

Figure 12. DFA managed landbase oldgrowthness distribution and degree at year 50.

VOIT 2 - Opening patch size distribution on the forested landbase for each FMU (1.1.1.2a).

Table 21 and Table 22 summarize the forecasted area and proportion of the total opening patch area within each of opening patch size class at years, 0, 10 and 50 of the 200-year planning horizon for the W11 and W13 forested landbases respectfully.

Table 21. W11 forested landbase opening patch area over 200-year planning horizon.

Year	> 0 & ≤ 4 ha		> 4 & ≤ 100 ha		> 100 & ≤ 1000 ha		> 1000 ha		Total Patch Area (ha)
	(ha)	(%)	(ha)	(%)	(ha)	(%)	(ha)	(%)	
2007	59	0.6%	8,104	83.6%	1,537	15.8%	-	0.0%	9,699
2017	129	0.9%	7,264	48.0%	6,276	41.5%	1,455	9.6%	15,124
2057	132	1.2%	8,333	76.0%	2,502	22.8%	-	0.0%	10,967

Table 22. W13 forested landbase opening patch area over 200-year planning horizon.

Year	> 0 & ≤ 4 ha		> 4 & ≤ 100 ha		> 100 & ≤ 1000 ha		> 1000 ha		Total Patch Area (ha)
	(ha)	(%)	(ha)	(%)	(ha)	(%)	(ha)	(%)	
2007	297	0.6%	16,552	31.6%	5,760	11.0%	29,713	56.8%	52,323
2017	1,324	3.7%	18,792	52.1%	12,666	35.1%	3,287	9.1%	36,068
2057	2,283	6.5%	22,735	64.8%	10,066	28.7%	-	0.0%	35,083

Figure 13, Figure 14 and Figure 15 illustrate the distribution of opening patch size classes on the W11 forested landbase at years 0, 10 and 50 of the 200-year planning horizon, respectively.

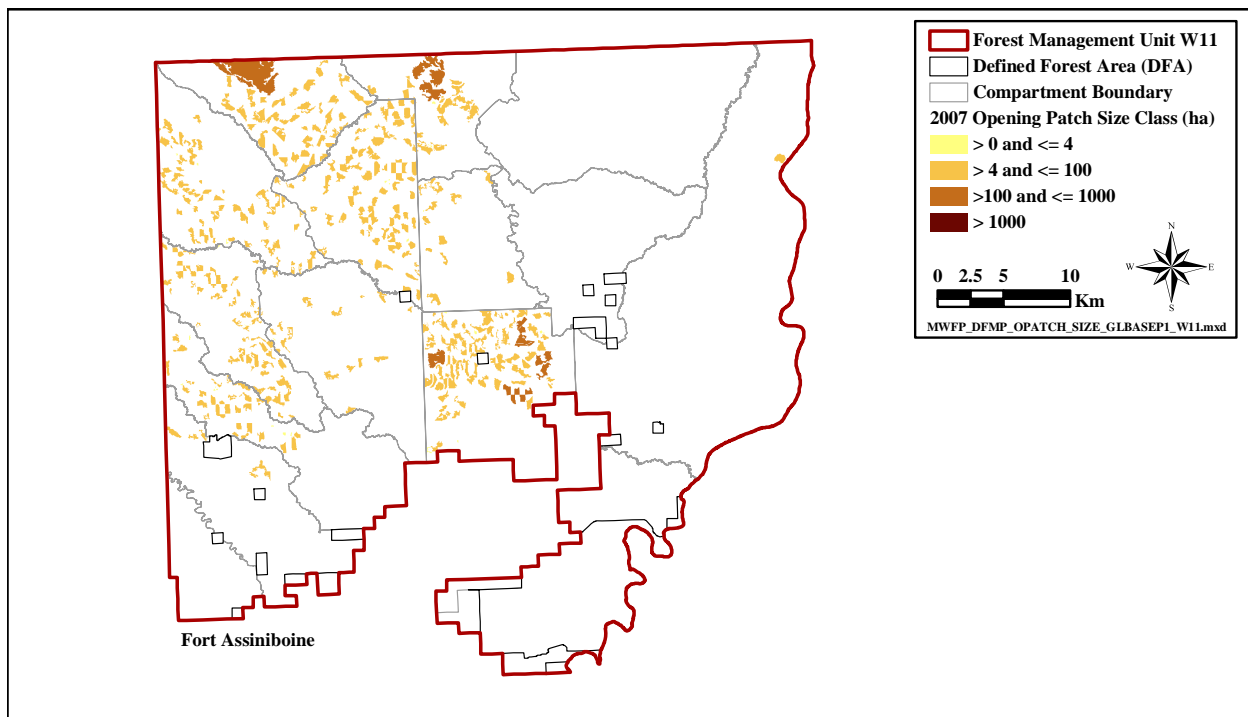


Figure 13. W11 forested landbase opening patch size class distribution at year 0.

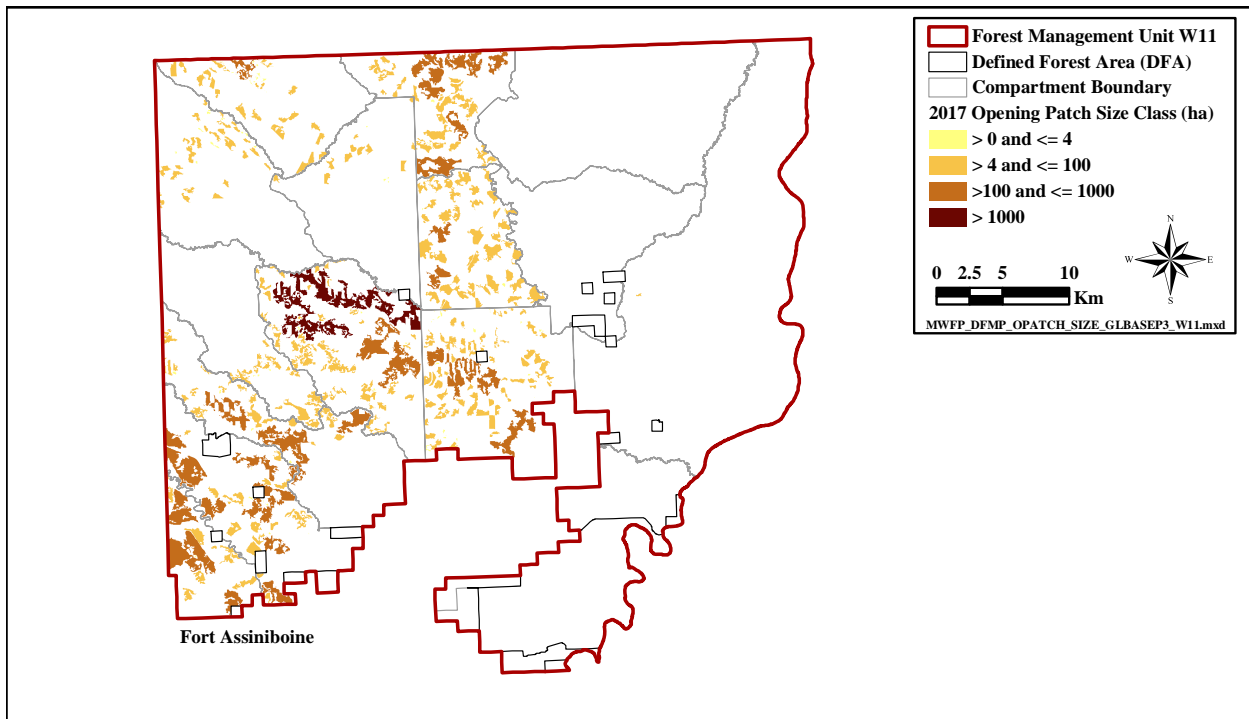


Figure 14. W11 forested landbase opening patch size class distribution at year 10.

