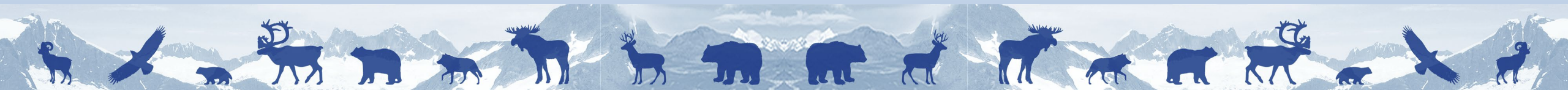


State Wildlife Management in Alaska

Scope, Scale, and Process

Chris Krenz, Tony Kavalok, Ryan Scott, and Tom Paragi
Alaska Department of Fish and Game, Division of Wildlife Conservation
Approaches to Adapting to Alaska's Rapidly Warming Climate Workshop
February 24, 2022



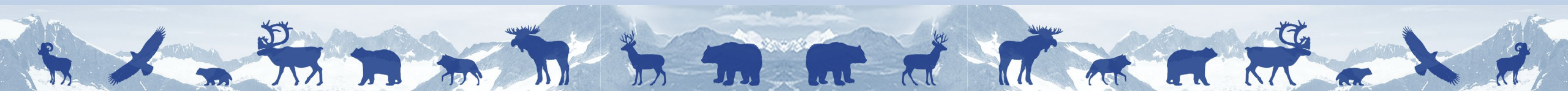
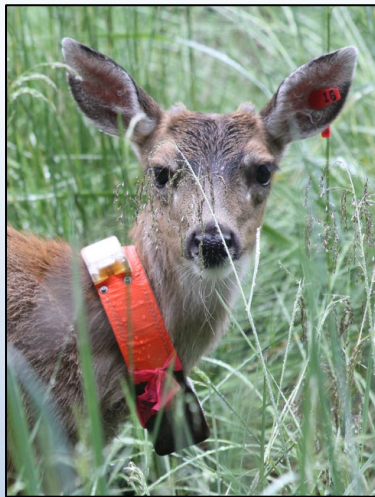
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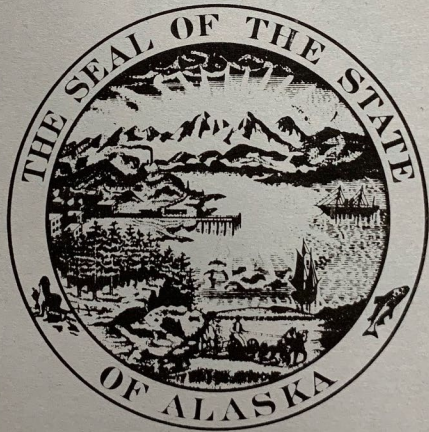




Article VIII, Section 4. Sustained Yield

Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.

THE
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STATE OF
ALASKA



John B. Coghill

Lieutenant Governor

December 1990

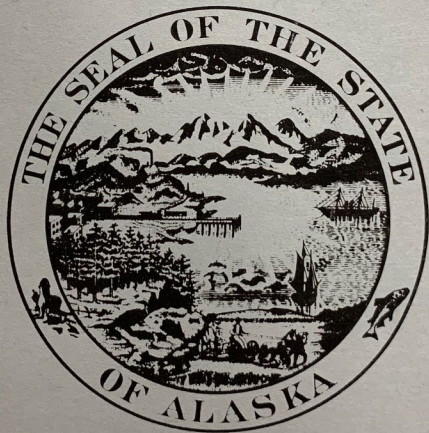




Use not preservation

Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.

