**

Within AOPs stream crossing construction details and erosion control measures will be proposed. The IRMT will identify additional measures companies must follow to mitigate potential negative impacts. Authorization for Harmful Alteration, Disruption or Destruction (HADD) of fish habitat is required from the federal Department of Fisheries and Oceans under *The Fisheries Act*. Authorization is required from federal Coast Guard under *The Navigable Waters Protection Act* for crossings deemed navigable. When the IRMT determines that a crossing has the potential to negatively impact a downstream landowner a Water Rights Licence may be required.

**Provincial Roads and Highways**

Manitoba Transportation and Government Services must be consulted to gain approval for the construction of access connecting forestry roads to provincial roads and highways.

**Hydro Line Right-of-Ways**

Manitoba Hydro must be consulted for approval to develop forestry roads that pass underneath or along hydro line right-of-ways.

**Forest Roads Outside of Forest Management Licence Area**

Forest operators outside of FML areas require a Work Permit to develop forestry roads.



# GENERAL CONSTRUCTION GUIDELINES

General construction guidelines are provided to influence the planning and placement of forestry roads. Exceptions to these guidelines may be considered on a case by case basis. Wherever feasible, existing roads should be used to gain access to operating areas, operating blocks and cut blocks.

Resource values will be identified by the IRMT in response to the road development and harvest areas projected in AOPs. The IRMTs knowledge regarding the location and extent of the resource values will be communicated in order for company planners to refine subsequent AOPs. Companies will determine the measures required to mitigate potential negative impacts through communications with Manitoba Conservation and affected First Nations and local communities.

All roads should be constructed to the minimum specifications required to transport harvested wood, while protecting the environment. Specific road construction details are not provided in this document. Unless otherwise stated the following guidelines will apply as determined in discussion with the IRMT.



**Figure 3.** Forestry road used for the transportation of wood.

## **Road Location**

1. Every effort will be made to ensure there is a single point of access where primary and secondary roads enter an operating area or harvest block. Every effort will be made to ensure that tertiary and winter roads do not provide access between adjacent operating areas.
2. Tertiary roads should be restricted to one entrance and located to minimize visibility into the cut block.
3. Primary, secondary and tertiary roads should be constructed no nearer than 100 m

from the normal high water mark of streams, rivers, ponds and lakes unless a greater distance requirement has been identified on specific waterbodies.

4. The provincial *Endangered Species Act* states that it is illegal to harm or kill endangered, threatened or extirpated species, or to destroy their critical habitat. On those specific waterbodies which have resource values that have been identified by the IRMT, primary and secondary roads may have to be constructed farther away than 100 m. For example:
  - a) the limiting habitat of species of special concern, or threatened and endangered species
  - b) areas with special designation (ex: Wildlife Management Areas, Parks) and areas that are culturally sensitive
  - c) high value recreation areas
  - d) sensitive water quality
5. Some winter roads may be required to be constructed farther away from resource values that have been identified by the IRMT. ex: major ungulate wintering area or other unique and/or essential habitat
6. Specific resource values and the limiting habitat of species of special concern or threatened and endangered species should be avoided. The specific distance that all forestry roads must be kept away from these resource values will be determined in discussion with the IRMT.

### **Visual Barriers**

1. Visual barriers to minimize disturbance of wildlife will usually be required on primary and secondary roads.
2. Visual barriers to obstruct the view of the cut block may consist of regenerated forest stands (> 2 m tall softwood or 3 m tall hardwood), topographic features, merchantable and non-merchantable stands, and non-productive forest cover.
3. Visual barriers left along primary and secondary roads may be harvested when:
  - a) regeneration in the cut block reaches sufficient height (> 2 m tall softwood or 3 m tall hardwood)
  - b) operations in the area are completed, provided the road will be closed immediately after the harvest and prompt renewal
4. On secondary roads where access management occurs, visual barriers may not be required.
5. An alternative to leaving visual barriers would be to construct roads and harvest the forest located 100 - 200 m along the road. Harvesting the adjacent cut blocks may commence when visual barrier reaches sufficient height (> 2 m tall softwood or 3 m tall hardwood).