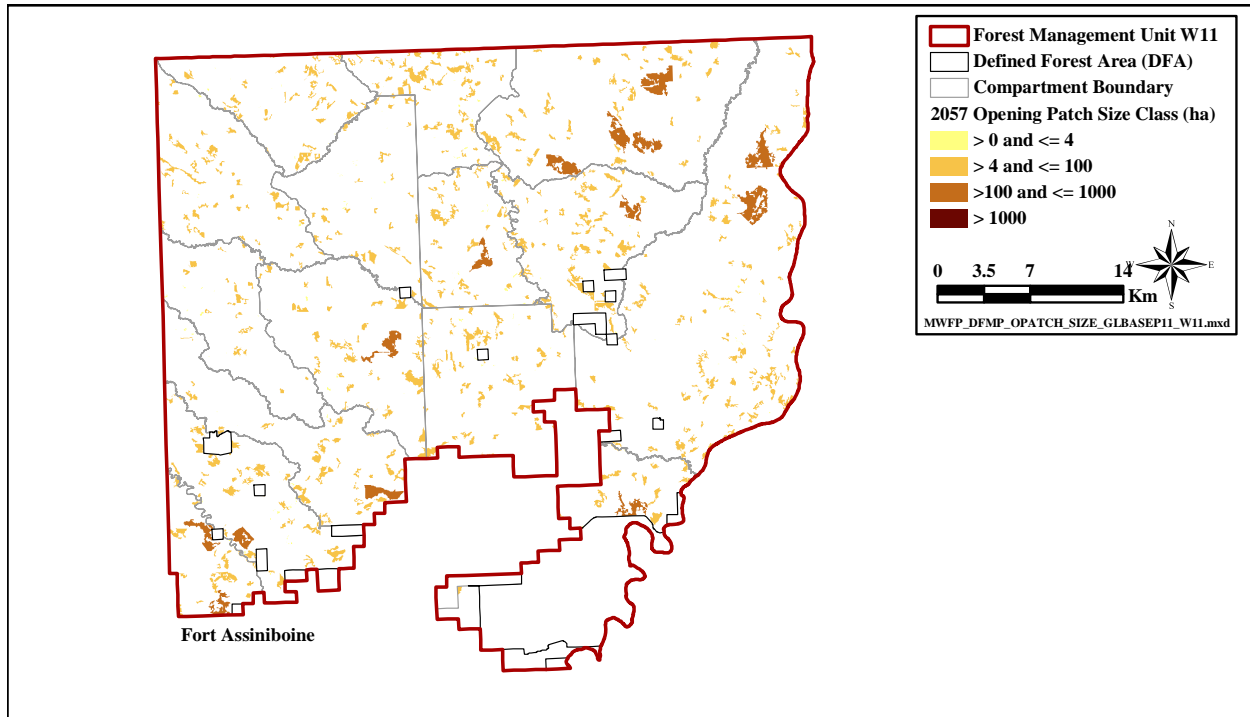


Figure 15. W11 forested landbase opening patch size class distribution at year 50.

Figure 16, Figure 17 and Figure 18 illustrate the distribution of opening patch size classes on the W13 forested landbase at years 0, 10 and 50 of the 200-year planning horizon, respectively.