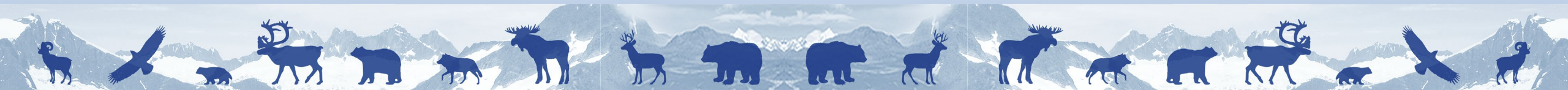
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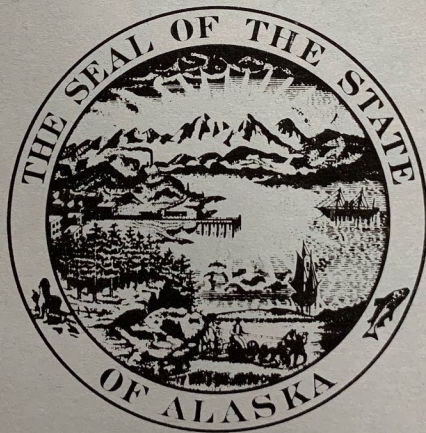




Conservation

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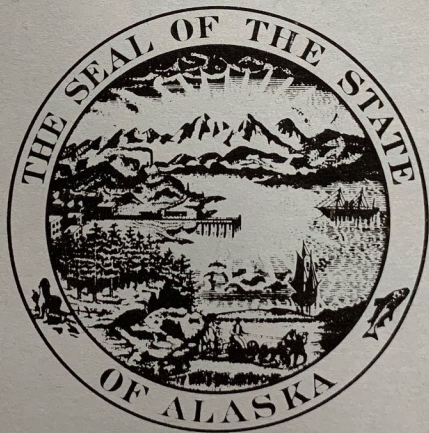




Competing uses

Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.

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Legislative Delegation of Wildlife Management



Wildlife Management Framework

- Board of Game
 - Advisory Committees
- DFG Commissioner & Department

AS 16.05.020. Functions of commissioner.

(2) manage, protect, maintain, improve, and extend the fish, game and aquatic plant resources of the state in the interest of the economy and general well-being of the state;



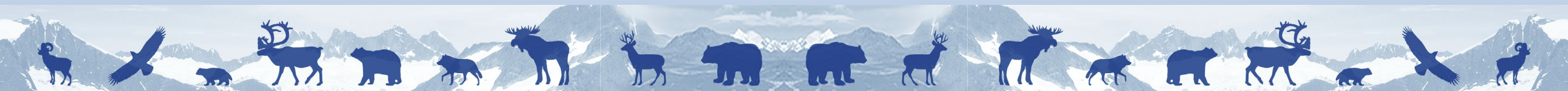
Board of Game



Conservation and sustainable use of wildlife

Utilization and allocation – “preferences among beneficial uses”

- Hunting and trapping regulations
- 7 members, 3-year terms
- Appointed by Governor
- Confirmed by Legislature
- 2 meetings/year, 3-year cycle
- Seasons
- Bag limits
- Areas for taking game
- Methods and means
- Allocative decisions





Fish and Game Advisory Committees

- 84 Advisory Committees
- Locally-elected members (up to 15)
- Listen to and discuss local issues
- Submit and comment on proposals to the BOG





