

MUTUALLY SELECTED INDICATORS - for scenario ranking <i>revised: Oct. 22, 2019</i>			156 indicators chosen by Indigenous communities, SAC, FMP planning team		
Number	Group	SHORT	Indicator	Comments	nat order
6	FMP planning team	17 IND BIRDS	17+1 Bird Indicators	If the indicator could summarize the +/- change in habitat across all 17+1 bird species that would be ideal (I understand there are limitations based on what scale you run the model at). Alternatively focus on the SaR ones.	16
10	FMP planning team	17 IND BIRDS	17 indicator bird species AND the CAWA model.	LP roads only, no highway / RM and please merge the winter roads with dry frozen.	41
3	FMP planning team	17 IND BIRDS	17 indicator bird species	most important	71
4	FMP planning team	17 IND BIRDS	17 indicator bird species		86
6	SAC	17 IND BIRDS	17 indicator bird species		99
5	FMP planning team	17 IND BIRDS	Utilize the 17 indicator species		108
	Indigenous Community	ACCESS	access maximized	access should not be closed or gated ever	128
	Indigenous Community	ACCESS	more access	would like to see all roads remain open. MRC community do not all have access to quads and population getting older. Roads allow continued traditional use of forests.	136
3	FMP planning team	AGE CLASS	Managed area by age class and period		3
4	FMP planning team	AREA BY HEC_AGE	Annual Harvest area by HEC and age class		4
7	FMP planning team	AREA BY HEC_AGE	Annual harvest area by HEC and age class - (Combine periods 1/2)	Combine to show the full duration of the 20-year FMP	17
4	FMP planning team	AREA BY HEC_AGE	Annual harvest area by HEC and age class	Possible to add in a best guess of area per FMU? Would mean more to the public.	35
5	FMP planning team	AREA BY HEC_AGE	Annual harvest area by HEC and age class		47
8	FMP planning team	AREA BY SPP_SERAL	Total Area by Species Group and seral stage in FML3		76
5	FMP planning team	AREA BY SPP_SERAL	Total Area by Species Groups and Seral Stage in FML3		87
9	FMP planning team	AREA HARVESTED	Area harvested by age class and period		51
10	FMP planning team	AREA HARVESTED	Annual Harvest Area Total - FMU 13		92
6	FMP planning team	AREA PLANTED	Annual Area by Treatment Type (by FMU)		6
7	FMP planning team	AREA PLANTED	Annual Area by Treatment Type, by FMU		49
	Indigenous Community	ARTIFACTS & CULTURAL	Artifacts and Cultural Heritage Resources	at April 30, 2019 meeting	112
	Indigenous Community	BIRDS	Birds - Chief and Council commented on LP's bird surveys and the maps showing where species at risk Canada Warbler and Golden Winged Warbler were found -thought it was good that LP completed this work annually	LP will continue annual bird surveys in proposed summer bl	125
	Indigenous Community	BUFFERS	questions around buffers and how they were decided on	buffer guidelines from Province of Manitoba; buffer width mitigation with Province of Manitoba's Integrated Resource Management Team	123
	Indigenous Community	BUFFERS	confusion around why some large areas were left to blow down and other areas of younger forest only a strip of timber was left	buffer guidelines from Province of Manitoba; buffer width mitigation with Province of Manitoba's Integrated Resource Management Team	124
10	FMP planning team	CARBON	Carbon storage in FML3		20
	Indigenous Community	CARBON	to identify forest management practices that sequester carbon	potential SFI grant proposal	119
1	FMP planning team	COVER GROUP	Current Cover Group in FML3		11
1	FMP planning team	COVER GROUP	Current Cover Group in FML3		32
1	FMP planning team	COVER GROUP	Current Cover Group in FML3,	It's rich in the model outputs, these are very useful to evaluate the scenario for SFM. As you requested, here's top list with 10+ [18] since they all are important:	43
4	FMP planning team	COVER GROUP	Total Area of HEC Cover Group in FML3		46
7	FMP planning team	COVER GROUP	Current cover group in FML3	age and cover type X	75
9	FMP planning team	COVER GROUP	Total Area of HEC cover group in FML3		77
