MANAGEMENT UNIT NAME: Dryden Forest (MU 535)

PLAN PERIOD: April 1, 2021 to March 31, 2031

FMP-8 PROJECTED AVAILABLE HARVEST AREA BY FOREST UNIT

Forest Unit	To	otal Available Harve	st Area (ha) for Firs	t 10-Year Period of	Each 20-Year Perio	d
Forest Offic	2021	2041	2061	2081	2101	2121
BFDOM	152	329	463	118	183	111
BWDOM	88	218	230	202	171	33
CONMX	1,856	2,348	2,475	324	484	370
HRDMW	1,235	1,641	2,008	957	463	655
HRDOM	1,164	1,080	638	874	504	505
PJDOM	2,184	2,429	3,178	3,801	6,169	5,033
PJMX1	1,849	1,183	1,019	2,132	2,361	2,557
PODOM	1,408	964	1,401	1,664	2,193	1,813
PRWMX	34	27	26	83	109	197
SBDOM	1,762	1,080	448	479	527	111
SBLOW	1,493	1,354	1,261	1,087	248	835
SBMX1	1,544	875	280	696	1,468	1,064
Total	14,769	13,528	13,428	12,416	14,881	13,285

# NOTE:

Data derived from results of Patchworks LTMD\_10.

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MANAGEMENT UNIT NAME: Dryden Forest (MU 535)

PLAN PERIOD: April 1, 2021 to March 31, 2031

#### FMP-9 PROJECTED AVAILABLE HARVEST VOLUME BY SPECIES GROUP AND BROAD SIZE GROUP

Species Group				olume (cubic metre od of Each 20-Yea	,							
.,	2021	2041	2061	2081	2101	2121						
Net Merchantable Volume (NM)	<u>V):</u>											
Spruce-Pine-Fir Small	1,165,086	998,017	994,182	1,092,658	1,450,490	1,258,580						
Spruce-Pine-Fir Large	3,326	15,837	20,224	9,003	5,370	3,515						
Spruce-Pine-Fir Subtotal	1,168,411	1,013,854	1,014,405	1,101,660	1,455,861	1,262,095						
Poplar Small	376,126	327,269	340,335	357,776	389,284	323,107						
Poplar Large	8,404	18,436	23,585	15,466	13,762	3,310						
Poplar Subtotal	384,531	345,704	363,921	373,243	403,045	326,417						
M/hita Divah	00.400	00.004	75.070	F4 044	40.444	25.042						
White Birch Small	92,133	89,361	75,679	54,214	49,141	35,913						
White Birch Large White Birch Subtotal	889 93,022	3,646 93,007	4,026 79,705	3,373 57,587	1,100 50,241	382 36,296						
White Birch Subtotal	93,022	93,007	79,705	57,367	50,241	30,290						
NMV TOTAL All Species Sm	nall 1,667,585	1,444,919	1,436,319	1,532,177	1,906,131	1,643,210						
•		38,773	48,800	31,798	23,654	11,266						
NMV TOTAL All Species Lar NMV TOTAL All Species	1,681,176	1,483,691	1,485,119	1,563,975	1,929,785	1,654,478						
THIN TOTAL All Openies	1,001,170	1,400,001	1,400,110	1,000,070	1,020,700	1,004,470						
Defect (Branches, Twigs, Leav	es. Bark):											
Spruce-Pine-Fir	374,405	312,681	277,740	277,273	342,731	295,295						
Poplar	290,438	264,913	289,398	303,585	320,388	234,215						
White Birch	55,054	56,077	51,755	38,882	27,141	20,174						
DEFECT TOTAL All Species	733,568	646,615	630,689	628,530	692,124	554,204						
Undersized (Top Wood)												
Spruce-Pine-Fir	193,621	177,341	158,701	162,121	203,590	190,144						
•	98,885	81,966	87,265	102,121	203,590 115,738	190,144 99,875						
Poplar White Birch	•	12,824	87,265 11,242	9,407	· ·	5,327						
UNDERSIZED TOTAL All Speci	13,013 <b>es</b> 309,587	276,034	260,757	279,880	6,748 326,659	296,703						
TOTAL AVAILABLE HARVEST		2,406,340	2,376,565	2,472,385	2,948,568	2,505,385						

#### NOTE:

Data derived from results of Patchworks LTMD\_10. Volume broad size group is applied to net merchantable volumes only (not defect or undersize volumes).

White Pine-Red Pine, Other Conifer, and Other Hardwood are incidental on the Dryden Forest, and are not considered major harvest volume Species Groups. Volumes associated with these incidental species are included in the TOTAL All Species and GRAND TOTAL volumes.

