# Environmental Impact Statement of the Forest Management Licence 01 2010-2029 Forest Stewardship Plan

# **Executive Summary**

Tembec, Pine Falls Operations (Tembec) has developed a Forest Stewardship Plan (FSP) for the 20 year period of 2010 to 2029 inclusive, to set out strategic long-term direction on the area of Manitoba known as Forest Management License (FML) 01. This plan, identified as the Forest Management Licence 01, 2010-2029 Forest Stewardship Plan, has been developed using an integrated approach to include the assessment of potential environmental impacts within the overall scope of the FSP itself. In this regard this Environmental Impact Statement (EIS) is included as one of several supporting documents for the FSP.

Tembec has achieved registration of their Environmental Management System (EMS) to the International Organization for Standardization (ISO) 14001standard, which forms an integral component of the FSP and EIA. Tembec also achieved Forest Stewardship Council (FSC) certification for FML 01 in 2001. The application of these processes has allowed for integration of environmental considerations up-front in the development of policies, departmental procedures and work instructions to be implemented in planning and operations.

The EIS has been developed within the framework outlined for Sustainable Forest Management (SFM) in Canada utilizing an approach based upon the Criteria and Indicators (C&I) framework. This approach was formulated to provide a basis for moving towards management of Canada's forests as ecosystems and for monitoring of progress towards this goal. By adopting the C& I approach in conducting this EIA, factors related to both the site and landscape level can be examined within a national context while ensuring that local concerns more specific to FML 01 are addressed. Local Level Indicators (LLI) were developed for FML 01 under the Manitoba Model Forest (MBMF) and annual LLI reports have been produced since 2002 and are available on the Tembec, Pine Falls Operations web site at <a href="http://www.tembec-frm-manitoba.ca">http://www.tembec-frm-manitoba.ca</a>.

In conducting this analysis the forest management activities as proposed in the FSP and described in Tembec's EMS Departmental Operating Procedures (DOP's) and Work Instructions (WI's) are examined in terms of potential impact upon the resources and/or land and resource uses and other values, as described through the C & I framework. Recommended additional mitigation measures including research and monitoring requirements have been advanced as well as the identification of residual impacts for which no mitigation is possible.

The framework for assessing potential impacts is comprised of 10 impact assessment matrices which capture the range of interactions between the various types of forest management activities carried out by Tembec and the environmental, social and economic components across FML 01. The technique used to assess these interactions and potential impacts is similar in scope to that recommended by the Canadian Environmental Assessment Agency (1992; 1998) and widely used by proponents across Canada.

Forest management activities proposed in the FSP to undertake planning, infrastructure development, timber harvesting, forest renewal, forest protection and equipment use are listed on the vertical axis of each matrix (comprising the rows of the matrix). There are 28 such activities as described in Appendix 1.

Environmental, social and economic components are displayed on the horizontal axis across the top of the columns that comprise these attributes. There are a total of 73 such components and groupings indicated in 10 matrices (Tables 1 to 10) to cover the range of values present across FML 01.

The impact assessment matrices are organized around each of the six C & I Criteria. The Criteria are indicated as a heading above each matrix. Within each matrix the Values which make up each Criteria are utilized as headings above the components (including Indicators). The components for the environmental, social and economic components are thereby grouped into the Values that they represent.

In undertaking the assessment, each of the forest management activities is assessed in terms of potential for impact on each component. The table provided in Appendix 2 describes the basis used to evaluate factors contributing to the overall assessment of impacts and significance for each activity. Each activity is assessed as follows:

No impact or not applicable, matrix cell left blank Impact but insignificant and mitigable, matrix cell indicates, "I" Impact significant but mitigable, matrix cell indicates, "M" Impact significant and non-mitigable, matrix cell indicates, "N" Impact positive, matrix cell indicates, "\*"

Where "no impact" is assessed, cells are left blank to improved readability of the matrix.

In support of the assessment provided in the impact implication matrices, a rationale and discussion is provided. The discussion and rationale incorporates pertinent research and other literature, industry experience, as well as Company experience in FML 01.

