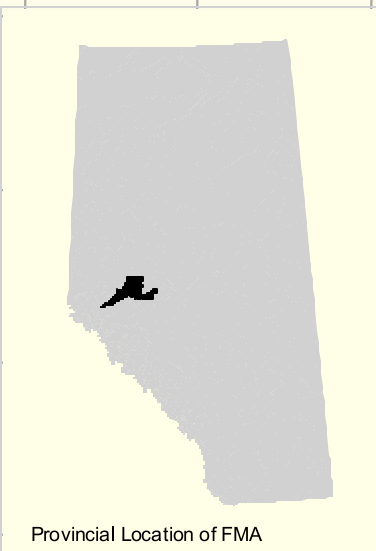
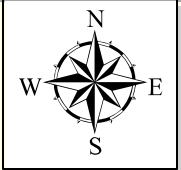


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FOREST MANAGEMENT AGREEMENT AREA
POST-ROTATION (HABITAT Type 3): Time 20
(2019)

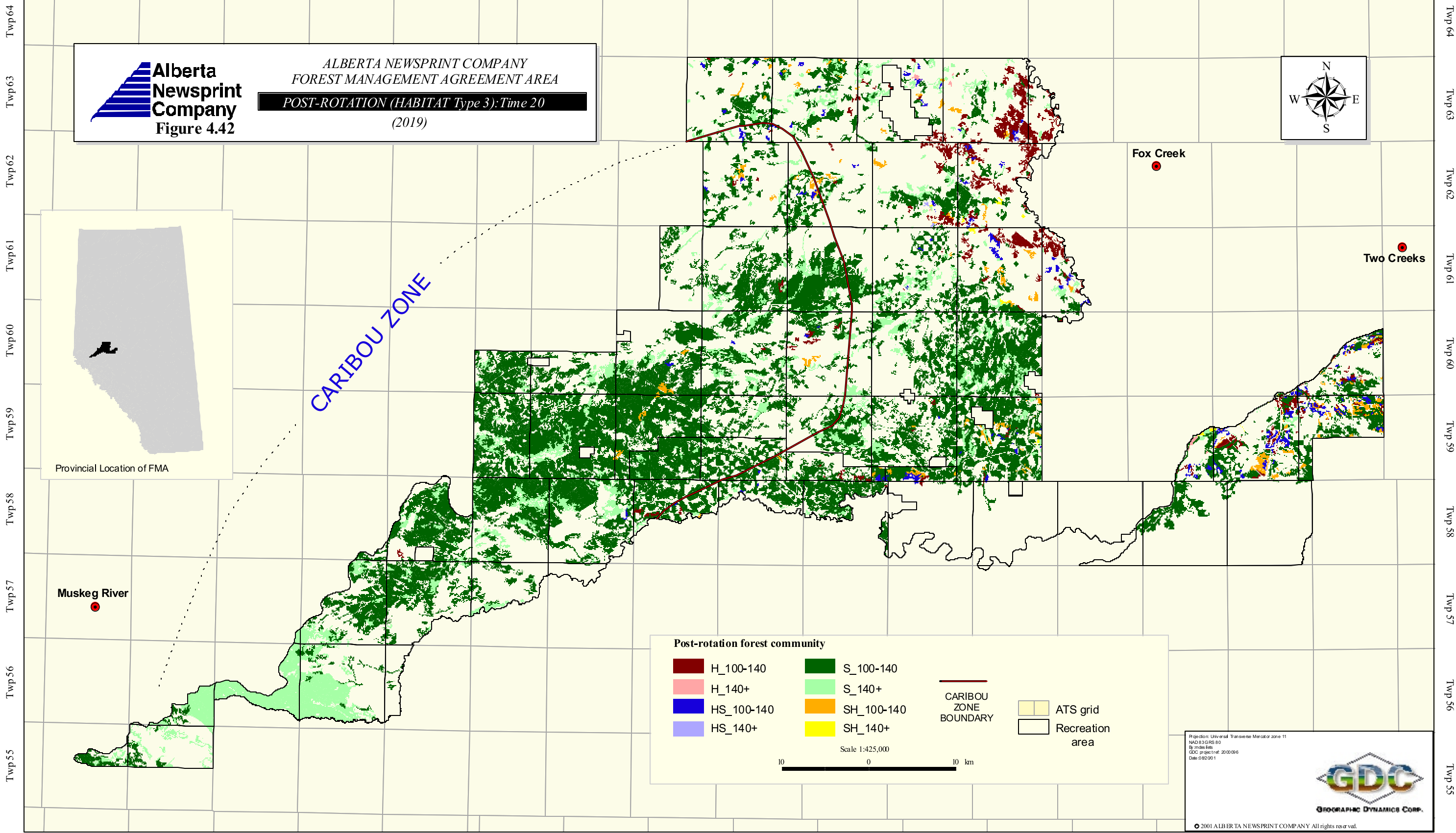


CARIBOU ZONE

Fox Creek

Two Creeks

Muskeg River



Post-rotation forest community

H_100-140	S_100-140	CARIBOU ZONE BOUNDARY	ATS grid
H_140+	S_140+		
HS_100-140	SH_100-140	Recreation area	Scale 1:425,000 0 10 km
HS_140+	SH_140+		

Projection: Universal Transverse Mercator zone 11
NAD 83 GRS 80
83 mode file
GDC project ref: 2010098
Date: 08/20/11



