

Mining... GREAT for Saskatchewan!

Proposed Recovery Strategy Boreal Caribou Population

Initial SMA concerns with
Environment Canada proposal
December 2011

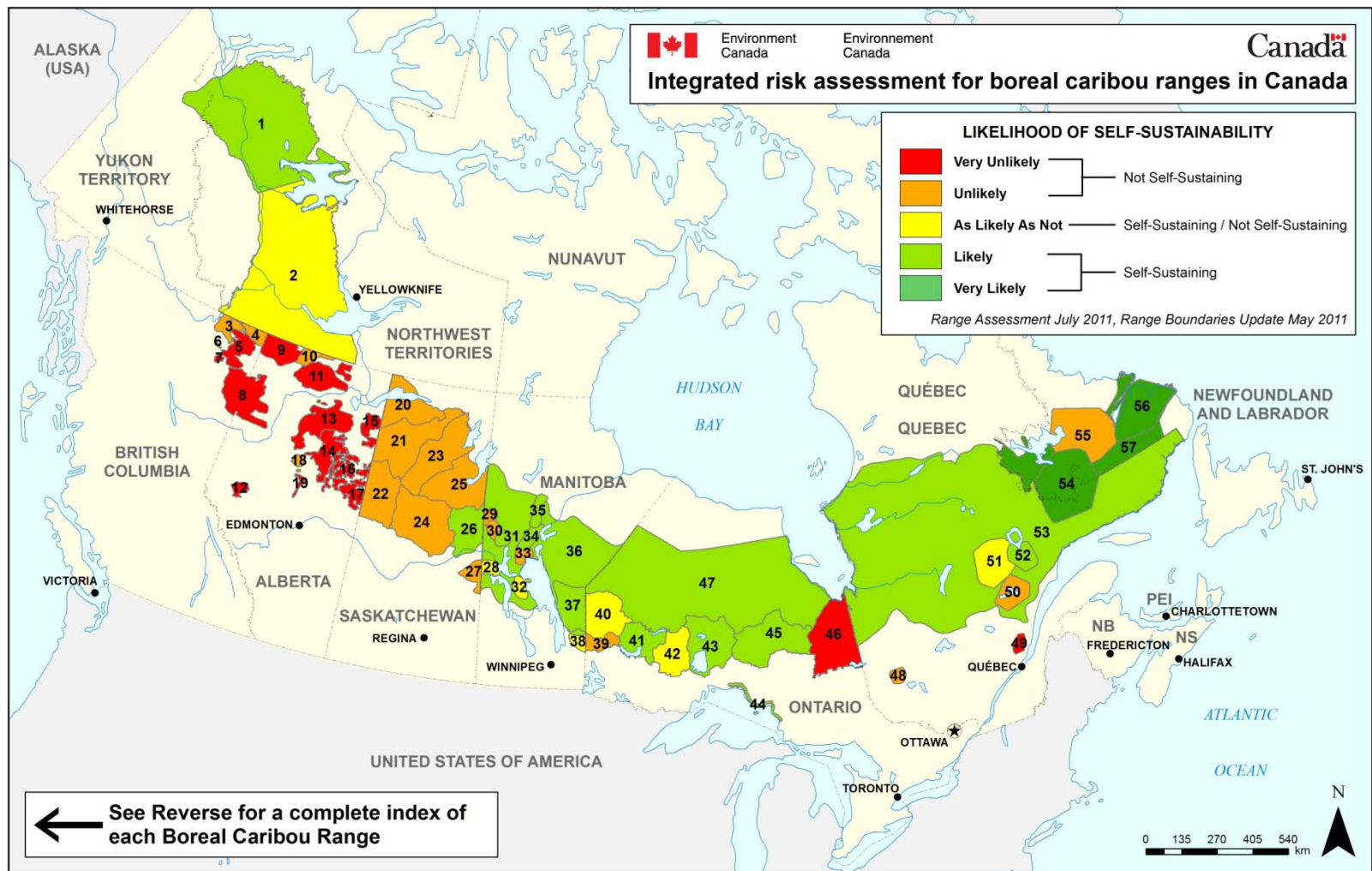


Background

- Boreal caribou designated as “threatened”
- Legislated requirements under SARA
- Environment Canada developed “Proposed Recovery Strategy” for boreal caribou
- Over past 2 years, SMA proactive, provided input to EC; Draft BMP
- Input largely disregarded or ignored in EC draft

