Proposal 1 Caribou / Units 21,22,23,24,26

Establish a Separate ANS for the WAH and TCH

Recommendation: NEUTRAL

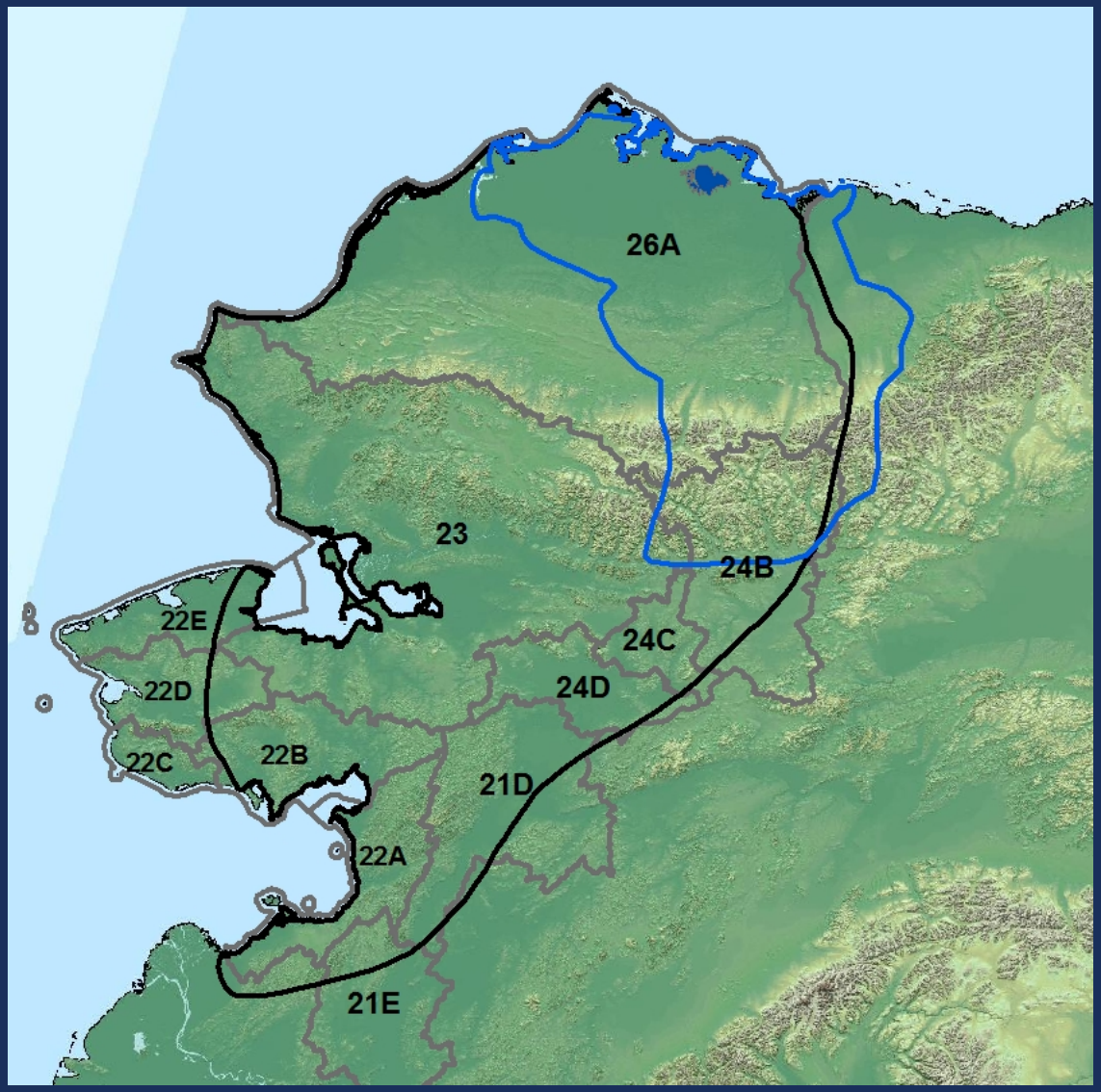
North Slope Subsistence Regional Advisory Council

Advisory Committee Votes
Kotzebue Sound: support 5-0
Upper Kobuk:
WAHWG: support 9-4

Arctic Advisory Committee: TNA
Noatak-Kivalina: support 5-0
Lower Kobuk:

Proposal 1

Caribou / Units 21,22,23,24,26



Proposal 1 Caribou / Units 21,22,23,24,26

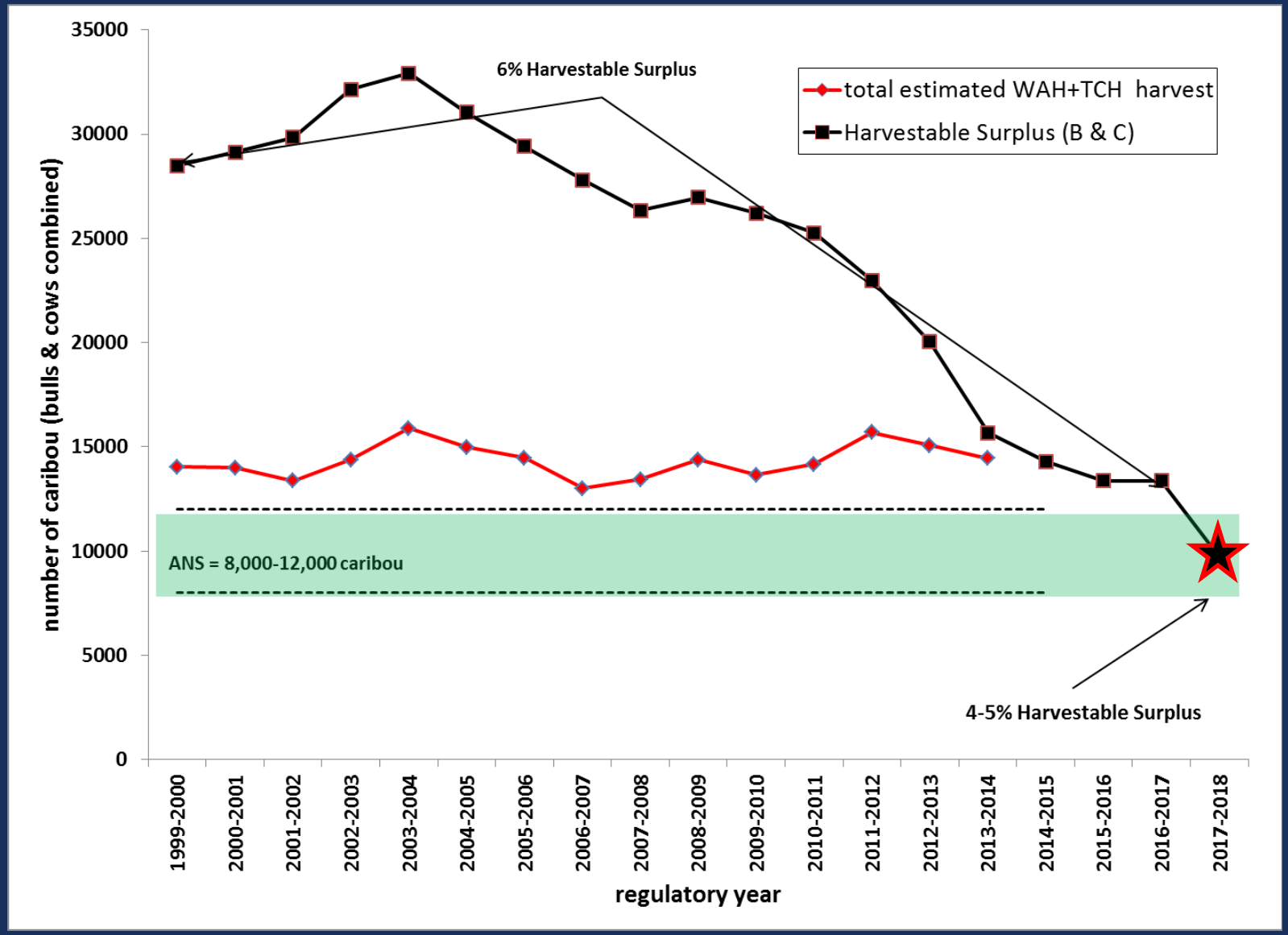
C&T Finding: Positive

Current ANS: 8,000-12,000, WAH and TCH

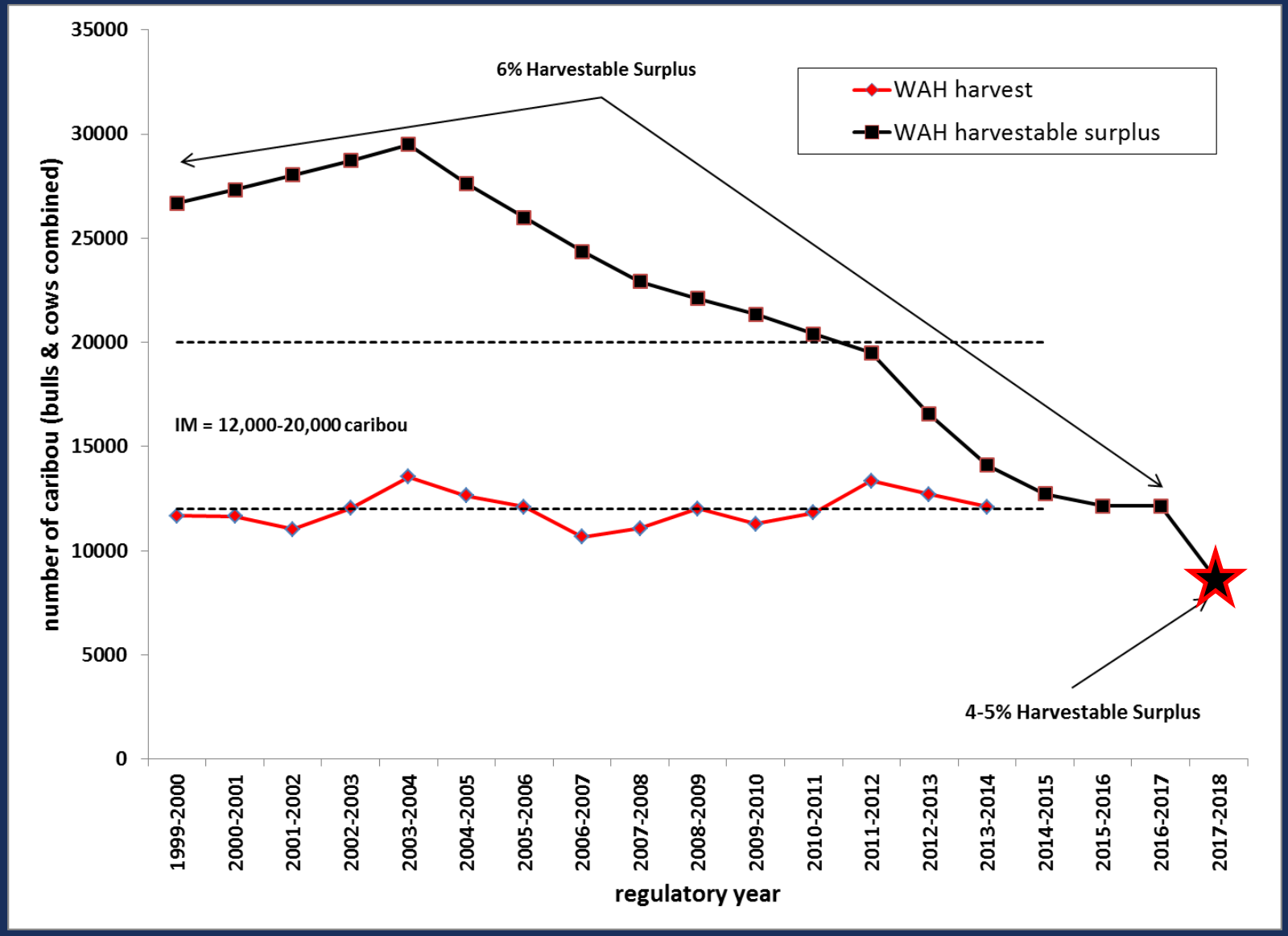
Historical Harvest:

- Averages 14,355 (+/- 1,750)
- Includes a static estimate of 2350 from TCH

Proposal 1 Caribou / Units 21,22,23,24,26



Proposal 1 Caribou / Units 21,22,23,24,26



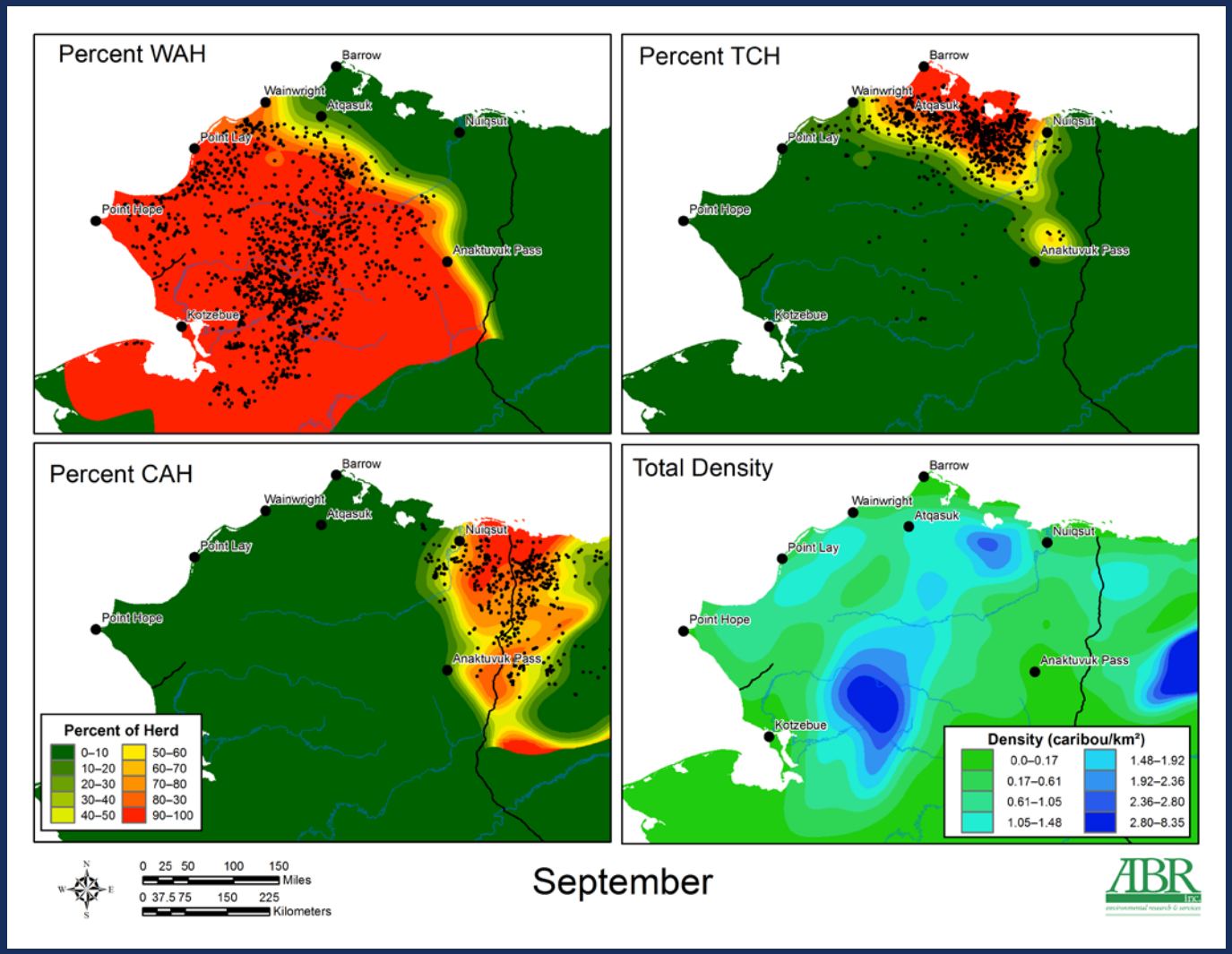
Proposal 1 Caribou / Units 21,22,23,24,26

TCH-only harvest / harvestable surplus

- Approximately 2,350 harvested per year
- Current harvestable surplus is 2,500

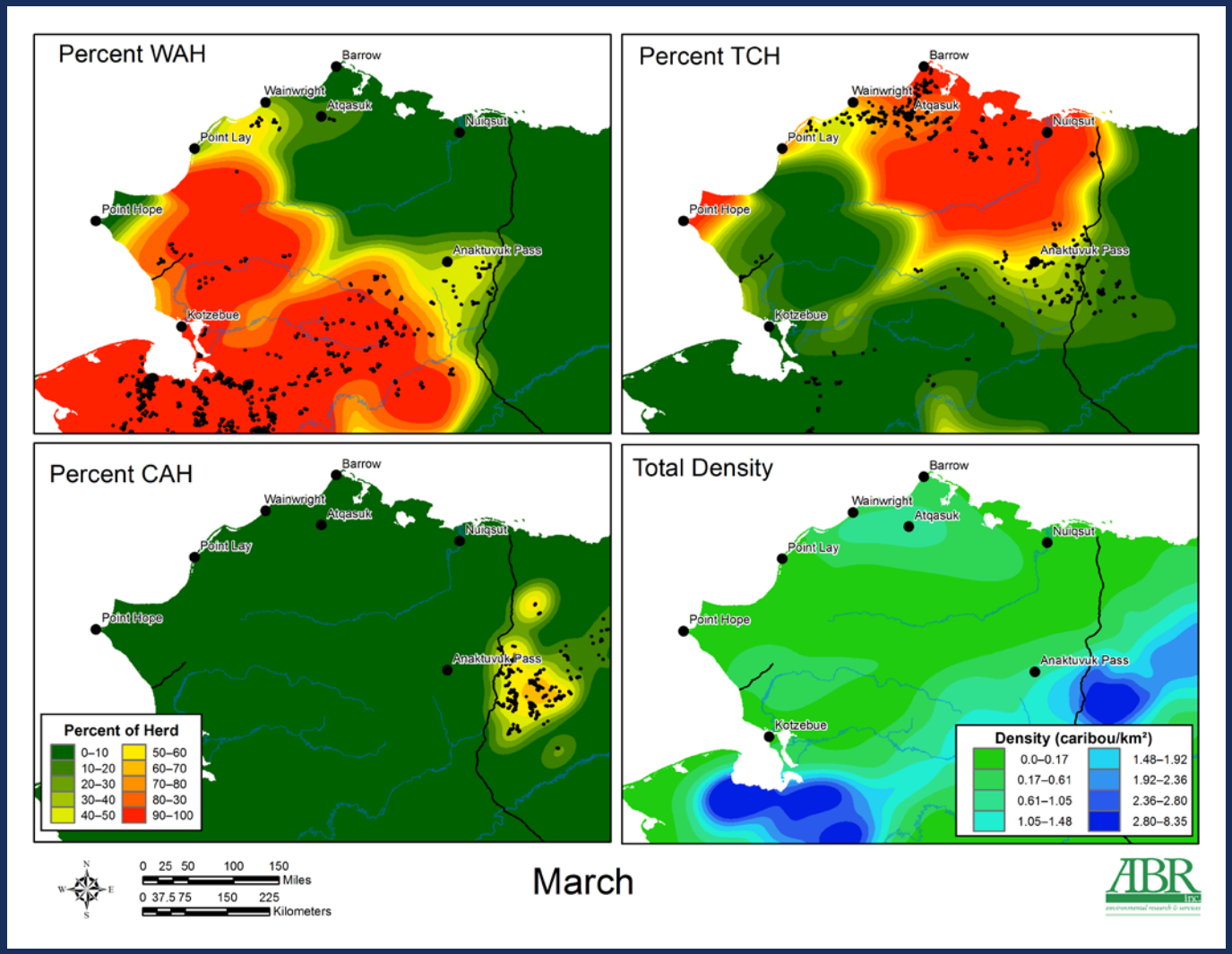
Proposal 1 Caribou / Units 21,22,23,24,26

Harvest Apportionment: 2010-2014



Proposal 1 Caribou / Units 21,22,23,24,26

Harvest Apportionment: 2010-2014



Proposal 1 Caribou / Units 21,22,23,24,26

Issues:

- **The WAH is much larger than the TCH; harvestable surplus of the WAH will tend to determine where these herds are relative to ANS thresholds**
- **The appropriate scale to evaluate reasonable opportunity**
- **The proponent is concerned that a combined ANS may lead to difficulties in managing harvest**

Proposal 1 Caribou / Units 21,22,23,24,26

- Nonresident harvest in the TCH averages <0.5% of total harvest; 2.5% of WAH
- The TCH and WAH currently have distinct regulations reflecting different patterns in biology and harvest
- A significant problem is the department's ability to estimate harvest in both herds

Proposal 1 Caribou / Units 21,22,23,24,26

Establish a Separate ANS for the WAH and TCH

Recommendation: NEUTRAL

North Slope Subsistence Regional Advisory Council

Advisory Committee Votes
Kotzebue Sound: support 5-0
Upper Kobuk:
WAHWG: support 9-4

Arctic Advisory Committee: TNA
Noatak-Kivalina: support 5-0
Lower Kobuk:

Proposal 2 Caribou / Units 21,22,23, 24, 26

Establish a Registration Permit for the WAH and TCH

Recommendation: NEUTRAL

Units 21,24, 26B will be addressed during the RIII meeting

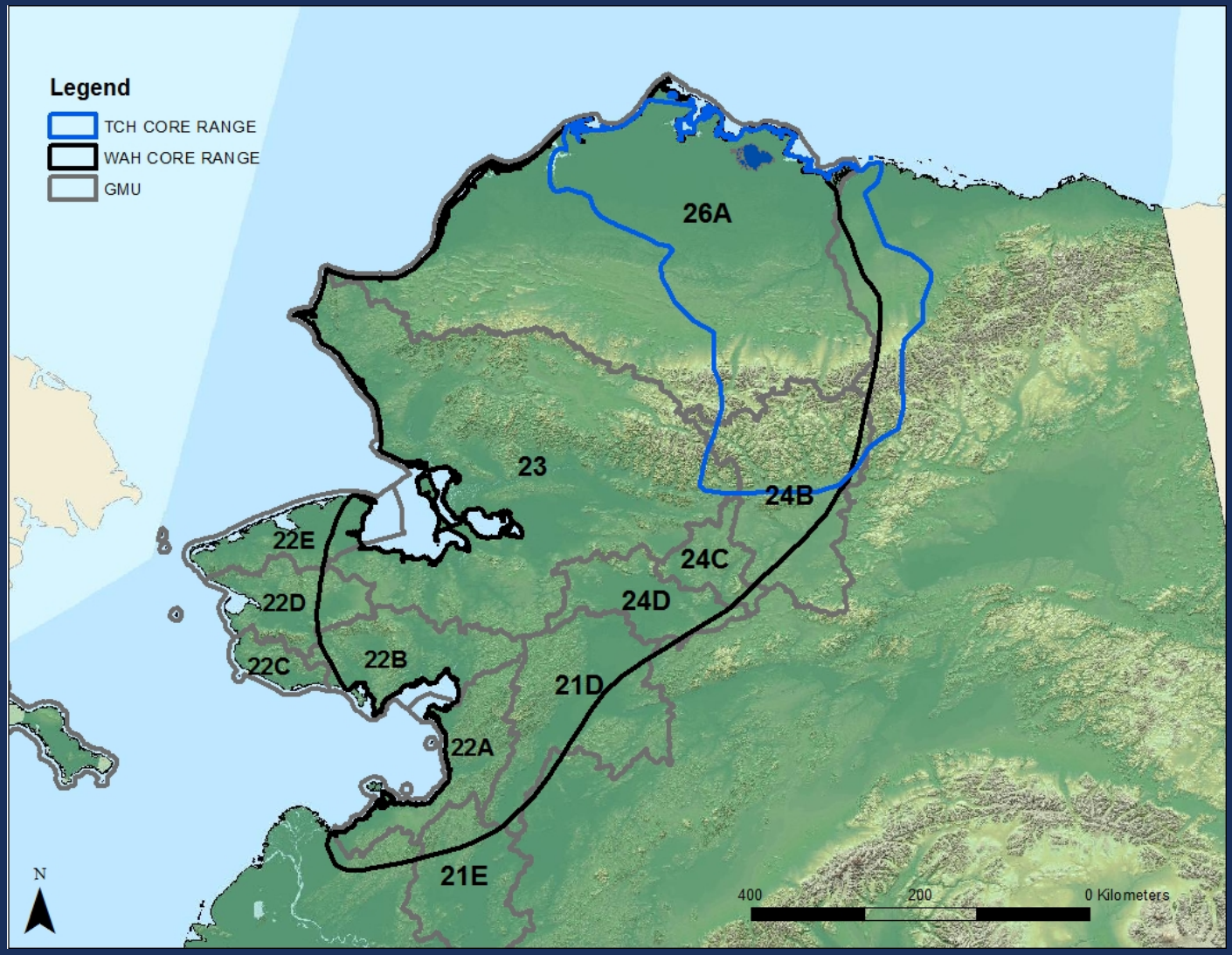
Department Proposal

Advisory Committee Votes

North Slope AC: opposed 0-8
Noatak-Kivalina: opposed 0-5
Lower Kobuk: Pending

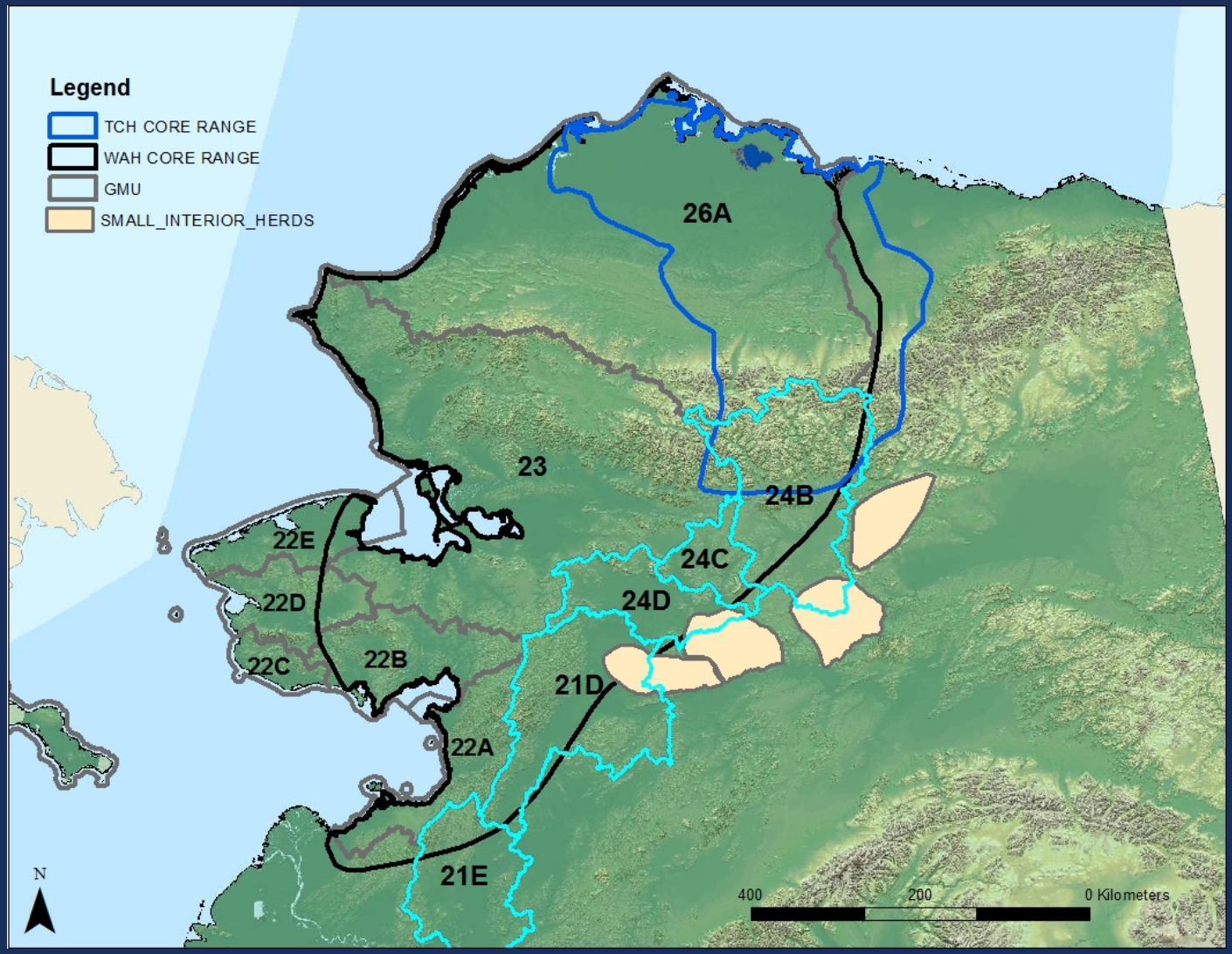
WAHWG: support 11-2
Kotzebue Sound: TNA
Upper Kobuk: Pending

Proposal 2 Caribou / Units 21,22,23,24,26



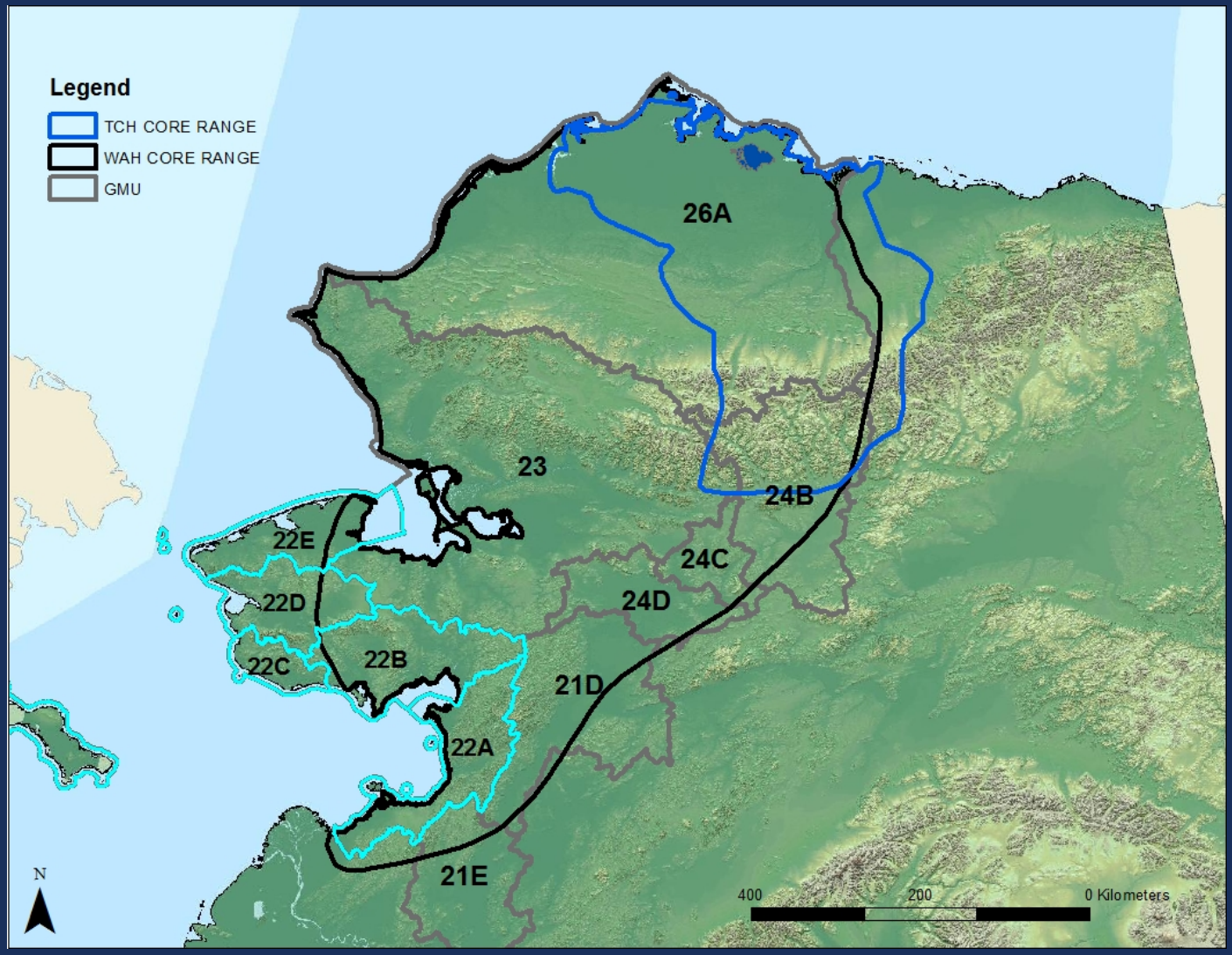
Proposal 2

Caribou / Units 21,22,23,24,26



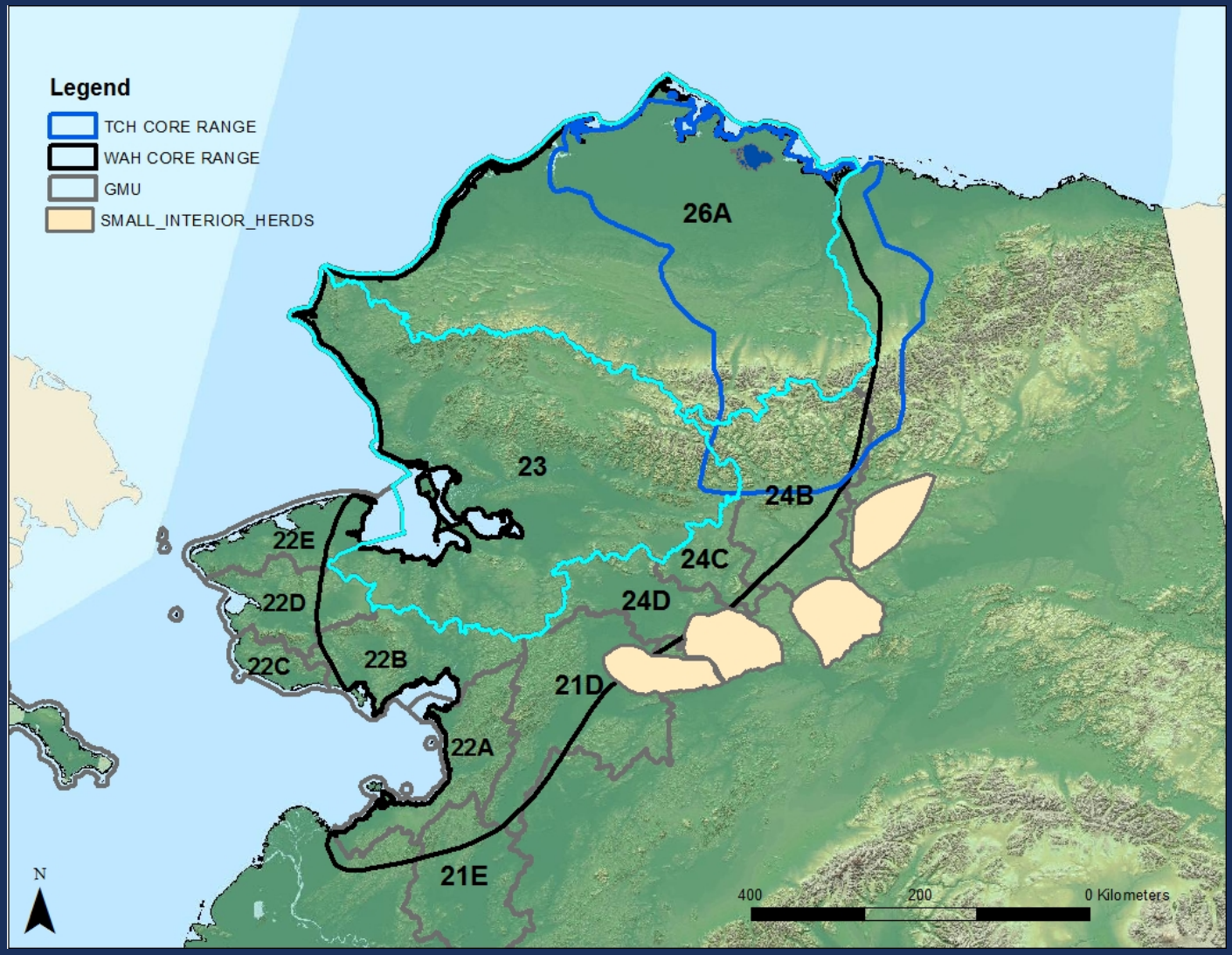
Proposal 2

Caribou / Units 21,22,23,24,26



Proposal 2

Caribou / Units 21,22,23,24,26



Proposal 2 Caribou / Units 21,22,23,24,26

C&T Finding: Positive

ANS: 8,000-12,000, WAH and TCH

Current Harvestable Surplus: 14,500

<u>Current Hunt Administration:</u>

Harvest Tickets:	**Units 21, 24**
Registration Permit:	**Unit 22**
Register with Department:	**Units 23, 26A**

Proposal 2 Caribou / Units 21,22,23,24,26

Seasons and Bag Limits:

Variable throughout Ranges of WAH and TCH

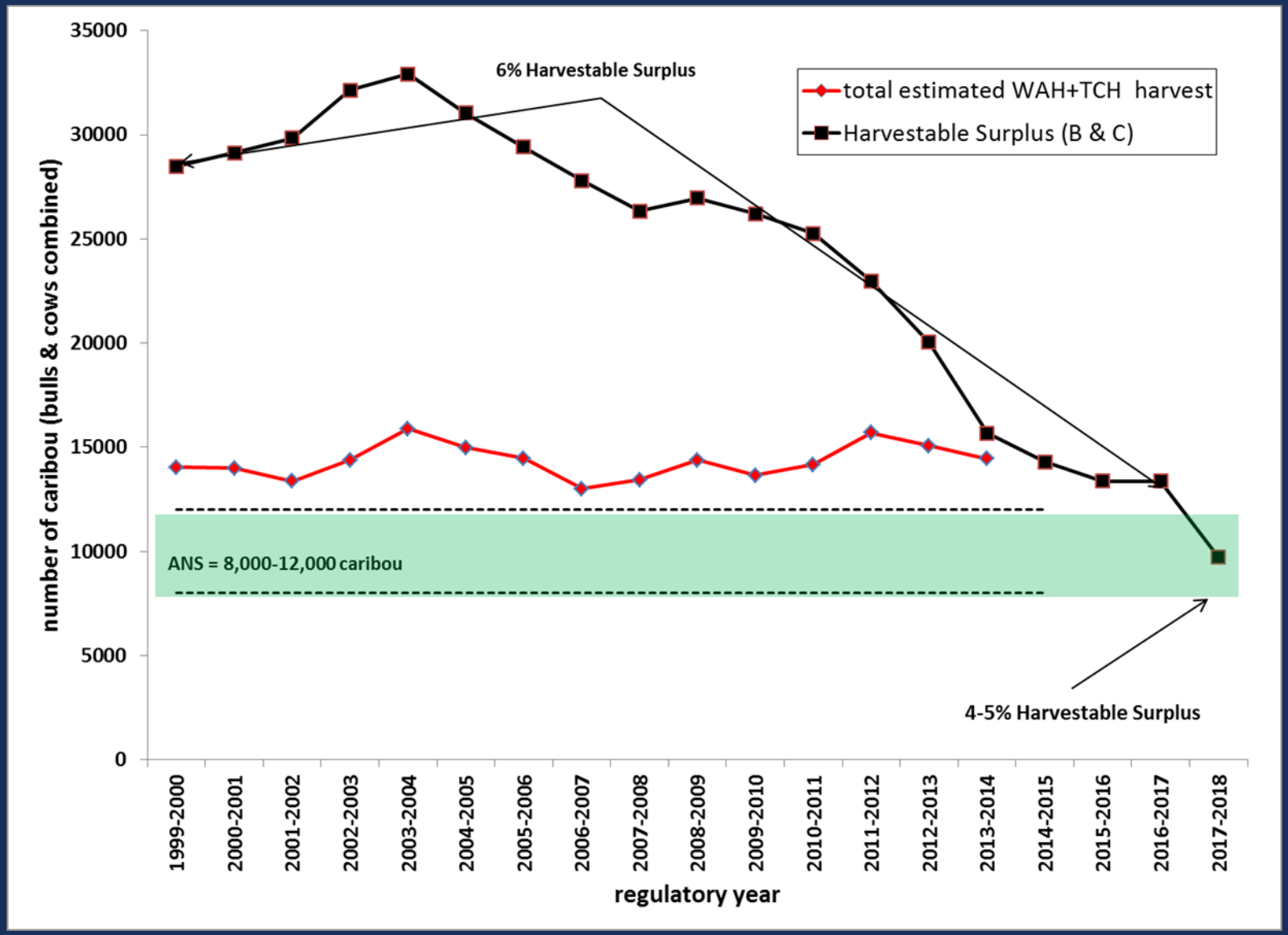
- **Year-round seasons (vary by sex)**
- **Daily Bag Limits, by sex, in 21,23,24, 26A**
- **Annual Bag Limit of 20 in Unit 22**