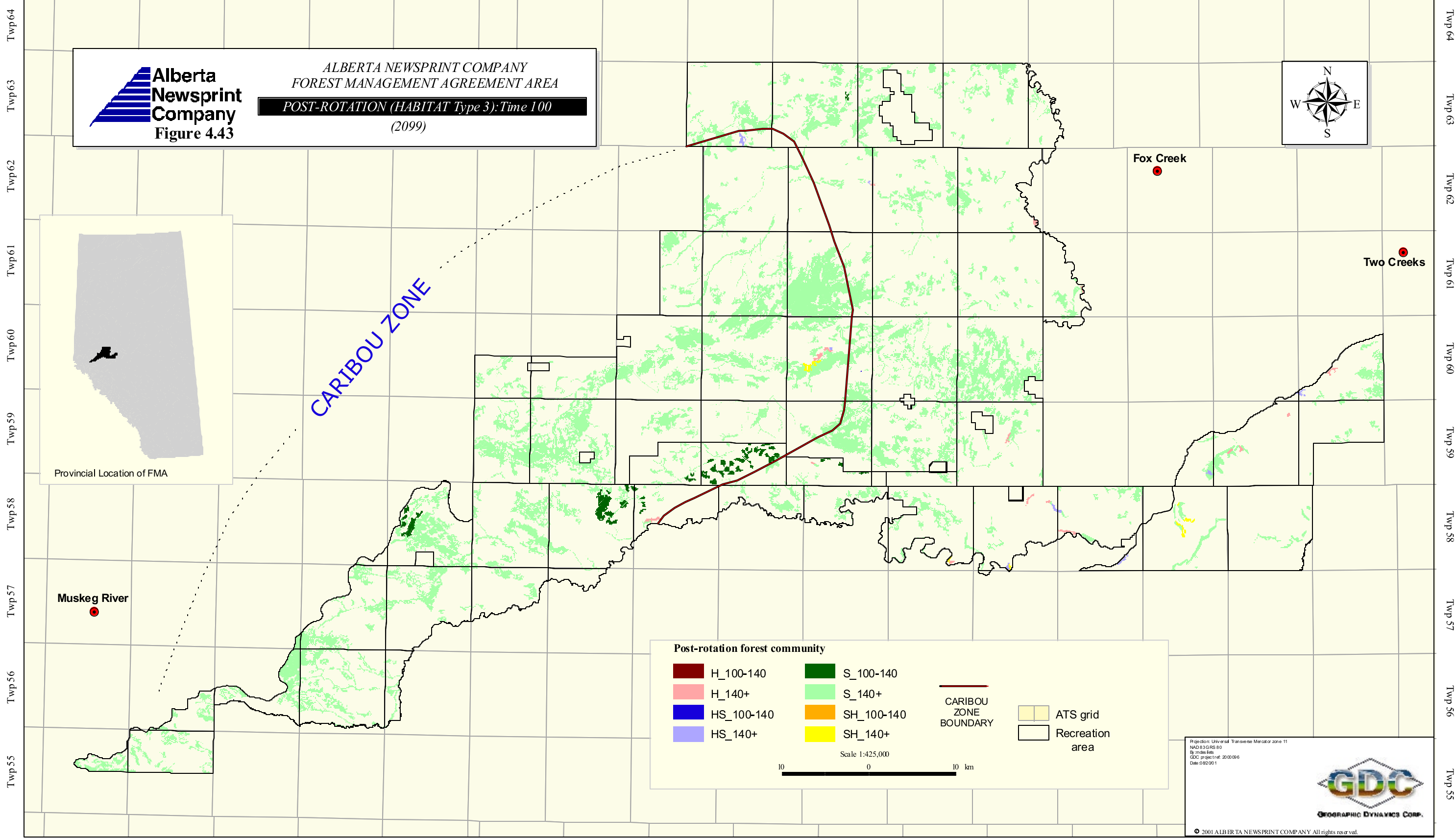
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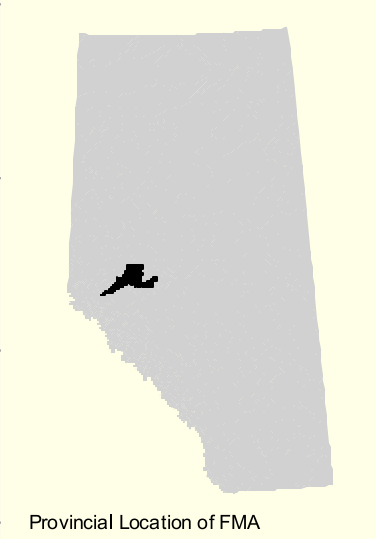
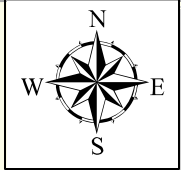
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Rge 5 Rge 4 Rge 3 Rge 2 Rge 1 6th MER Rge 27 Rge 26 Rge 25 Rge 24 Rge 23 Rge 22 Rge 21 Rge 20 Rge 19 Rge 18 Rge 17



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Figure 4.43

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 FOREST MANAGEMENT AGREEMENT AREA
POST-ROTATION (HABITAT Type 3): Time 100
 (2099)



CARIBOU ZONE

Fox Creek

Two Creeks

Muskeg River

Post-rotation forest community

H_100-140	S_100-140	CARIBOU ZONE BOUNDARY ATS grid Recreation area
H_140+	S_140+	
HS_100-140	SH_100-140	
HS_140+	SH_140+	

Scale 1:425,000

10 0 10 km

Projection: Universal Transverse Mercator zone 11
 NAD 83 GRS 80
 30 metres file
 GDC project ref: 200008
 Date: 09/20/01