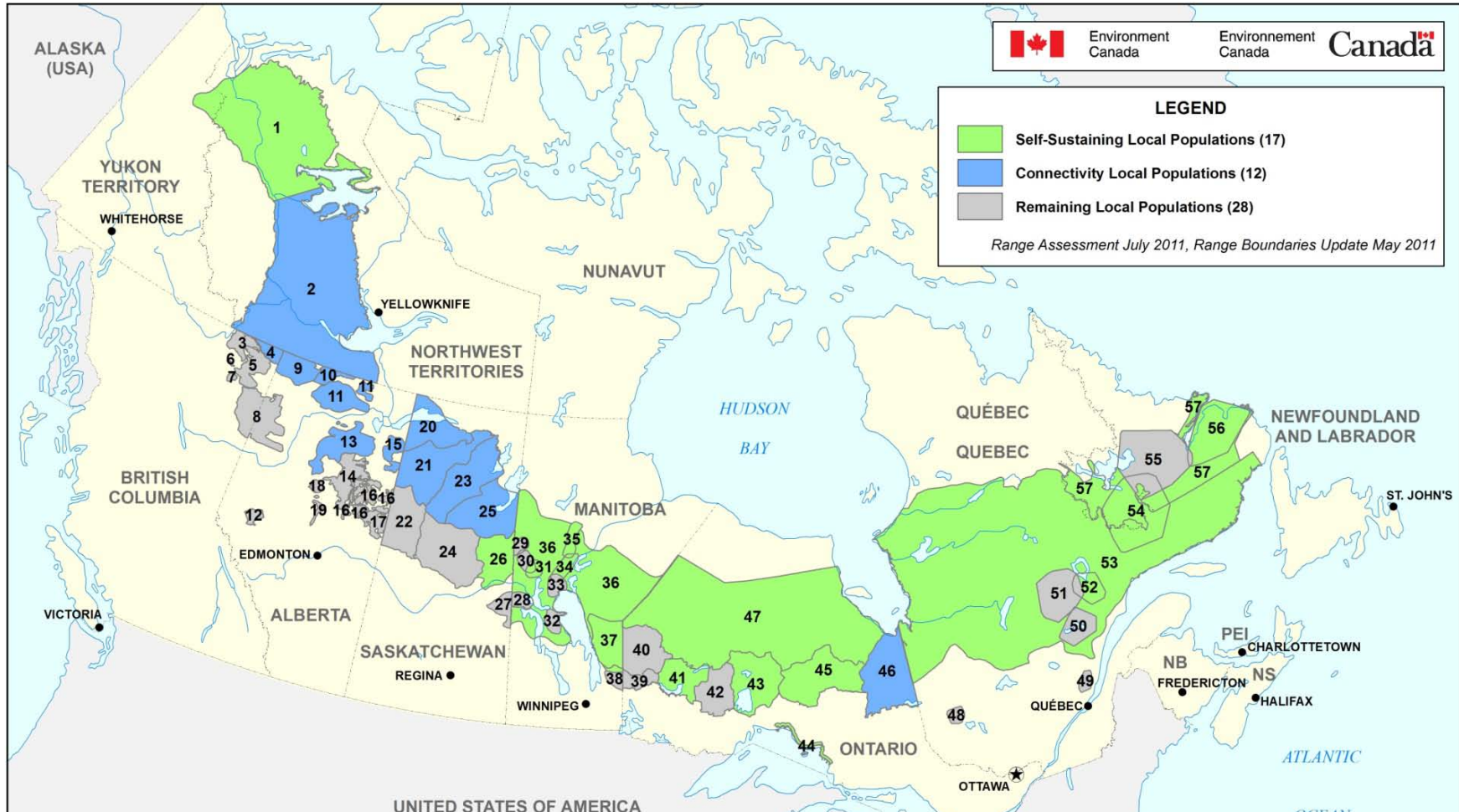


Boreal Caribou Distribution and Status



Map 1: Boreal caribou population identified as **unlikely** to be self-sustaining in northern Saskatchewan