As described in the Preface, the EIS was developed and revised, during the period of 1995 to 2009, as long term forest management plans were under development. A more complete chronology of forest management plan development is contained in Section 1.6.4 of the FSP document.

Sections 3 through 8 contains the environmental impact assessment of the forest management activities proposed in the FSP which have been organized into the six Criteria defined by the Canadian Council of Forest Ministers (1995) in *Defining Sustainable Forest Management: A Canadian Approach to Criteria and Indicators.* Tables 1 through 10 provide a summary of the assessment which is detailed in these sections of the EIS.

# Table 1: Impact Implications on Conservation of Biological Diversity (Ecological, Species & Genetic Vegetation Diversity)

Note: Ecological Diversity Component for Landscape Level, Forest Composition (Species & Age Class Structure - Non-forested Areas) from Table 1 also represents impact implications for this component as they apply to Table 4: Maintenance of Ecosystem Condition and Productivity, Ecosystem Resilience, in terms of Forested and Non-forested Composition.

				Ecologic	al Diversity			Species Diversity	Genetic Diversity
			Site / Stand /	Cutblock Level		Landsca	pe Level		
F	orest Management Activities	Overstory Vegetation	Understory Vegetation	Forest Stand Structure	Wetlands & Other Non-Forested Areas	Forest Composition (Species & Age Class Structure – Non-forested Areas)	Landscape Patterns & Fragmentation	VTE Flora	Maintain Gene Pool
Planning	Public Participation								
8	Road & Watercourse Crossing Planning							I	
	Harvest & Renewal Planning					М	M	I	M/*
	Sustainability Modeling					M/*	М		
	Information Collection & Application					M/*	M/*	M/*	
	Access Management								
Infrastructure	All-weather Road (Class I & II)	N	N	N	N	I	I		
Development	Dry-weather Road (Class III)	М	M	M	M				
	Winter Road (Class IV)	М	M	M	M				
	Road & ROW Maintenance	I	I	I					
	Permanent Watercourse Crossings				I				
	Temporary Watercourse Crossings				<u> </u> <u>I</u>	. =			
	Camps, Timber & Fuel Storage Sites	I	I	I					
	Non-hazardous Construction Waste								
	Decommissioning	*	*	*	*				
Harvesting	Logging (Felling/Forwarding)	М	I	M	I	, M	M		I
	Slashing & Woody Debris Management			I					
	Timber Storage								
	Timber Transportation to Mill					: 			
Forest	Site Preparation / Scarification	*	I I			*		· · · · ·	
<b>Renewał</b>	Tree Establishment (Natural & Planting)	*/I		*		*			M/*
	Mechanical Stand Tending	* .	<u>I</u>			*			
	Chemical Stand Tending	I/*	M			I/*			
Forest	Insect & Disease Control					I/*			
Protection	Fire Control					I/*			
Equipment Use	In-block Operations		<u> </u>		I				
	Fuel Storage & Handling							l	
	Non-hazardous & Hazardous Waste			L			1		