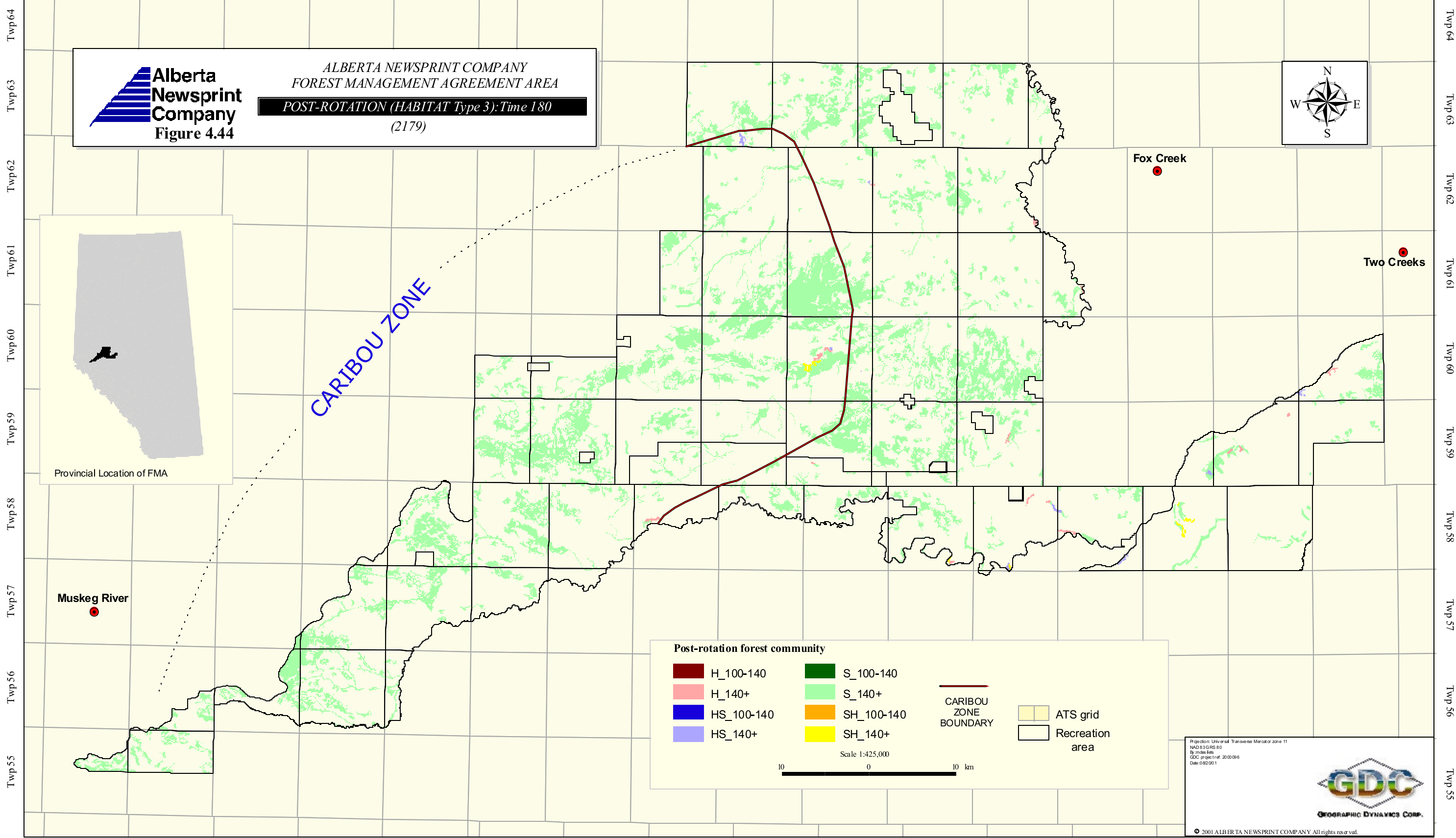
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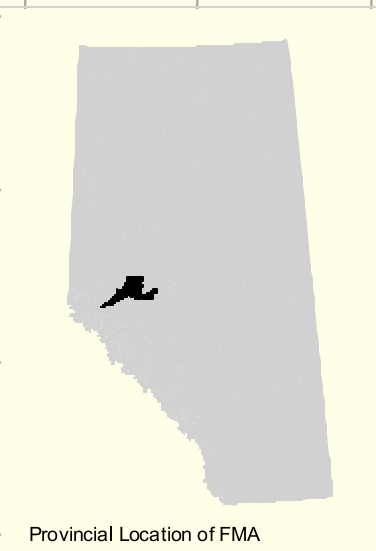
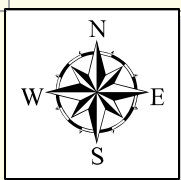
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Figure 4.44

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 FOREST MANAGEMENT AGREEMENT AREA
POST-ROTATION (HABITAT Type 3): Time 180
 (2179)



CARIBOU ZONE

Post-rotation forest community

H_100-140	S_100-140	CARIBOU ZONE BOUNDARY ATS grid Recreation area
H_140+	S_140+	
HS_100-140	SH_100-140	
HS_140+	SH_140+	

Scale 1:425,000

10 0 10 km

Projection: Universal Transverse Mercator zone 11
 NAD 83 GRS 80
 30 metres file
 GDC project ref: 200008
 Date: 09/20/01



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Table 4.19 Area summaries of thermal cover habitat type