6	FMP planning team	COVER GROUP	Total Area of HEC Cover Group in FML3		88
	Indigenous Community	COVER GROUP			144
	SAC	ELK	Report the ranges of elk in spring, summer, fall and winter	added: Oct. 22, 2019	149
	Indigenous Community	FIRE		spring 2018 burned area on SCN land	139
	Indigenous Community	FIREWOOD		want access to firewood	133
	SAC	FUR BEARERS	Once a particular area is harvested, showcase what process LP uses to accommodate the fur bearing animals natural habitat.	added: Oct. 22, 2019	153
2	FMP planning team	GROWING STOCK	Growing stock in FML3		33
	Indigenous Community	HARVEST		FMUs 10 and 11 - most easily accessible by MRC members. Harvest in FMUs 10 and 11 has biggest impact on MRC members.	130
	Indigenous Community	HARVEST		SCN would like to harvest timber for LP. Sold wood to LP a long time ago, would like to do so again.	142
11	FMP planning team	HARVEST MAPS	Harvest maps		53
5	FMP planning team	HEC STRATA	HEC strata silvicultural transitions		5
6	FMP planning team	HEC STRATA	HEC strata silvicultural transition by period		37
6	FMP planning team	HEC STRATA	HEC strata silvicultural transition by period		48
12	FMP planning team	LANDSCAPE CLASS	Landscape class maps		54
4	SAC	MARTEN	Marten Winter Cover		24
5	SAC	MARTEN	Marten Winter Cover	ensure marten habitat exists on landscape for plan duration	30
11	FMP planning team	MARTEN	Marten habitat	FMU 13 only as little of the changes to watershed outside of FMU 13 have anything to do with LP. Need to stay separated from the impacts of agriculture	42
15	FMP planning team	MARTEN	Marten/Bird Habitat Report		57
5	FMP planning team	MARTEN	Marten Winter Cover	most important	73
5	SAC	MARTEN	Marten Winter cover		98

2	FMP planning team	MOOSE	Maximize moose habitat, summer		1
1	FMP planning team	MOOSE	Maximize moose habitat, winter		2
1	SAC	MOOSE	CHOOSE THE MOOSE EMPHASIS SCENARIO	choice of scenario (which Gerald help build) rather than an indicator	21
	Indigenous Community	MOOSE	moose	moose	22
1	FMP planning team	MOOSE	Moose Habitat	These were chosen to address concerns heard during consultation and by ENGO	26
	Indigenous Community	MOOSE	Moose habitat	August 20th, 2019. Pine Creek believes Moose negatively impacted by forest operations.	38
	Indigenous Community	MOOSE	moose habitat	Moose winter and summer good. Asked about spring and fall.	56
1	SAC	MOOSE	Moose Habitat indicators		61
10	FMP planning team	MOOSE	Moose Habitat Indicators for FMU13		69
14	FMP planning team	MOOSE	Moose Habitat reports		70
	Indigenous Community	MOOSE	Moose populations	April 30 <sup>th</sup> , 2019 – Pine Creek believes the moose population decline began with LP commencing operations	78
	Indigenous Community	MOOSE	moose populations low		83
2	FMP planning team	MOOSE	Moose summer habitat		84
2	SAC	MOOSE	Moose summer habitat		94
2	FMP planning team	MOOSE	Moose summer habitat (Habitat Supply Model)		97
1	FMP planning team	MOOSE	Moose winter habitat		104
1	SAC	MOOSE	Moose winter habitat		105
7	FMP planning team	MOOSE	Moose winter habitat (Resource Selection Function)		110
1	FMP planning team	MOOSE	Moose winter habitat (Resource Selection Function)		111
4	SAC	MOOSE	Summer and Winter Moose Habitat		120
2	FMP planning team	MOOSE	Summer Moose Habitat Supply Model (HSM)	most important	131
1	FMP planning team	MOOSE	Winter Moose Habitat (RSF – Resource Selection Function)	most important	132
	Indigenous Community	MOOSE		Biggest concern for forest management in the Duck Mountains	140
	SAC	MOOSE	Incorporate moose habitat reports in LP's FMP for the purpose of conservation for moose.	added: Oct. 22, 2019	146
	SAC	MOOSE	LP to map these habitat areas for the purpose of monitoring moose numbers and identifying areas moose generally frequent for the purpose of protecting some of these areas for moose to generate their numbers.	added: Oct. 22, 2019	147
	SAC	MOOSE	Report the ranges of moose in spring, summer, fall and winter	added: Oct. 22, 2019	148
