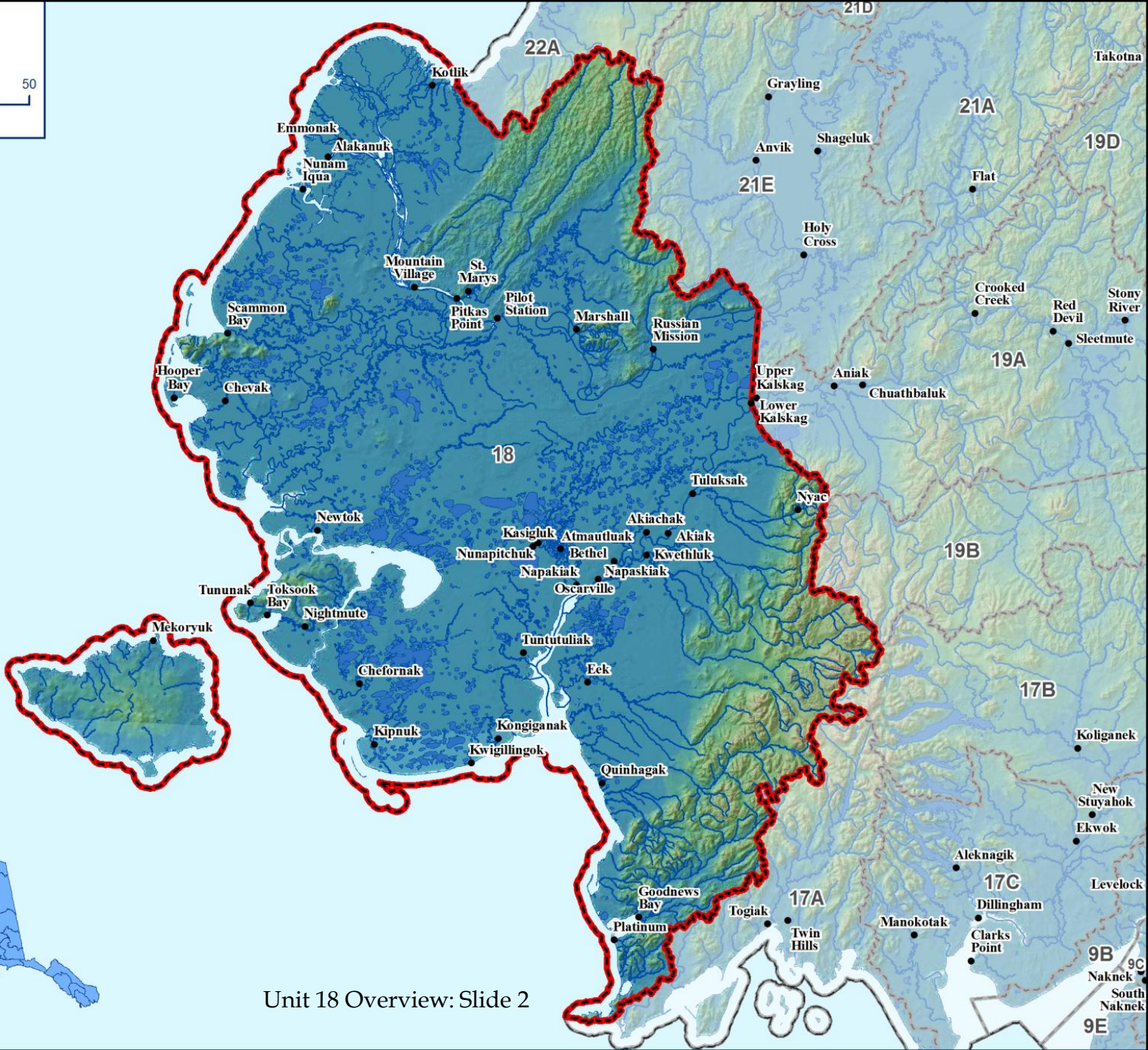


Unit 18 Overview

**Phillip Perry, Area Biologist
Patrick Jones, Assistant Area Biologist**