Proposed Population and Distribution Objectives



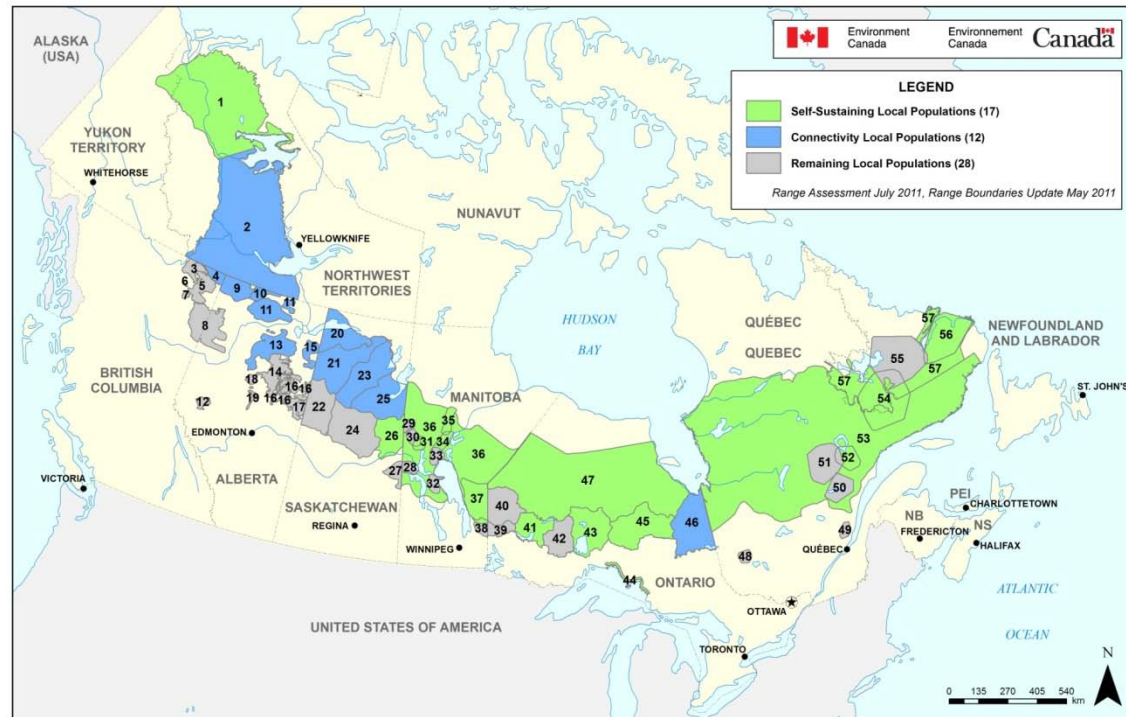
- **Maintain the current status of the 17 existing self-sustaining local populations (green)**
- **Achieve self-sustaining status for 12 local populations that are not self-sustaining, to ensure representivity of ecological conditions and maintain connectivity across Canada (blue)**
- **Stabilize the remaining 28 local populations that are not self-sustaining (grey)**

Map 2: What do colours mean?

Green - human activity will be allowed as long as the proportion of undisturbed habitat is not brought below 65%. (ie max 35% disturbance)

Grey - human activity may be allowed as long as there is an approved provincial action plan that contains a mix of measures to maintain populations.

Blue - human activity may be allowed as long as there is an approved provincial action plan that will achieve 65% undisturbed habitat (ie max 35% disturbance) within 50 years, showing progress every 5 years.



Report – as written

- Blue areas in northern SK already have >35% disturbed habitat
- Activities that affect/reduce/harm critical habitat in northern Sask would not be acceptable activity under any SARA sanctioned Action Plan.
- “Activities” includes (4 threats – pg 10 - 12):
 - Habitat loss (change to landscape resulting in areas with no current or immediate future value to boreal caribou – agriculture or development of industrial activities);
 - Habitat degradation (timber harvesting, seismic line development); or habitat fragmentation (man-made linear features such as roads, geophysical lines, pipelines, hydroelectric corridors) that may negatively affect how boreal caribou use habitat.
 - Habitat alteration from natural processes (fire)
 - Hunting



Critical Habitat Disturbance Data

(Blue - Maximum allowed 35%)