						Te	errestrial Wild	ife Species				
	a mer i se se la sut tatue		Ungulate	es	Ot	her Mamma	als			Birds		STE Wildlife
For	est Management Activities	Moose	Woodland Caribou	White-tailed Deer	Furbearers	Bats	Rodents	Raptors	NTMB	Game Birds	Resident & Water Birds	Species
Planning	Public Participation	I	М	M	M					I	I	М
В	Road & Watercourse Crossing Planning	I	I			I						М
	Harvest & Renewal Planning	1/*	M	I/*	М	М		M	M		M	М
	Sustainability Modeling	I/*	M/*	I/*	I/*				I/*		I/*	M/*
	Information Collection & Application	I/*	M/*	I/*		I/*		I/*				M/*
	Access Management	M/*	M/*	M/*	M/*					I/*	I/*	M
Infrastructure	All-weather Road (Class I & II)	I	M	I	I	I	I	I	I		I	
Development	Dry-weather Road (Class III)	I	M	I	I							
-	Winter Road (Class IV)											
	Road & ROW Maintenance											
	Permanent Watercourse Crossings											
Γ	Temporary Watercourse Crossings											
	Camps, Timber & Fuel Storage Sites		I		I							<u> </u>
	Non-hazardous Construction Waste											
	Decommissioning											
Harvesting	Logging (Felling/Forwarding)	M/*	M	M/*	I-M/*	M	I	I-M/*	M	I/*	M	
-	Slashing & Woody Debris Management						I/*	1/*	I/*			
	Timber Storage											
	Timber Transportation to Mill						]					
Forest Renewal	Site Preparation / Scarification		*		I		<u> </u>					
	Tree Establishment (Natural & Planting)		*		*							
	Mechanical Stand Tending								I			
	Chemical Stand Tending	I	*				I		I/*	I		
Forest	Insect & Disease Control								·			
Protection	Fire Control											
Equipment Use	In-block Operations		I						ļ			
	Fuel Storage & Handling								<b> </b>			
	Non-hazardous & Hazardous Waste								i	L		

## Table 2: Impact Implications on Conservation of Biological Diversity (Terrestrial Wildlife Species Diversity)

Note: Terrestrial Wildlife Species Components (Moose, Woodland Caribou, etc.) from Table 2 also represents impact implications for these components as they apply to Table 4: Maintenance of Ecosystem Condition and Productivity, Biomass, in terms of Habitat Suitability Index Units for these species; and to Table 7:Multiple Benefits to Society, Productive Capacity, in terms of Sustainable Wildlife Habitat

				Aquatic & Amphibian Species		
For	est Management Activities	Aqı	atic	Amphibians		STE Aquatic Species
	8	Benthic	Fish	Anurans	Snakes	
Planning	Public Participation		I/*			I/*
a d	Road & Watercourse Crossing Planning		М		I	M
	Harvest & Renewal Planning		М			М
	Sustainability Modeling					
	Information Collection & Application		M		I	M/*
	Access Management		M/*			M/*
Infrastructure	All-weather Road (Class I & II)	I	I	I	I	
Development	Dry-weather Road (Class III)	I	Ĩ	I	I	
-	Winter Road (Class IV)					
	Road & ROW Maintenance					
	Permanent Watercourse Crossings	I	M			
	Temporary Watercourse Crossings	I	I			
	Camps, Timber & Fuel Storage Sites					
	Non-hazardous Construction Waste					
	Decommissioning	I/*	I/*			
Harvesting	Logging (Felling/Forwarding)	I	I			
U	Slashing & Woody Debris Management					
	Timber Storage	I	I			
	Timber Transportation to Mill					
Forest Renewal	Site Preparation / Scarification	I	<u>M</u>			
	Tree Establishment (Natural & Planting)	*	*			
	Mechanical Stand Tending					
	Chemical Stand Tending	M	M			
Forest	Insect & Disease Control					
Protection	Fire Control					
Equipment Use	In-block Operations	1	M	I	I	
F F	Fuel Storage & Handling	I	I	<u> </u>	I	
	Non-hazardous & Hazardous Waste	I	I	I I	I	