Age Class	1999	2009	2019	2049	2099	2179
0-20	-	-	-	-	-	-
21-40	-	-	-	-	-	-
41-60	1,793	2,268	880	6,137	8,192	7,738
61-80	7,897	4,465	1,939	42	8,159	9,048
81-100	11,194	8,822	7,991	2,209	6,869	3,130
101-120	16,018	20,465	16,315	5,065	513	-
121-140	1,661	3,417	10,884	10,778	15	-
141-160	1,393	887	939	6,534	88	-
160+	155	641	1,088	1,948	4,916	4,968
Total	40,111	40,965	40,036	32,712	28,753	24,884

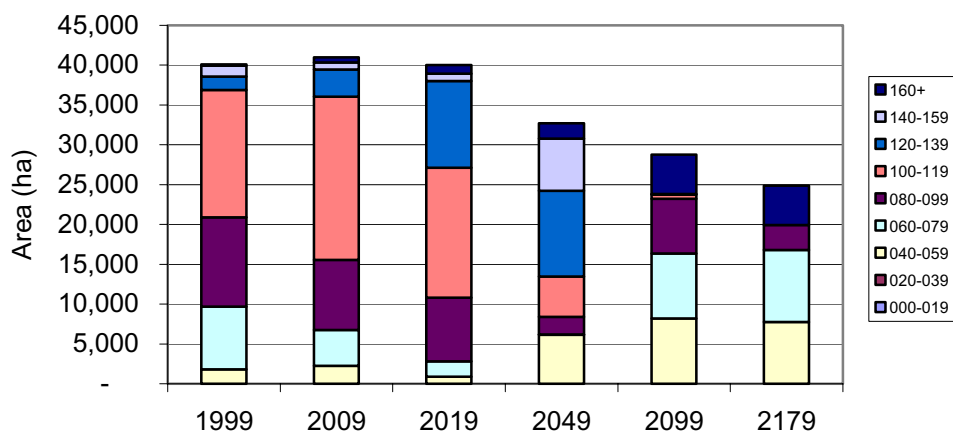


Figure 4.49 Habitat Type 5 Predicted Area Summary for the Entire FMA Area

Although thermal cover communities will be slightly older in 20 years, the total area of the thermal cover forest community will remain stable. Thermal cover ‘160+’ age-class will increase from 155 ha to 1088 ha. By 50 years, total thermal cover will decrease by 32,712 ha (18%). At this time, 17,312 ha (53%) of the stands will be between 120 and 140 years while stands older than 160 years will increase to 1,948 ha. Also, in 50 years, only 42 ha (0.01 %) of thermal cover communities will be between the ages of 60 to 80 years. In 100 years, thermal communities older than 160 years will continue to increase to 4,916 ha. In 180 years, zero hectares in the FMA area will be between 100 and 160 years old. Figures 4.50-4.54 show the change in spatial distribution in thermal cover at five points in time.

4.3.6 Habitat Type 6 — Residual Forest Structure

This habitat type was not modeled for future condition.

4.3.7 Habitat Type 7 — Caribou Habitat

Caribou habitat is defined as all pure conifer (80% coniferous cover) greater than or equal to 80 years of age, as well as open and closed muskeg areas. For caribou habitat to be considered effective it must have limited fragmentation (i.e., must consist of large contiguous

patches) and few linear disturbances. Road densities are also included as part of the caribou habitat model. The critical threshold for road densities was less than or equal to 0.3 km/km².

Using GIS, stands (polygons) identified as caribou habitat were dissolved to continuous habitat patches. Patches greater than or equal to ten hectares are considered caribou habitat. Descriptive statistics (pie graphs) for future fragmentation characterization of caribou Habitat is included.

Tables 4.20-4.21 summarize the predicted age-class distribution for this habitat. Figure 4.55a graphically depicts the change of caribou habitat over the planning horizon.

Table 4.20 Univariate statistics of caribou patch sizes in the FMA area¹

Time	Number of Patches	Total Area (ha.)	Mean Patch Size	Max. Patch Size	Standard Dev.
0	306	95,405	312	20,923	1,730
20	362	82,648	228	17,088	1,259
50	312	104,829	336	25,075	2,110
100	428	54,170	127	4,814	521
180	393	38,681	98	3,379	327

¹Minimum patch size is always 10 ha

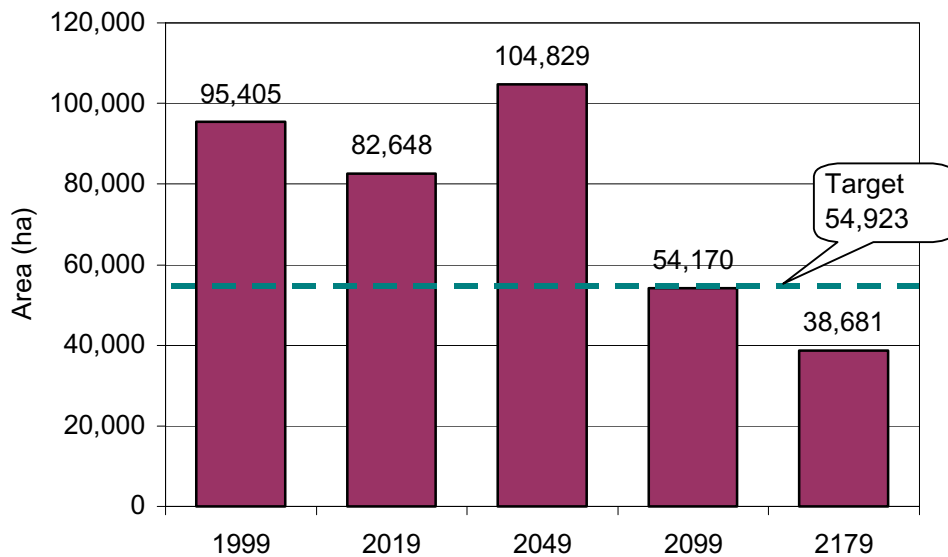
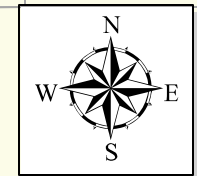


