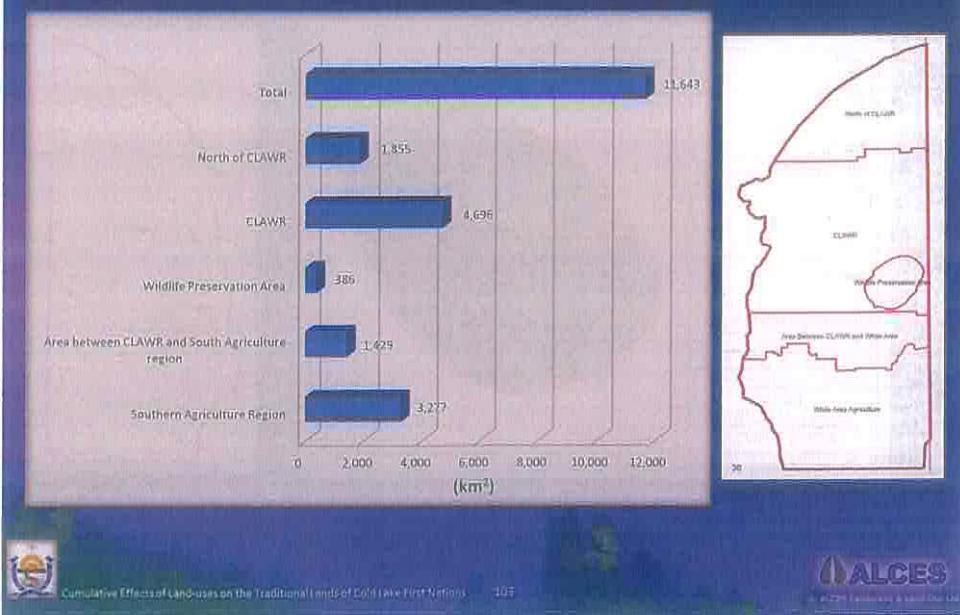


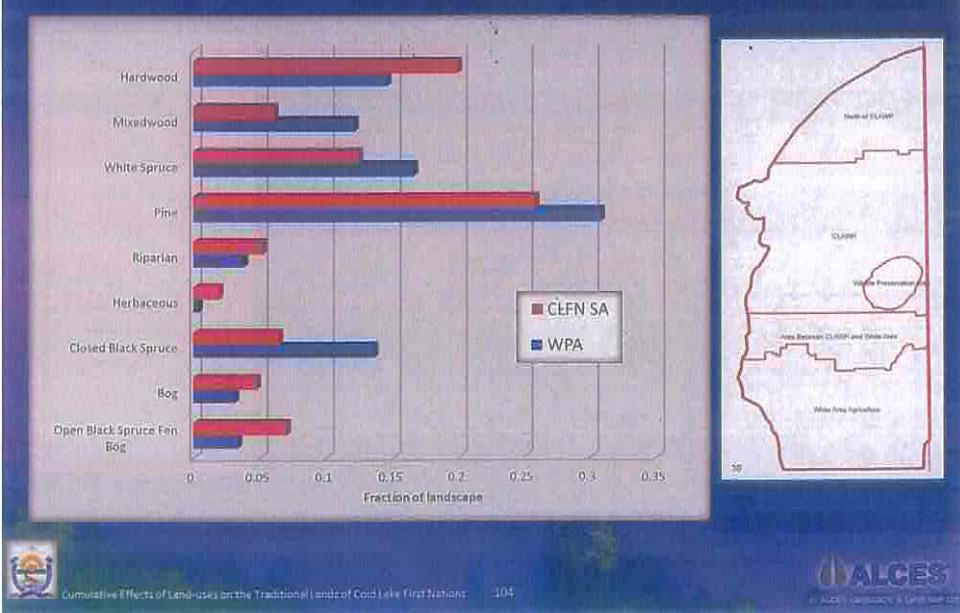
## Comparison of Land-use Area among different CLFN zones.