Proposal 2 Caribou / Units 21,22,23,24,26

Issue 1:

- **Harvestable surplus and harvest are converging;**
- **Knowledge of harvest is retrospective; Harvest Estimation Model is not sensitive to change; department will need to be conservative**
- **Data on sex ratio and spatial location of harvest is even more limiting**
- **More adaptive management may be needed in the future**

Proposal 2 Caribou / Units 21,22,23,24,26



Proposal 2 Caribou / Units 21,22,23,24,26

Issue 2:

- **This will be a significant change for most hunters in the ranges of these herds**
- **Access to license vendors and the internet remain poor; permits will need to be widely available**
- **Local public is inexperienced with registration permits**

Proposal 2 Caribou / Units 21,22,23,24,26

PARTICIPATION IN RC900 – 5 year average
"register with the Department"

Unit 22:	**245 hunters/year**
Unit 23:	**400 hunters/year**
Unit 26A:	**27 hunters/year**

Proposal 2 Caribou / Units 21,22,23,24,26

Harvest ticket reporting is very slow:

- **Spring seasons lead to a slow trickle of reporting**
- **In 2013, 2014, and 2015, only ~40% of reports had come in by January**
- **If the department needs more timely information, split seasons may be necessary**

Proposal 2 Caribou / Units 21,22,23,24,26

- RC800 in Unit 22 (started RY 16)
  - Permits are available online
  - The department undertook a substantial in-person effort to distribute permits outside of Nome
  - Educational efforts are ongoing

Proposal 2 Caribou / Units 21,22,23, 24, 26

Establish a Registration Permit for the WAH and TCH

Recommendation: NEUTRAL

Units 21,24, 26B will be addressed during the RIII meeting

Department Proposal

Advisory Committee Votes

North Slope AC: opposed 8-0

Noatak-Kivalina: opposed 5-0

Lower Kobuk:

Northern Seward Peninsula:

Kotzebue Sound: TNA

Upper Kobuk:

Proposal 3 Caribou / Units 21,22,23, 24, 26

Remove the Exception to Harvest Tickets and Reports for Caribou

Recommendation: NEUTRAL

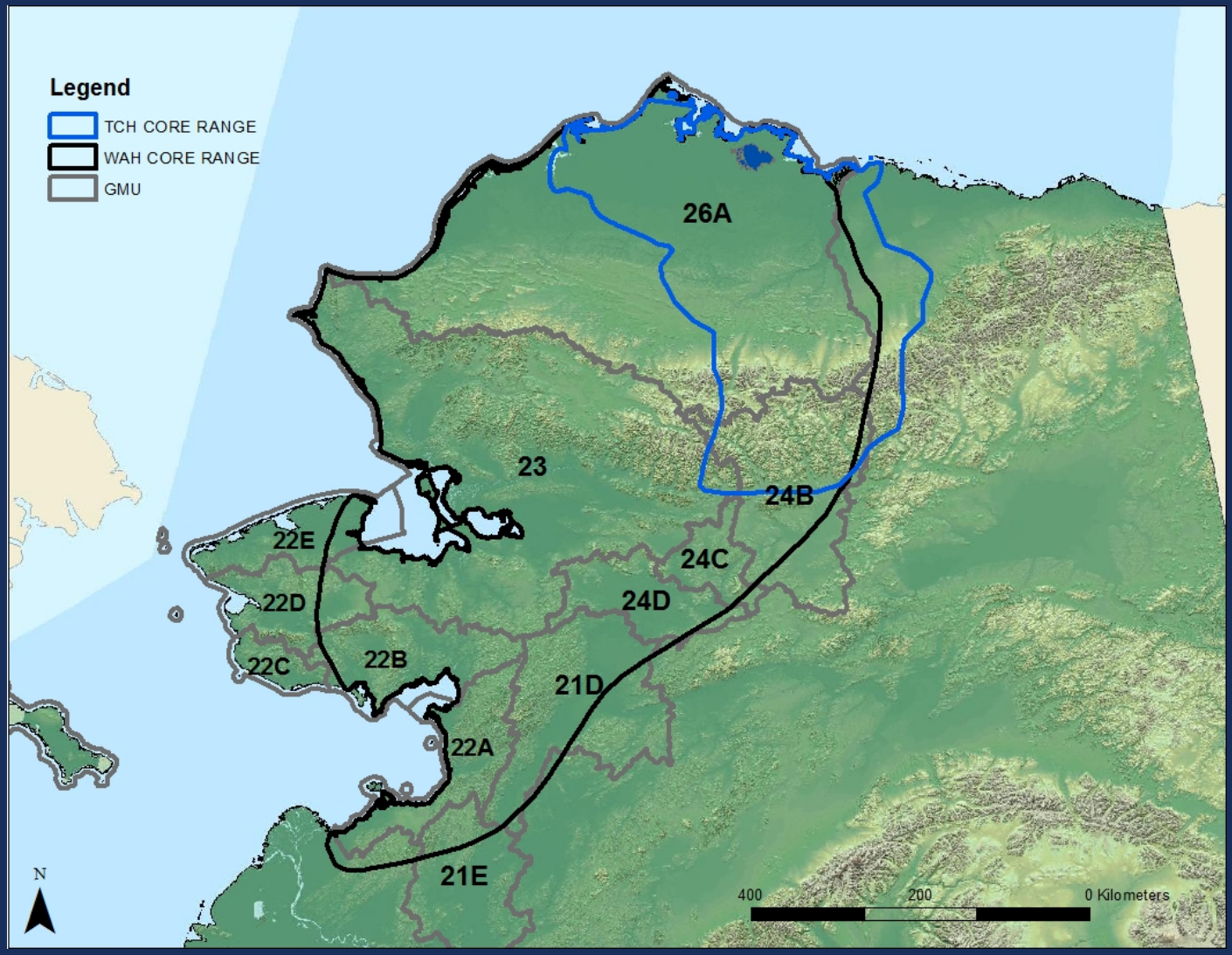
Alaska Outdoor Council

Advisory Committee Votes
Kotzebue Sound: opposed 0-5
Lower Kobuk:
WAHWG: TNA

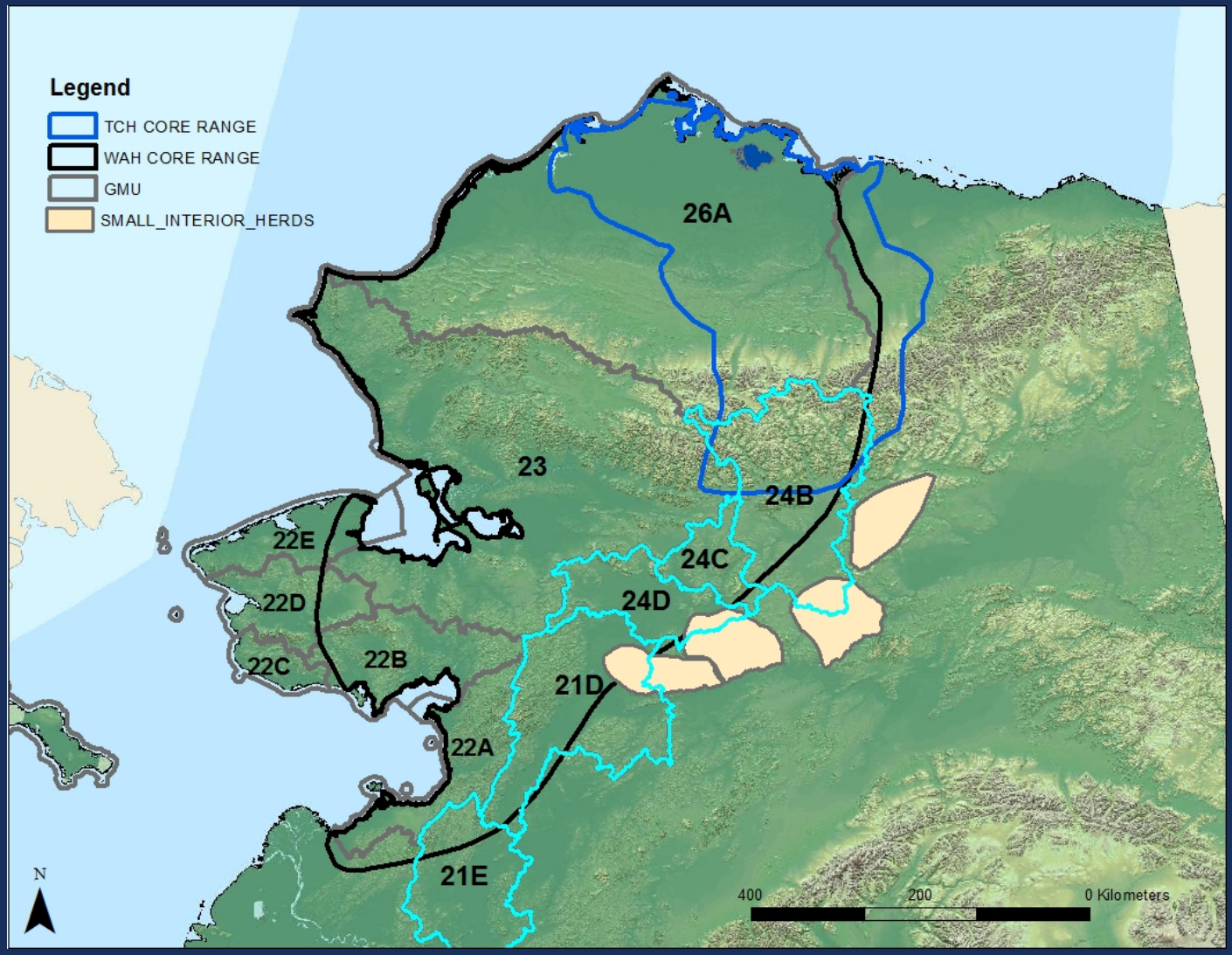
Arctic AC: opposed 0-7
Noatak-Kivalina: opposed 0-5
Upper Kobuk: support
Buckland-Deering: support