**Alaska Department of Fish and Game
Bethel, Alaska**

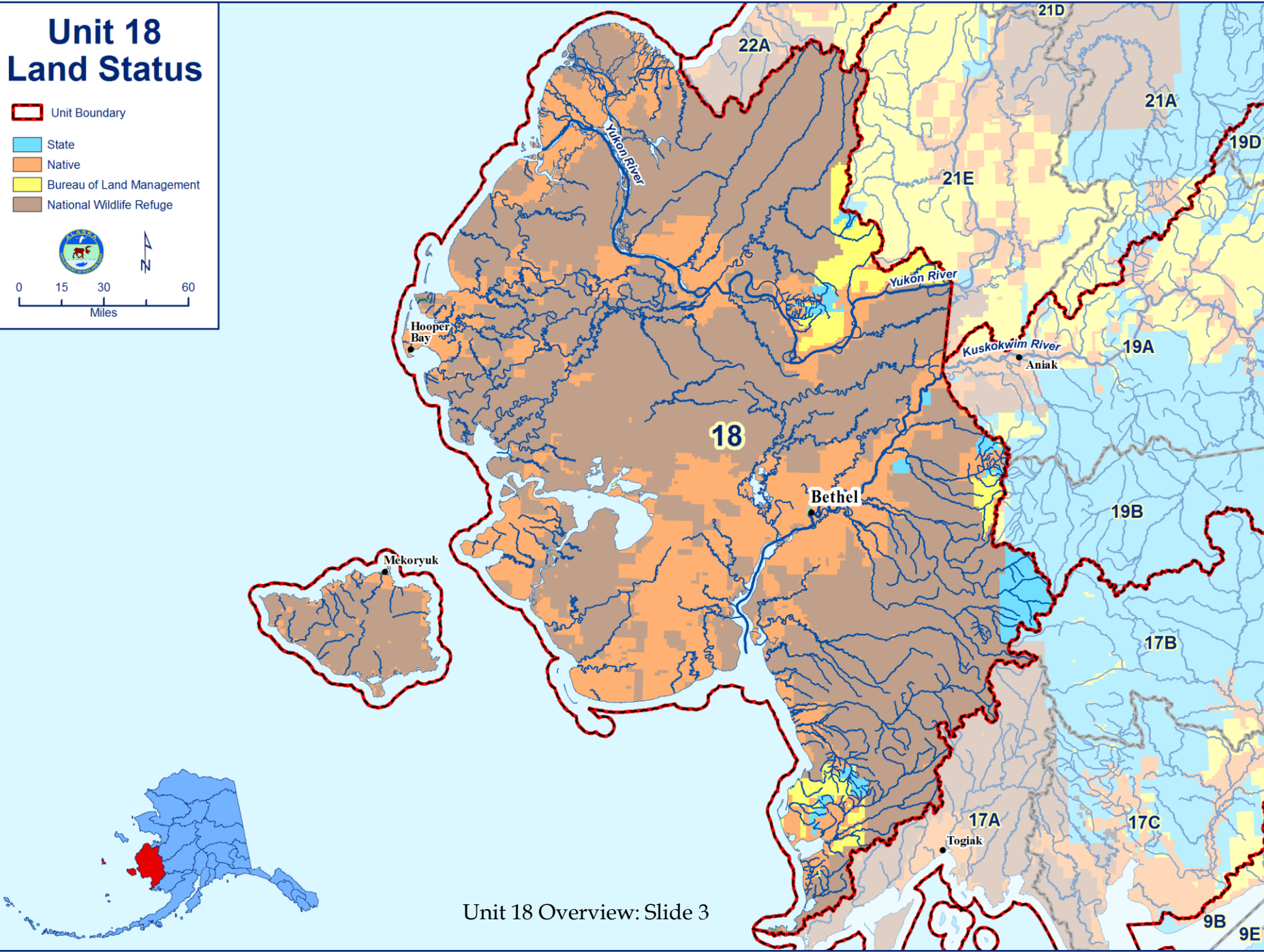
Unit 18



Unit 18 Overview: Slide 2