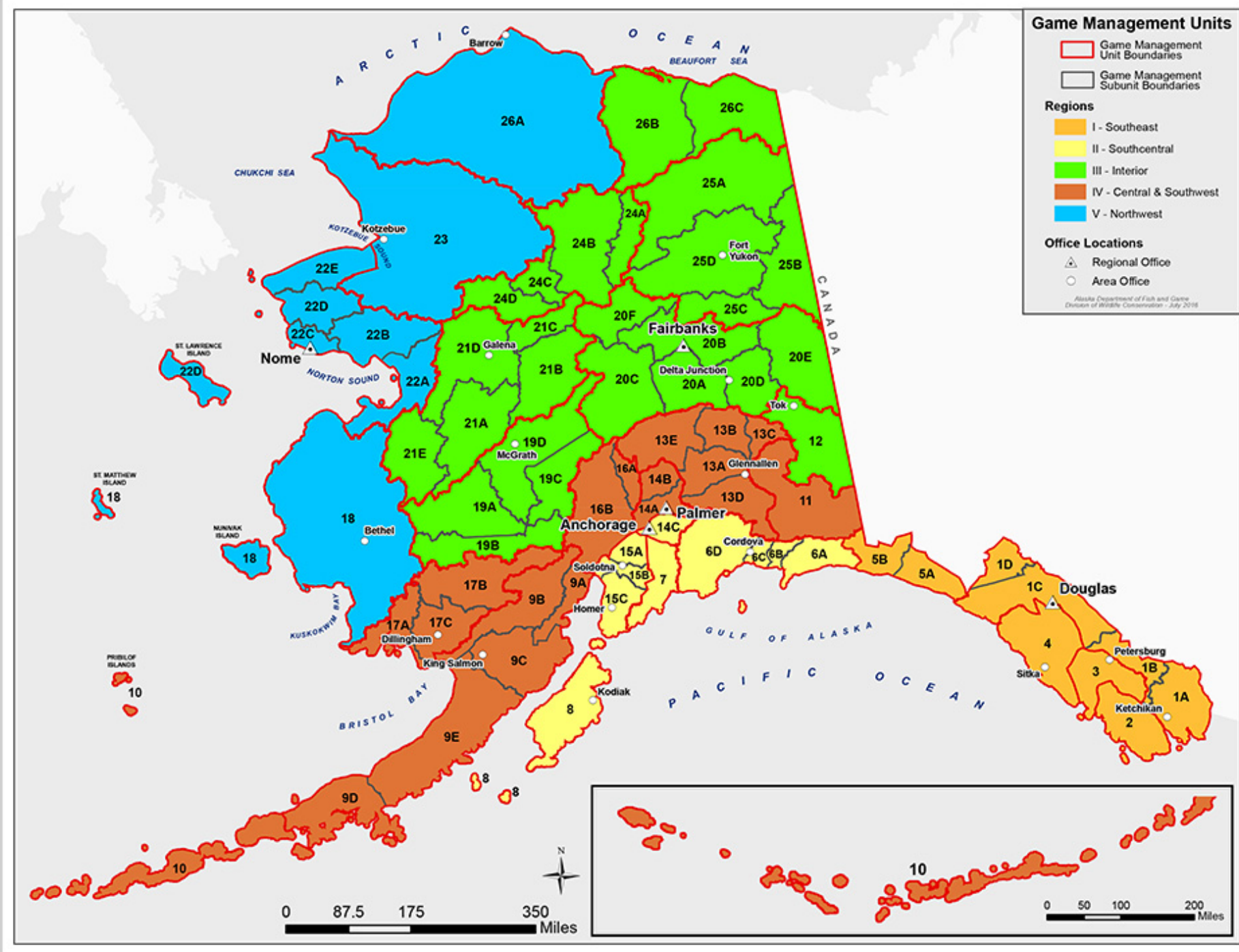
Alaska Department of Fish and Game

- Emergency order authority
- Implement regulations
 - BOG can provide limited discretion
- Monitoring and research
- Provide information, analyses, and recommendations to BOG, ACs, and the public
- Submit proposals to BOG