Proposal 3

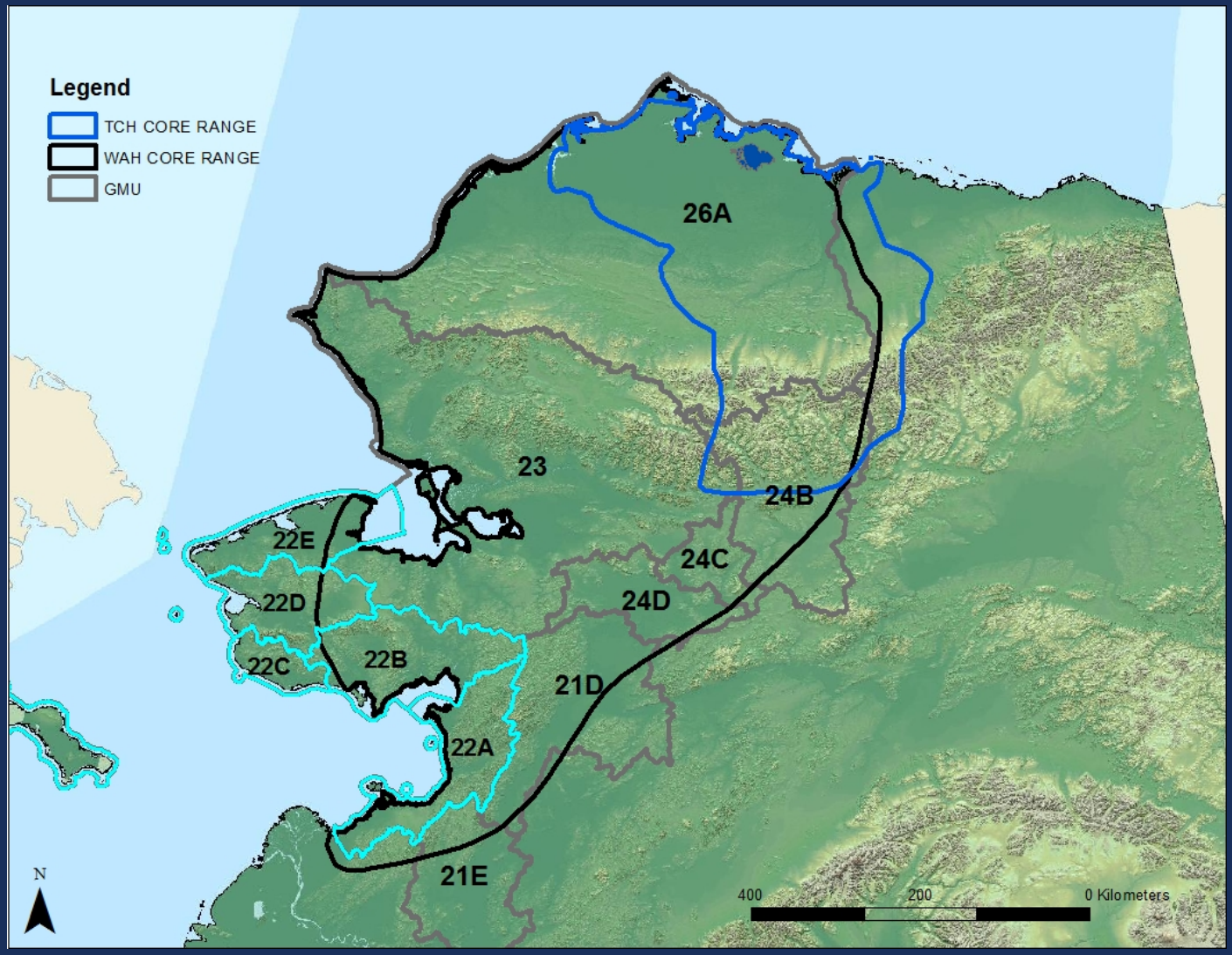
Caribou / Units 21,22,23,24,26



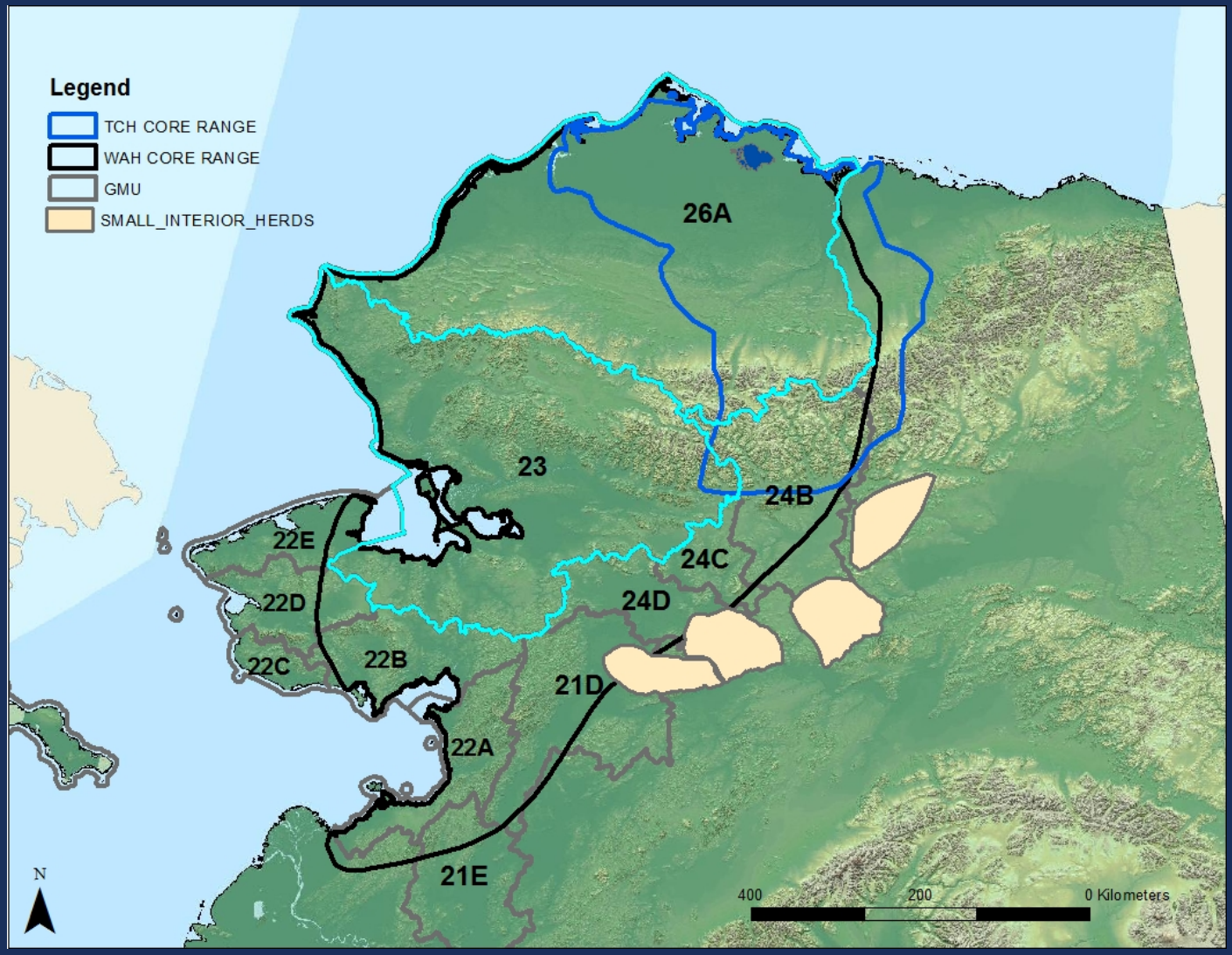
Proposal 3 Caribou / Units 21,22,23,24,26



Proposal 3 Caribou / Units 21,22,23,24,26



Proposal 3 Caribou / Units 21,22,23,24,26



Proposal 3 Caribou / Units 21,22,23,24,26

Issues:

- The current administrative tool (RC900) does not work well
- Low participation has led the department to abandon efforts to follow up in most areas
- A change to harvest tickets may not improve participation in many areas

Proposal 3 Caribou / Units 21,22,23, 24, 26

Remove the Exception to Harvest Tickets and Reports for Caribou

Recommendation: NEUTRAL

Alaska Outdoor Council

Advisory Committee Votes
Kotzebue Sound: opposed 0-5
Lower Kobuk:
WAHWG: TNA

Arctic AC: opposed 0-7
Noatak-Kivalina: opposed 0-5
Upper Kobuk: support
Buckland-Deering: support

Proposal 4 Caribou / Units 21D,22,23, 24, 26A

Institute no-fly zones for caribou hunting in Units 21D, 22, 23, 24 and 26A.

Recommendation: NEUTRAL

Public Proposal

Advisory Committee Votes:
Kotzebue Sound: opposed 0-5
Lower Kobuk:
N. Norton Sound: opposed 0-14
WAHWG: opposed 0-13
Buckland-Deering: opposed
Noatak-Kivalina: opposed 0-5
Upper Kobuk: support
S. Norton Sound: support 5-0

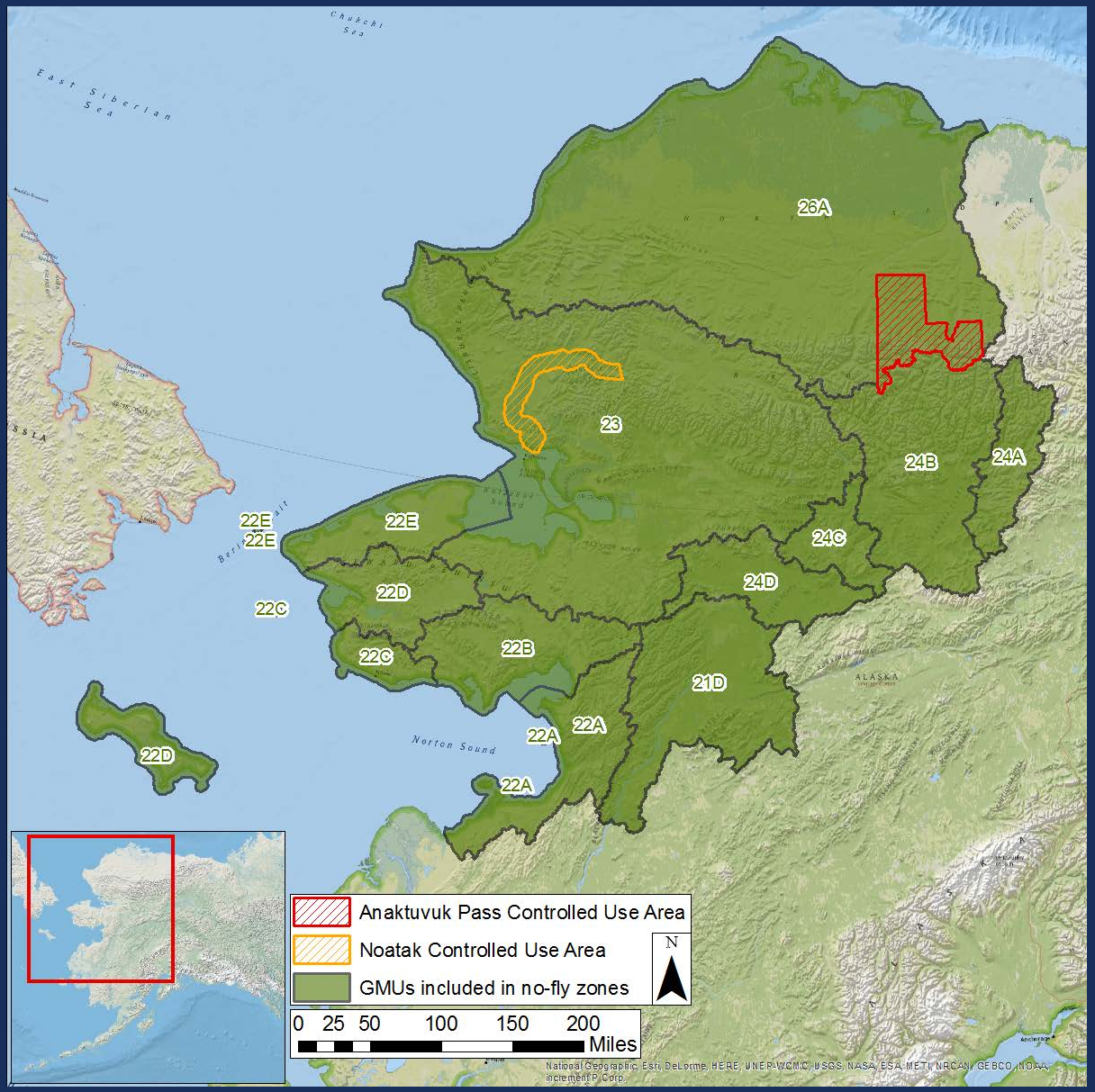
Proposal 4 Caribou / Units 21,22,23,24,26

Effect of Proposal:

- Aircraft use would be limited to certain days (Fri-Mon)
- Traffic would be concentrated on some days, and eliminated on others
- Effects on caribou movements, success rates of hunters, or on the satisfaction of hunters or other caribou users is unknown
- This restriction could reduce the number of fly-in hunters in the field if the remaining flight time available becomes a limiting factor

Proposal 4

Caribou / Units 21,22,23,24,26



Proposal 4 Caribou / Units 21,22,23,24,26

Issues:

- Conflicts between user groups are common within the range of the WAH
- The areas with the most persistent user conflicts are near Anaktuvuk Pass in 26A, and the Noatak River in Unit 23
- Both areas have controlled use areas that prohibit access by aircraft for caribou hunting
- Literature on the effects of aircraft and hunters on caribou movements is sparse

Proposal 4 Caribou / Units 21D,22,23, 24, 26A

Institute no-fly zones for caribou hunting in Units 21D, 22, 23, 24 and 26A.