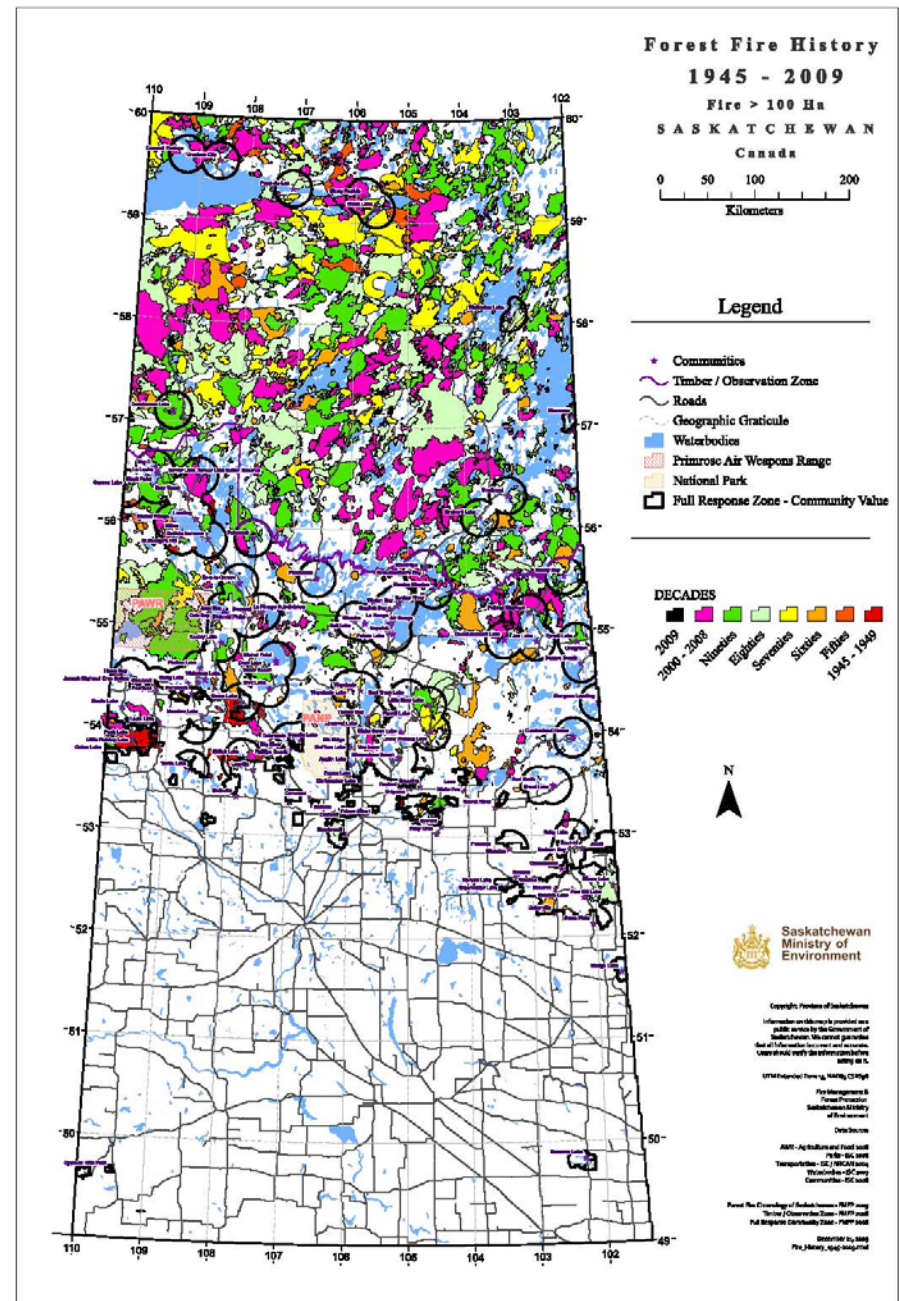
Region B = Blue G = Gray; GR = Green	Size (ha)	Fire - Disturbed Area	Human + Buffer Disturbed Area
Davy – Athabasca B	3,186,758 ha	60%	2%
Clearwater B	4,718,489 ha	69%	3%
Highrock – Key B	4,393,300 ha	62%	4%
Steephill – Foster B	4,221,619 ha	49%	2%
Primrose Cold Lake G	3,220,752 ha	40%	19%
Smoothstone Wapawekka G	4,988,180 ha	17%	20%
Pasquia Bog G	682,435 ha	12%	33%
Suggi – Amisk GR	2,487,894 ha	18%	8%