### **Stream Crossings**

1. All stream crossings must be designed in accordance with Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat (1996).
2. Appropriate erosion control to prevent or minimize environmental impacts will be implemented.
3. Where industry determines that a stream crossing construction plan, as identified in the AOP, is not feasible and must be altered, an amendment request should be filled out for review and approval.



4. Manitoba Conservation Work Permits may contain specific conditions for road construction and/or access management proposed in the operating year. Timber inspections will determine if Work Permit conditions have been fulfilled on forestry roads.

### **Clearing Roadway and Salvage**

1. The preferred center line clearing method is to harvest the timber.
2. Companies will request approval for alternative center line clearing methods on primary and secondary roads. The approved center line clearing methods will be identified on Manitoba Conservation permits. Damaging merchantable wood in center line clearing should be minimized. If shear blading is the approved center line clearing method, shearing merchantable timber must be at a height less than or equal to the minimum allowable harvest stump height.
3. If the IRMT determines during planning that trees are merchantable and there is a potential market (commercial product or public fuelwood), those tree species should be salvaged and piled roadside during road development.
4. If timber salvage is not required, alternative methods of disposing debris may be permitted.
5. If merchantable trees are destroyed during road construction, the IRMT may assess timber dues and charges (see Forestry Branch Circular D-1 Timber Removal or Destruction for Non-forestry Land Use and Forest Damage Appraisal and Valuation Procedures).

### **Impact on Productive Forest Land**

1. The width of a primary and secondary ROW should be minimized to prevent unnecessary loss of productive forest land. Companies will identify right-of-way widths in AOPs.
2. The network of roads should be minimized to prevent unnecessary impact or loss of productive forest land.
3. The size of a borrow pit or stockpile area should be minimized to prevent unnecessary loss of productive forest land. The IRMT may require these sites to be rehabilitated.

### **Miscellaneous**

1. Brush piles resulting from road construction should be compacted and buried or kept at least five meters away from the edge of standing timber.
2. Primary and secondary forestry road systems should have permanent signs placed at the start that indicate that it is a logging road and that drivers should exercise caution. When major haul operations are active an additional sign shall be put in place indicating that a log haul is in progress.

Where the protection of the environment, resource values and/or public safety are of particular concern, the IRMT may require any combination of access management, visual barriers, specific road location or harvest sequencing (ex: back to front) to regulate use of secondary roads

# ACCESS MANAGEMENT

Access management may be required at any time for the protection of the environment, resource values and/or public safety. Access management to regulate the use and management of resource roads is authorized through relevant legislation and Forest Management Licence Agreements (FMLA).

There are several provisions for restricting access on forestry roads:

- Section 27 (1) of *The Provincial Parks Act* authorizes the posting of signs to restrict travel or close any road or trail which includes for the protection of resource values.
- Manitoba Regulation 145/91 under *The Crown Lands Act* (Section 3 (2)) provides for the posting of signs to close a road to vehicle travel and the erection of gates or barricades as required.
- Section 78 of *The Forest Act* provides for the closure of forest access roads when, because of conditions such as weather, vehicle use could result in damage to the roads.
- Section 20 (1) of *The Wildfires Act* provides for closure of an area to protect land, property or public safety during the wildfire season.
- Subsection 2.1 (2) of the General Hunting Regulation, Manitoba Regulation 351/87, made under *The Wildlife Act* provides for the posting of signs to prohibit hunting within three hundred meters of a resource road, a timber operation or forest harvested area for public safety or for management, conservation or enhancement (Chapter W130, Section 3) reasons. Although Subsection 2.1 (2) prohibits hunting during the active period of a timber harvesting operation as well as the forest harvested area, it does not close roads.

The IRMT and the forest company will determine the appropriate method of access management. Appropriate signage will be developed and signs erected governing the restriction of vehicles on the road.

Access management may be required during forestry operations, during periods of inactivity such as breaks in harvest operations, between initial harvesting operations and silvicultural treatments, between silvicultural treatments and future harvesting, or after all uses of the road for forestry have ended. The access management strategy for specific roads in an operating area will be included in the Forestry Road Development Plan.

Three categories of access management have been created to offer alternatives for the appropriate situation:

Road use restrictions: these may be appropriate for forest activities, resource protection or public safety.