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## FMP-10: Assessment of Objective Achievement

Strategic modelling projections based on: LTMD\_10

						LTMD - Projections			
Management Objective	Indicator	Plan Start Level	Desirable Level	Timing of Assessment	Target (short-term)	Short (10 yrs)	Medium (20 yrs)	Long (100 yrs)	Assessment
1. Forest	(1a) Landscape Class Area:	(ha)		(1) Proposed LTMD					PARTIALLY ACHIEVED: 3 of 4 classes meet
Composition:	Mature and late balsam fir	1,765	2,108 - 3,426	(2) Completion of operational	increase	1,973	2,190	2,129	desirable levels alighned with BLG milestones.
	Mature and late lowland conifer	12,727	5,238 - 7,016	planning (4) Annual Reports for Year 5 and	decrease	11,725	10,498	7,959	ML Balsam achieves the desirable level in the medium-term. ML Lowland Conifer
To emulate natural	Mature and late upland conifer	31,496	20,088 - 40,910	final year of plan implementation	maintain	25,300	21,490	23,246	consistently moves towards the desirable level
forest composition and age classes which includes old growth forest.	Mature and late hardwood	19,101	8,472 - 12,731	ma year or pranting	decrease	18,835	19,347		through the long-term (is above desirable level all periods) as a result of inventory classification. ML Upland Conifer maintains the desirable level all periods. ML Hardwood decreases towards then mantains desirable level in 80 years onwards.
	(1b) Old Growth Forest Area:	(ha)	(ha)						ACHIEVED: OGUpl_Con, OG Mix_Hwd and
	Lowland Conifer	509	3,498 - 4,916	(1) Proposed LTMD	increase	873	1,764	3,540	OG Pr_Pw increase then maintain desirable
	Upland Conifer	5,956	6,765 - 14,652	(2) Completion of operational	increase	9,260	9,403	7,086	levels from 2031 onwards.OG Low_Con moves towards and achieves desirable level in
	Mixedwood and Hardwood	3,464	9,913 - 17,843	planning (4) Annual Reports for Year 5 and final year of plan implementation	increase	9,817	13,252	10,381	60 years (result of inventory classification,
	White Pine and Red Pine	12	increase		increase	12	25		minor decrease within 1% in 70-80 years).  Overall indicator is achieved.
	(1c) All ages red pine and white pine forest unit area (ha)	742	ha, while not falling below the 1995 level of	Proposed LTMD     Completion of operational planning     Annual Reports for Year 5 and final year of plan implementation	increase	842	912		ACHIEVED: Area increases for next 100 years, desirable level met. Achievement of estimated 7,900 ha is not possible for approx. 300+ years. Operational strategies will continue 100+ years to ensure continued increase.
	(1d) Upland Jack Pine and Spruce: (ha) PJDOM+PJMX1+SBDOM+SBMX1	54,554	68,831 - 74,915 ha	Proposed LTMD     Completion of operational planning     Annual Reports for Year 5 and final year of plan implementation	increase	56,609	59,259	69,350	ACHIEVED: Target level is achieved with steady movement toward achieving desirable level in 50 years.
	(1e) Young Forest Area: (ha) All Plan Forest Units <36 years	36,525	31,801 - 64,374 ha	(1) Proposed LTMD (2) Completion of operational planning	maintain	43,599	45,636	,	<b>ACHIEVED</b> : Desirable level is achieved at Plan Start and maintained through the planning horizon.

