

Proposal 1: Evaluate a separate ANS for the Teshekpuk Caribou Herd

5 AAC 99.025. Customary and
traditional uses of game populations.



Proposal 1

- Proposal submitted by the North Slope Regional Advisory Council
- Requests the board evaluate a separate Amount Reasonably Necessary for Subsistence (ANS) for the Teshekpuk caribou herd.
- Teshekpuk range includes parts of Region III – Proposal also will be before the board in Fairbanks in February as Proposal 102.

Department Recommendation: Neutral

Background

- Board made a positive C&T determination for Teshekpuk caribou (TCH) in January 2014.
- In 2014, board presumed that 1992 board had included Teshekpuk caribou in their Nov. 13, 1992 deliberations in reconfirming the 1987 C&T finding for Western Arctic caribou and setting the ANS at 8,000 – 12,000 caribou.
- As a result, board concluded ANS for Western Arctic herd included the Teshekpuk herd.

Background

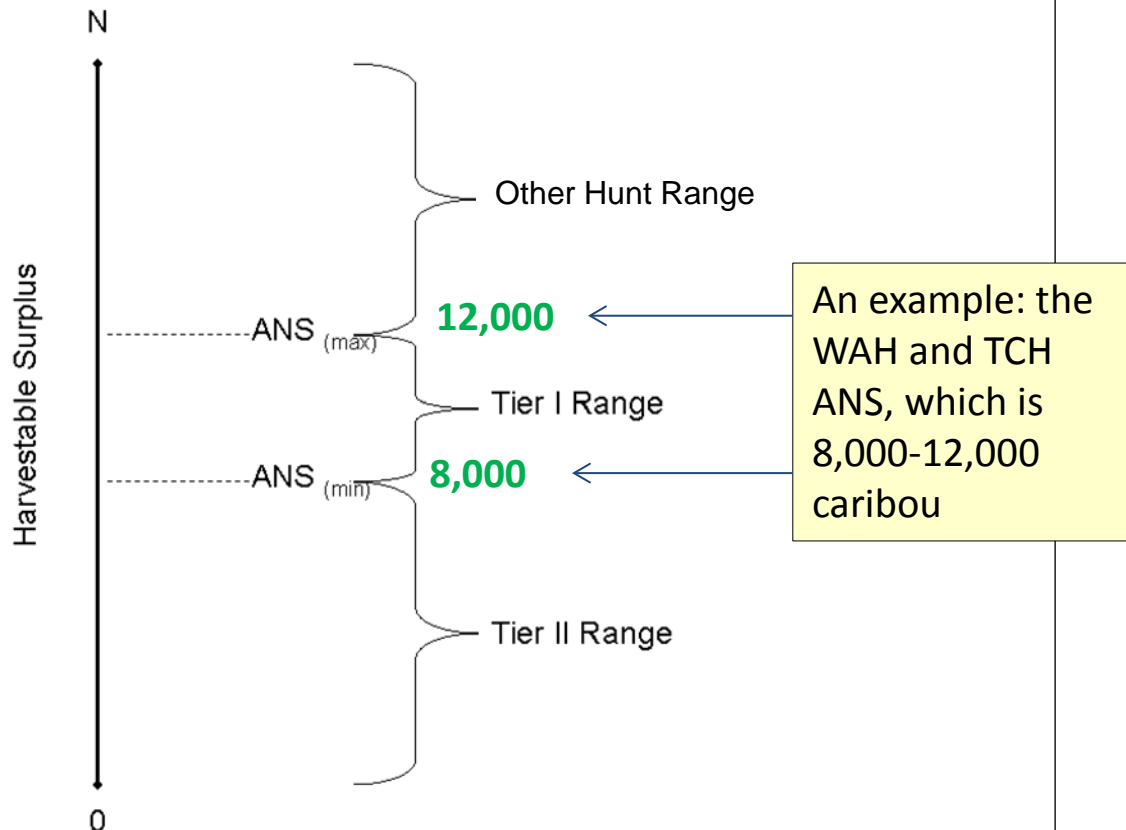
- ADF&G recognized TCH as a management population in 1978.
- TCH recognized as important for providing high levels of human harvest under the Intensive Management law with a population objective of 15,000 – 28,000 and harvest objective of 900 – 2,800 Teshekpuk caribou.

Background

- In August 2016, the department reviewed the tape recordings of the November 13, 1992 board meeting and determined that the board did not discuss Teshekpuk caribou during their deliberations when setting the ANS for the Western Arctic caribou herd and reconfirming the C&T finding for Western Arctic caribou.