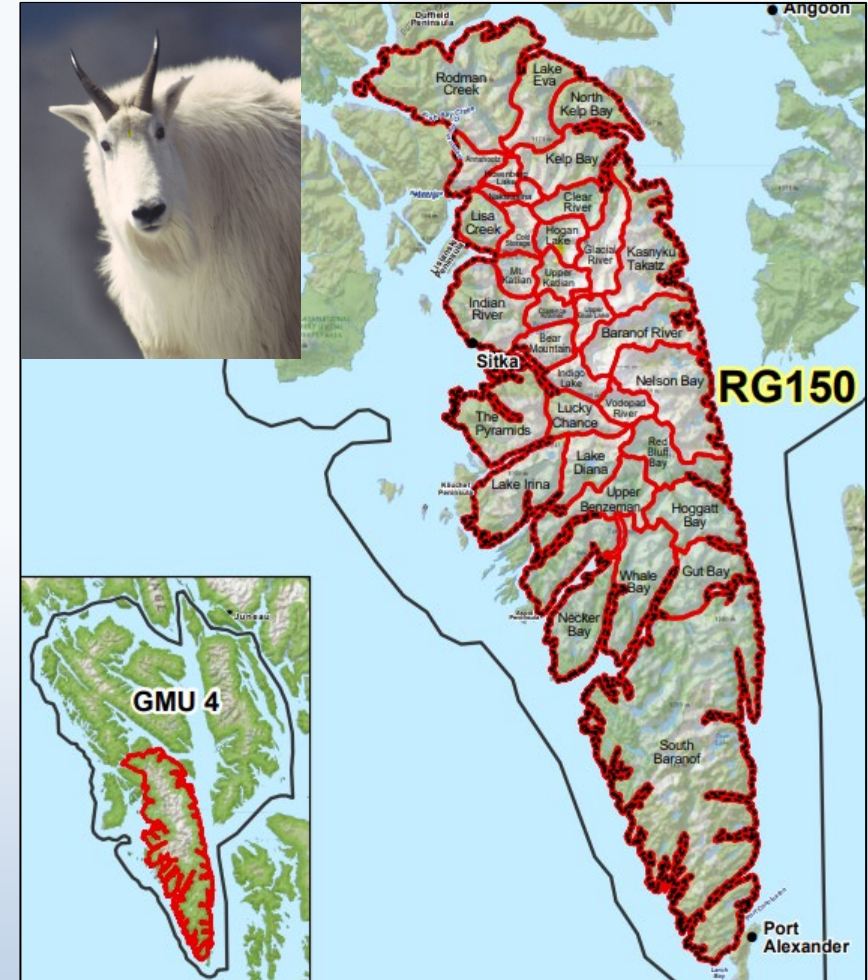
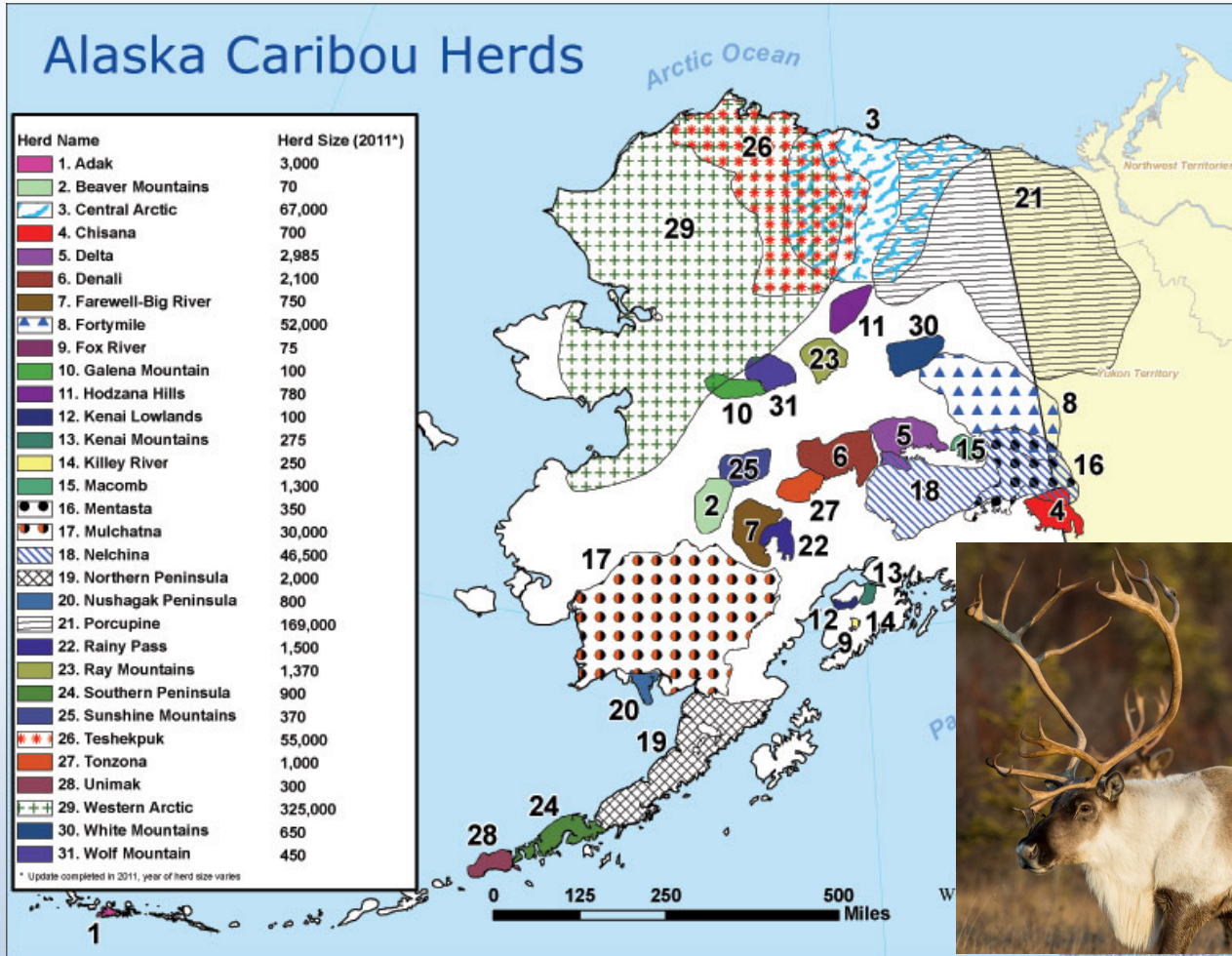