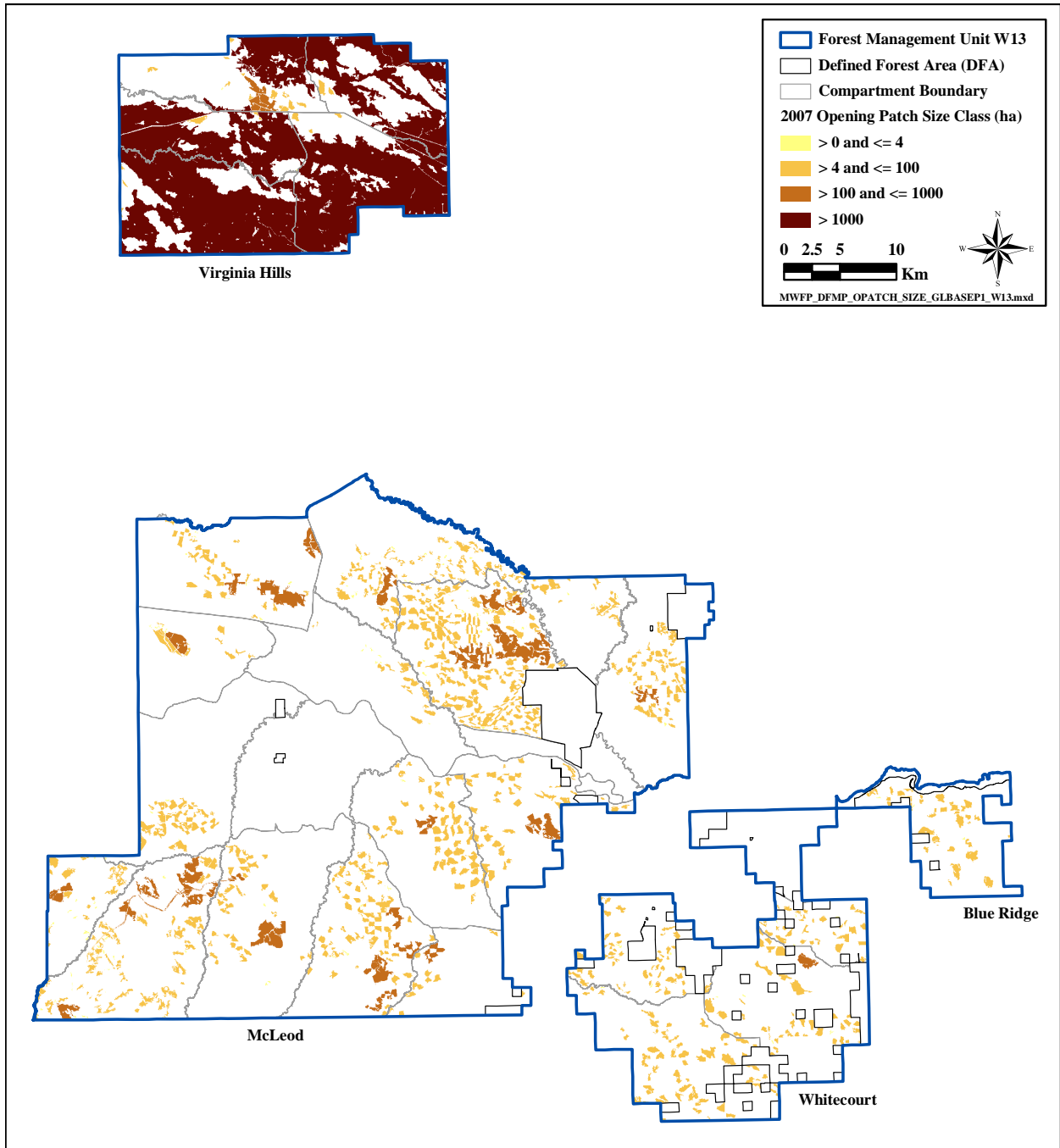


Figure 16. W13 forested landbase opening patch size class distribution at year 0.

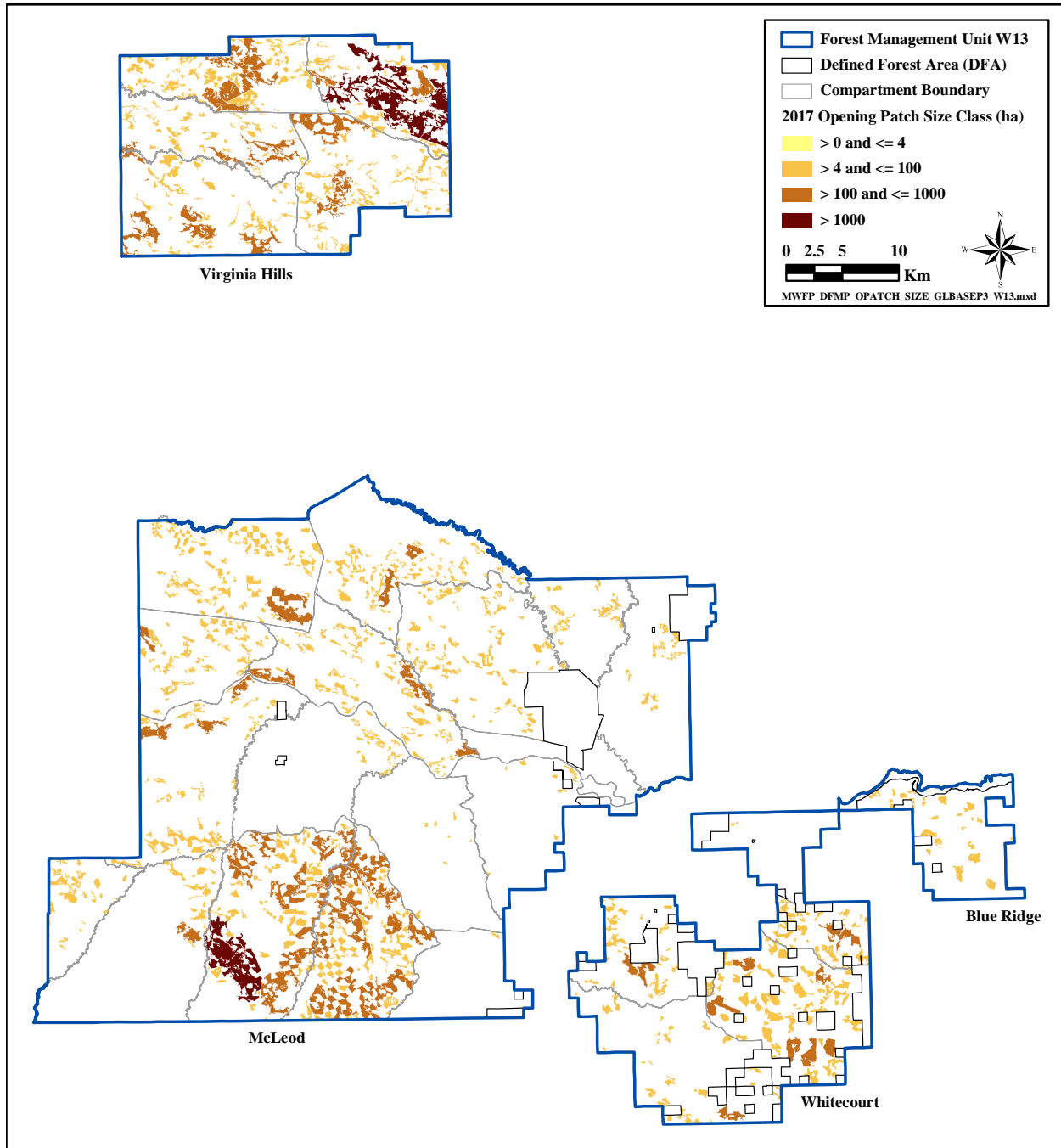


Figure 17. W13 forested landbase opening patch size class distribution at year 10.