Temporary road closure: this action may be warranted when roads are expected to be re-used.

Road decommissioning: this activity should be undertaken when operating areas or harvest blocks will not be re-entered for forest management activities for an extended period.

## **Road Use Restrictions**

The use of forestry roads may be restricted when vehicle access may negatively impact

resource values, the environment or public safety. Gates, barricades and/or other methods may be employed to restrict road use.

The reasons for applying road use restrictions include:

1. for the better management, conservation or enhancement of resource values
2. for worker and public safety
3. if high forest fire hazard conditions exist
4. to prevent damage to the road

### Temporary Closure

While it is recognized that an acceptable level of access should be provided on Crown land, uncontrolled access may have a negative impact on resource values, the environment or public safety. Additionally, the expense of maintaining roads and crossings for an extended period may be unreasonable when the road is not being used for forestry. Temporary road closure may be warranted when forestry roads must be closed but are expected to be re-used. Temporary closure is designed to prevent motor vehicle access on a specific forestry road. Temporary closure will normally involve blocking access at strategic location(s), but would not involve the amount of road work that full decommissioning would require. If the road is to be closed for a longer term decommissioning is recommended.



**Figure 4.** An example of a temporary road closure.

Forest companies or the IRMT may propose temporary closure for specific forestry roads. Local communities or other developers of forest roads may also propose temporary closure through a similar process. Discussion with affected First Nation communities and notification of road closure with affected stakeholders is required. Final recommendations from the company, incorporating input from the planning process, will be reviewed for approval by the IRMT.

Where there are plans to remove crossings, the company will notify the Department of

Fisheries and Oceans if there is a potential HADD of fish habitat. Stream crossing maintenance for structures left in place will continue to be a company responsibility.

Effective access blockage at strategic location(s) may include, but is not limited to:

1. erecting gates and signage at appropriate locations
2. placement of barricades such as logging debris or boulders
3. constructing berms or ditches
4. making sections of roads impassable
5. removing culverts or bridges at some or all locations

Physical closure methods, such as those listed above, may be used in combination with the implementation of road use restrictions. When access is required between harvest and forest renewal activities, a less permanent form of temporary closure may be constructed. The opening of roads for caching of seedlings can only occur with department approval and roads must be closed immediately thereafter.

The agency that constructed each forestry road or water crossing will be responsible for implementing and maintaining their work. The chosen methods of temporarily closing a road and the related signage are also their responsibility. Periodic inspection and potential maintenance of stream crossings must occur. Sites of particular concern would include the current and former locations of culverts and bridges, and portions of roads where erosion risks are significant.

The IRMT will inspect bridges or culverts that have been removed and the measures implemented to prevent subsequent erosion. If these activities have been satisfactorily completed the IRMT will not require the company to be responsible for any future maintenance on these sites.

### **Decommissioning**

The decommissioning of forestry roads may be necessary to provide long-term protection of resource values, the environment and public safety. Decommissioning is intended to deter any efforts to travel on the road and may involve returning the road to a vegetated state. Decommissioning also involves the rehabilitation of streams at crossings to prevent excessive erosion. It is recognized that revegetation will occur.

Initial road designs should incorporate intentions to decommission roads. The location and design of forestry roads should consider future access management requirements. For example the use of impassable natural topography at the start of a road may assist in implementing future access management.

In general, any forestry road no longer required for forestry purposes should be decommissioned. Tertiary forestry roads are intended primarily for forestry purposes, and will normally be constructed shortly before harvest and decommissioned promptly after forest management activities, including silviculture, are finished. Secondary roads tend to be used over a longer period of time to access additional blocks of timber in an operating area. However, if a secondary road will not be required over a long period, it should be decommissioned. The decommissioning of forestry roads requires:

1. company discussion with affected First Nation communities and notification of road closure with affected stakeholders
2. effective access blockage at start of road
3. notifying the Department of Fisheries and Oceans of plans to remove stream crossings and re-contouring stream slopes if a HADD of fish habitat may occur
4. removal of stream crossings and acceptable re-contouring of stream slopes
5. taking measures to prevent erosion at stream crossings and along the road
6. for safety reasons posting signs to indicate the road has been closed
7. the revegetation of all tertiary roads