## FMP-10: Assessment of Objective Achievement

Strategic

	С	modelling	projections	based	on:	LTMD
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						LTMD - Projections		ions	
Management Objective	Indicator	Plan Start Level	Desirable Level	Timing of Assessment	Target (short-term)	Short (10 yrs)	Medium (20 yrs)	Long (100 yrs)	Assessment
2. Landscape Pattern:	(2a) Texture of mature and old forest (hexagon frequency distribution by mean proportion): 500 ha Hexagon Scale:		Move towards mean, with a focus on the two concentration classes > 60%. Mean:	(1) Proposed LTMD (2) Completion of operational planning (4) Annual Reports for Year 5 and					NOT ACHIEVED: Mature and Old Forest texture is below desirable level at Plan Start, and is projected to decrease during this plan period. A large proportion of the old forest that
To emulate natural disturbance and landscape patterns characteristic of the Dryden Forest.	1 - 20% concentration 21 - 40% concentration 41 - 60% concentration 61 - 80% concentration 81 - 100% concentration 5,000 ha Hexagon Scale: 1 - 20% concentration 21 - 40% concentration 41 - 60% concentration 61 - 80% concentration 81 - 100% concentration	11% 25% 37% 19% 8% 11% 12% 65% 12% 0%	47% 14% 9% 8% 22% 35% 22% 18% 16% 9%	final year of plan implementation	Same as desirable level	15% 35% 31% 15% 4% 13% 28% 56% 3% 0%	N/A	N/A	currently stands is very old, starting to fall down, and succeed to balsam fir. The length of time that these patches could maintain old forest into the future was carefully considered in the strategy. Strategies are being implemented on the Dryden Forest to defragment and also to retain/avoid harvest in specific larger patches of currently mature/old forest, as well as avoiding areas that will become mature/old in the next 20 years to generate future large patches of even-aged young forest (acceptable short-term result). Results of the defragmentation strategy are evident in the short-term with the reduction of the proportion of the 40-60% concentration class on the Dryden Forest. Achievement in future FMPs is expected to improve.
	(2b) Young forest patch size: (frequency by size class ha)	67% 22% 8% 2% 1% 1% 0% 0%	Move towards mean: 65% 13% 8% 5% 5% 5% 2% 11% 0% 0%	(1) Proposed LTMD     (2) Completion of operational planning     (4) Annual Reports for Year 5 and final year of plan implementation	Same as desirable level	62% 21% 10% 3% 3% 1% 0% 0%	N/A	N/A	PARTIALLY ACHIEVED: Certain size classes move towards the mean, others move away, and the remaining classes do not change significantly from Plan Start proportions. Overall young forest pattern by size class generally approximates the desirable level at Plan Start and through implementation of planned activities in this FMP.
3. Wildlife Habitat:  To maintain forest function for wildlife habitat in the Dryden	(3a) Habitat Proportion by Moose Emphasis Area: Rumac MEA: Browse Producing Forest Hardwood/Mixedwood Forest	38% 38%	5-30% 20-55%	(1) Proposed LTMD (2) Completion of operational planning	decrease maintain	44% 34%	45% 35%	N/A N/A	PARTIALLY ACHIEVED: Browse exceeds desirable range at Plan Start. Browse target level was relaxed to allow movement toward desirable level over 40 years. Mature conifer and mixedwood habitats acceptable (generally
Forest.	Mature Conifer Forest	25%	15-35%		maintain	23%	20%	N/A	with desirable ranges throughout planning horizon).

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## FMP-10: Assessment of Objective Achievement