Figure 4.55a Change of Predicted Caribou Habitat Over the Planning Horizon

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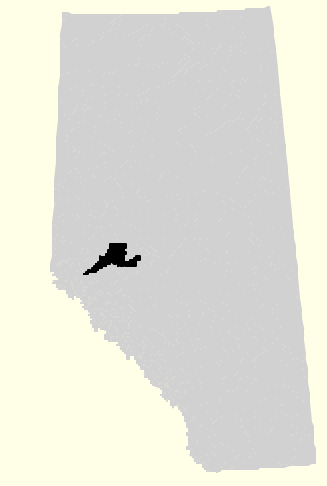


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FOREST MANAGEMENT AGREEMENT AREA
THERMAL COVER (HABITAT 5): Time 10
(2009)



Fox Creek

Two Creeks



Provincial Location of FMA

CARIBOU ZONE

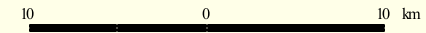
Muskeg River

Thermal Cover Habitat

CARIBOU ZONE BOUNDARY

ATS grid
Recreation areas

Scale 1:425,000



Projection: Universal Transverse Mercator zone 11
NAD 83 GRS 80
83 metre file
GDC project ref: 2000098
Date: 08/2001



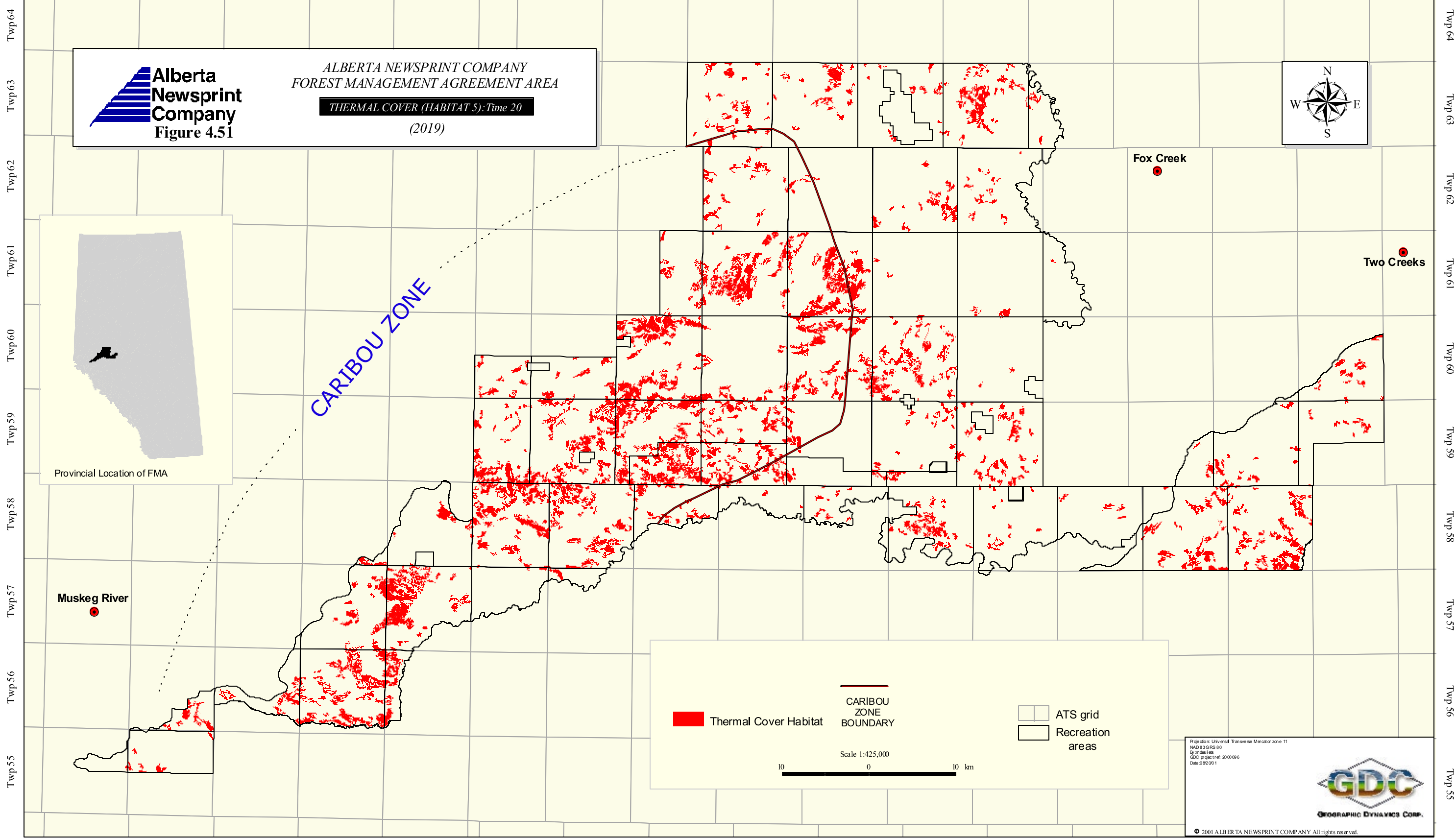
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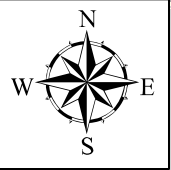
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FOREST MANAGEMENT AGREEMENT AREA