Background: Subsistence Procedures

Figure 1. Potential Regulatory Approach for Management of Species With C&T Use and a Variable Harvestable Surplus



Subsistence and general hunt range: Board may provide additional opportunity for non-subsistence uses

Tier I Subsistence Priority: Board must restrict all other consumptive uses.

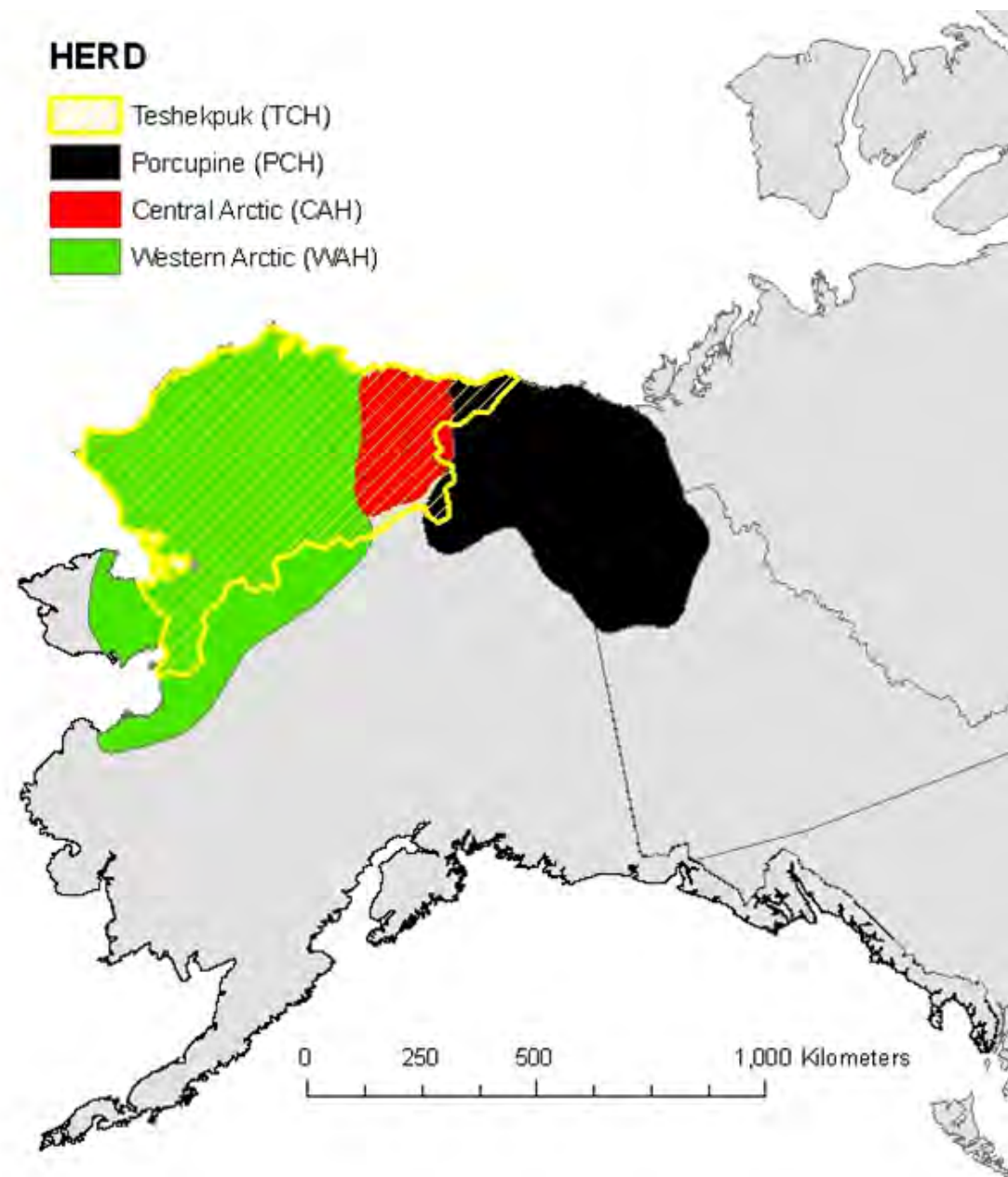
Tier II: Harvestable surplus is not sufficient for all subsistence uses. Board must distinguish between subsistence users.

Harvest Data Limitations

- 2 sources of harvest information, including new information obtained since 2014:
 - Community household harvest surveys
 - Harvest ticket database
- Both data sources are associated with significant limitations to developing ANS options:
 - Household survey data is limited to a small number of community harvest estimates annually
 - Harvest tickets do not capture harvests by residents living within the range of the WAH and TCH.