The decommissioning of some forestry roads may also require additional efforts such as:

8. ripping the beginning of secondary roads
9. site preparing specific portions of roads to render them permanently impassable
10. placing barriers at critical points along the length of the road

Companies may propose to decommission specific forestry roads they manage. This process should include notifying the IRMT of the company's intentions by letter. Appropriate stakeholder discussion will be determined by the IRMT. Final recommendations from the company, incorporating input from the discussion process, will be reviewed for approval by the IRMT. The company should include decommissioning plans in AOPs for Manitoba Conservation approval. If decommissioning has been satisfactorily completed Manitoba Conservation will not require the company to be responsible for any future maintenance on these sites.

In some circumstances, the province may not want to close some forestry roads constructed by companies because of established public, First Nations or commercial uses. In these circumstances the province will release the company from its responsibility and may take on or transfer to another party (ex. First Nation community or other communities) the maintenance, responsibility and liability for the road. Future closure, when activities conclude, may require decommissioning. If forestry activities resume, the company may reacquire road maintenance responsibilities





**Figure 5.** Forestry road prior to decommissioning (1992).



**Figure 6.** Forestry road post decommissioning (1998).

## RELEVANT LEGISLATION

Authorization for forestry road management planning is granted to each company by Manitoba Conservation. Manitoba Conservation also approves each company's FMP and issues *Environment Act Licences*. Several forms of authorization are required to regulate and guide forestry road management planning, construction and maintenance.

### **Provincial Legislation**

In general, these acts document the Minister's legal authority to regulate the use and management of resource roads. The Minister may restrict or prohibit the use of motorized vehicles, erect barricades or gates, prohibit activities such as hunting, and post signs indicating these measures. These measures may be undertaken for public safety or to protect a variety of resource values. Pertinent sections of *The Forest Act*, *The Crown Lands Act*, *The Wildlife Act* and *The Provincial Parks Act* are found in Appendix III.

### **Federal Legislation**

The *Fisheries Act* and the *Navigable Waters Protection Act* are both relevant to the development of forestry roads where there may be potential impacts from crossings and nearby roads. Pertinent sections of each Act are found in Appendix IV. These Acts provide for the protection of fish habitat and navigation in waterbodies.

### **Forest Management Licence Agreements and Timber Sale Agreements**

Under the authority of *The Forest Act*, Manitoba has entered into Forest Management Licence Agreements and Timber Sale Agreements.

In general all of these agreements allow the companies to construct and maintain forestry roads for timber harvesting, construct roads jointly with Manitoba, permit public use of forestry roads, and enable Manitoba to designate resource roads as provincial roads or highways. More recent agreements allow the companies to close roads in specific conditions, undertake a road retirement program, and instruct the companies on tree utilization during road construction.

### **Environment Act Licences**

Each company is also required to obtain an *Environment Act Licence* for their FMP. Among other requirements, each licence contains specific references to the management of forestry roads. Links to *Environment Act Licences* are found in Appendix V.

## Appendix I - Forest Management Licensee Road Classification System

FML ROAD CLASS	SEASON	TIME (years)	ROW (metres)	USERS	MANITOBA CONSERVATION CLASS
<b>CLASS 1</b>					
LP	ALL	20 <sup>+</sup>	45m	All Users	Primary
TOLKO	ALL	20 <sup>+</sup>	60m	"	"
TEMBEC	ALL	Permanent	45m	"	"
<b>CLASS 2</b>					
LP	ALL	20	30m	Access Throughout Forest	Secondary
TOLKO	ALL	3-20	50m	"	"
TEMBEC	ALL	20 <sup>+</sup>	40m	"	"
<b>CLASS 3</b>					
LP	SEASONAL	2-20	20m	Primarily Timber Harvesting	Tertiary
TOLKO	SEASONAL	1-12	40m	"	"
TEMBEC	SEASONAL	1-10	35m	"	"
<b>CLASS 4</b>					
LP	SEASONAL	5 <sup>+</sup>	10-20m	Primarily Timber Harvesting	Tertiary
TOLKO	SEASONAL (WINTER)	1-12	40m	"	"
TEMBEC	WINTER	1-10	20-30m	"	"
<b>CLASS 5</b>					
LP	WINTER	2	8-20m	Primarily Timber Harvesting	"
TOLKO	WINTER ICE	VARIABLE	60m	"	"
TEMBEC	—	—	—	—	—