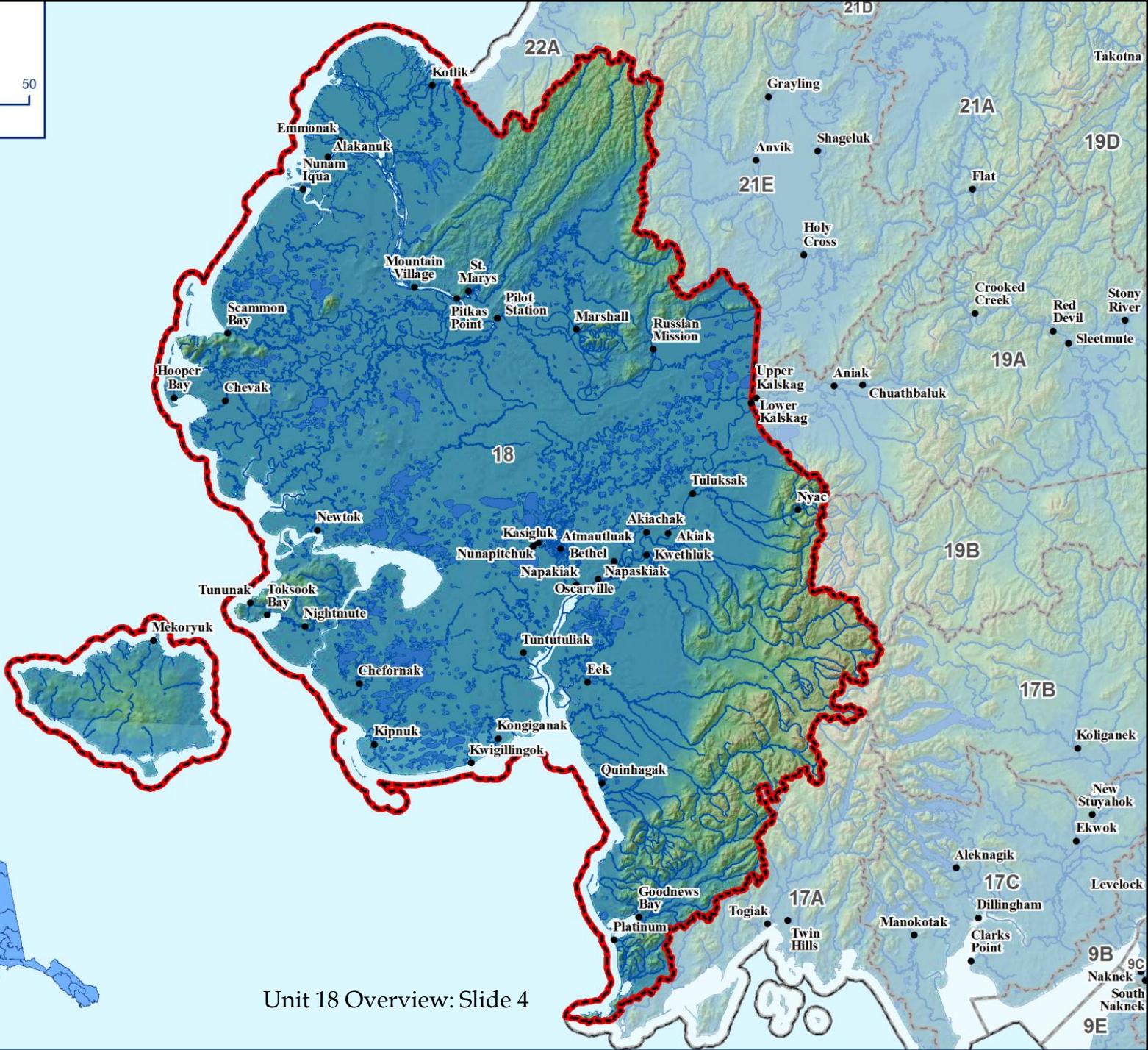
Unit 18 Land Status

- Unit Boundary
- State
- Native
- Bureau of Land Management
- National Wildlife Refuge