# Table 3: Impact Implications on Conservation of Biological Diversity (Aquatic & Amphibian Species Diversity)

			Disturbance	e & Stress		Biomass	
FOI	rest Management Activities	Insect Infestation	Disease Incidence	Forest Fires	Introduction of Exotic Species	Mean Annual Increment	
Planning	Public Participation						
U	Road & Watercourse Crossing Planning	*	*				
	Harvest & Renewal Planning	*	*	*		M/*	
	Sustainability Modeling					M/*	
	Information Collection & Application	*	*	*		M/*	
	Access Management			М	I		
Infrastructure	All-weather Road (Class I & II)	*	*	*			
Development	Dry-weather Road (Class III)			*			
-	Winter Road (Class IV)						
	Road & ROW Maintenance			*			
	Permanent Watercourse Crossings						
-	Temporary Watercourse Crossings						
	Camps, Timber & Fuel Storage Sites			M/*	I		
	Non-hazardous Construction Waste						
	Decommissioning				*		
Harvesting	Logging (Felling/Forwarding)	M/*	*	*	I	M	
Û,	Slashing & Woody Debris Management	I		I/*			
	Timber Storage	М					
	Timber Transportation to Mill						
Forest Renewal	Site Preparation / Scarification				*	*	
	Tree Establishment (Natural & Planting)	*	*		*	*	
	Mechanical Stand Tending					*	
	Chemical Stand Tending					*	
Forest	Insect & Disease Control	*	*			*	
	Fire Control			*		*	
Equipment Use	In-block Operations			М	I		
	Fuel Storage & Handling			<u>M</u>		·····	
	Non-hazardous & Hazardous Waste						

Note: Ecological Diversity Component for Landscape Level, Forest Composition (Species & Age Class Structure – Non-forested Areas) from Table 1 represents impact implications for Ecosystem Resilience as they apply to Table 4. This component is not repeated in this table, refer to Table 1 and associated textual description.

Species Diversity Components for Representative Species (Moose, Woodland Caribou, etc.) from Table 2 represents impact implications for Biomass in terms of wildlife productivity as they apply to Table 4 and the Productive Capacity for Sustainable Wildlife Habitat as they apply to Table 7. This component is not repeated in this table, refer to Table 2 and associated textual description.

	Table 5: Impact Im	plications on Conserving	Soil & Water Resources
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			Phys	ical Environmental Fa	ctors		Policy & Protec	tion Forest Factors
Fo	rest Management Activity	Geology, Topography & Landforms	Soil Productivity	Soil Stability	Surface Water	Ground Water	Riparian Zones	Planning & Operating Practices & Approvals
Planning	Public Participation						M/*	M/*
5	Road & Watercourse Crossing Planning	M		М	M	M	М	M/*
	Harvest & Renewal Planning		М	М	I		M	M/*
	Sustainability Modeling						M/*	M/*
	Information Collection & Application	*	*	*	*		*	M/*
	Access Management			•				
Infrastructure	All-weather Road (Class I & II)	I	N	М	М		М	
Development	Dry-weather Road (Class III)	I	М	М	M			
-	Winter Road (Class IV)		M	М			М	
	Road & ROW Maintenance			*	I/*			
	Permanent Watercourse Crossings	I		М	M		М	
	Temporary Watercourse Crossings			I	I		I	
	Camps, Timber & Fuel Storage Sites	Ĭ	M	Ι	М	M		
	Non-hazardous Construction Waste							
	Decommissioning		*	I/*	I/*		*	
Harvesting	Logging (Felling/Forwarding)			Ι	М	М	М	
0	Slashing & Woody Debris Management	<u> </u>	M					
	Timber Storage				I	I		
	Timber Transportation to Mill							
Forest Renewal	Site Preparation / Scarification		M/*	М	M			
	Tree Establishment (Natural & Planting)		*	*	*	*	*	
	Mechanical Stand Tending							
	Chemical Stand Tending		М		M			
Forest	Insect & Disease Control							
Tempo   Camps   Non-ha   Decom   Harvesting Loggin   Slashin   Timber   Timber   Forest Renewal   Site Pro   Tree B:   Mechan   Chemin   Forest   Insect 2   Protection   Fire Cc   Equipment Use   Fuel St	Fire Control			I/*				
Forest Renewal Site F Tree Mech Forest Insec Protection Fire C Equipment Use In-blo	In-block Operations		М	М	M		М	
	Fuel Storage & Handling		I		I	I		
	Non-hazardous & Hazardous Waste		I		I	I		

Note: Forest Land Conversion Component of Forested Landbase from Table 6 represents impact implications for Physical Environmental Factors in terms of Forested Landbase as they apply to Table 5. This component is not repeated in this table, refer to Table 6 and associated textual description.