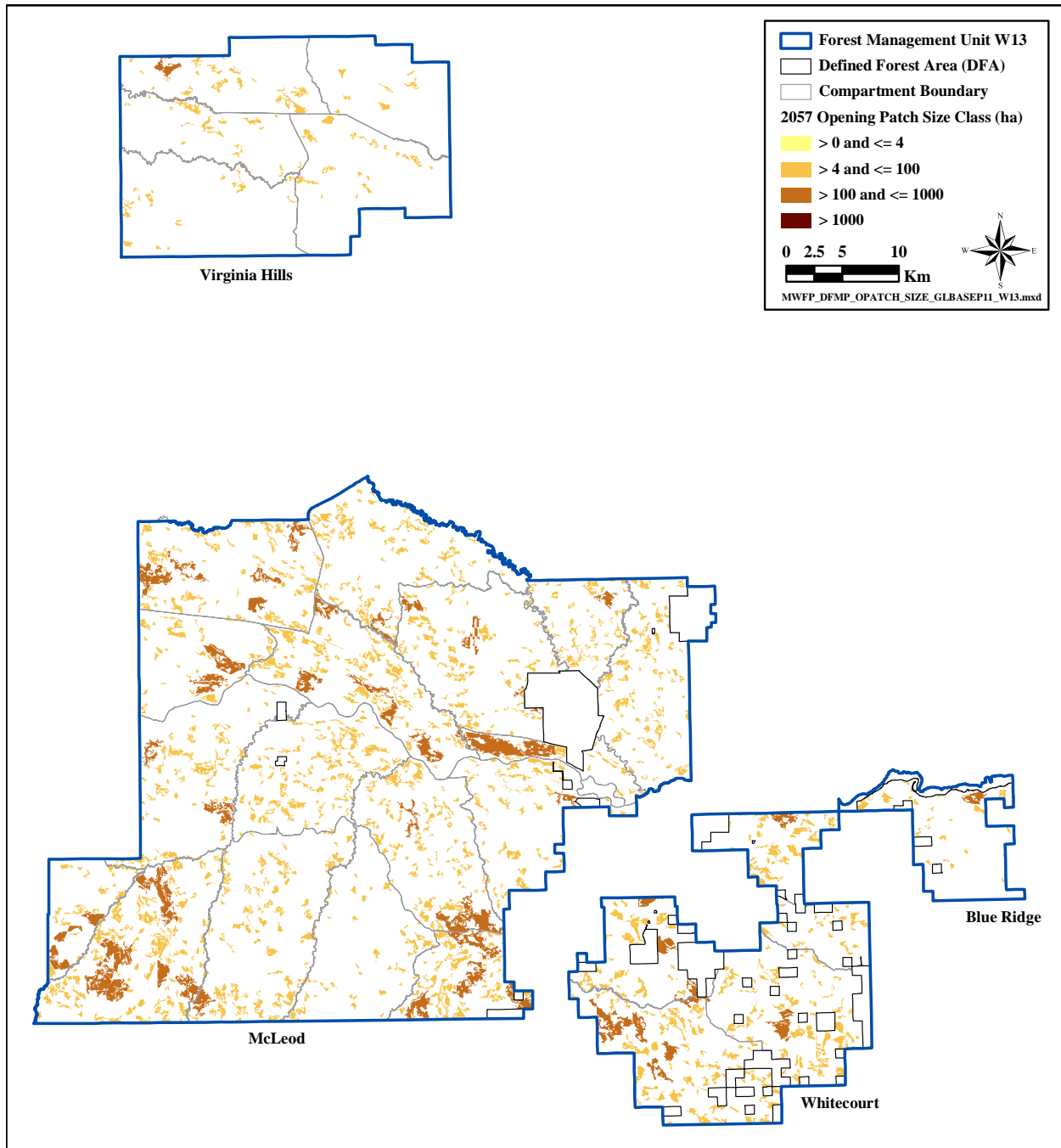


Figure 18. W13 forested landbase opening patch size class distribution at year 50.



VOIT 3 – Proportion of overall oldgrowthness forest that is interior oldgrowthness forest by FMU for the forested landbase (1.1.1.2B).

Information on interior oldgrowthness is contained within the Supplemental Information section of *Appendix XXIII – Commitments*.

Table 23 and Table 24 summarize the forecasted area and proportion of oldgrowthness forest that is interior oldgrowthness forest at years 0, 10 and 50 of the 200-year planning horizon for the W11 and W13 forested landbases.

Table 23. W11 forested landbase oldgrowthness and interior oldgrowthness for years 0, 10 and 50 of the 200-year planning horizon.

Year	Total Oldgrowthness (ha)	Interior Oldgrowthness (ha)	Interior Oldgrowthness (%)
2007	20,305	10,893	54%
2017	25,237	13,870	55%
2057	39,106	28,681	73%

Table 24. W13 forested landbase oldgrowthness and interior oldgrowthness for years 0, 10 and 50 of the 200-year planning horizon.

Year	Total Oldgrowthness (ha)	Interior Oldgrowthness (ha)	Interior Oldgrowthness (%)
2007	49,603	34,277	69%
2017	43,610	28,139	65%
2057	41,562	21,474	52%

Figure 19, Figure 20 and Figure 21 illustrate the area of interior oldgrowthness forest on the DFA forested landbase at years 0, 10 and 50 of the 200-year planning horizon, respectively.

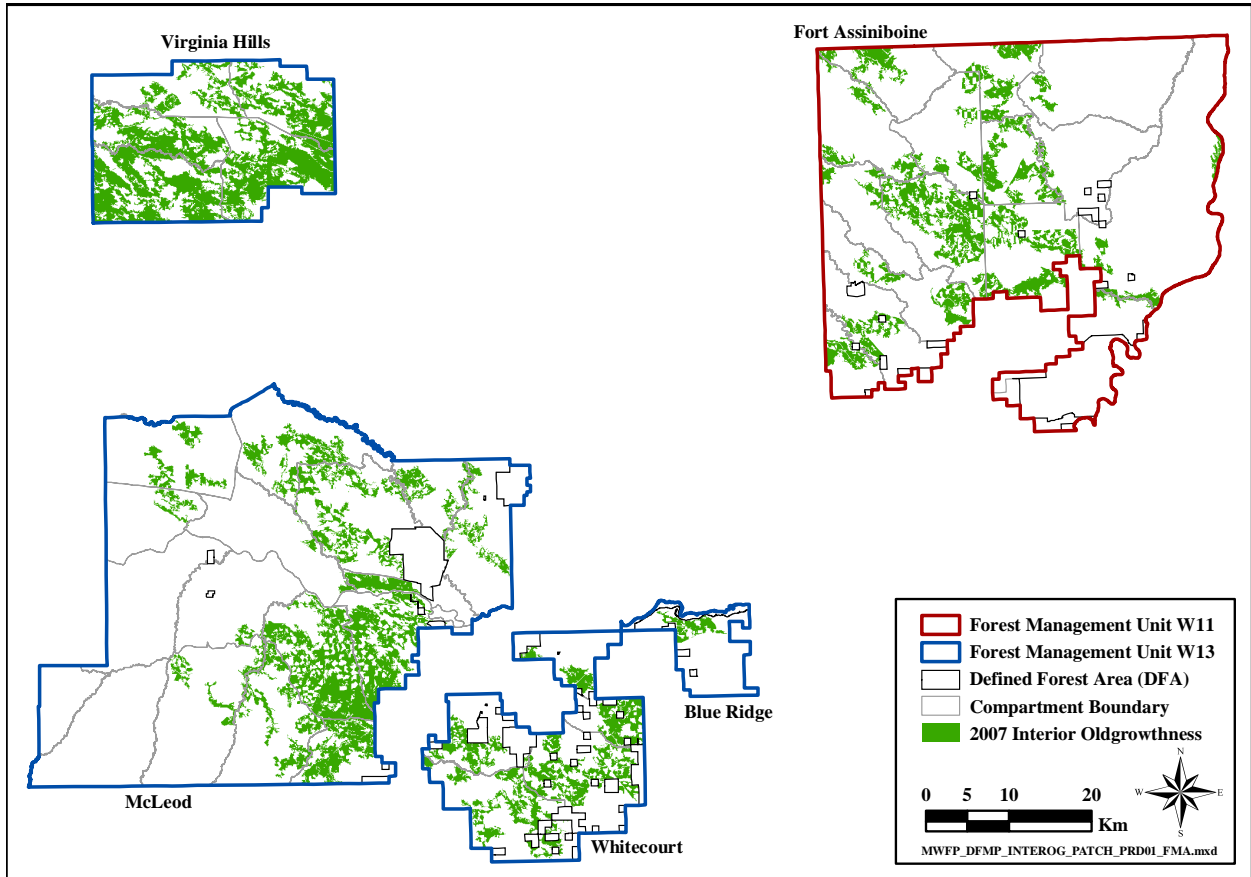


Figure 19. DFA forested landbase interior oldgrowthness at year 0.