Data from Appendices – Boreal Caribou National Recovery Strategy Document

SMA Comments on EC Proposed Recovery
Strategy, Boreal Caribou

Saskatchewan Forest Fire History Map, 1945 – 2009

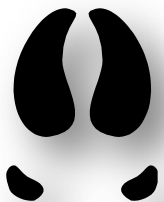
- Environment Canada model uses forest fire history from 40 years back when considering amount of “disturbance” to critical habitat
- EC model indicates that in “blue zones” a maximum of 35% disturbance is allowable
- Map reflects the 49 – 69% forest fire disturbance that exists already in the “blue zones” where no additional development would be allowable until the disturbance fell below 35%
- The EC model attributes 100% disturbance of a forest fire area for 40 years even though not all the area within the fire polygons is burned, and even though caribou utilize the habitat area prior to 40 years.
- SK firecycle is 39 years; difficult to achieve 40 years without a burn.



Report – as written SARA Trumps

- The report lacks clarity on what the implications of this strategy are on normal activity.
- However, when directly asked whether new mines, new roads, or new power infrastructure would be allowed in the blue areas under this proposal, the DM, ADM and Recovery Biologist of EC have been clear and all said

“No developments would be allowed to proceed”



Result – as written

- EC proposed strategy very detrimental to SK
 - Scientifically inaccurate or realistic for the province
 - Limit or halt economic activity and infrastructure development in the north (>20,000,000 ha)
 - Potentially override made-in-SK recovery strategy
 - Compel Province to fight all fires everywhere to manage natural process EC calls “disturbance”
 - Open for public comment until February 22 then final national strategy to be prepared



Science-based questions with model

- What has been used for population data?
- Why were 8 “local population units” used for SK?
- Geographic distribution of local populations across Canada – provincial boundaries change whether populations are sustainable or not (note MB – SK boundary; large geography in ON and QB)
- Why are natural fires considered to be a disturbance to manage?
- Model based on high human impact; low fire regime that is opposite SK situation
- Once area is identified as disturbed habitat, how does an area move back into undisturbed habitat?
- “Professional judgement” vs. scientific info



What needs to change?

- **MODEL** - Science-based changes:
 - MOE indicates no evidence to suggest that populations are declining in northern SK and does not support the proposed Recovery Strategy
 - Population unit map needs to reflect 2 boreal caribou populations recognized by SMOE rather than 8
 - Model for determining level of disturbance of caribou habitat must change to focus on amount of human disturbance rather than amount of natural disturbance (i.e. forest fires)
 - Model must recognize and adjust to reflect that SK situation of high fire regime, low human impact is opposite that of modelled area
 - Fire cycle in Saskatchewan is 39 years; impossible to get 40 year “undisturbed” status



What needs to change?

- **MODEL** - Science-based changes (Continued):
 - Remove water bodies from calculation of “disturbed area”
 - Recognition of “residual” areas of habitat within fire areas
 - Recognition that caribou re-use fire-burned areas prior to 40 years currently identified in model.
 - Recognition that fire is part of the natural ecosystem that benefit other valued species such as moose
 - MOE and EC need to incorporate caribou population that is available but hasn't been used



Policy-based issues

- Federal intrusion on provincial jurisdiction (wildlife)
- Compel change to SMOE “values at risk” based fire management policy
- Actioning of all fires in Boreal forest region – detrimental to broader ecosystem and costly; caribou have evolved in landscape that includes 39 year fire cycle;
- Northern SK and NWT envisioned as incubator for boreal caribou population recovery in Canada
- 2 – 4% human disturbance is not affecting caribou populations, but recovery strategy will limit – not allow future and current economic and infrastructure activity
- Caribou perhaps first of many species targeted



What needs to change?

- Policy-based changes:
 - Province needs to continue development of its own made-in-SK caribou recovery plan
 - Province needs to bolster caribou data collection and research to inform provincial efforts and recovery model (partnerships)



Conclusion

- Critical issue to effective wildlife management, provincial autonomy, and economy of province
- Lawsuit pressure from anti-development groups says strategy not enough; suing federal and provincial gov't
- Bottom line:
 - If the final national strategy does not change considerably from the proposed plan, there will be many long-term, negative social and economic repercussions for SK residents without any benefit to caribou populations