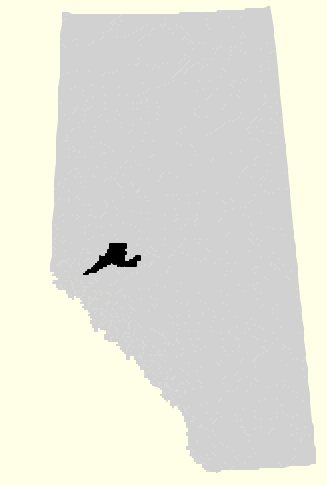
THERMAL COVER (HABITAT 5): Time 20

(2019)



Fox Creek

Two Creeks



Provincial Location of FMA

CARIBOU ZONE

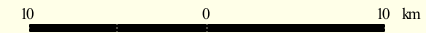
Muskeg River

Thermal Cover Habitat

CARIBOU ZONE BOUNDARY

ATS grid
Recreation areas

Scale 1:425,000



Projection: Universal Transverse Mercator zone 11
NAD 83 GRS 80
30 metres file
GDC project ref: 200008
Date: 09/20/11

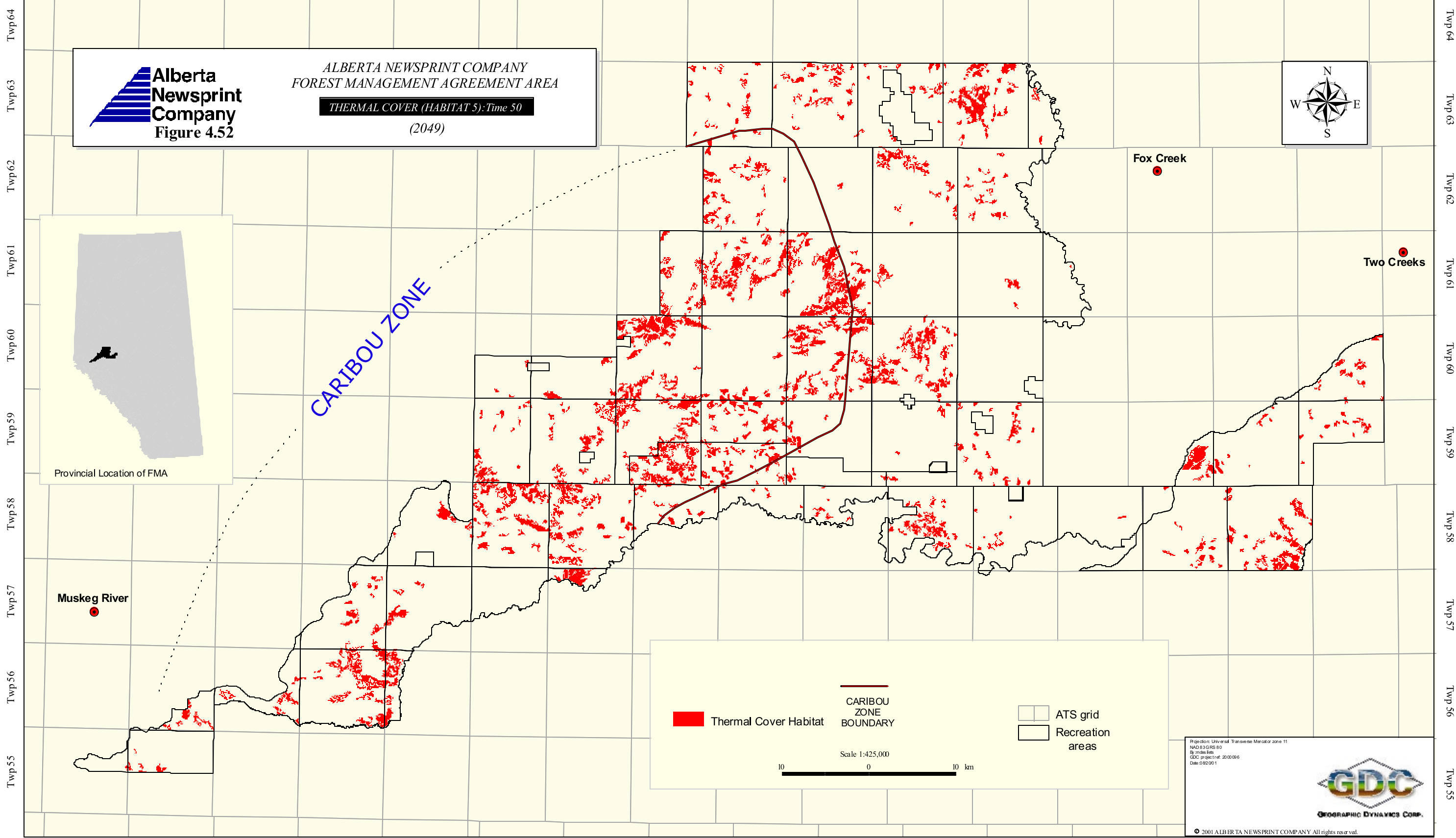


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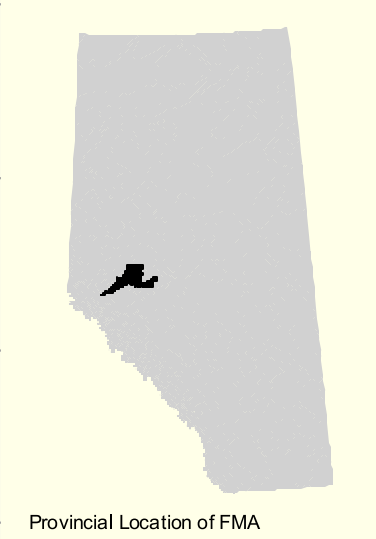
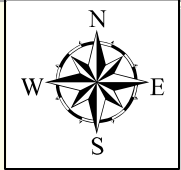
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Figure 4.52