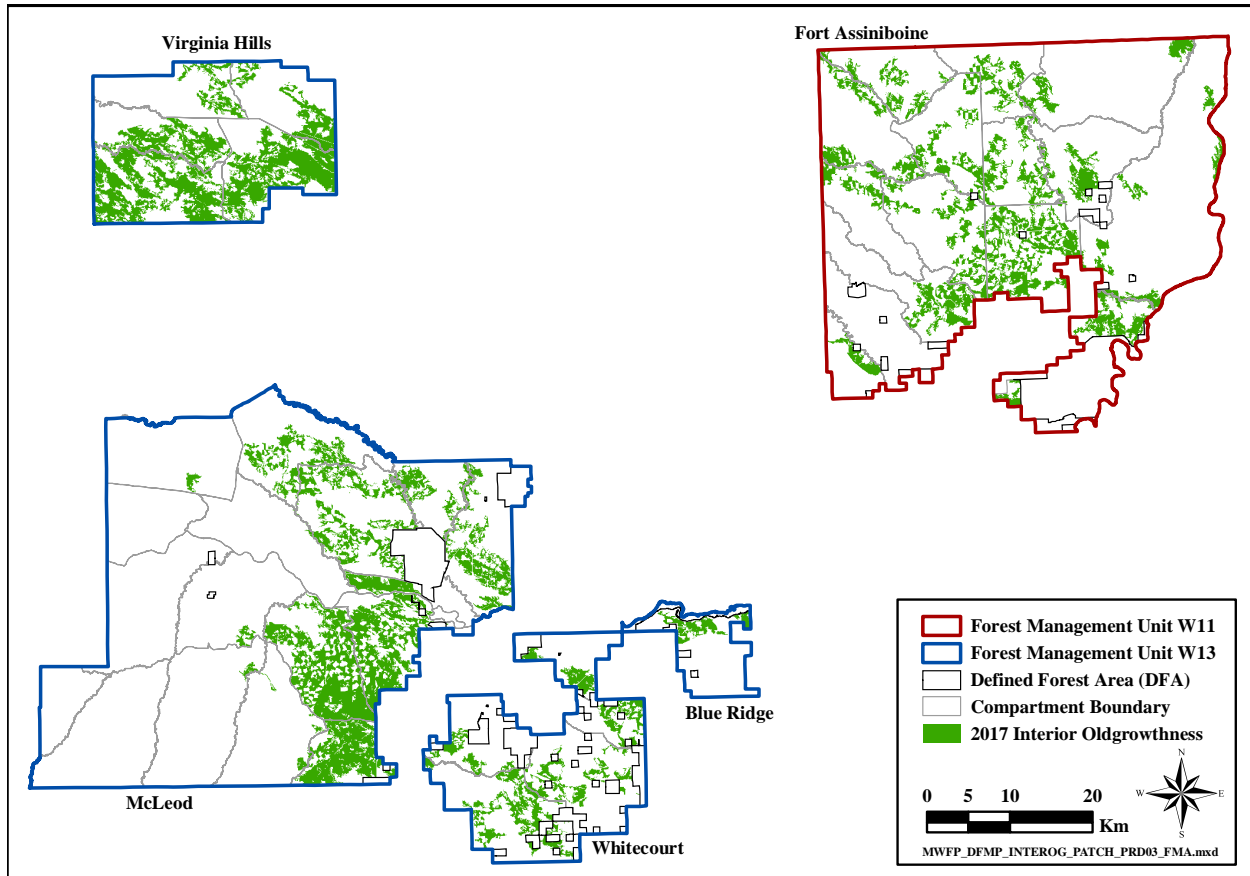


Figure 20. DFA forested landbase interior oldgrowthness at year 10.

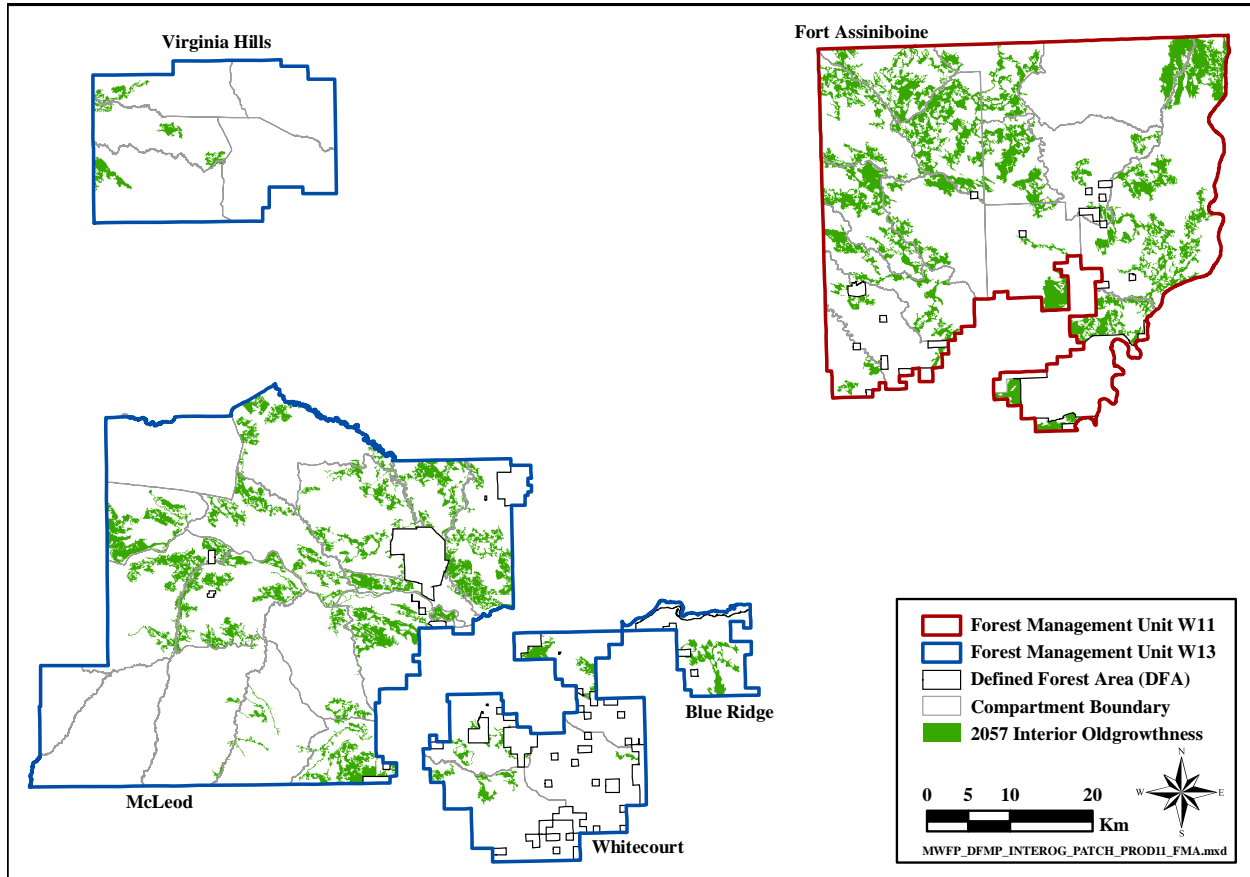


Figure 21. DFA forested landbase interior oldgrowthness at year 50.