Recommendation: NEUTRAL

Public Proposal

Advisory Committee Votes:
Kotzebue Sound: opposed 0-5
Lower Kobuk:
N. Norton Sound: opposed 0-14
WAHWG: opposed 0-13
Buckland-Deering: opposed
Noatak-Kivalina: opposed 0-5
Upper Kobuk: support
S. Norton Sound: support 5-0

Proposal 157 Emperor Goose/Statewide


photo: Milo Burcham

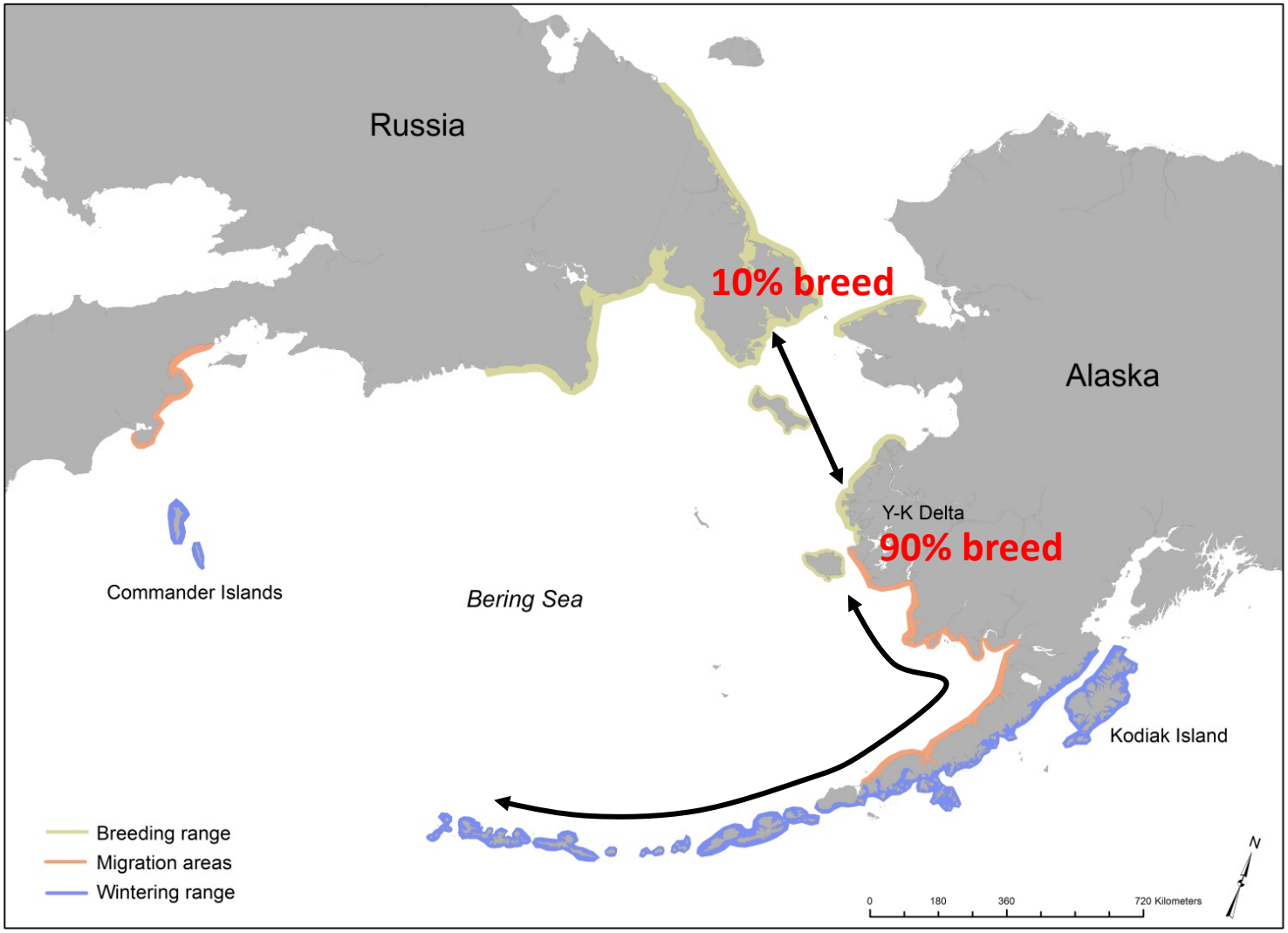
Emperor goose hunt

Adopt

Customary and traditional use finding

Neutral

Proposal 157 Emperor Goose/Statewide



Proposal 157 Emperor Goose/Statewide

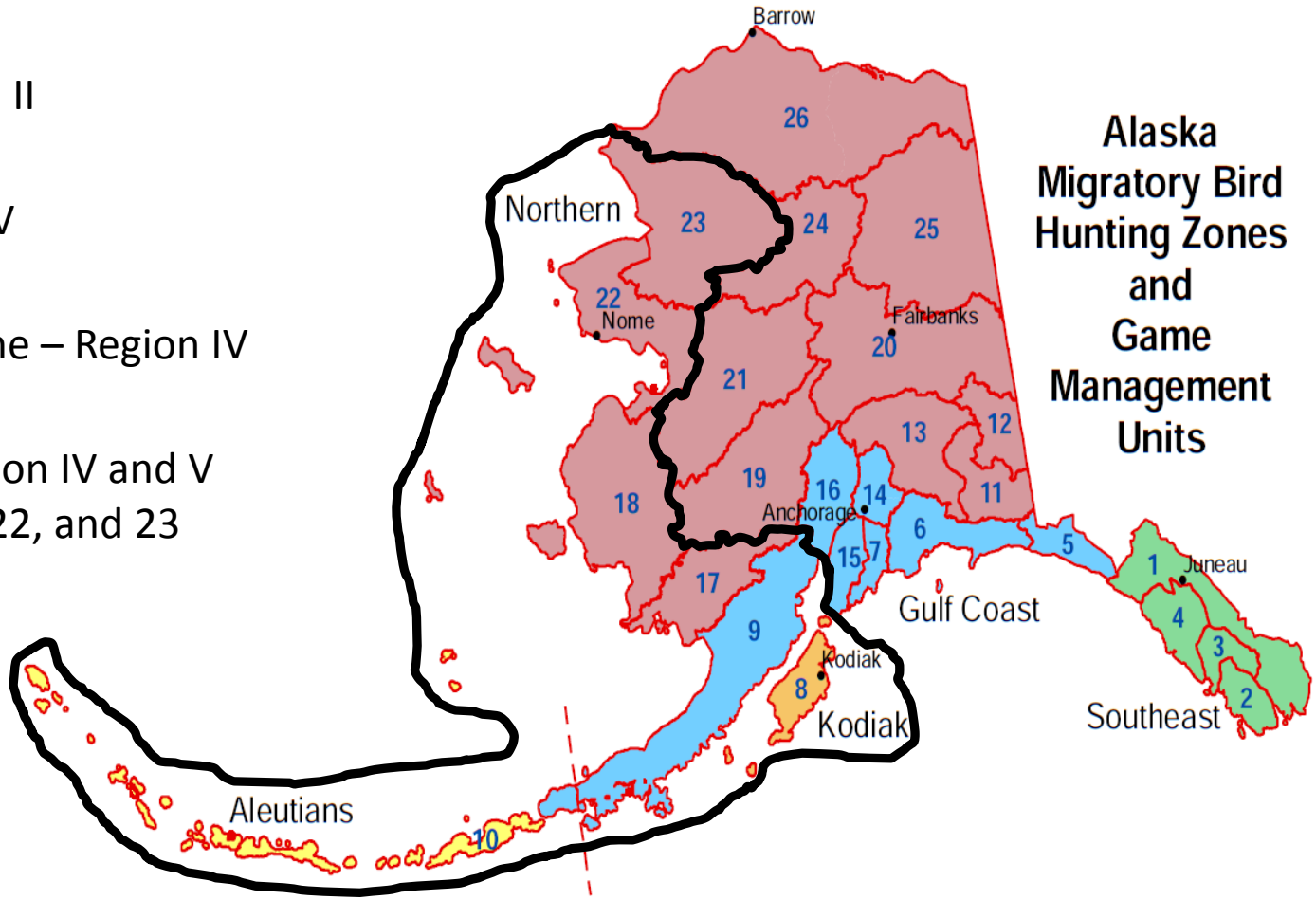
Migratory Bird Zones and Game Management Units affected -

Kodiak Zone – Region II
Unit 8

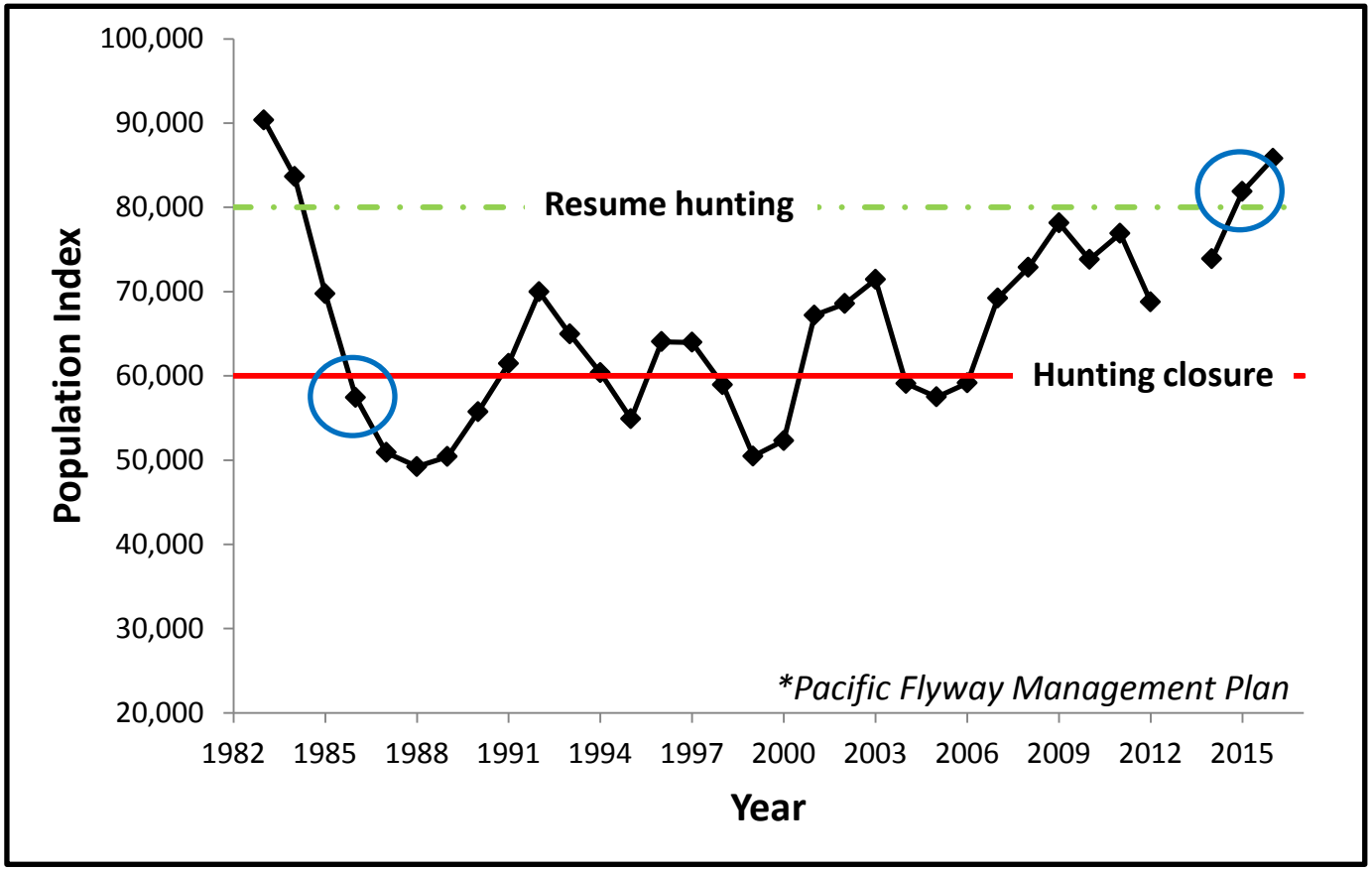
Gulf Coast – Region IV
Unit 9

Aleutian/Pribilofs Zone – Region IV
Unit 10

Northern Zone – Region IV and V
Units 17, 18, 22, and 23



Population status and Harvest strategy*



- General hunt closed in 1986
- Population increased to harvestable level in 2015
- 2016 population estimate is 170,000 geese

Proposal 157 Emperor Goose/Statewide

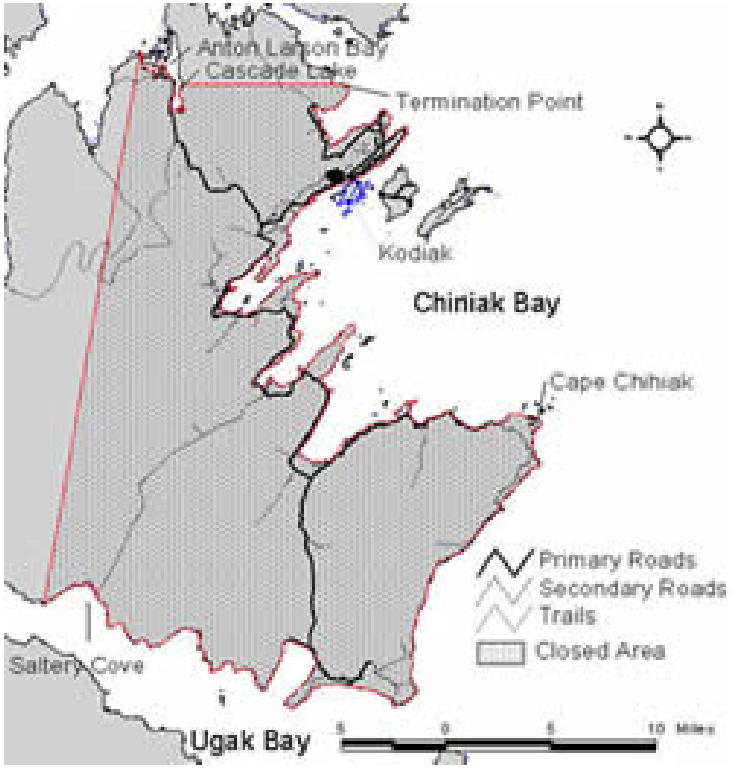
Federal framework:

- Opens general hunt with a 1,000 bird quota, administered as a permit hunt
- Kodiak Road closure

Kodiak Road closure

Kodiak Archipelago Region

The closed area consists of all lands and water (including exposed tide lands) east of a line extending from Crag Point in the north to the west end of Saltery Cove in the south and all lands and water south of a line extending from Termination Point along the north side of Cascade Lake extending to Anton Larson Bay. Marine waters adjacent to the closed area are closed to harvest within 500 ft from the water's edge. The offshore islands are open to harvest, for example Woody, Long and Gull islands.