	SAC	MOOSE	Some focus should be added on the areas that will not be harvested for	added: Oct. 22, 2019	151
3	FMP planning team	NRV	Deciduous seral stages compared to NRV		13
4	FMP planning team	NRV	Mixed seral stages compared to NRV		14
3	FMP planning team	NRV	Natural Range of Variation reports	Would be nice to have all of them, and somehow link in the Seral Stage maps.	34
16	FMP planning team	NRV	Natural Range of Variation reports		58
12	FMP planning team	NRV	NRV - all spp		80
7	FMP planning team	NRV	Deciduous seral stages compared to NRV	not sure if all [NRV]species scored as one, but if not, below would be two to rank if I had to choose	89
8	FMP planning team	NRV	Mixed seral stages compared to NRV	not sure if all [NRV]species scored as one, but if not, below would be two to rank if I had to choose	90
	Indigenous Community	NRV	Natural Range of Variation (NRV)	April 30th and August 20th, 2019 meeting	113
	Indigenous Community	NRV	agreed NRV targets should be used	liked how an 'old' [seral stage] target was present	134
9	FMP planning team	OLD SPP GROUPS	Managed Area of OLD Species Groups FML3		19
2	FMP planning team	OLD SPP GROUPS	Old Seral by Species Group on Entire Land Base		44
3	FMP planning team	OLD SPP GROUPS	Unmanaged Area of OLD Species Groups in FML3	These were chosen to address concerns heard during consultation and by ENGO	63
4	FMP planning team	OLD SPP GROUPS	Managed Area of OLD Species Groups in FML3	These were chosen to address concerns heard during consultation and by ENGO	64
5	FMP planning team	OLD SPP GROUPS	Old Seral Cover Group % Change (Managed Landbase)	These were chosen to address concerns heard during consultation and by ENGO	65
3	FMP planning team	OP GROWING STOCK	Operable Growing stock by FMU		45
	SAC	OPEN HOUSES	LP to continue having open houses for the public on their two-year operating plan.	added: Oct. 22, 2019	150
2	FMP planning team	PATCH SIZE	Harvest Patch Size Distribution		12
5	SAC	PATCH SIZE	Harvest Patch Size		25
3	SAC	PATCH SIZE	patch size variation	ensure NRV variation in cutblock size for all wildlife and bird species	28
17	FMP planning team	PATCH SIZE	Patch reports		59
8	FMP planning team	PATCH SIZE	Harvest patch frequency distribution	These were chosen to address concerns heard during consultation and by ENGO	68
11	FMP planning team	PATCH SIZE	Young forest patch size		79
9	FMP planning team	PATCH SIZE	Harvest patch size distribution		91
10	SAC	PATCH SIZE	Harvest patch frequency distribution		103
	Indigenous Community	PATCH SIZE	more aggregated harvest	would like to see more aggregated harvest to minimize disturbance of logging to moose	129
	Indigenous Community	PATCH SIZE		want to see bigger blocks with multiple [logging] contractors in them to let areas of the forest 'rest' from disturbance	135
	SAC	PATCH SIZE	Reports on harvest patch sizes and locations.	added: Oct. 22, 2019	155
	Indigenous Community	REGEN			143
7	FMP planning team	ROADS	Road deactivation		7
8	FMP planning team	ROADS	Road construction		8
5	FMP planning team	ROADS	Total road network (all-weather/candidate/dry-frozen)	I think the indicator should take into account % all-weather access if possible	15

3	SAC	ROADS	Roads		23
2	SAC	ROADS	roads	decrease total roads	27
8	FMP planning team	ROADS	Candidate (active) roads- generated by Craig Robinson (ForSite)		39
18	FMP planning team	ROADS	Route reports		60
6	FMP planning team	ROADS	Total length of active roads	These were chosen to address concerns heard during consultation and by ENGO	66
6	FMP planning team	ROADS	Candidate (active) roads	most important	74
13	FMP planning team	ROADS	Roads - Route reports		81
3	FMP planning team	ROADS	Candidate (active) roads- generated by Craig Robinson (ForSite)		85
8	SAC	ROADS	Candidate roads		101
3	FMP planning team	ROADS	Minimize roads		106
	Indigenous Community	ROADS	Roads	April 30th and August 20th, 2019 meeting	114
	Indigenous Community	ROADS	Access	April 30th and August 20th, 2019 meeting	115