VOIT 36 – Completion of carbon budget analysis on the Preferred Forest Management Strategy of the 2007 DFMP (4.1.1.1).

As determined using the Canadian Forest Service (CFS) Carbon Budget Model (CBM), and based on the 2007 DFMP PFMS, a carbon budget was modeled for the DFA over the period from 2002 to 2207. Table 25 summarizes the values modeled carbon stocks at years 0, 10, 50, 100 and 200 of the 200-year planning horizon, while Figure 22 illustrates the dynamics of the carbon stocks over the period modeled. Refer to *Appendix XV – Carbon Accounting on the DFA*, for more information on this assessment.

Table 25. Forecasted DFA carbon stocks, based on 2007 DFMP PFMS, at years 0, 10, 50, 100 and 200 of the 200-year planning horizon (2007 – 2207).

Year	DFA Carbon Stocks (Mt)		
	Dead Organic Matter	Live Biomass	Total Ecosystem
2007	372	63	436
2017	372	60	431
2057	357	45	402
2107	335	55	391
2207	390	75	465

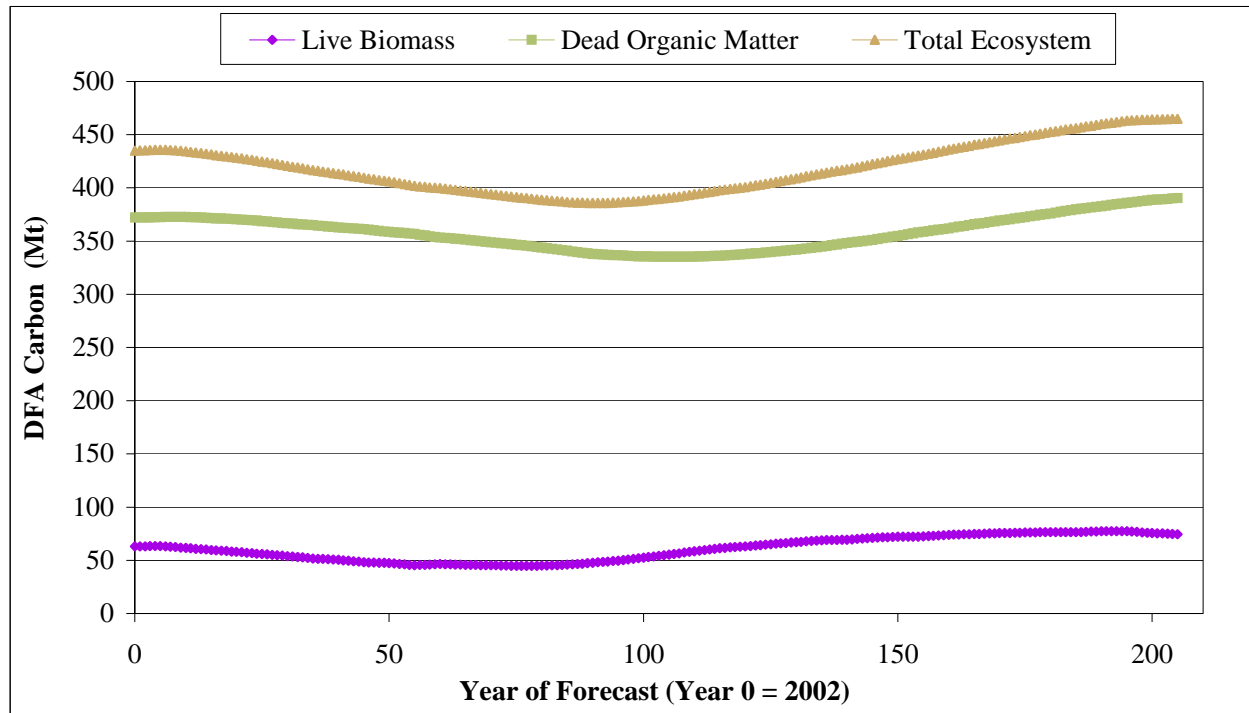


Figure 22. Forecasted DFA carbon stocks, based on 2007 DFMP PFMS, for period 2002 – 2207



VOIT 42 – Area in the ‘extreme’ and ‘high’ Fire Behaviour Potential rating categories within the Whitecourt FireSmart Community Zone, over the planning horizon (5.2.1.1A).

Table 26 summarizes the forecasted area and proportion of forested landbase within the Whitecourt FireSmart Community Zone (WFSCZ) that is forecasted to fall within the “extreme” and “high” Fire Behaviour Potential (FBP) category at years 0, 10, 20 and 50 of the 200-year planning horizon.

Table 26. Whitecourt FireSmart Community Zone projected area of extreme and high FBP ranking at years 0, 10, 20 and 50 of the 200-year planning horizon.

FBP Value	FBP Description	2007		2017		2027		2057	
		(ha)	(%)	(ha)	(%)	(ha)	(%)	(ha)	(%)
N/A	N/A	7,910	7%	7,910	7%	7,910	7%	7,910	7%
1 - 10	Low	41,372	37%	44,643	40%	43,844	40%	41,372	37%
11 - 30	Moderate	30,993	28%	26,852	24%	28,424	26%	30,993	28%
31 - 70	High	7,619	7%	11,792	11%	10,415	9%	7,619	7%
71 - 100	Extreme	23,008	21%	19,704	18%	20,308	18%	23,008	21%
Total		110,901	100%	110,901	100%	110,901	100%	110,901	100%
31 - 100 High + Extreme		30,627	28%	31,496	28%	30,723	28%	30,627	28%

Figure 23, Figure 24, Figure 25 and Figure 26 illustrate the distribution of FBP rating category within the WFSCZ at years 0, 10, 20 and 50, respectively, over the 200-year planning horizon.