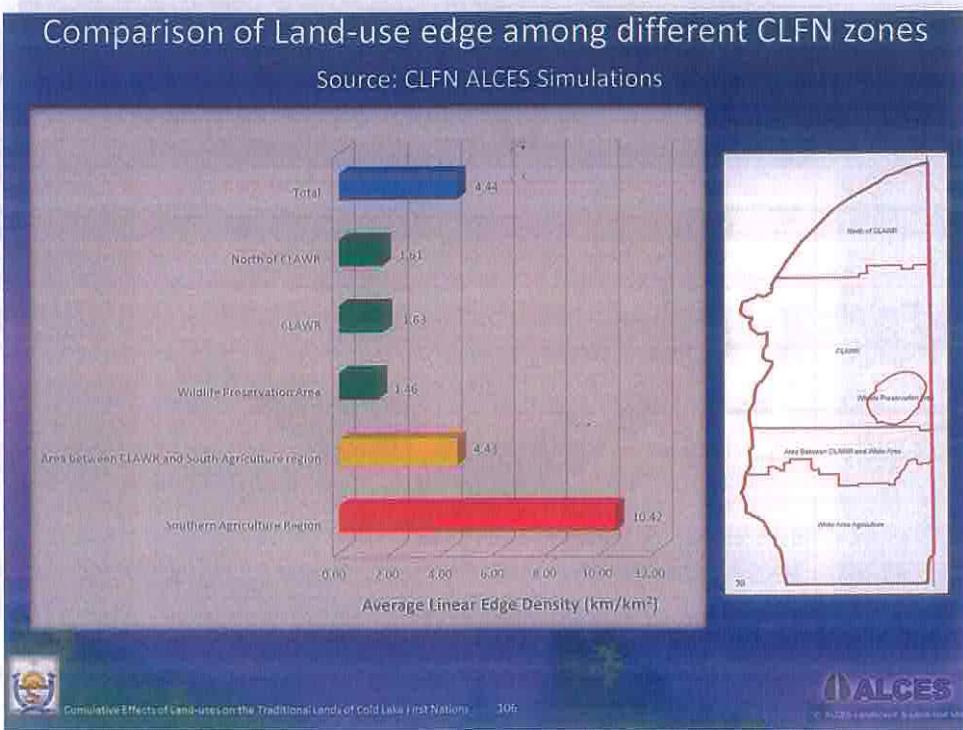
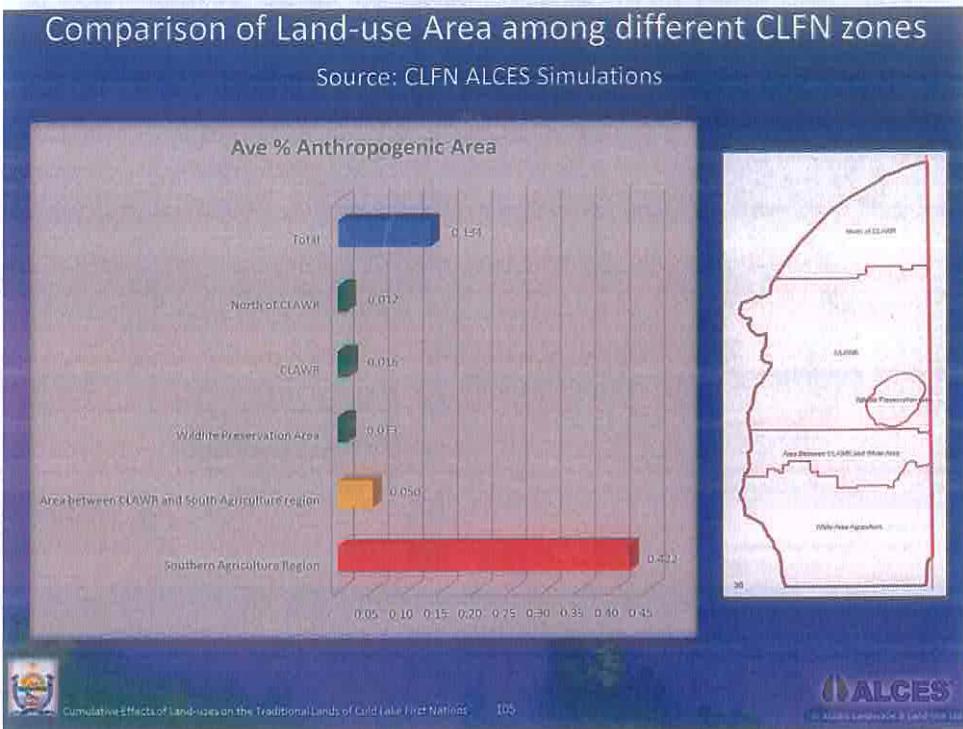
Source: CLFN ALCES Simulations