**Appendix II** - Other Provincial guideline documents with road related references

Consolidated Buffer Management Guidelines (1996)

Interim Submission Guidelines for Ten Year Forest Management Plans (1996)

Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat (1996)

Planning and Submission Requirements for Annual Operating Plans (1994)

Ten Year Forest Management Plan Submission Guidelines (1999)

Timber Harvesting Practices for Forestry Operations in Manitoba (1994)

Wildlife Guidelines for Forest Management in Manitoba (1989)

Guidelines available in digital format can be found on the Forestry Branch web site at :  
[www.gov.mb.ca/conservation/forestry/forest-practices/practices/fpp-guideline-pdfs.html](http://www.gov.mb.ca/conservation/forestry/forest-practices/practices/fpp-guideline-pdfs.html).

## Appendix III – Provincial Legislation

### The Forest Act Chapter F150 - 1970

#### Part I

8(2) The minister may, subject to other relevant legislation, maintain or build roads, winter roads and stream improvements on Crown land, designate any of them as resource roads or improvements, regulate and set charges for their maintenance and assess and recover the cost of any damage to them as a debt owed to the Crown from the person responsible for the damage.

#### Part III

23(2) Every road and highway, the title to which is vested in the Crown, and that lies between parcels of land contained in a provincial forest, shall, for the purposes of forest administration, be deemed to be part of the provincial forest.

#### Revised Regulation F150-R1 – 1984

9 Any timber cut in the construction of a road or in the clearing of a skidway, landing, or camp site shall be paid for in accordance with the rate set out in the licence, timber sale agreement, or permit.

73(1) An operator shall allow other authorized users of the forest to use such roads as he has constructed or may construct and maintain in connection with his operations; but any such authorized users of the forest shall pay to the operator such part of the costs of construction and maintenance of the road as may be mutually agreed upon.

73(2) Where the director considers it necessary for an authorized user of the forest to have access to any part thereof, and for any use therein which may from time to time arise in an area held by an operator, the operator shall allow the said access and required use, but the authorized user shall pay to the operator a reasonable amount for any estimated loss that may be caused to the operator by virtue of said access and use.

73(3) Where, under subsection (1) or subsection (2) the persons concerned fail to agree on the amount payable, the director, upon being notified of the failure, may direct, and the operator when so directed shall allow, the authorized user of the forest to use the road or said access and required use, as the case may be; and the amount payable and any other matter in dispute shall be settled by arbitration.

78 Where, owing to weather or other conditions, the hauling of timber or other product is likely to cause damage to a forest access road or a road within a provincial forest, the minister may cause a notice to be posted

- (a) closing any such road to traffic until the road, in his opinion, is fit for traffic; or
- (b) imposing weight restrictions with respect to that road.

The Forest Act can be found at: <http://web2.gov.mb.ca/laws/statutes/ccsm/f150e.php>.

### The Crown Lands Act

#### Chapter c340, Regulation 145/91, Section 3

- 1) The minister may cause signs to be posted on or adjacent to resource roads prohibiting controlling or governing the operation of vehicles on those roads.
- 2) The minister may cause signs to be posted on or adjacent to a resource road closing the road to the operation of vehicles, and in the event may cause gates or barricades to be erected.

The Crown Lands Act can be found at: <http://web2.gov.mb.ca/laws/statutes/ccsm/c340e.php>.

### The Wildlife Act

#### Chapter W130, Section 3

- (1) Unless otherwise provided by this Act or the regulations, the designation of an area for the better management, conservation or enhancement of the wildlife resource of the province in accordance with section 2 does not limit or affect the uses and activities that may be undertaken in the area, and the minister

may make such regulations as the minister considers appropriate:

- (a) respecting the use, control and management of an area;
- (b) authorizing, regulating or prohibiting and use, activity or thing in an area;
- (c) authorizing the construction, operation and maintenance of any building, structure or thing in a wildlife management area.