Physical Environmental Factor for Surface Water from Table 5 also represents impact implications for this component as they apply to Table 6: Global Ecological Cycles, Contribution to Hydrological Cycles.

#### Table 6: Impact Implications on Global Ecological Cycles

		Atmos	phere	Contributions to Global Carbon Budget	Forest Land Conversion	Forest Sector CO <sup>2</sup> Conservation
Е0	rest Management Activities	Climate	Air	Forest Sector Carbon Budget	Forested Landbase	Non-renewable Energy Resources
Planning	Public Participation					
	Road & Watercourse Crossing Planning					
	Harvest & Renewal Planning			*		
	Sustainability Modeling			M/*		
	Information Collection & Application					
	Access Management		I			
Infrastructure	All-weather Road (Class I & II)				I	
Development	Dry-weather Road (Class III)					
	Winter Road (Class IV)		· · · · · · · · · · · · · · · · · · ·			
	Road & ROW Maintenance					
	Permanent Watercourse Crossings					
	Temporary Watercourse Crossings					
	Camps, Timber & Fuel Storage Sites					
	Non-hazardous Construction Waste					
	Decommissioning				*	
Harvesting	Logging (Felling/Forwarding)	I		M		
•	Slashing & Woody Debris Management		I			
	Timber Storage					
	Timber Transportation to Mill		I			I
Forest	Site Preparation / Scarification			*	*	
Renewal	Tree Establishment (Natural & Planting)	*	*	*	*	
	Mechanical Stand Tending			*		
	Chemical Stand Tending					
Forest	Insect & Disease Control					
Protection	Fire Control		*	*		
Equipment	In-block Operations		Ι			I
Use	Fuel Storage & Handling					
	Non-hazardous & Hazardous Waste					

Note: Physical Environmental Factors Component of Surface Water from Table 5 represents impact implications for Contribution to Hydrological Cycles in terms of this component as they apply to Table 6. This component is not repeated in this table, refer to Table 5 and associated textual description.

Forest Land Conversion Component of Forested Landbase from Table 6 also represents impact implications for this component as they apply to Table 5: Physical Environmental Factors.

•	unt Management Asthelites	Productive Capacity	Competitivenes Non-timber Reso	s of Timber &	Contribution	n to the Timber & Non-timb	er Economy
FO	rest Management Activities	Sustainable Timber Harvest	Timber Based Economic Activity	Non-timber Based Economic Activity	Contributions to Economy	Employment in FML 01 and Region	Subsistent Forest Uses
Planning	Public Participation	*	*	*	*	*	*
~	Road & Watercourse Crossing Planning	M/*	М	M	М	М	М
	Harvest & Renewal Planning	M/*	M	М	M	М	М
	Sustainability Modeling	M/*	M		M	М	
	Information Collection & Application	M/*	M	М	M	М	М
	Access Management		1/*	M/*	I/*	*	M/*
Infrastructure	All-weather Road (Class I & II)	I/*	*	M/ *	M/*	*	I/*
Development	Dry-weather Road (Class III)	*	*	I/*	I/*	*	I/*
-	Winter Road (Class IV)	*	*	*	*	*	I/*
	Road & ROW Maintenance						
	Permanent Watercourse Crossings				*		
	Temporary Watercourse Crossings	· · · · · · · · · · · · · · · · · · ·					
	Camps, Timber & Fuel Storage Sites	··· <u>·</u> ·····					
	Non-hazardous Construction Waste						
	Decommissioning						
Harvesting	Logging (Felling/Forwarding)	М	*	М	*/M	*	М
8	Slashing & Woody Debris Management	=	*		*	*	
	Timber Storage						
	Timber Transportation to Mill		*		*	*	
Forest	Site Preparation / Scarification	*	*		*	*	
Renewal	Tree Establishment (Natural & Planting)	*	*		*	*	
	Mechanical Stand Tending	*	*		*	*	
	Chemical Stand Tending	*	*				
Forest	Insect & Disease Control	*					
Protection	Fire Control	*	*		*	*	
Equipment	In-block Operations						
Use	Fuel Storage & Handling						
	Non-hazardous & Hazardous Waste				-		

## Table 7: Impact Implications on Multiple Benefits to Society (Productive Capacity, Competitiveness, Contribution to Timber and Non-timber Economies)

Note: Non-timber Uses (Provincial Road Network, Railways, Agriculture, etc.) from Tables 8 and 9 represents impact implications for Productive Capacity in terms of Non-timber Uses as they apply to Table 7. This component is not repeated in this table, refer to Tables 8 and 9 and associated textual description.