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 FOREST MANAGEMENT AGREEMENT AREA

THERMAL COVER (HABITAT 5): Time 50
 (2049)



Provincial Location of FMA

CARIBOU ZONE

Thermal Cover Habitat

CARIBOU ZONE BOUNDARY

ATS grid

Recreation areas

Scale 1:425,000

10 0 10 km

Projection: Universal Transverse Mercator zone 11
 NAD 83 GRS 80
 30 metres file
 GDC project ref: 200008
 Date: 09/20/01

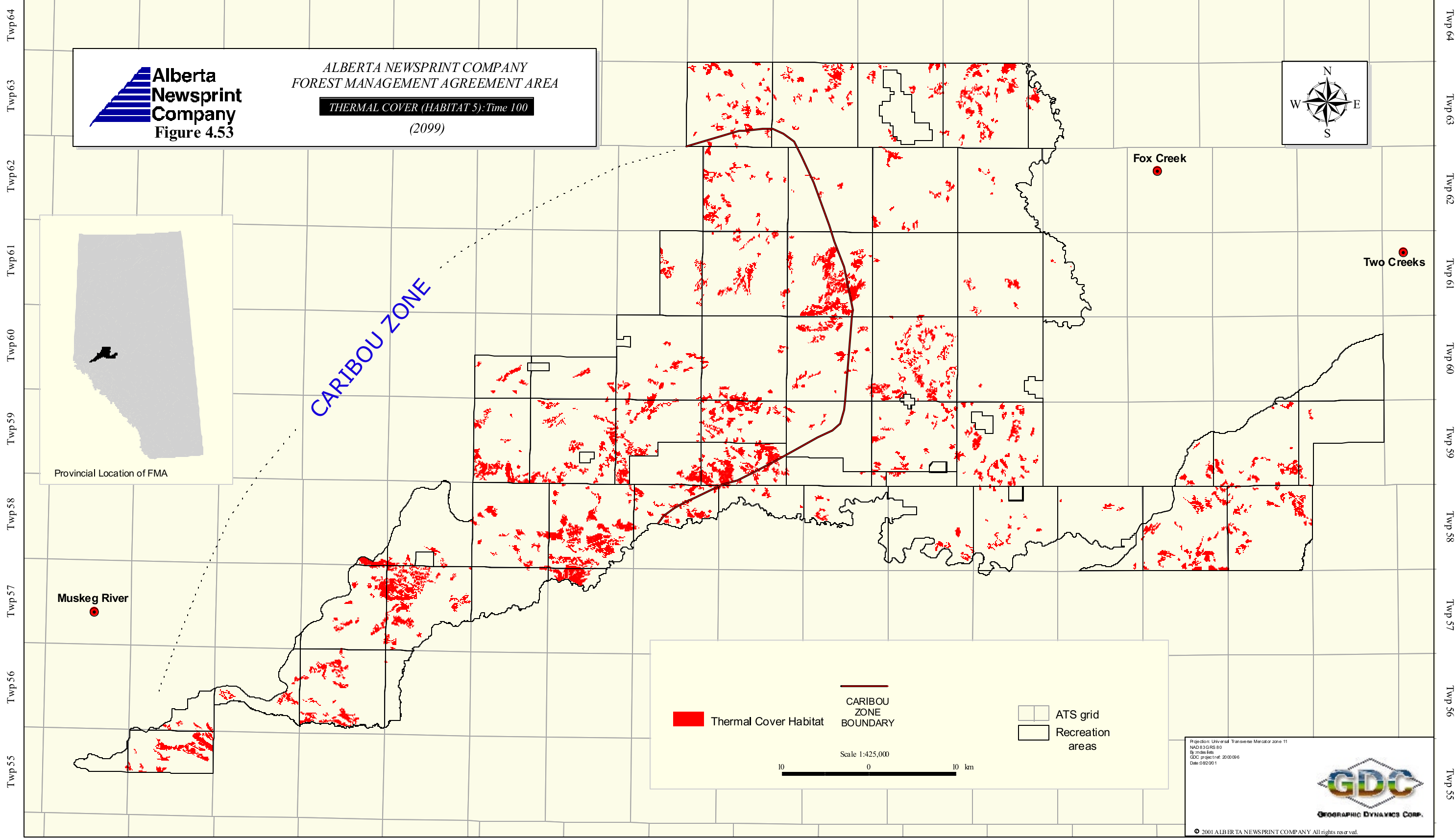


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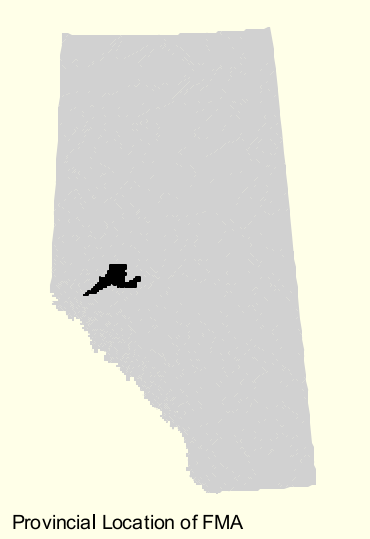
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 FOREST MANAGEMENT AGREEMENT AREA
THERMAL COVER (HABITAT 5): Time 100
 (2099)