Arctic Caribou

- Four herds on North Slope:
- Primary harvesters of TCH = Utqiagvik (Barrow), Atqasuk, Nuiqsut.
- Substantial caribou harvests documented (Table 1 in report).
- In some years, can apportion harvest by herd.



Harvest Data by Herd

- 2002–2014, community harvest surveys: Some harvests can be apportioned by herd:

Community	% of Harvest from Herd, 2002-2007				2009		2011-2012	2014			
	WAH	TCH	CAH	Unknown	WAH	TCH	TCH	WAH	TCH	CAH	PCH
Atqasuk	2%	84%		14%			98%	16%	86%	0%	0%
Utqiagvik	1%	66%		33%			97%	6%	93%	1%	0%
Nuiqsut	1%	77%	11%	11%			77%	0%	45%	41%	13%
Wainwright ^a	a	a	a	a	80%	20%	60%				
Anaktuvuk P. ^b	80%	20%					30%	57%	38%	2%	3%

^aIt is not possible to apportion Wainwright harvest between 2002-2007

^bBetween 2002-2007, Anaktuvuk Pass harvest can only be apportioned for the 2006-2007 study year

- 1998–2014, harvest ticket database: 10% of harvests apportioned to Teshekpuk caribou (TCH); 90% to Western Arctic (WAH) caribou.

Data: TCH harvest, 2002-2014

Based on herd apportionment percentages in *Slide 9*

Community	2002– 2003	2003– 2004	2004– 2005	2005– 2006	2006– 2007	2008	2009	2010	2011	2012	2013	2014*	Mean
Atqasuk	186		295	173	146	132							186.5
Utqiagvik		1,380										2,651	2,015.8
Nuiqsut	306		434	420	280	365						348	359.0
Wainwright ^a							246						246.1
Anaktuvuk Pass ^b					139				185			292	205.5
Total													3,012.9

Note Blank cells indicate data not available.

* Utqiagvik 2014 value is lower bounds of range of the 95% confidence interval of harvest estimate

^aIt is not possible to apportion Wainwright harvest between 2002–2007

^bAnaktuvuk Pass harvest can only be apportioned for the 2006–2007 and 2011 study year

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012		Mean	
Other Alaskan	3.3	5.2	6.5	4.6	4.6	6.5	5	5.8	3.9	3.7	4.4	3.5	3.6	4.7
Nonresident	4.2	4.8	4.8	3.9	4.4	4.2	4	1.9	2.9	5	3.8	6.1	8	4.5
Total														9.1

Source WINFONET

Method for setting bounds of ANS

Mean Teshekpuk caribou harvests, plus or minus 25 %

Mean value:

3,018 caribou

$\pm 25\% = 2,263$ to $3,772$ caribou

ANS range =

2,200 to 3,800 TCH caribou

(rounded)

Options 1 – 3 overview

- Option 1: Single ANS
Add a Teshekpuk ANS to existing 8,000-12,000 WAH ANS
- Option 2: Separate ANS
Find a separate Teshekpuk ANS.
- Option 3: Take no action

Option 1

Single ANS for WAH/Teshekpuk caribou

Option 1: One ANS for WAH and TCH combined = 10,200-15,800 caribou						
Mean harvests of Teshekpuk caribou		Mean ± 25%			ANS Range option	
	<i>Bounded by</i>	Low	High	<i>Equals</i>	Low	High
3,018		2,264	3,773		2,200	3,800
Thus, 8,000-12,000 WAH caribou + 2,200-3,800 TCH caribou = 10,200-15,800 caribou						

Option 2

Separate ANS Teshekpuk caribou

Option 2: Separate ANS for TCH = 2,200 - 3,800 caribou						
Mean harvests of Teshekpuk caribou		Mean \pm 25%			ANS Range option	
	<i>Bounded by</i>	Low	High	<i>Equals</i>	Low	High
3,018		2,264	3,773		2,200	3,800
Thus, 2,200 - 3,800 TCH caribou						

Option 3

Take no action

Key considerations

Implications and scenarios of various structural approaches

- Option 1 – Combine herds
 - May need additional regulations or harvest management plan to ensure sustained yield and reasonably opportunity.
- Option 2 – Similar to other herds.
 - In the event of herd declines, may need regulations or harvest management plan to ensure sustained yield and reasonable opportunity.

Finding?

- What amounts are reasonably necessary for customary and traditional uses of Teshekpuk caribou?