Spatial Scale of Management GMU Subunit

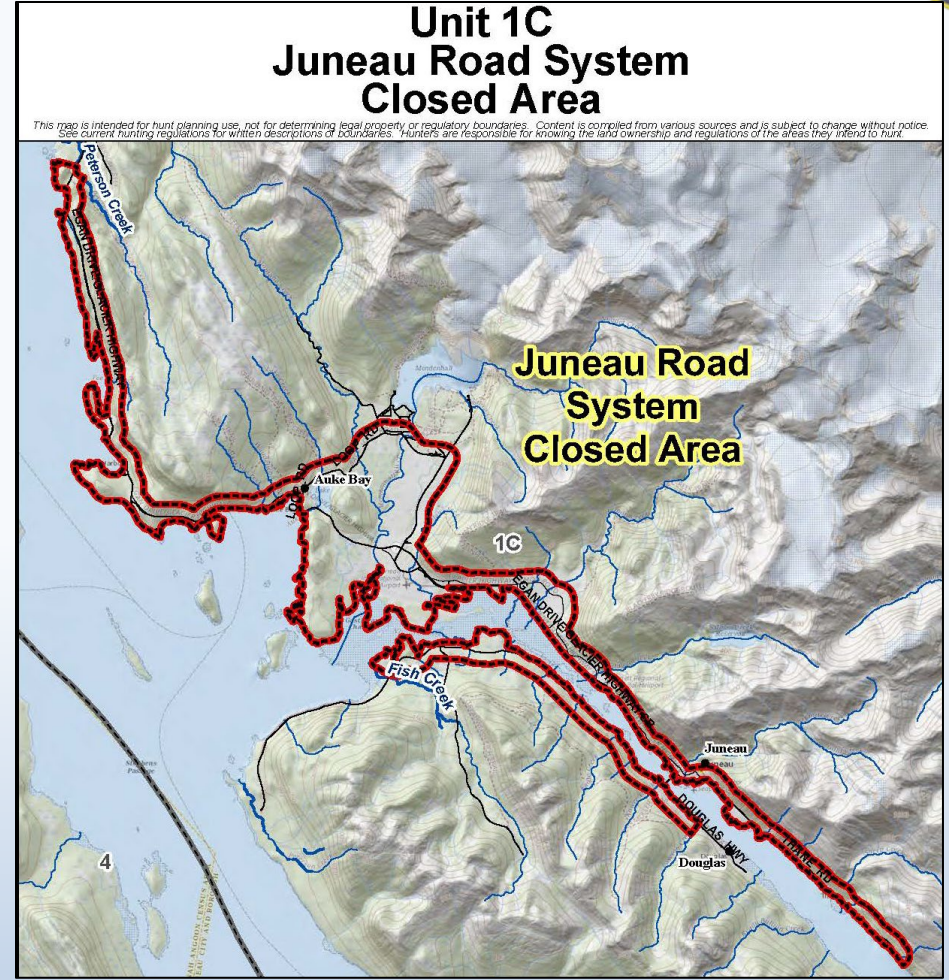


Spatial Scale of Management: Biology





Spatial Scale of Management: Values



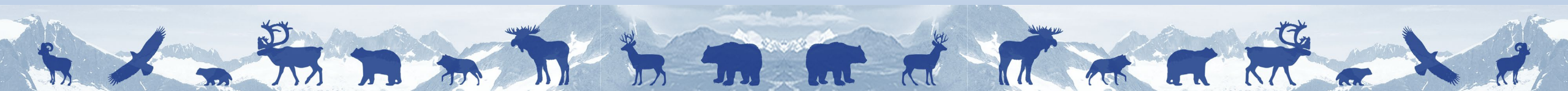


Temporal Scale of Management

- BOG 3-year cycle
- ADF&G area biologists: species management plan 5-year cycle
- Yearly quota adjustments (BOG → limited discretion to ADF&G)
- Commissioner's "emergency order" authority – in season management



E.g., Macomb herd is closed by "EO" when the yearly quota is reached.





Management Responds to Public Interest

D = desire for harvest, HS = harvestable surplus

UC = ungulate population important for human consumption

$D \ll HS \rightarrow$ opportunity for use

$D > HS \rightarrow$ management limits effort (e.g., draw hunt, quota, etc.)

$D > HS + UC \rightarrow$ intensive management considered at low harvest

Intensive management = manipulating ecological dynamics

– Predation and habitat management as tools





State Wildlife Management in Alaska

- Established and carried out through representative government