Manitoba Regulation 351/87 Section 2.1 (2)

The minister may cause signs to be posted on Crown lands prohibiting hunting, the discharge of a firearm or bow or the possession of a loaded firearm on or within 300 meters of a resource road, timber operation, forest harvested area or mine that is located on Crown lands.

The Wildlife Act can be found at: <http://web2.gov.mb.ca/laws/statutes/ccsm/w130e.php>.

### **The Provincial Parks Act**

Chapter P20, Section 27

- (1) The director may, by posting signs or other suitable means
  - (a) open or close all or part of a provincial park; or
  - (b) restrict travel on or close any road or trail in a provincial park that is not under control of the Minister of Highways and Government Services.

The Provincial Parks Act can be found at:

<http://web2.gov.mb.ca/laws/statutes/ccsm/p020e.php>.

### **The Wildfires Act**

Area closure

20(1) In order to protect land, property or public safety during the wildfire season, the minister may order an area to be closed to entry or travel for a specified period of time, and shall make reasonable efforts to have the public notified immediately of the order.

The Wildfires Act can be found at: <http://web2.gov.mb.ca/laws/statutes/ccsm/w128e.php>.

### **The Endangered Species Act**

10(1) No person shall

- (a) kill, injure, possess, disturb or interfere with an endangered species, a threatened species, or an extirpated species that has been reintroduced;
- (b) destroy, disturb or interfere with the habitat of an endangered species, a threatened species or an extirpated species that has been reintroduced; or
- (c) damage, destroy, obstruct or remove a natural resource on which an endangered species, a threatened species or an extirpated species that has been reintroduced depends for its life and propagation.

The Endangered Species Act can be found at:

<http://web2.gov.mb.ca/laws/statutes/ccsm/e111e.php>.

## Appendix IV – Federal Legislation

### Fisheries Act Chapter F-14

**35.** (1) No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.

Alteration, etc., authorized

(2) No person contravenes subsection (1) by causing the alteration, disruption or destruction of fish habitat by any means or under any conditions authorized by the Minister or under regulations made by the Governor in Council under this Act.

R.S., c. F-14, s. 31; R.S., c. 17(1st Supp.), s. 2; 1976-77, c. 35, s. 5.

#### Throwing overboard of certain substances prohibited

**36.** (1) No one shall

(a) throw overboard ballast, coal ashes, stones or other prejudicial or deleterious substances in any river, harbour or roadstead, or in any water where fishing is carried on;

(b) leave or deposit or cause to be thrown, left or deposited, on the shore, beach or bank of any water or on the beach between high and low water mark, remains or offal of fish or of marine animals; or

(d) leave decayed or decaying fish in any net or other fishing apparatus.

Disposal of remains, etc.

(2) Remains or offal described in subsection (1) may be buried ashore, above high water mark.

Deposit of deleterious substance prohibited

(3) Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

The Fisheries Act can be found at: <http://laws.justice.gc.ca/en/F-14/60370.html>.

### Navigable Waters Protection Act Chapter N-22

General

#### Construction of works in navigable waters

**5.** (1) No work shall be built or placed in, on, over, under, through or across any navigable water unless

(a) the work and the site and plans thereof have been approved by the Minister, on such terms and conditions as the Minister deems fit, prior to commencement of construction;

(b) the construction of the work is commenced within six months and completed within three years after the approval referred to in paragraph (a) or within such further period as the Minister may fix; and

(c) the work is built, placed and maintained in accordance with the plans, the regulations and the terms and conditions set out in the approval referred to in paragraph (a).

Exceptions

(2) Except in the case of a bridge, boom, dam or causeway, this section does not apply to any work that, in the opinion of the Minister, does not interfere substantially with navigation.  
R.S., c. N-19, s. 5.

Ministerial orders respecting unauthorized works

6. (1) Where any work to which this Part applies is built or placed without having been approved by the Minister, is built or placed on a site not approved by the Minister, is not built or placed in accordance with plans so approved or, having been so built or placed, is not maintained in accordance with those plans and the regulations, the Minister may

- (a) order the owner of the work to remove or alter the work;
- (b) where the owner of the work fails forthwith to comply with an order made pursuant to paragraph (a), remove and destroy the work and sell, give away or otherwise dispose of the materials contained in the work; and
- (c) order any person to refrain from proceeding with the construction of the work where, in the opinion of the Minister, the work interferes or would interfere with navigation or is being constructed contrary to this Act.