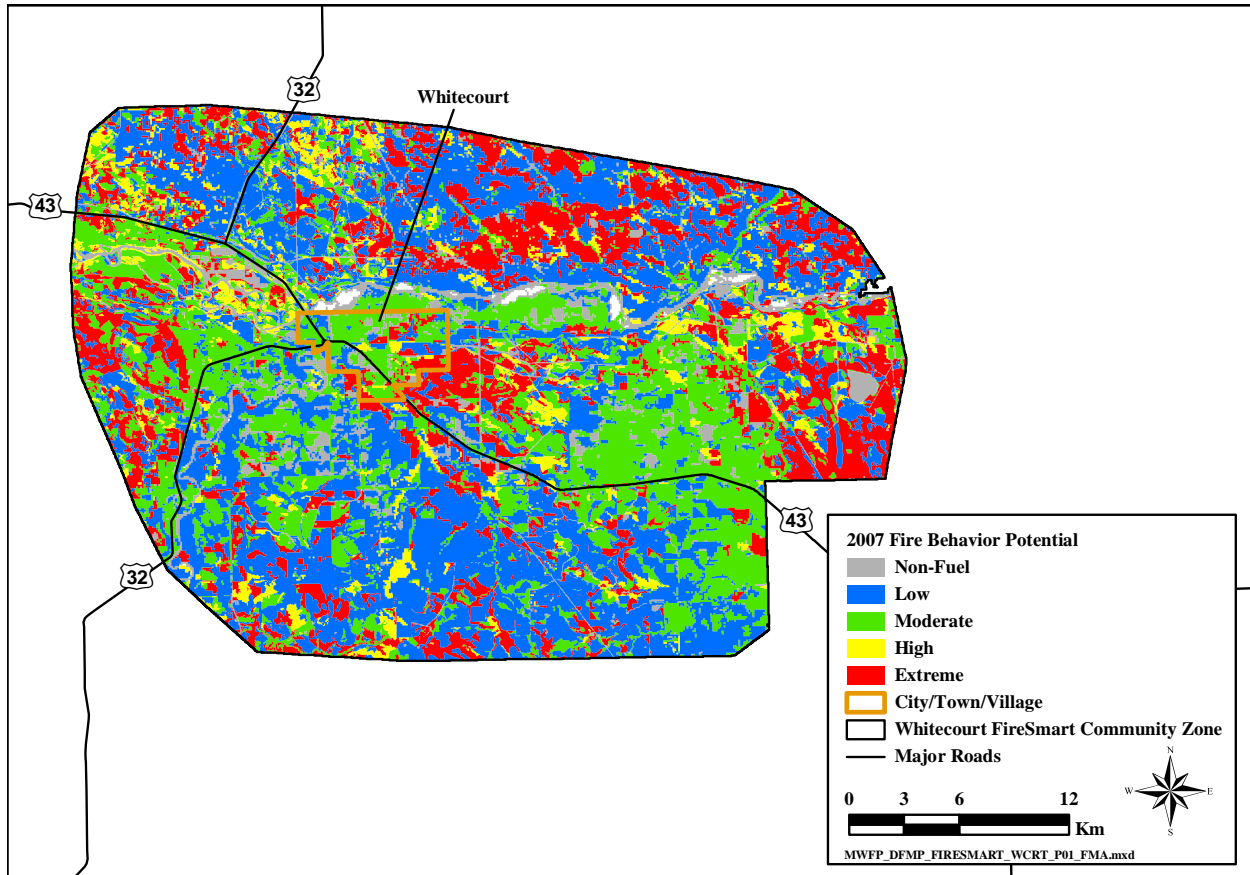


Figure 23. Whitecourt FireSmart Community Zone projected FBP ranking at year 0.

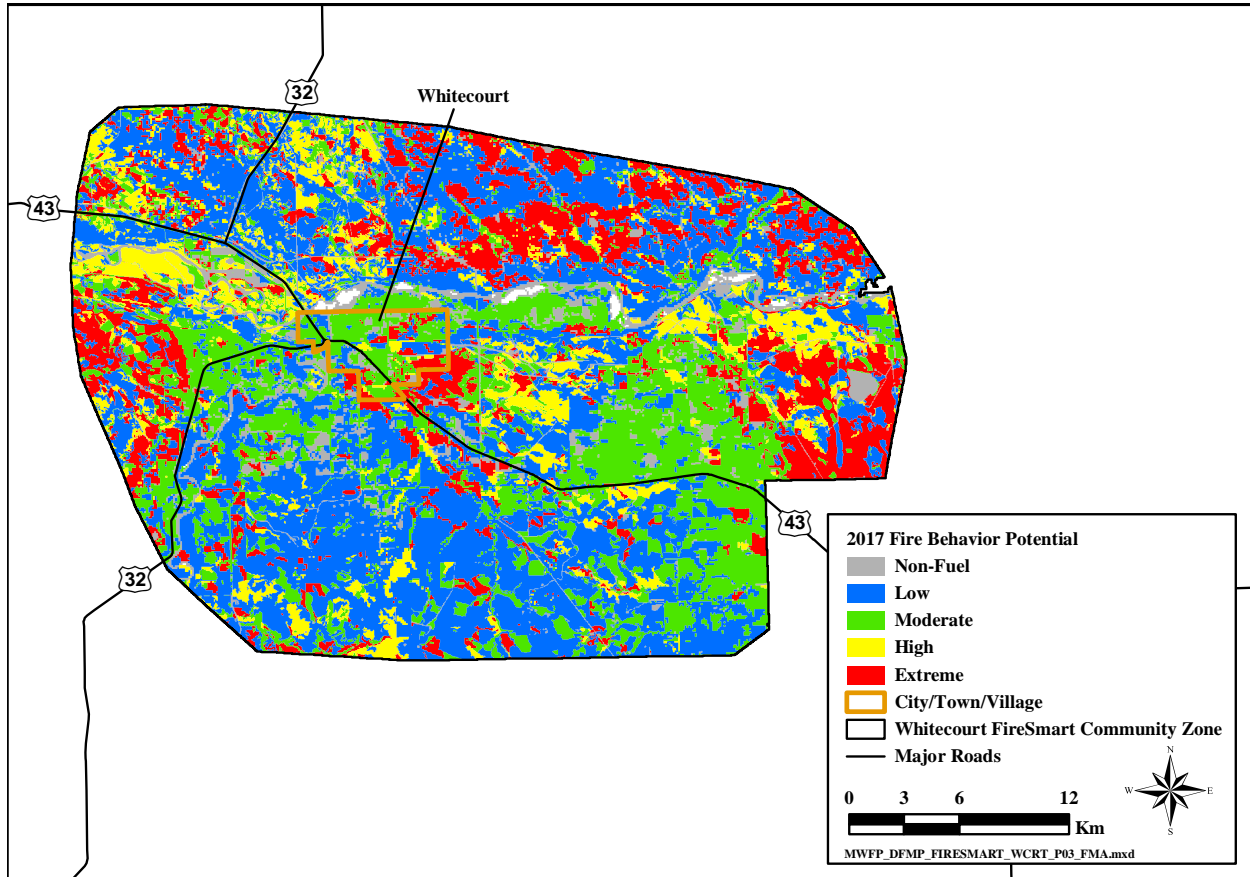


Figure 24. Whitecourt FireSmart Community Zone projected FBP ranking at year 10.

