



# WRRB Joint Caribou Proposal

Karen McMaster  
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# Overview

- Part 1: Goal & Conclusions: Karen, Dr. Rick Page, Mr. Mark Fraker (RP biologists)
- Part 2: Basis for Decision Making
- Part 3: Review Process
- Part 4: Tlicho Land Claim
- Part 5: Future Management
- Part 6: Summary/Conclusions



## Part I: Goal: Decisions which are...

- Reliable
- Accurate
- Logical
- Fair
- Reasonable
- Transparent
- Inclusive
- Independent
- Unbiased
- Legally sound
- Not political
- Sustainable Development
- In the public interest



## Conclusion: Karen McMaster

- Total allowable harvest: unnecessary, unreasonable and not in public interest
- Status quo for hunting should be restored
- We must all work together to collect and manage caribou information and create a path forward
- Information should not be controlled by any one group and must be shared on a regular basis



## Summary of reasons

- Crisis/decline not substantiated, inadequate data/information
- ENR models: not widely accepted, no independent evaluation, no consultation
- ARC did not confirm ENR's declines and models
- ARC recommended significant improvements in data collection, scientific rigor and transparency; highly critical of caribou information
- Review process compromised



## Summary (continued)

- No where close to understanding caribou situation
- Can't just do what is easy or do something “just to do something” which affects so many lives
- Basis must be solid and need demonstrated
- Must be a reasonable solution



## Summary (continued)

- We don't have and we need:
  - a) solid basis of information
  - b) socio-economic assessment
  - c) reliable harvest information
  - d) predation information
  - e) near certainty harvest restrictions will affect population
  - f) creative and collective thought



# Independent Biologists

- Dr. Rick Page, PhD, RPBio
- Mr. Mark Fraker, RPBio
- Provided a limited independent analysis of information that forms basis of Joint Proposal





## Dr. Page and Mr. Fraker conclusions

- Bathurst Herd has not declined per ENR
- Bathurst and Ahiak Herds: one herd
- Fundamental flaws in ENR information
- June 2009 survey information: disregard
- High mortality rates used by ENR:  
unreasonable, sampling bias and error
- Proposed management plans: not justified



## Biologists' conclusions (continued)

- Numbers: often “etched in stone” regardless of reliability
- 1996 estimate of 200,000 Ahiak incorrect: serious flaws with report #126
- Estimate on website of caribou organization in 2010
- Reliability of other ENR reports is questionable: reanalysis of information has not taken place



## Biologists' conclusions (continued)

- ENR's technical report inconsistent with Dr. Tom Bergerud's epic work on caribou biology
- Reporting of survey and research results immediately and transparently as per ARC does not seem to be occurring
- Scientists are expected to disclose raw data to those who are interested



## Biologists' conclusions (continued)

- Possible that tens of thousands could have switched without being detected: small sample size, 5% per year = 50% over 10 years
- ENR: Beverly joining the Ahiak on the calving grounds
- Surely this is possible for the Bathurst
- Metapopulation



## Biologists' conclusions (continued)

- ENR estimates of 32% mortality and higher are unreasonable and probably due to sampling bias and error
- Data from 1983 to 2003 do not support a statistically significant decline
- 2009 data should be disregarded
- ENR calf:cow ratios do not suggest a major decline



## Biologists' conclusions (continued)

- Low numbers of males: not a management concern for caribou
- Small number of bulls harvested could not cause a skewed sex ratio and closing the the hunt: no significant effect
- Wolf numbers: seem to have been high until 2005 (parvovirus outbreak), reductions since, & healthy crop of calves last three years: wolf management



## Part 2: Basis for Decision Making

- Joint Proposal: no support for decline
- Bathurst Herd: definition and creation of artificial decline
- Alberta Research Council Report (“ARC”)
- ENR Draft Technical Report (December 2009)



## Bathurst Herd: Artificial Perception of Decline

- Definition changes
- Poor quality of reports
- Mortality rates
- Necessary collaring information not produced
- No genetic differences





## Alberta Research Council (“ARC”)

- Irregular survey frequency and methodology across herds hamper population comparisons
- Movement rates, fidelity, birth and survival rates etc. for the entire population are being based on sample sizes that are far too low to reliably infer to the greater population
- Caribou conclusions based on 1-3 caribou in 10,000 (.01% to .03%)-not significant



## ARC (continued)

- Does not review or confirm ENR caribou numbers, broader high level approach
- Does not support Joint Proposal Management Actions
- Does not state caribou numbers are low
- Assumed ENR definitions: fundamental flaw
- Based on available information: not all relevant information, key information missing
- Extremely weak conclusions
- Not independent: report written with deference to ENR and in light of pending litigation to protect ENR-scope controlled



# Caribou Calculator

- Inappropriate use
  - Not well understood by public or biologists
  - Not accepted
  - Assumptions
  - Does not incorporate reliable and acceptable NWT data
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## ENR Draft Technical Report December 2009

- Produced weeks into the hearing, not part of consultations, public unaware of its creation, no opportunity to discuss
- Draft form, not peer reviewed as per ARC
- Model not discussed and produced
- Biologists: model problematic (mortality rates not supported, model designed to fit estimates)



## PART 3: Review: Compromised

- Time lines: ENR urgency: premature and not in the public interest: harmful
- Intervener disadvantage: ongoing provision of information, ENR use of public resources, lack of disclosure/ transparency, no certainty, deference
- Lack of independence/bias: ENR focused reports, lack of peer review, lack of independent reports and experts, biases



## Part 4: Tlicho Land Claim Agreement

- WRRRB institution of public government and to act in public interest:
- Canada, residents and businesses in NWT
- No ownership of wildlife
- No guarantee of supply of wildlife
- Restrictions on harvest only for conservation, public health, public safety
- Principles in management of wildlife



## Tlicho LC Agreement (continued)

- Lack of complete information shall not prevent reasonable conservation measures where there are threats of serious or irreparable harm
- We are no where close to having complete information
- Can't do “something” “just to do something”
- Connection necessary-cause and effect
- Reasonable action plans



## Tlicho LC Agreement (continued)

- Harvest restrictions are unnecessary, unreasonable, not in public interest
- Without a) reliable or sound caribou numbers, b) evidence to support their decline, c) accurate and reliable harvest data/models, d) review of predators e) reasons, f) socio-economic assessment
- Harvest restrictions are draconian: harmful to many people and not proven to be necessary and effective
- ARC did not suggest or support harvest restrictions





## Tlicho LC Agreement (continued)

- WRRRB: public government/public interest
- Ensure full transparency/disclosure
- Ensure creativity and reasonableness
- Priority is not exclusivity to any group
- Not all to one and nothing to another
- Encourage collective problem solving, cohesiveness among NWT people and businesses, accountability



## Part 5: Future Management

- Data collection and management of caribou should not reside with ENR
  - a) Apprehension and lack of trust in ENR
  - b) ENR mismanagement over the years
  - c) Lack of cooperation and co-ordination with other stakeholders
  - d) Unwilling to meaningfully engage with stakeholders



## Future Management (continued)

- Work together
  - a) to collect sound caribou information
  - b) to collect sound harvest data, including by herd? Impossible? Metapopulation
  - c) to develop effective management plans, including harvest management plans



## Part 6: Summary/Conclusion

- Basis for proposal has not been substantiated
- Proposed actions are unreasonable
- We must ensure we do not prematurely affect the lives of so many individuals
- All stakeholders should work together to collect reliable information and proceed with a thoughtful and coordinated plan

THANK YOU/MASI