Species Diversity Components for Representative Species (Moose, Woodland Caribou, etc.) from Table 2 represents impact implications for Biomass in terms of wildlife productivity as they apply to Table 4 and the Productive Capacity for Sustainable Wildlife Habitat as they apply to Table 7. This component is not repeated in this table, refer to Table 2 and associated textual description.

Contribution to the Timber and Non-timber Economy Component of Subsistent Forest Uses from Table 7 also represents impact implications for this component as they apply to Table 10: Society's Responsibility, Participation by First Nations in Sustainable Forest Management in terms of Subsistent Forest Uses.

					Non-timb	er Values (Page 1 of	[2]			
Fo	rest Management Activities	Provincial Road Network	Agriculture	Fishing	Wild Rice	Hunting	Trapping	Aesthetics	Lodges & Outfitting	Snowmobiling
Planning	Public Participation			*	*	*	*	*	*	*
	Road & Watercourse Crossing Planning	I		M/*	*	M/*	M/*	M	М	I/*
	Harvest & Renewal Planning						M/*	M	М	I
	Sustainability Modeling		The second s							
	Information Collection & Application			М		*	*		*	*
	Access Management	*		M/*	*	M/*	I/*		*	*
Infrastructure	All-weather Road (Class I & II)	*		*	*	*	I/*	M	N/*	I/*
Development	Dry-weather Road (Class III)			*	*	*	I/*	I	M/*	I/*
_	Winter Road (Class IV)			*	1		I/*	I		I/*
	Road & ROW Maintenance							I		
	Permanent Watercourse Crossings							I		
	Temporary Watercourse Crossings							I		
	Camps, Timber & Fuel Storage Sites							I		
	Non-hazardous Construction Waste							I		
	Decommissioning							*	¥	
Harvesting	Logging (Felling/Forwarding)		I/*	I		M/*	M/*	М	M	I
Ũ	Slashing & Woody Debris Management									
	Timber Storage									
	Timber Transportation to Mill	М						I		
Forest	Site Preparation / Scarification			*	I		*	I/*	*	
Renewal	Tree Establishment (Natural & Planting)			*			*	*	*	
	Mechanical Stand Tending									
	Chemical Stand Tending				I			1/*		
Forest	Insect & Disease Control				I			*	*	
Protection	Fire Control			*				*	*	
	In-block Operations		Í					I	Ī	
Use	Fuel Storage & Handling			I	····			I		
	Non-hazardous & Hazardous Waste							I		

### \_\_\_\_\_Table 8: Impact Implications on Multiple Benefits of Forests to Society (Non-timber Values 1 of 2)

Note: Non-timber Values Components from Tables 8 and 9 also represents impact implications for these components as they apply to Table 7: Multiple Benefits to Society, Productive Capacity in terms of Non-timber Uses.