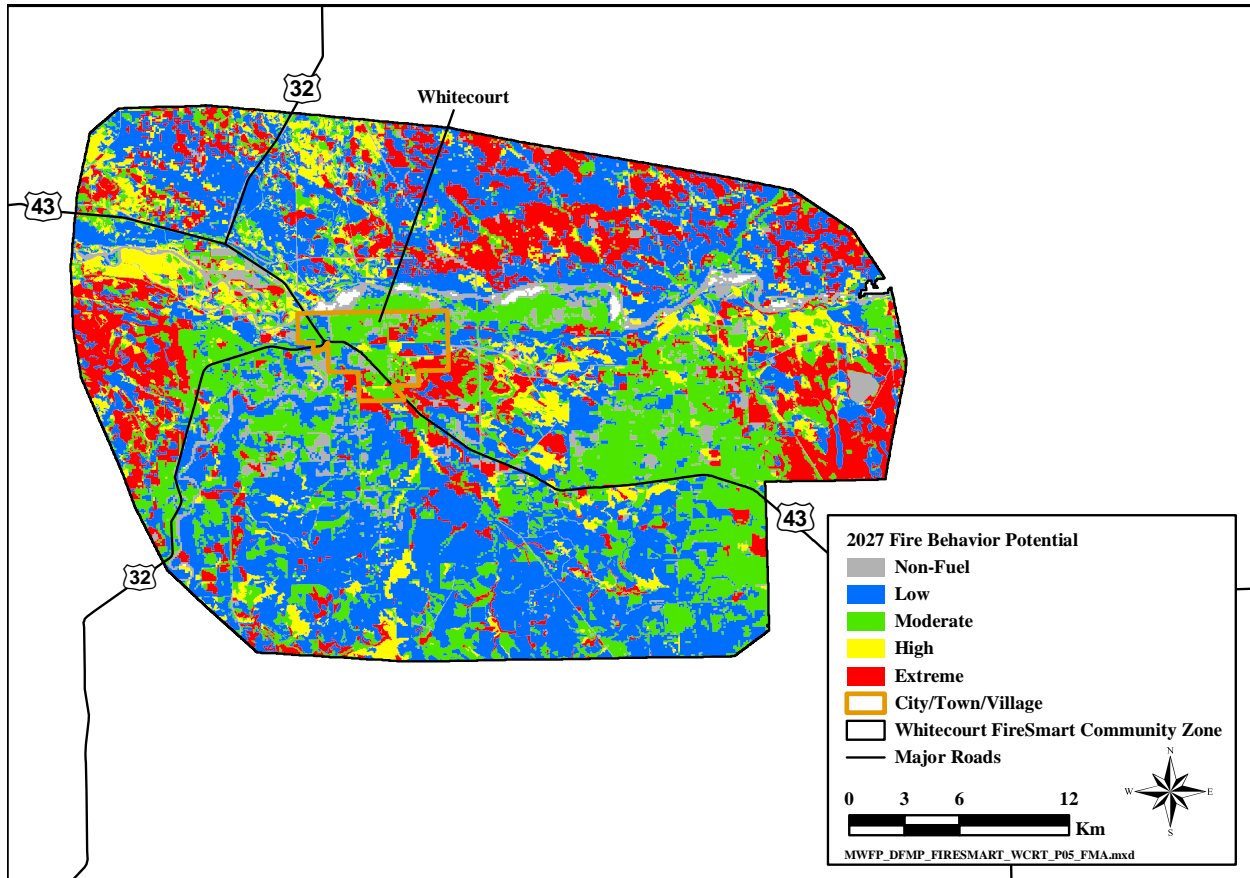


Figure 25. Whitecourt FireSmart Community Zone projected FBP ranking at year 20.

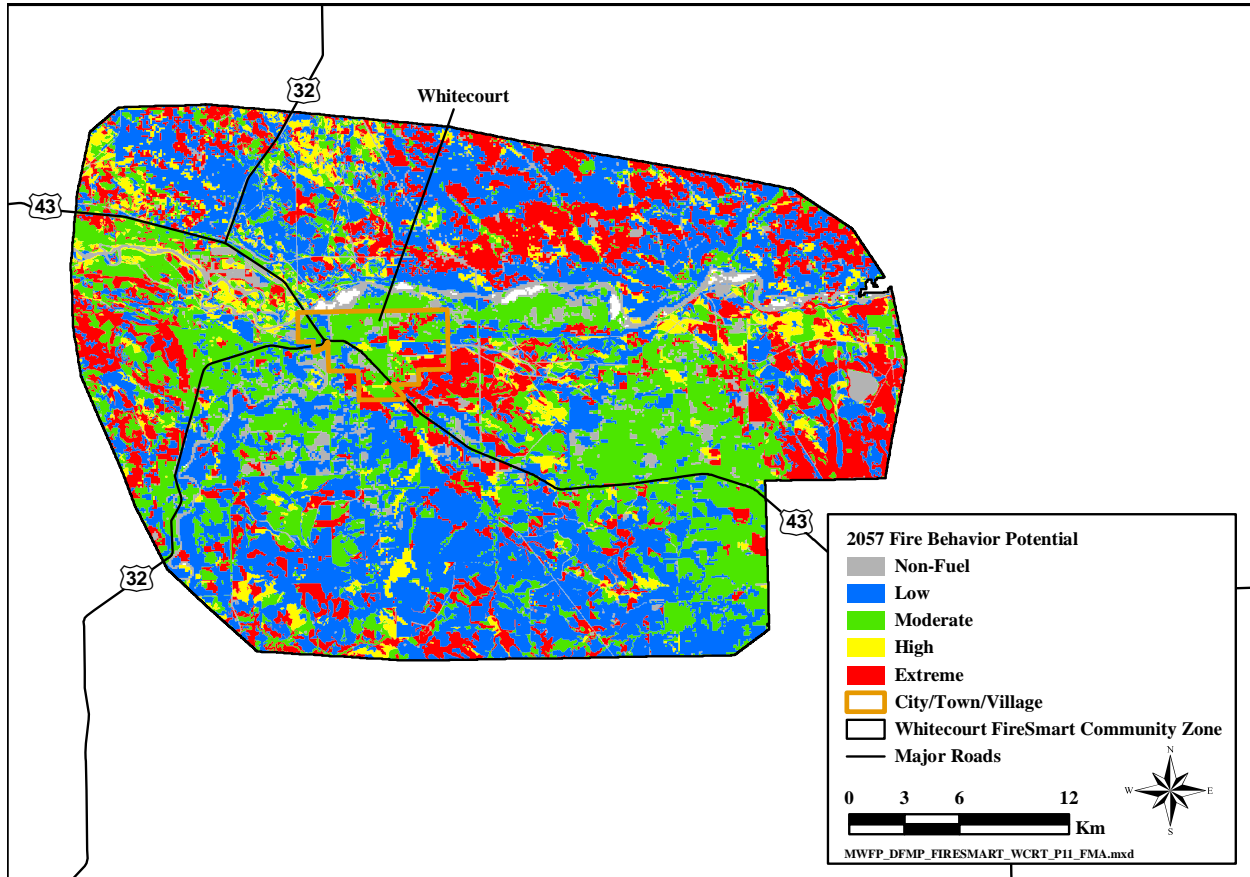


Figure 26. Whitecourt FireSmart Community Zone projected FBP ranking at year 50.