The Navigable Waters Protection Act can be found at: <http://laws.justice.gc.ca/en/N-22/87026.html>.

## Appendix V - Environment Act Licences

Licence No.: 1557 ER

Issue Date: November 1, 1993

Revised: December 21, 2001

**TEMBEC INDUSTRIES INC.:** "the Licensee"

<http://www.gov.mb.ca/conservation/forestry/forest-practices/companies/fml1.html>

Licence No.: 2302 ER

Issued Date: December 30, 1997

Revised: October 8, 1998, and

Revised: January 11, 1999 (*Note: the only revision made on this date was to the company name.*)

**TOLKO INDUSTRIES LTD.:** "the Licensee"

<http://www.gov.mb.ca/conservation/envapprovals/archive/archive96/licences/2302er.html>

Licence No. 2191 E

Issue Date: May 27, 1996

Varied: December 10, 1996, for the period 1996 - 2005

**LOUISIANA-PACIFIC CANADA LTD.:** "the Licensee"

<http://www.gov.mb.ca/conservation/envapprovals/archive/archive96/licences/2191e.html>

# GLOSSARY

**Berm** - An artificial ridge or embankment used to stop vehicle traffic or to block line of sight

**Borrow pit** - A small quarry or excavation which provides material for use in road construction.

**Cut Block** - An area defined on the ground and planned for harvest, usually in one season.

**Forest Management Licence (FML)** – Means any forest management licence granted under The Forest Act authorizing the cutting and removal of Crown timber.

**Forest Practices** - Activities conducted during all stages of forest management. Examples are surveys, harvesting, road construction, and silviculture.

**Guidebook** - A collection of policies, guidelines, procedures and standards related to a specific forest practice.

**Guideline** - Alternative procedures or standards that can be applied to satisfy the principle upon which the guidelines are based. Specific guidelines are enforceable when identified on Work Permits.

**Integrated Resource Management Team (IRMT)** – A regional team organized to review natural resource issues and comprised of members of Manitoba Conservation (Forestry, Wildlife and Ecosystems Protection, Regional Operations, Lands, Parks and Natural Areas and Manitoba Water Stewardship (Fisheries and Water).

**Mitigate** - Actions taken during the planning, design, construction and operation of works and undertakings to alleviate potential adverse effects on the land base.

**Operating Area** - A contiguous area upon which forest development activities are planned. Impacts of proposed harvesting activities on various resource concerns (ex: ecological diversity, habitat management, access, water management) are assessed based on the entire operating area.

**Operating Block** - A specific area within the operating area planned for harvest, usually in one season.

**Policy** - A deliberately chosen course of action. Policy in this document refers to governing principles and corresponding procedure and standards of the Provincial government.

**Procedures** – A step or series of steps taken to put into practice a policy or guideline.

**Resource** - Anything that is useful for something be it animal, vegetable, mineral or an abstract concept, such as aesthetics.

**Resource Value** - A recognized and desired resource, existing or potential, including environmental, commercial, recreational, social, or cultural function or uses.

**Right-of-Way (ROW)** - The cleared area along the road alignment, which contains the roadbed, ditches, road slopes and back slopes.

**Road Decommissioning** - To close or take a road out of service.

**Stakeholder** - A person or group who believes that their interests may be affected by a decision making process.

**Standards** – Descriptions of targets or goals used to measure the success of procedures. They may be general or specific.



## REFERENCES

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Towards better relations with First Nations: Manitoba Conservation Consultation Policy “Discussion Paper”. Draft. November 2002.

Policy and Economics Directorate Forestry Canada. 1992. Silvicultural Terms in Canada. Science and Sustainable Development Directorate, Forestry Canada. Ottawa

Tembec Industries Inc. 2001. Operating and renewal plan 2002 Forest Management Licence 01, IWSA East, IWSA West. Tembec Forest Resource Management Pine Falls Operations.