- Focused on sustainability and use
- Emphasis on regional input
- Very open, public process
- Adaptive and evolves
- Flexible



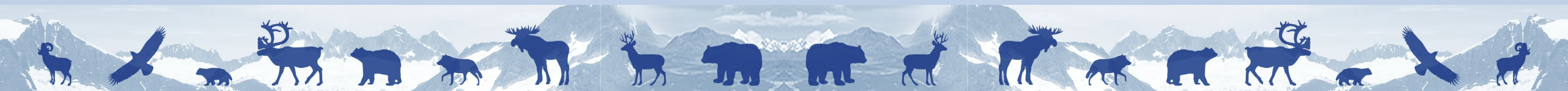


Climate Change and Wildlife Management

Is there a spatial-temporal mismatch?

WM is generally at a finer spatial and temporal scale than CC

- Biome shifts
 - Shrubification
 - Changed fire-regimes
- Range expansions
 - Moose
 - Mule deer
 - Parasites and diseases



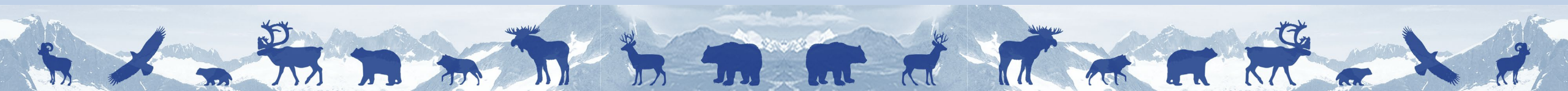


Climate Change and Wildlife Management

Is there a spatial-temporal mismatch?

Increased variability and extreme events

- Can be positive or negative
- Concern: failed recruitment and die-offs
- Management changes to die-offs
 - Short-term: Emergency order closures
 - Long-term: BOG restrictions
 - Longer-term: Intensive management





Climate Change Specific BOG Proposals

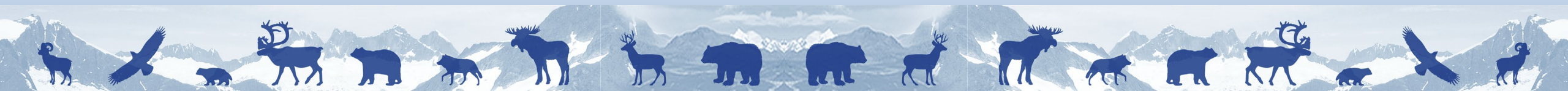
Central and Western Interior Moose Seasons

Warmer Septembers:

- Difficult meat care
- Changed moose movement (?)
- Delayed leaf fall (↓ visibility)

Concerns with season extension into rut:

- Rut based on photoperiod
- Susceptibility of bulls to harvest
- Meat quality



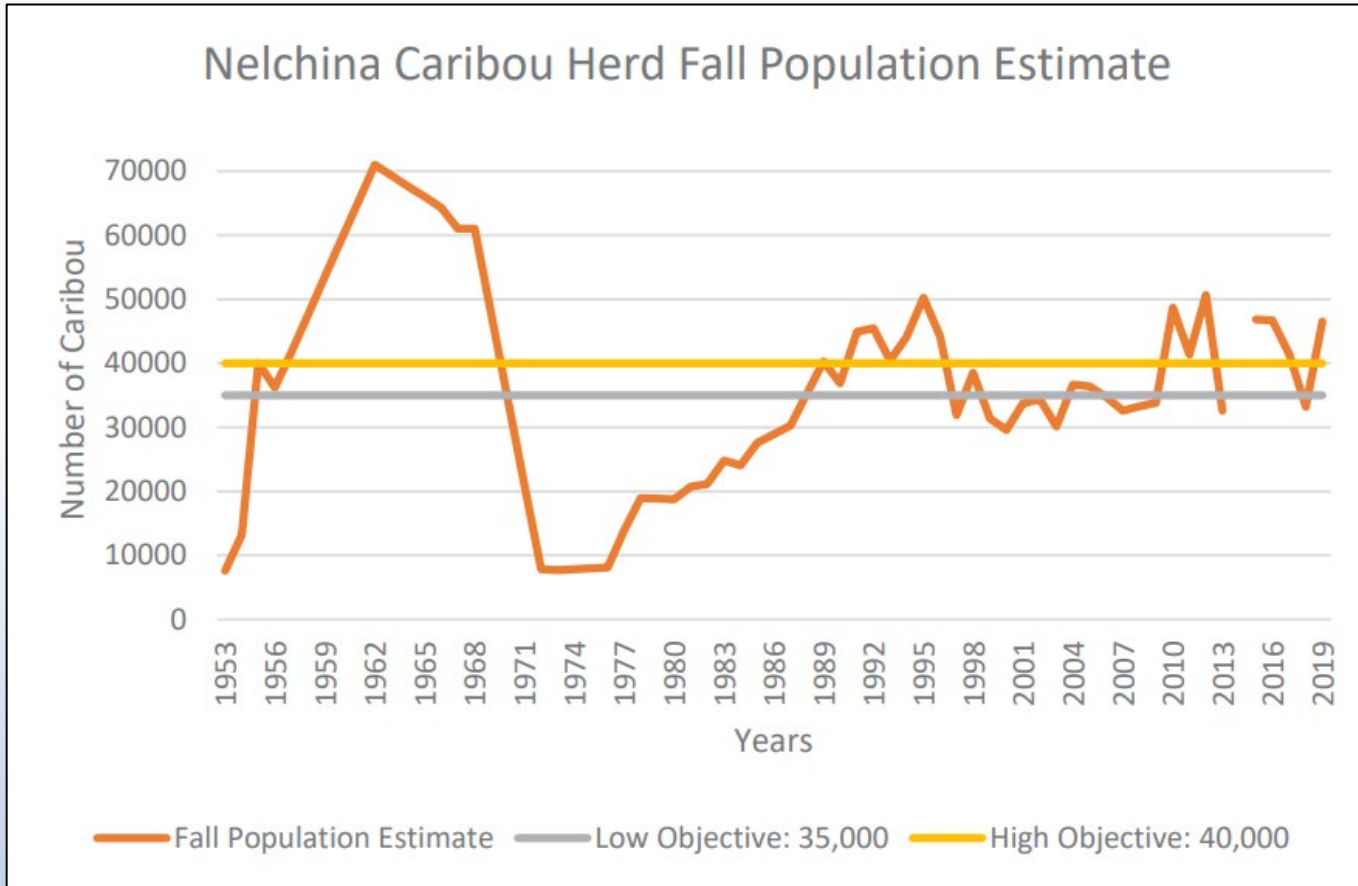


Does Wildlife Management Resist, Accept, or Direct?