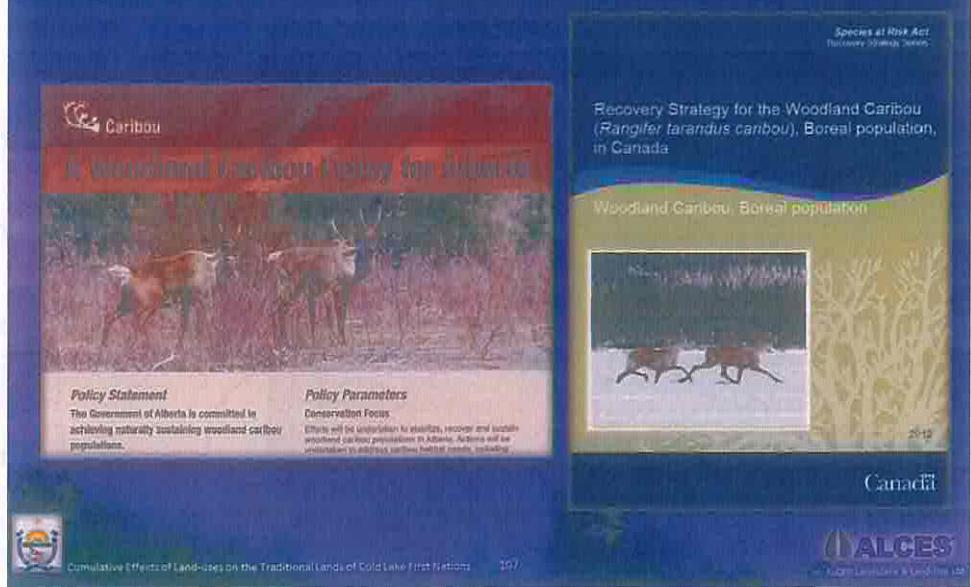
## Comparison of Landscape Composition of WPA and CLFN SA

Source: ALCES CLFN Simulations



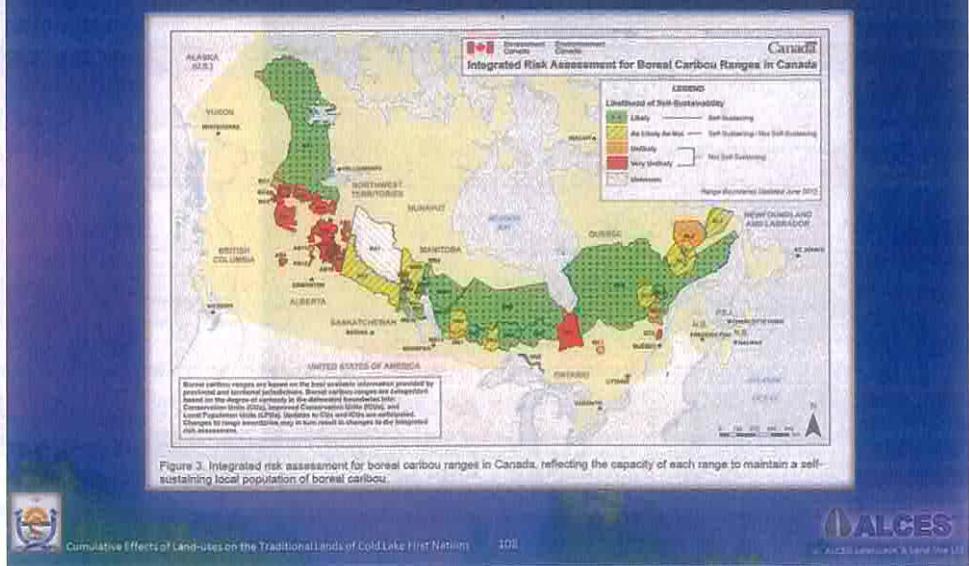


## Conserving Threatened Caribou Herds Strategies at Provincial and National Scales



**National Caribou Recovery Strategy highlights the challenges of maintaining caribou in CLFN SA**

Source: Federal Caribou Recovery Strategy Document (2012)