					Non-timber Valu	tes (Page 2 of 2)			
Fo	orest Management Activities	Skiing	Canoeing & Designated Waterways	Tourism	Special Forest Products	Mining	Natural Lands & Special Places	Protected Areas	First Nations Traditional Forest Uses
Planning	Public Participation	*	*	*	*	*	*	*	*
	Road & Watercourse Crossing Planning	I	М	M/*		*	M	М	M/*
	Harvest & Renewal Planning	I	I	М	M		M	М	M/*
	Sustainability Modeling								
	Information Collection & Application	*	*	*	*		*		*
	Access Management	*	I/*	*	*	*	*	· · · ·	
Infrastructure	All-weather Road (Class I & II)		I						N/*
Development	Dry-weather Road (Class III)		I						M/*
	Winter Road (Class IV)								M/*
	Road & ROW Maintenance								
	Permanent Watercourse Crossings		M						N/*
	Temporary Watercourse Crossings		I						
	Camps, Timber & Fuel Storage Sites								
	Non-hazardous Construction Waste		I						
	Decommissioning		*	*		· · · ·			I
Harvesting	Logging (Felling/Forwarding)		M	М	M	Ι			M/*
	Slashing & Woody Debris Management								
	Timber Storage								
	Timber Transportation to Mill								
Forest	Site Preparation / Scarification		*	*					
Renewal	Tree Establishment (Natural & Planting)		*	*					
	Mechanical Stand Tending								
	Chemical Stand Tending				I				I
Forest	Insect & Disease Control			*	I		1		
Protection	Fire Control			*	*				
Equipment	In-block Operations		I	Ι					
Use	Fuel Storage & Handling								
	Non-hazardous & Hazardous Waste								

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### Table 9: Impact Implications on Multiple Benefits to Society (Non-timber Values 2 of 2)

Note: Non-timber Values Components from Tables 8 and 9 also represents impact implications for these components as they apply to Table 7: Multiple Benefits to Society, Productive Capacity in terms of Non-timber Uses.

### Table 10: Impact Implications on Society's Responsibility

		Aboriginal & Treaty Rights	Sustainable For	y First Nations in rest Management	Sustainability of Forest Communities	Fair & Effective Decision Making		Informed Dec	ision Making	
Fo	rest Management Activities	Aboriginal & Treaty Rights	First Nations Participation in Forest Based Economic Opportunities	First Nations Social, Cultural & Spiritual Sites	Regional Economic Activity	Public Participation in Decision Making Processes	Forest Research & Partnerships	Training & Awareness of PFPC Personnel	Information Systems & Monitoring	Public Health
Planning	Public Participation	М	M/*	M/*	*	*	*	*	*	
	Road & Watercourse Crossing Planning	М	*	M	M/*	*	-			······
	Harvest & Renewal Planning	М	*	M	M/*	*				
	Sustainability Modeling					*				
	Information Collection & Application	М		M/*	М	*	*	*	*	
	Access Management	М		*	*			· · · · · · · · · · · · · · · · · · ·		
Infrastructure	All-weather Road (Class I & II)		*	M	*					
Development	Dry-weather Road (Class III)		*	I	*					<u>T</u>
	Winter Road (Class IV)	-	*	I	*					<u>1</u>
	Road & ROW Maintenance		*							1
	Permanent Watercourse Crossings									
	Temporary Watercourse Crossings									
	Camps, Timber & Fuel Storage Sites				*					
	Non-hazardous Construction Waste		· · · -	-						
	Deconimissioning				*	·				
Harvesting	Logging (Felling/Forwarding)		*	М	*/M					1 M
U	Slashing & Woody Debris Management		• • • • • • • • • • • • • • • • • • • •							
	Timber Storage									
	Timber Transportation to Mill		*							ī
Forest	Site Preparation / Scarification		*	I	*				·	1
Renewal	Tree Establishment (Natural & Planting)		*		*					
	Mechanical Stand Tending			*						
	Chemical Stand Tending				······				·····	
Forest	Insect & Disease Control				*					<u>1</u>
Protection	Fire Control				*				<b></b>  -	*
Equipment	In-block Operations			М						M
Use	Fuel Storage & Handling				·	· · · · · · · · · · · · · · · · · · ·				I
	Non-hazardous & Hazardous Waste									

Note: Contribution to the Timber & Non-timber Economy Component for Subsistent Forest Uses from Table 7 represents impact implications for Participation by First Nations in Sustainable Forest Management in terms of Subsistent Forest Uses as they apply to Table 10. This component is not repeated in this table, refer to Table 7 and associated textual description.