Strategic modelling projections based on: LTMD\_10

						LTMD - Projections		ions	
Management Objective	Indicator	Plan Start Level	Desirable Level	Timing of Assessment	Target (short-term)	Short (10 yrs)	Medium (20 yrs)	Long (100 yrs)	Assessment
4. Forest Access:	(3b) Frequency of Young Forest Patch Size for Rumac MEA  < 100 ha  101-250 ha  251-500 ha  501-1,000 ha  1,001-2,500 ha  2,501-5,000 ha  5001-10,000 ha  10,001-20,000 ha  >20,000 ha  (4a) Kilometres of primary and	69% 20% 9% 2% 0% 0% 0% 0%	100% of young forest patches in the <100, 101 250, and 251-500 ha size classes	(1) Proposed LTMD (2) Completion of operational planning  (4) Annual Reports for Year 5 and	Move towards or maintain the young forest patch size frequency for the smallest three size classes.	61% 23% 9% 4% 2% 0% 0% 0%	N/A N/A N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A N/A N/A	NOT ACHIEVED: Through implementation of LTMD preferred harvest areas, young forest patches less than 500 ha is projected to move from 98% to 93% (away from the desirable level of 100%). The harvest strategy in the Rumac is to maintain a high proportion of small, young forest patches to maximize edge. This strategy and young forest patch size projected achievement may be improved through operational planning and harvest block layout during 2021 FMP development.
	branch road per square kilometre of Crown productive forest.	0.35 km primary and branch SFL roads per km2 Crown productive forest	0.35 - 0.48 km primary and branch SFL roads per km2 Crown productive forest	final year of plan implementation	maintain within desirable level	TBD Stage 3	N/A	N/A	(and accession and pair inperior and)
recreational opportunities through road maintenance and development of access to areas planned for harvest within the plan period.	(4b) Kilometres of operational road per square kilometre of Crown productive forest.	0.31 km operational SFL roads per km2 Crown productive forest	0.25 - 0.46 km operational roads per km2 Crown productive forest	(4) Annual Reports for Year 5 and final year of plan implementation	maintain within desirable level	TBD Stage 3	N/A	N/A	(future assessment after plan implementation)
5. Wood Supply:	(5a) Area of Managed Crown forest available for timber production (ha)	111,784	Maintain a minimum of 111,000 ha	(4) Annual Reports for Year 5 and final year of plan implementation		111,646	111,515	111,132	(future assessment after plan implementation, but estimated projections are good.)
To provide a predictable and continuous supply of	(5b) Long-term projected available harvest area (ha) (all Forest Units combined)	14,766	Highest long-term AHA while balancing other plan objectives	(1) Proposed LTMD	Same as desirable level.	14,193	13,507	14,555	<b>ACHIEVED</b> : Harvest area projected through time to achieve harvest volumes and balanced objective achievement.
wood to the forest products industry from the Dryden Forest.	(5c) Long-term projected available harvest volume by major species group (m³ / year).  SPF PO BW TOTAL	Annual Harvest Volume:  116,841 38,453 9,302 168,118	Highest long-term harvest volumes while balancing other plan objectives (reported by species group).	(1) Proposed LTMD	Same as desirable level.	105,147 37,991 9,302 155,402	101,385 34,570 9,301 148,369	140,235 36,273 4,270 165,448	ACHIEVED: Harvest volume projected through time to achieve harvest volumes, manage harvest volume variation between FMPs, and balanced objective achievement through the planning horizon.
	(5d) Long-term projected available harvest volume by broad size (m³/year).  Small Large TOTAL	Annual Harvest Volume: 166,759 1,359 168,118	Maintain similar size distribution as 2021 Plan Start	(1) Proposed LTMD	Same as desirable level.	151,363 4,039 155,402	144,492 3,877 148,369	164,321 1,127 165,448	ACHIEVED: The proportion of harvest volume by broad size groups is calculated to be similar (same or greater proportion of "large" sized volume) throughout planning horizon, as compared to Plan Start.

FMP-10: Assessment of Objective Achievement

Strategic modelling projections based on:

						LTN	ID - Project	ions	
Management Objective	Indicator	Plan Start Level	Desirable Level	Timing of Assessment	Target	Short	Medium	Long	Assessment
Objective	(5.) 4 4 111 4 4			(1) A 15 (1) (5 1	(short-term)	(10 yrs)	(20 yrs)	(100 yrs)	
	(5e) Actual Harvest Area as Percentage of Planned, by forest unit.	Annual Harvest Area (ha):	Percentage of Planned Harvest Area Actually Harvested:	(4) Annual Reports for Year 5 and final year of plan implementation					(future assessment after plan implementation)
	BFDOM	152	100%		min. 90%				
	BWDOM	88	100%		min. 95%				
	CONMX	1,856	100%		min. 95%				
	HRDMW	1,235	100%		min. 95%				
	HRDOM	1,164	100%		min. 95%	NI/A	NI/A	NI/A	
	PJDOM	2,184	100%		min. 95%	N/A	N/A	N/A	
	PJMX1	1,849	100%		min. 95%				
	PODOM	1,408	100%		min. 95%				
	PRWMX	34	N/A		N/A				
	SBDOM	1,762	100%		min. 95%				
	SBLOW	1,493	100%		min. 85%				
	SBMX1	1,544	100%		min. 95%				
	TOTAL	14,769							
	(5f) Actual Harvest Volume as	Annual Harvest Volume:	Major species groups:	(4) Annual Reports for Year 5 and					(future assessment after plan implementation)
	Percentage of Planned, by major			final year of plan implementation					
	species group.								
	SPF	116,841	100%		min. 90%	N/A	N/A	N/A	
	PO	38,453	100%		min. 90%				
	BW	9,302	100%		min. 90%				
	TOTAL	168,118							
				(C) = (C)					# · · · · · · · · · · · · · · · · · · ·
6. First Nation Engagement:	(6a) Feedback on effectiveness of engagement from First Nation and		100% of First Nation and	(3) Draft Plan					(future assessment at Draft Plan stage)
	Métis communities that participated		Métis communities that						
To engage during plan	in FMP development		participated during plan production to provide		Same as desirable	N/A	N/A	N/A	
development First			feedback on the		level	IN/A	N/A	N/A	
Nation and Métis			effectiveness of their						
communities in or			engagement.						
adjacent to the Dryden			engagement.						
Forest, as well as	(6b) Opportunities for involvement of		100% of First Nation and	(3) Draft Plan					(future assessment at Draft Plan stage)
individual Indigenous	First Nation and Métis communities		Métis communities						
peoples who live off the	in plan development, background		provided opportunities						
reserve but continue to	information and values identification		for involvement in plan		Same as desirable	A1/A	N1/A	N1/A	
have traditional ties to			development,		level	N/A	N/A	N/A	
the Dryden Forest.			background information						
			and values identification						
7. LCAC	(7a) Local Citizens' Advisory		LCAC Effectiveness	(3) Draft Plan					(future assessment at Draft Plan stage)
Engagement:	Committee's self-evaluation of its		survey results indicate at						
L	effectiveness in plan development.		least 80% effectiveness		LCAC Effectiveness				
To have the Local			in the development of the		survey results				
Citizens' Advisory			FMP.		indicate at least	N/A	N/A	N/A	
Committee (LCAC)					70% effectiveness				
effectively participate in					in the development				
the development of the					of the FMP.				
management plan.									
					l				