## Caribou Herd Risk Assessment

Source: National Caribou Recovery Strategy (2012)

Range Identification	Range Name	Range Type	Population Size Estimate	Population Trend	Disturbed Habitat (%)			Risk Assessment
					Fire <sup>1</sup>	Anthropogenic <sup>2</sup>	Total <sup>3</sup>	
AB1	Chinchaga (incl. BC portion)	LP	250	declining	8	74	76	NSS
AB2	Bistcho	LP	195	declining	20	61	71	NSS
AB3	Yates	LP	350	stable	43	21	61	NSS
AB4	Caribou Mountains	LP	315-394	declining	44	23	57	NSS
AB5	Little Smoky	LP	78	declining	0.2	95	95	NSS
AB6	Red Earth	LP	172-206	declining	30	44	62	NSS
AB7	West Side Athabasca River	LP	204-272	declining	4	68	69	NSS
AB8	Richardson	LP	150	not available	67	22	82	NSS
AB9	East Side Athabasca River	LP	90-150	declining	26	77	81	NSS
AB10	Cold Lake	LP	150	declining	32	72	85	NSS
AB11	Nipisi	LP	55	not available	6	66	68	NSS
AB12	Slave Lake	LP	65	not available	37	63	80	NSS

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### WPA relative to Cold Lake Caribou herd



Source: Map modified from Provincial Caribou Recovery Document (2012)

**Critical Habitat Identification: Cold Lake Range (AB10)**

• The identification of critical habitat for boreal caribou is denoted by three components for each range: i) Location of habitat; ii) Amount of habitat; and iii) Type of habitat.

i) Location: Where critical habitat is found.

Figure J-21. Very map of the general location of the range.

Figure J-22. The geographic boundary within which critical habitat is located.

ii) Amount: Quantity of critical habitat.

Field Range Area (ha)	Disturbed Habitat (%)	Estimated Undeveloped Critical CHA (%)	Percent of Critical Habitat (%)
672,422	32	72	31

Existing habitat that may contribute to at least 60% undeveloped over time.

iii) Type: Biophysical attributes of critical habitat.

Environmentally Sensitive Areas  
See Appendix H

<sup>1</sup> See Appendix H

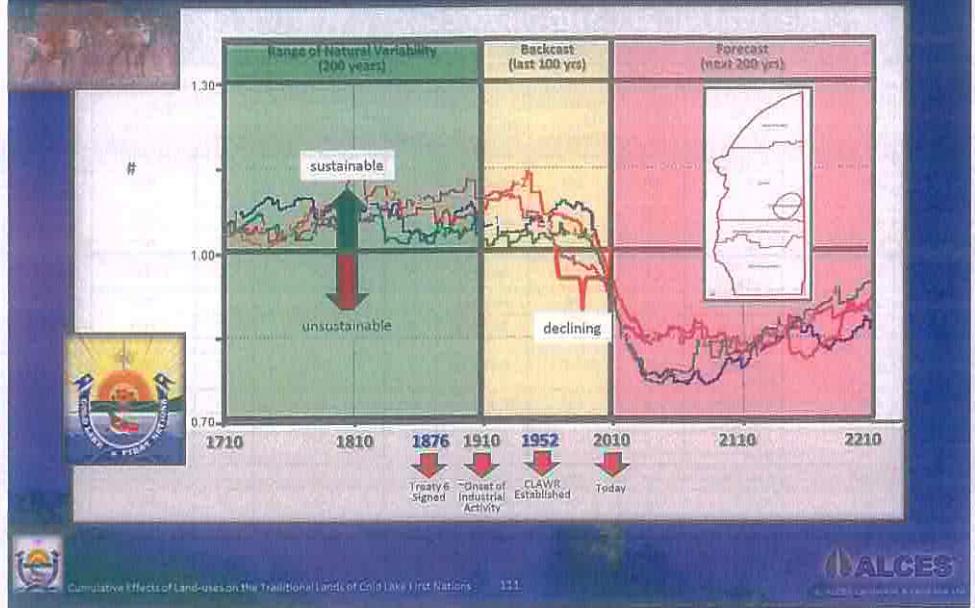
<sup>2</sup> See Appendix H

<sup>3</sup> See Appendix H

Source: Map modified from Federal Caribou Recovery Strategy Document (2012)