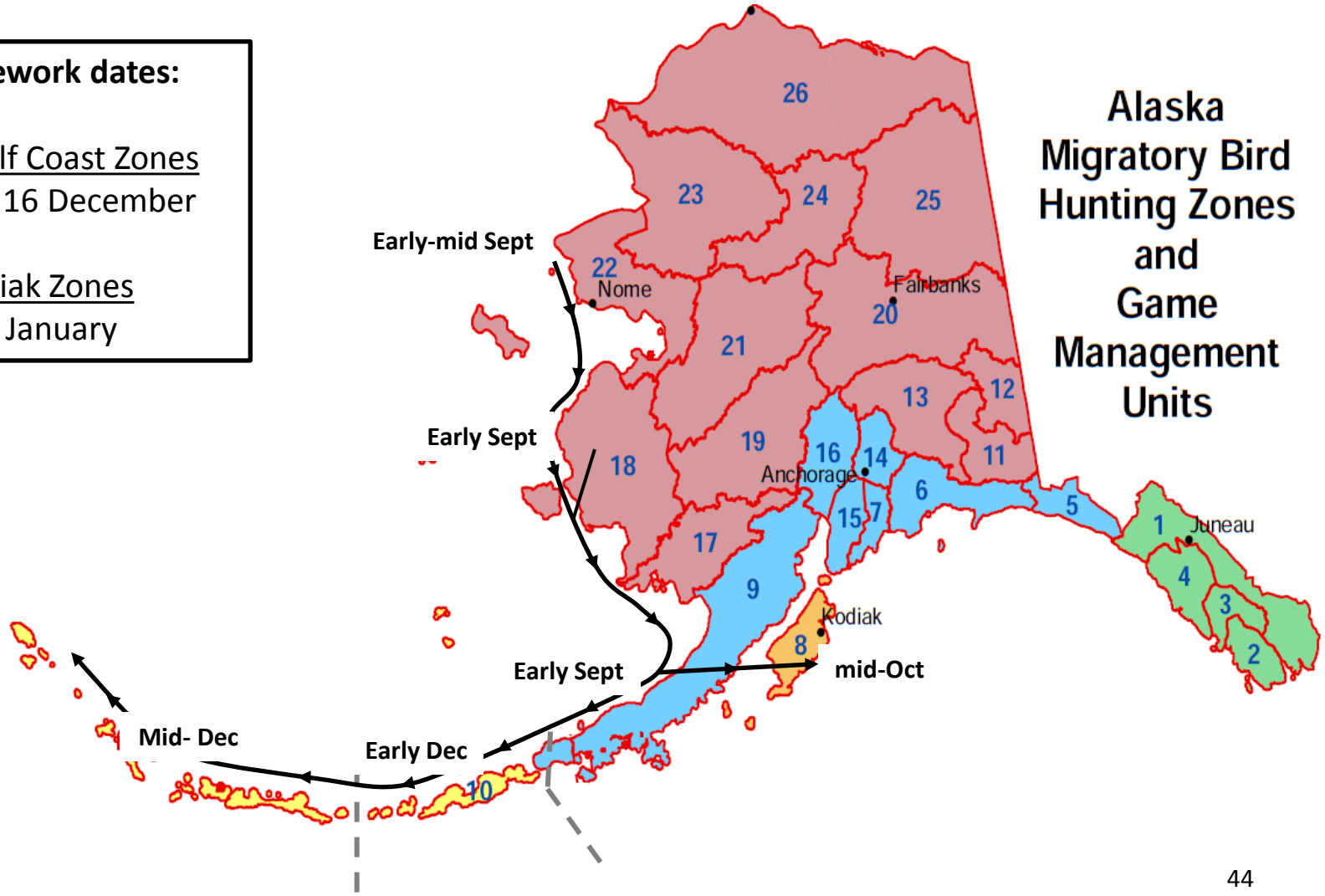


Timing of fall migration

Fall hunt framework dates:

<u>Northern & Gulf Coast Zones</u>
1 September – 16 December

<u>Aleutian & Kodiak Zones</u>
8 October – 22 January



Additional recommendations for Proposal 157

- Provide an equitable harvest opportunity based on seasonal distribution, regional availability, and harvest
- Managed under unlimited registration permit system using quotas and EO closures to keep harvest within prescribed limits
- Hunts could be administered through regional registration hunts in clusters of Units
- Create a special zone for Izembek State Game Refuge with a limited season

Proposal 157 Emperor Goose/Statewide

ADF&G Proposed Hunt Areas:

Unit 23: Sept 1-Dec 16; 3-day report

Unit 22: Sept 1-Dec 16; 3-day report

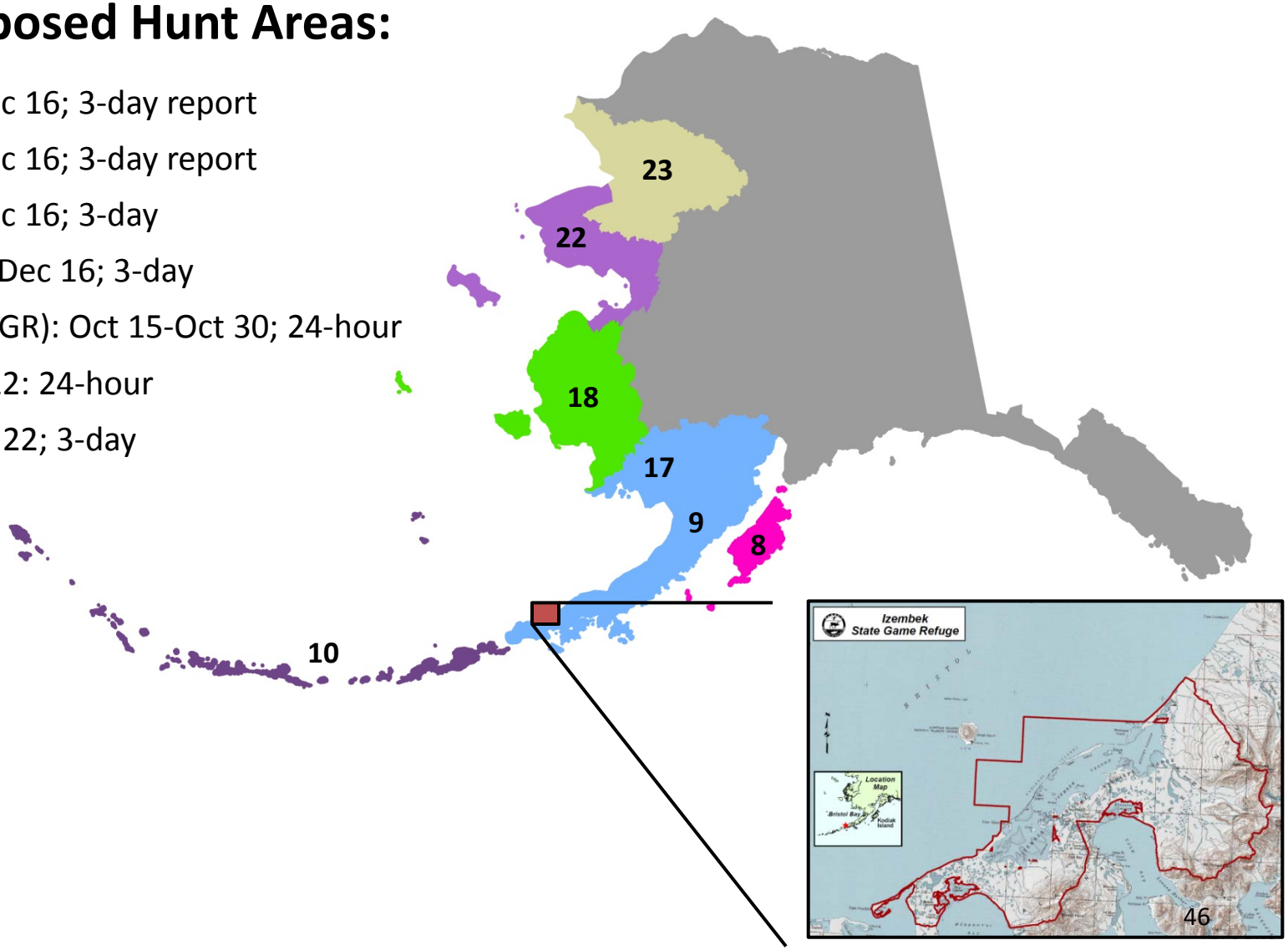
Unit 18: Sept 1-Dec 16; 3-day

Unit 9, 17: Sept 1-Dec 16; 3-day

Unit 9: (Izembek SGR): Oct 15-Oct 30; 24-hour

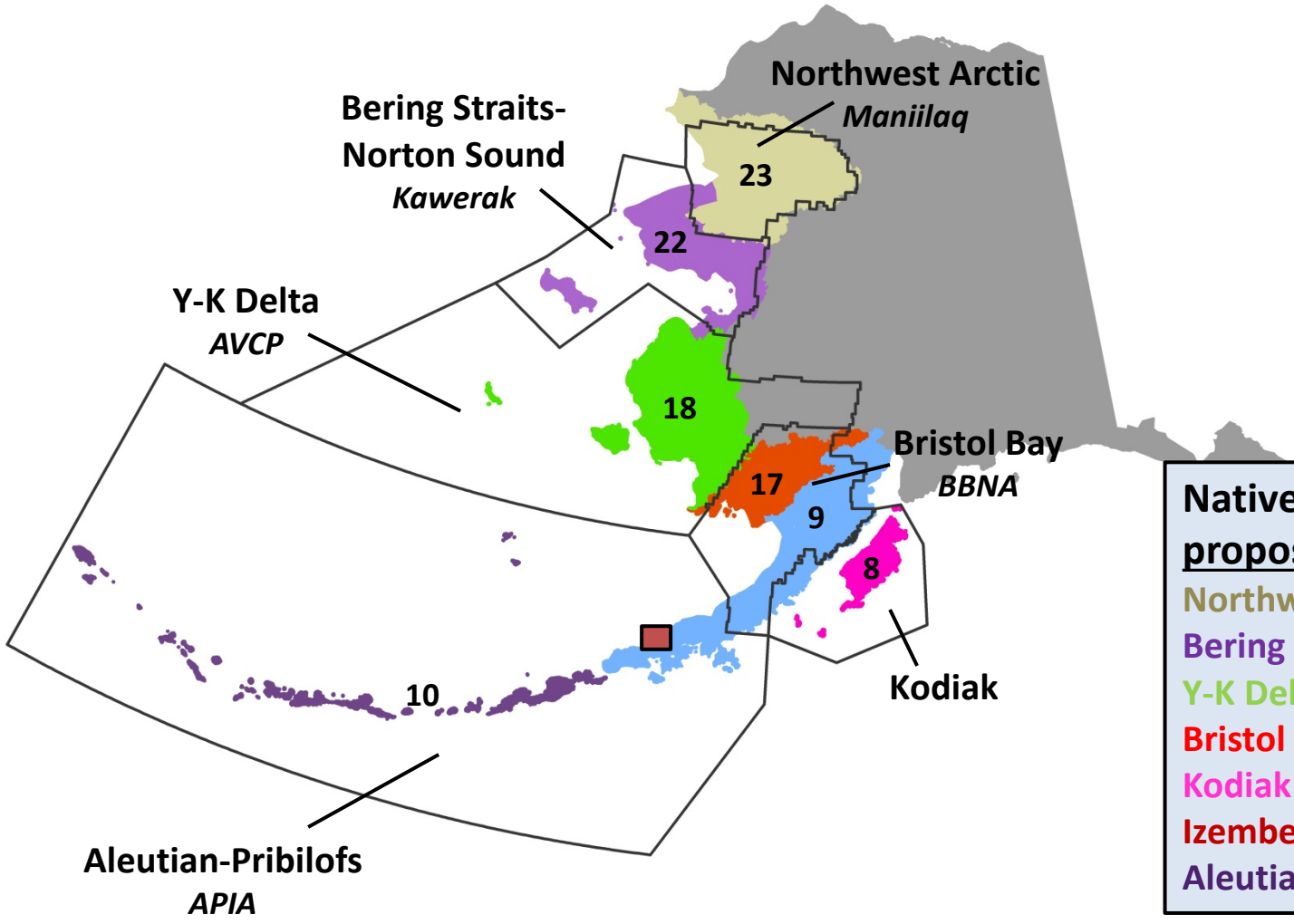
Unit 8: Oct 8-Jan 22: 24-hour

Unit 10: Oct 8-Jan 22; 3-day



Proposal 157 Emperor Goose/Statewide

Subsistence Harvest Regions and GMUs



Native Caucus (AMBCC) proposed quota:

Northwest Arctic – 125 birds
Bering Straits – 125
Y-K Delta – 125
Bristol Bay – 150
Kodiak – 175
Izembek SGR - 125
Aleutians – 175

ADFG-DWC

Proposal 157 Emperor Goose/Statewide

Emperor goose hunt

Adopt

Customary and traditional use finding

Neutral

Proposal 5 – Hunt Labels in Codified Regulations

Public Proposal

Effect of Proposal :

Change labels and classification of “General hunt only” in 5 AAC to “Subsistence” for black bear populations with a +C&T finding

Recommendation :

Take No Action

General Guidelines for labeling

“General hunt only” is applied to resident hunts in areas designated as nonsubsistence areas by the Joint Board of Fisheries and Game and to hunts outside of nonsubsistence areas that have a negative customary and traditional use (C&T) finding for the game population.