CARIBOU ZONE

- Thermal Cover Habitat
- CARIBOU ZONE BOUNDARY
- ATS grid
- Recreation areas

Scale 1:425,000
 10 0 10 km

Projection: Universal Transverse Mercator zone 11
 NAD 83 GRS 80
 30 m x 60 m UTM
 GDC project ref: 200008
 Date: 09/20/01

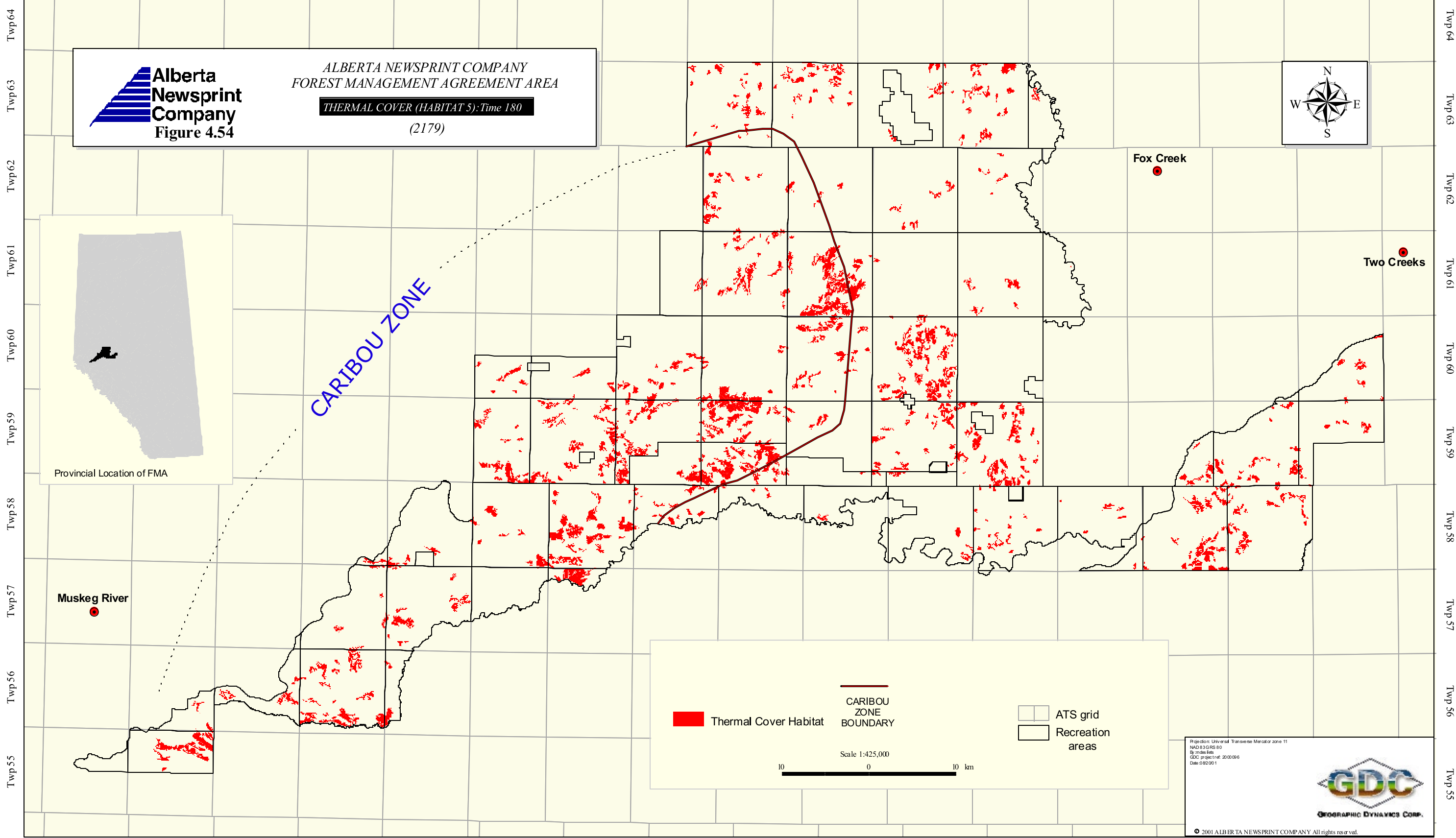


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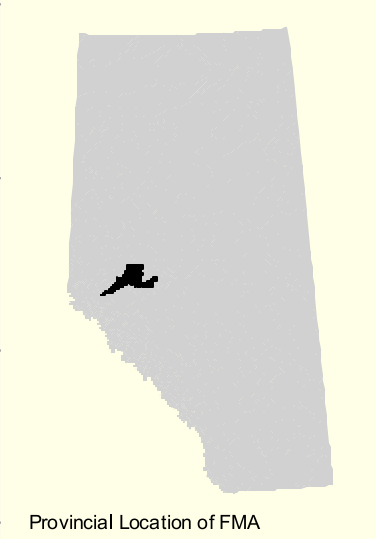
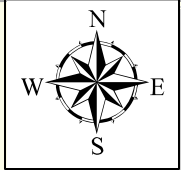
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Figure 4.54

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 FOREST MANAGEMENT AGREEMENT AREA

THERMAL COVER (HABITAT 5): Time 180
 (2179)



CARIBOU ZONE

Thermal Cover Habitat
 CARIBOU ZONE BOUNDARY
 ATS grid
 Recreation areas

Scale 1:425,000

10 0 10 km

Projection: Universal Transverse Mercator zone 11
 NAD 83 GRS 80
 30 m x 30 m cells
 GDC project ref: 200008
 Date: 09/20/01

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