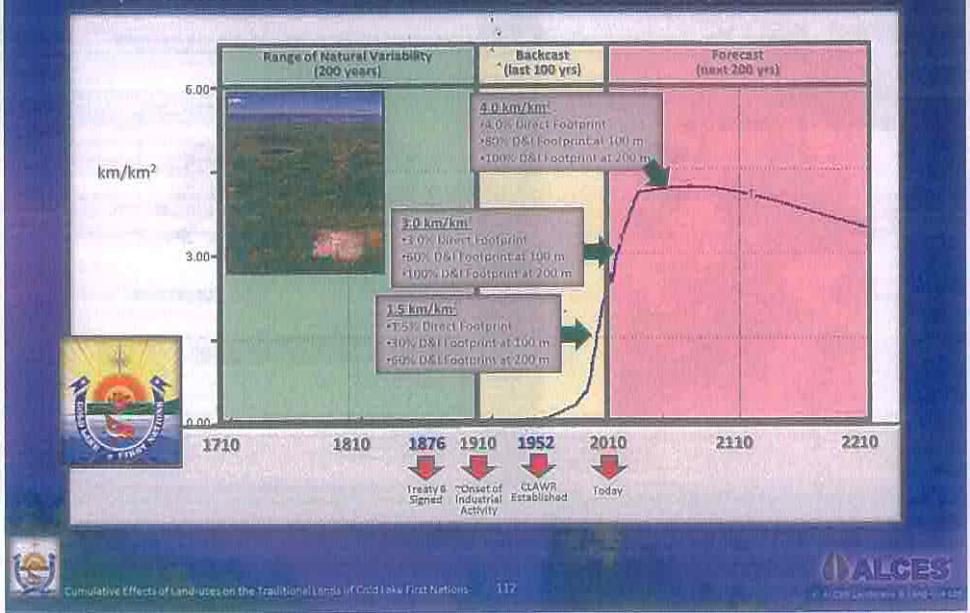
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## Simulated Changes in Caribou Population Level Response (lambda) in CLFNA SA; Source: CLFN ALCES Simulations



## Land-use Intensity Thresholds

(simulated in the Cold Lake First Nation ALCES Landscape Simulator)



## Conclusions

- The traditional lands of the CLFN have been profoundly altered by a suite of overlapping land uses (agriculture, settlements, roads, military, oil and gas)
- Currently, portions of the CLAWR maintain a high level of ecological integrity – the WPA is a key example.
- Current policies favoring bitumen recovery will cause a significant loss of this ecological integrity (caribou, furbearers, moose, fish) within CLFN's traditional lands in the immediate future.
- Simulations in the ALCES are consistent with the provincial and federal recovery plans that indicate that the Cold Lake caribou herd is destined for regional extirpation if industrial trajectories unfold as defined by current policy
- Habitat protection is an important and scientifically accepted wildlife management strategy.
- Government of Alberta and Government of Canada policies describe a commitment to ecological sustainability and habitat protection, but it is not clear how/ when these will be implemented.
- CLFN requires a collaborative conversation with Alberta and such further accompanying study and assessment as may be required to ensure the sustainability of key species and CLFN's ability to exercise traditional activities into the future.



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## Moving Forward - Key Questions

- What contribution does the CLAWR make to Alberta's protected areas network?
  - What do Alberta's policies and studies indicate in this regard?
  - What further studies or information may be required to answer this question?
- How large does the WPA need to be to ensure regional sustainability of environmental indicators?
  - What do Alberta's policies and studies indicate in this regard?
  - What further studies or information may be required to answer this question?
- How do DND activities affect the amount of habitat required for protection?
  - What do Alberta's policies and studies indicate in this regard?
  - What further studies or information may be required to answer this question?
- How important is the WPA to conserving regional and local caribou populations in northeast Alberta?
  - What do Alberta's policies and studies indicate in this regard?
  - What further studies or information may be required to answer this question?



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