“Subsistence hunt only” is applied to resident hunts if the hunt occurs outside nonsubsistence areas on a game population with a positive C&T finding and the harvestable portion of the population is not great enough to allow for nonsubsistence harvests and uses.

No label. These hunts generally include all types of resource use, subsistence and nonsubsistence, and do not differentiate between the various types of use.

Background

- **No C&T finding for black bears in Units 18, 22, 23, and 26A**
  - **As a result – there is no label**
- **Current hunts allow for both subsistence and nonsubsistence uses**

- **To address the proposal as written the board would need to:**
  - **Determine if a C&T pattern exists for each population**
  - **If a pattern exists, an ANS will need to be set to determine the hunt type (Tier II, Tier I, Tier I+)**

  -The effect on hunters in the field is unknown, pending action on the above items.
- **"Subsistence" is potentially different than "Subsistence hunt only"**

- **AS 16.05.258(a) directs the board to identify populations or portions of populations that are customarily and traditionally taken or used for subsistence**
- **Since the early 1980s the board has used joint board regulations to identify these populations**
- **Evaluation is done based on the 8 criteria in regulation**
- **When no determination has been made, the open season is for "general and subsistence hunts"**

Previous discussions

- **Discussed most recently in March 2016 at the Statewide Board of Game meeting**
- **Board maintained status quo, directed ADF&G to work with DOL to make appropriate updates to accurately label following the guidelines**
- **Labeling errors do exist, are being identified, and fixed at each regional meeting**
- **Adoption of the proposal would be inconsistent with previous board action, which recognizes not all uses of game by Alaska residents are C&T subsistence uses**

Proposal 5 – Hunt Labels in Codified Regulations

Public Proposal

Effect of Proposal :

Change labels and classification of “General hunt only” in 5 AAC to “Subsistence hunt only” for black bear populations with a +C&T finding

Recommendation :

Take No Action

Proposal 6 – Hunt Labels in Codified Regulations

Public Proposal

Effect of Proposal :

Add labels and classification of all caribou hunts open to residents as “Subsistence” and all caribou hunts open to nonresidents as “General season”

Recommendation :

Take No Action

General Guidelines for labeling

“General hunt only” is applied to resident hunts in areas designated as nonsubsistence areas by the Joint Board of Fisheries and Game and to hunts outside of nonsubsistence areas that have a negative customary and traditional use (C&T) finding for the game population.

“Subsistence hunt only” is applied to resident hunts if the hunt occurs outside nonsubsistence areas on a game population with a positive C&T finding and the harvestable portion of the population is not great enough to allow for nonsubsistence harvests and uses.

No label. These hunts generally include all types of resource use, subsistence and nonsubsistence, and do not differentiate between the various types of use.

Background

- **Currently no labels for any of the caribou hunts in Units 18, 22, 23, and 26A, and there are no –C&T findings for caribou in the units**
  - **Alaska residents take caribou for a variety of uses, not all of which conform to the 8 criteria that characterize subsistence use patterns.**
  - **Example: use that involves considerable travel and expense is likely not consistent with Criterion 3**
  - **Example: harvest of game in an area with little or no use of other resources from the area may not be consistent with Criterion 8**
- **Current hunts allow for both subsistence and nonsubsistence uses**

Previous discussions

- Discussed most recently in March 2016 at the Statewide Board of Game meeting
- Board maintained status quo, directed ADF&G to work with DOL to make appropriate updates to accurately label following the guidelines
- Labeling errors do exist, are being identified, and fixed at each regional meeting, none have been identified for caribou in this region
- Adoption of the proposal would be inconsistent with previous board action, which recognizes not all uses of game by Alaska residents are C&T subsistence uses

Proposal 6 – Hunt Labels in Codified Regulations

Public Proposal

Effect of Proposal :

Add labels and classification of all caribou hunts open to residents as “Subsistence” and all caribou hunts open to nonresidents as “General season”

Recommendation :

Take No Action

Proposal 7 – Hunt Labels in Codified Regulations

Public Proposal

Effect of Proposal :

Label some sheep hunts as "Subsistence"; keep "Subsistence hunt only" in others; leave some blank that should be "General hunt only"; and label all nonresident sheep hunts as "General season"

Recommendation :

Take No Action

General Guidelines for labeling

"General hunt only" is applied to resident hunts in areas designated as nonsubsistence areas by the Joint Board of Fisheries and Game and to hunts outside of nonsubsistence areas that have a negative customary and traditional use (C&T) finding for the game population.

"Subsistence hunt only" is applied to resident hunts if the hunt occurs outside nonsubsistence areas on a game population with a positive C&T finding and the harvestable portion of the population is not great enough to allow for nonsubsistence harvests and uses.

No label. These hunts generally include all types of resource use, subsistence and nonsubsistence, and do not differentiate between the various types of use.

Background

- **All sheep populations in the Arctic/Western region have a +C&T and an ANS.**
- **There are no populations with a –C&T, and no populations lacking a determination**
- **“Subsistence hunt only” is used in a few sheep hunts open to residents only where the harvestable portion is not great enough to allow for nonsubsistence harvest.**

Previous discussions

- Discussed most recently in March 2016 at the Statewide Board of Game meeting
- Board maintained status quo, directed ADF&G to work with DOL to make appropriate updates to accurately label following the guidelines
- Labeling errors do exist, are being identified, and fixed at each regional meeting, none have been identified for caribou in this region
- Adoption of the proposal would be inconsistent with previous board action, which recognizes not all uses of game by Alaska residents are C&T subsistence uses

Proposal 7 – Hunt Labels in Codified Regulations

Public Proposal

Effect of Proposal :

Label some sheep hunts as "Subsistence"; keep "Subsistence hunt only" in others; leave some blank that should be "General hunt only"; and label all nonresident sheep hunts as "General season"

Recommendation :

Take No Action

Proposal 8 Region V – Moose/Caribou/Prey Species

Proposed by Resident Hunters of Alaska

Effect of Proposal :

Prevent nonresidents from hunting prey species in Region 5 where an IM plan exists until IM population and harvest objectives have been reached

1. **Region 5 does not have any current IM plans**

Recommendation :

NEUTRAL - allocation

Proposal 9

Region V – Sheep

Public Proposal

Effect of Proposal :

Establish a 10% nonresident sheep permit allocation (based on previous 3 year average) for the Arctic/Western Region

1. **Would require new nonresident draw hunts, limited registration hunts, or adjusted nonresident seasons to regulate nonresident hunting opportunity**

2. **Nonresident opportunity exists in Unit 26(A)**

Recommendation :

NEUTRAL - allocation

Proposal 10

Region V – Sheep

Public Proposal

Effect of Proposal :

Establish a 10% nonresident sheep permit allocation (based on previous 3 year average) for the Arctic/Western Region

1. **Would require new nonresident draw hunts, limited registration hunts, or adjusted nonresident seasons to regulate nonresident hunting opportunity**

2. **Nonresident opportunity exists in Unit 26(A)**

Recommendation :

NEUTRAL - allocation

Proposal 11

Region V – Sheep

Proposed by Alaska Outdoor Council

Effect of Proposal :

Require a harvest ticket or individual harvest report for hunting in Gates of the Arctic National Park (GAAR)

- **Would require additional vendors, education, and increased presence of staff**
- **Resident and Nonresident opportunity exists in Unit 26(A)**
- **No open hunting seasons in Unit 23**
- **Unit 23 and Unit 26A sheep populations declined 78% between 2011 and 2015**

Recommendation :

Support – to improve harvest reporting

Proposal 12

Region V – Sheep

Proposed by Resident Hunters of Alaska

Effect of Proposal :

Establish a 10% nonresident sheep permit allocation (based on previous 3 year average) and change all nonresident sheep hunts to draw permits in Region 5

- **Would require new nonresident draw hunts, limited registration hunts, or adjusted nonresident seasons to regulate nonresident hunting opportunity or harvest**
- **Nonresident opportunity exists in Unit 26(A)**
- **Excluding federal hunts between RY2011-RY2015, 15% (n=4) of Region 5 hunters were nonresidents.**

Recommendation :

NEUTRAL - allocation

Proposal 13

Region V – Sheep

Public Proposal

Effect of Proposal :

Establish a 25% nonresident sheep permit allocation (based on previous 5 year average) and change all Region 5 nonresident sheep hunts to draw permits

- **Would require new nonresident draw hunts, limited registration hunts, or adjusted nonresidents seasons to regulate nonresident hunting opportunity**
- **NR opportunity exists in Unit 26(A)**
- **Excluding federal hunts, between RY2011-RY2015, 15% (n=4) of Region 5 hunters were nonresidents.**

Recommendation :

NEUTRAL - allocation

Proposal 14

Region V – Sheep

Public Proposal

Effect of Proposal :

Establish a 12% nonresident sheep permit allocation using a three- year average in Region 5

- **Would require new nonresident draw hunts, limited registration hunts, or adjusted nonresidents seasons to regulate nonresident hunting opportunity**
- **NR opportunity exists in Unit 26(A)**
- **Excluding federal hunts, between RY2011-RY2015, 15% (n=4) of Region 5 hunters were nonresidents.**

Recommendation :

NEUTRAL - allocation

Proposal 15

Region V – Sheep

Public Proposal

Effect of Proposal :

Restrict the harvest of Dall Sheep to one every 5 years if a hunter is determined to have harvested a sub-legal ram in Region 5

- **Unit 23 sheep seasons closed in 2014; prior to the closure the BOG established ‘any sheep’ bag limits**
- **Unit 26(A) has a full-curl bag limit; not aware of sublegal sheep harvest from the area**
- **Since RY2005, 10% of Unit 26(A) sheep hunters returned to the area one additional time**

Recommendation :

NEUTRAL - allocation

Proposal 16

Region V – Draw Permits

Public Proposal

Effect of Proposal :

Establish up to 10% of available draw permits be allocated to nonresident hunters for sheep, moose, caribou, and brown bears for species that utilize drawing hunts for both residents for both residents and nonresidents.

1. **There are no Region 5 drawing hunts that meet this description**

Recommendation :

NEUTRAL - allocation

Proposal 17

Public Proposal

Effect of Proposal :

Modify the definition of edible meat for all game birds in Units 18, 22, 23, and 26A

Recommendation :

Neutral

- **Current:**
  - Cranes, Geese, Swan –breast, legs, and thighs
  - Small game birds – breast

- **Proposed:**
  - All game birds – breast, back, thighs, and legs

Proposal 17

Public Proposal

Effect of Proposal :

Modify the definition of edible meat for all game birds in Units 18, 22, 23, and 26A

Recommendation :

Neutral

Proposal 18

Region V – Brown Bear

Proposed by the Department

Effect of Proposal :

Reauthorize tag fee exemption for resident drawing, registration, and subsistence hunts in:

- **Unit 18 (publicly supported for 5 years)**
- **Unit 22 (publicly supported for 15 years)**
- **Unit 23 (publicly supported for 10 years)**
- **Unit 26A (publicly supported for 5 years)**

- **Supports incremental increases in harvest**
- **Additional opportunity for residents**
- **Harvest for a wide range of uses**

Recommendation :

SUPPORT – Brown bear populations are believed to be stable or increasing

Proposal 19 Region V – Bag Limit Restrictions

Public Proposal

Effect of Proposal :

Would allow resident hunters to hunt with nonresident relatives without having nonresident harvest count towards the resident bag limit.

Recommendation :

NEUTRAL - allocation

Because the board adopted this regulation during the 2016 Statewide BOG meeting, the department recommends that the board consider this topic on a statewide basis.

Proposal 20

Region V – Restricted Weapons Hunts

Public Proposal

Effect of Proposal : Would allow the use of crossbows in restricted weapons hunts.

Recommendation : NEUTRAL

Background

- **Proposal discussed by the board on a statewide basis in 2016, and deferred to each regional meeting.**
- **Region 5 has one restricted weapons hunt (TX095) near the City of Nome.**
  - **Restriction implemented using discretionary authority**
  - **Bow and arrow, muzzleloader, shotgun only**

Proposal 20

Region V – Restricted Weapons Hunts

Public Proposal

Effect of Proposal : Would allow the use of crossbows in restricted weapons hunts.

Recommendation : NEUTRAL