## FMP-10: Assessment of Objective Achievement

Strategic modelling projections based on: LTMD\_10

						LTMD - Projections			
Management	Indicator	Plan Start	Desirable	Timing of Assessment	Target	Short	Medium	Long	Assessment
Objective 8. Forest Renewal: To effectively regenerate harvest areas consistent with the regeneration standards outlined in the Silvicultural Ground	(8a) Percent of harvested forest area assessed as successfully established, by forest unit	Level N/A		(4) Annual Reports for Year 5 and final year of plan implementation	(short-term) Minimum of 95% of harvested area, successfully meeting SGR establishment standards (by forest unit)	(10 yrs) N/A	(20 yrs) N/A	(100 yrs) N/A	(future assessment after plan implementation)
Rules.	(8b) Planned and actual percent of harvest area treated by broad treatment type.  Natural Plant	Planned Renewal Area as a Percentage of Harvest Area, by Broad Treatment Type 25% 47%	a Percentage of Planned Harvest, by broad treatment type  Min. 90%  Min. 90%	(4) Annual Reports for Year 5 and final year of plan implementation	Minimum of 80% of the actual harvest area treated by the planned broad treatment type	N/A N/A	N/A N/A	N/A N/A	(future assessment after plan implementation)
	(8c) Planned and actual percent of area successfully regenerated to the target forest unit, by forest unit.	28% N/A	Min. 90%  Minimum of 90% of the actual harvested area successfully regenerated to the target forest unit, by forest unit.	(4) Annual Reports for Year 5 and final year of plan implementation	Minimum of 70% of the actual harvested area successfully regenerated to the target forest unit, by forest unit.	N/A N/A	N/A N/A	N/A N/A	(future assessment after plan implementation)
9. Forest Values: To implement forestry operations in a manner that minimizes negative impacts on all identified resource users, and protects all identified values.	(9a) Percent of forest operation inspections in non-compliance, by activity and remedy type.	N/A	0% of FOIP inspections reported as non- compliant by activity and remedy type.	(4) Annual Reports for Year 5 and final year of plan implementation	Maximum 5% of FOIP inspections reported as non-compliant by activity and remedy type.	N/A	N/A	N/A	(future assessment after plan implementation)
10. Healthy Ecosystems:  To maintain productivity of soil function, and to protect water quality and fisheries habitat where forest management activities occur in the Dryden Forest.	(10a) Compliance with management practices that prevent, minimize or mitigate site damage (% of inspections in non-compliance, by remedy type).	N/A	0% of FOIP inspections reported as non-compliant with management practices that prevent, mitigate, or minimize site damage (by activity and remedy type).	(4) Annual Reports for Year 5 and final year of plan implementation	Maximum 5% of FOIP inspections reported as non-compliant with management practices that prevent, mitigate, or minimize site damage (by activity and remedy type).	N/A	N/A	N/A	(future assessment after plan implementation)

## FMP-10: Assessment of Objective Achievement

Strategic modelling projections based on: LTMD\_10

							MD - Project	ions	
Management	Indicator	Plan Start	Desirable	Timing of Assessment	Target	Short	Medium	_	Assessment
Objective		Level	Level		(short-term)	(10 yrs)	(20 yrs)	(100 yrs)	
	(10b) Compliance with management practices that protect water quality and fish habitat (% of inspections in non-compliance, by remedy type).	N/A			Maximum 5% of FOIP inspections reported as non-compliant with management practices that protect water quality and fish habitat (by activity and remedy		N/A	N/A	(future assessment after plan implementation)
					type).				