	Indigenous Community	ROADS	to measure or illustrate the unique role of industrial road densities in contributing to the vulnerability of wildlife	potential SFI grant proposal	118
	Indigenous Community	ROADS	Access – how we close roads	SOG – close all new road access. Existing roads dealt with operationally, in mitigation with Province of Manitoba.	121
	Indigenous Community	ROADS	roads maximized	roads should be left open	127
	SAC	ROADS	New routes constructed to go into harvest areas should be decommissioned immediately once these areas will no longer be logged.	added: Oct. 22, 2019	156
9	FMP planning team	SAR CAWA	Birds at risk habitat – need to pick one I think . Should it be a species that is represented in other parts of the province as well?	PL - Canada Warbler (CAWA) is the only bird spp at risk with habitat data at present (Oct. 2019)	9
4	FMP planning team	SAR CAWA	One bird species at risk with sufficient data to generate a model – Canada Warbler	most important	72
11	FMP planning team	SAR CAWA	One bird species at risk with sufficient data to generate a model - Canada Warbler -CAWA.		93
7	SAC	SAR CAWA	One bird species at risk [CAWA]		100
4	FMP planning team	SAR CAWA	Account for the species at risk with sufficient data [CAWA] (Golden winged warbler)		107
	Indigenous Community	SAR CAWA	concern for bird species at risk	LP will continue annual bird surveys in proposed summer blocks. Often, the bird species at risk Canada Warbler is found. Other bird species at risk are rarely found.	126
	Indigenous Community	SAR CAWA	habitat	need to keep habitat around for all	137
4	SAC	SERIAL STAGE	seral stage distribution	ensure NRV variation for stand age	29
13	FMP planning team	SERIAL STAGE	Seral Stage maps		55
	SAC	SMALL ANIMALS	Mitigation plan on the habitat of small animals is critical.	added: Oct. 22, 2019	152
	Indigenous Community	SUCCESSION			145
	Indigenous Community	TLE		Treaty Land Entitlement - most important concern of SCN	138
	Indigenous Community	TREE PLANT	tree planting opportunities	Tree planting is supervised by the Mountain Forest Section Renewal Company. Outland is a long-time contractor executing the tree plant work. LP will pass this information on to Jeannette Coote (Silviculture forester with MFSRC).	122
	Indigenous Community	TREE PLANT		reforest burned area	141
5	FMP planning team	VOLUME	Annual Harvest Volume - FMU 10, 11, 13	Stacked bar graph of all three? Maybe not workable (scale issue of FMU 10 vs FMU 13)?	36
8	FMP planning team	VOLUME	Annual Harvest Volume - FML3		50
10	FMP planning team	VOLUME	Average volume by FMU		52
9	SAC	VOLUME	Volume harvested		102
10	FMP planning team	WATERSHED	Harvest levels by watershed		10
8	FMP planning team	WATERSHED	Disturbance by watershed for FMU13		18
6	SAC	WATERSHED	watershed	ensure harvest disturbance remains less than 30% for watershed	31
9	FMP planning team	WATERSHED	Disturbance by watershed for FMU13		40
2	FMP planning team	WATERSHED	Disturbance by watershed for FMU13	These were chosen to address concerns heard during consultation and by ENGO	62
7	FMP planning team	WATERSHED	Annual Area harvested by watershed	These were chosen to address concerns heard during consultation and by ENGO	67
14	FMP planning team	WATERSHED	Disturbance by watershed		82
2	SAC	WATERSHED	Annual Area harvested by watershed		95
3	SAC	WATERSHED	Disturbance by watershed		96
6	FMP planning team	WATERSHED	Minimize impacts to watersheds		109
	Indigenous Community	WATERSHED	increased surface water at PCFNs	PCFN dislikes the hydrology report results from Lee 2014	116
	Indigenous Community	WATERSHED	qualitative analysis of the hydraulic impacts of forest harvesting	potential SFI grant proposal	117
	SAC	WATERSHED	Require watershed reports one year after on the particular areas that were harvested. Was there any erosion? These reports would be very appreciated by the people living downhill from Duck Mountains.	added: Oct. 22, 2019	154