**Yes, but resist and direct
are at local scales**

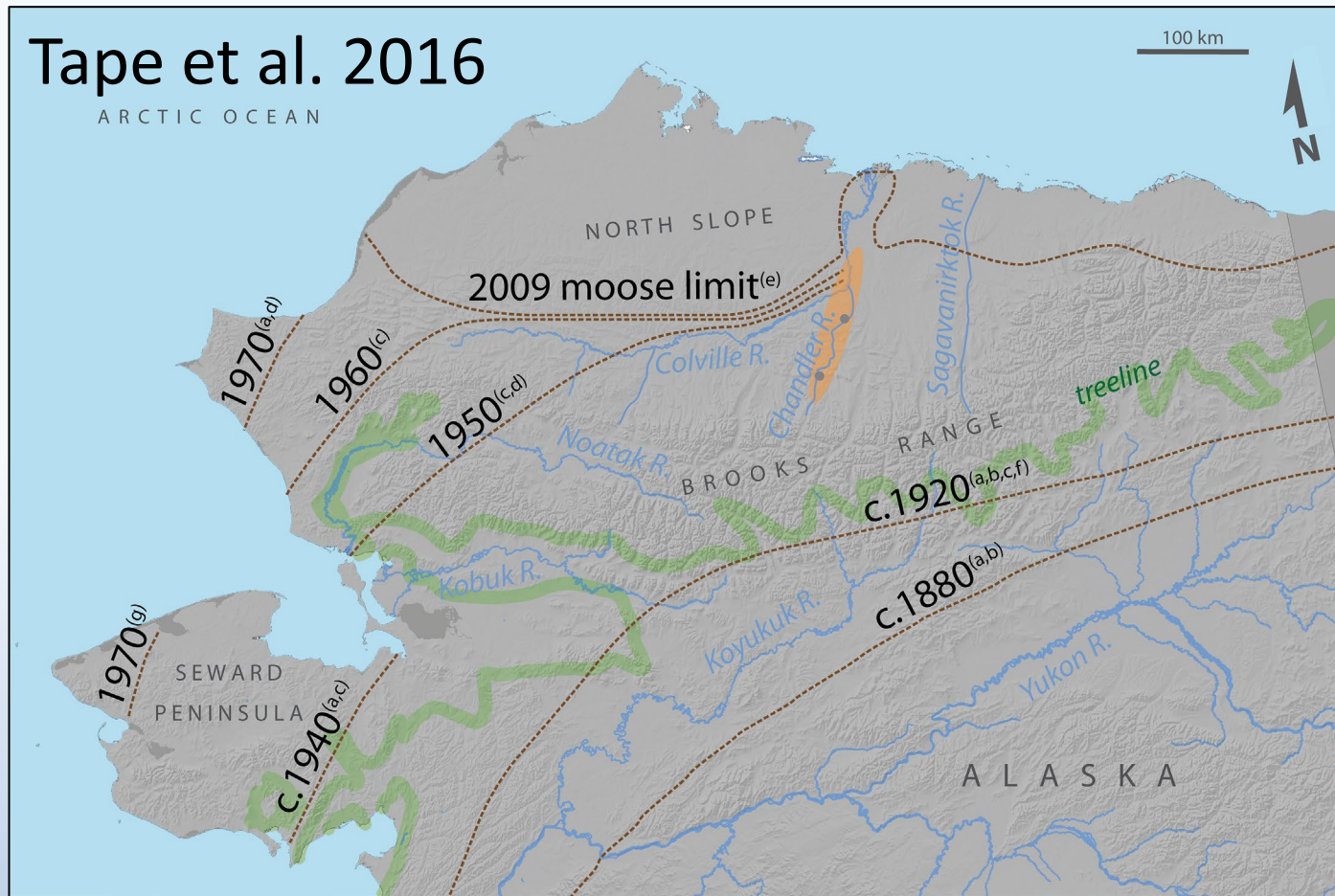


Does Wildlife Management Resist, Accept, or Direct?





Does Wildlife Management Resist, Accept, or Direct?



The Arctic Sounder

Utqiagvik man harvests moose in Arctic Alaska, far from its normal habitat

By Jenna Kunze, Arctic Sounder

Updated: August 10, 2020

Published: August 10, 2020



Utqiagvik resident Lloyd Anthony Leavitt with the moose he harvested in an area where they're rarely seen. (Courtesy Lloyd Anthony Leavitt)



Does Wildlife Management Resist, Accept, or Direct?