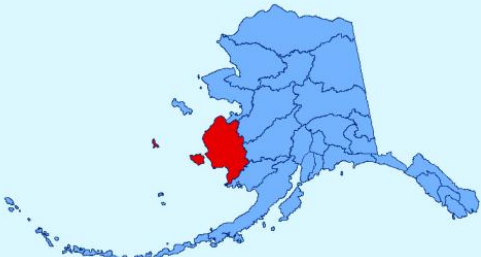


Unit 18 Overview: Slide 3

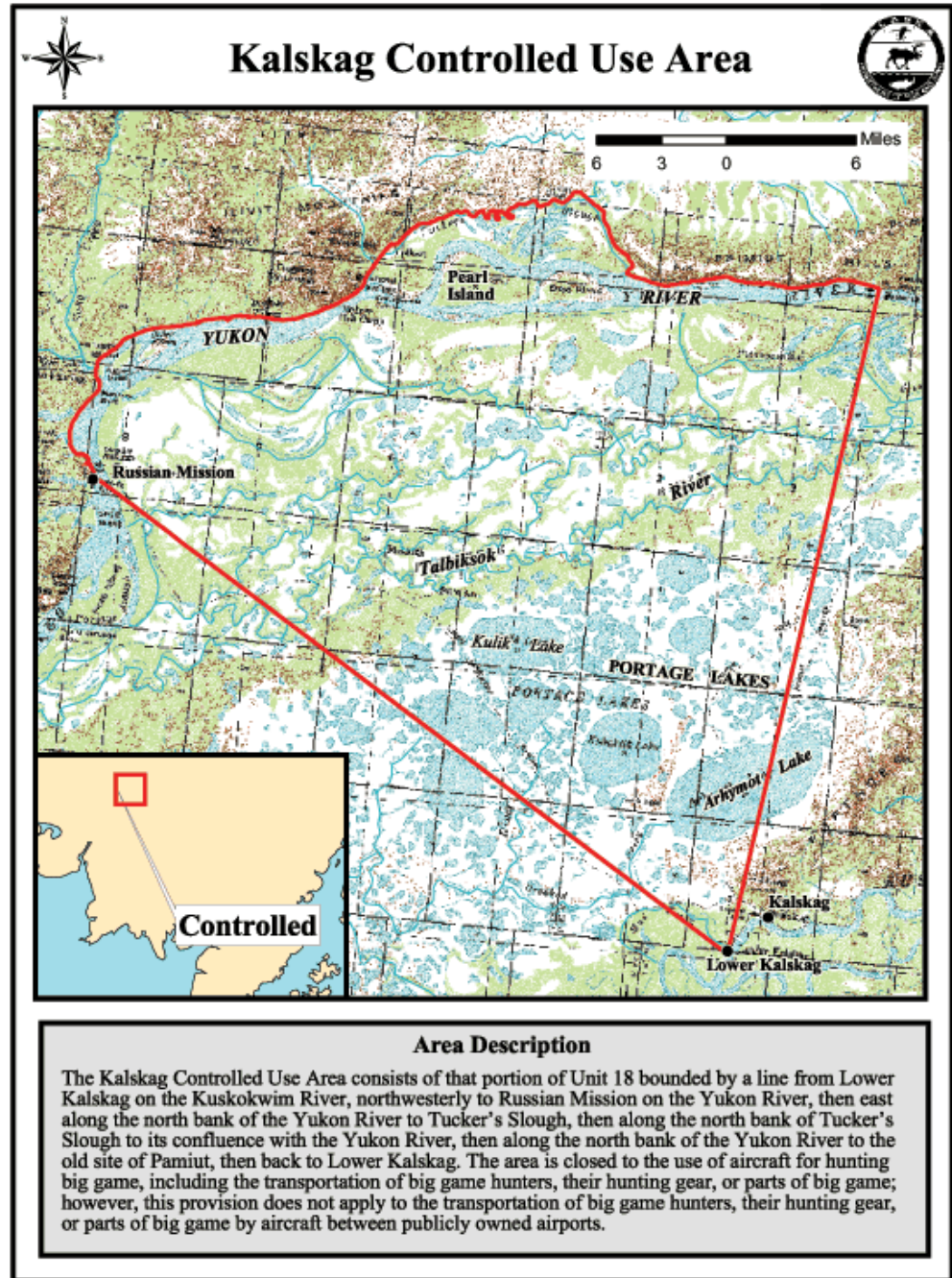
Unit 18



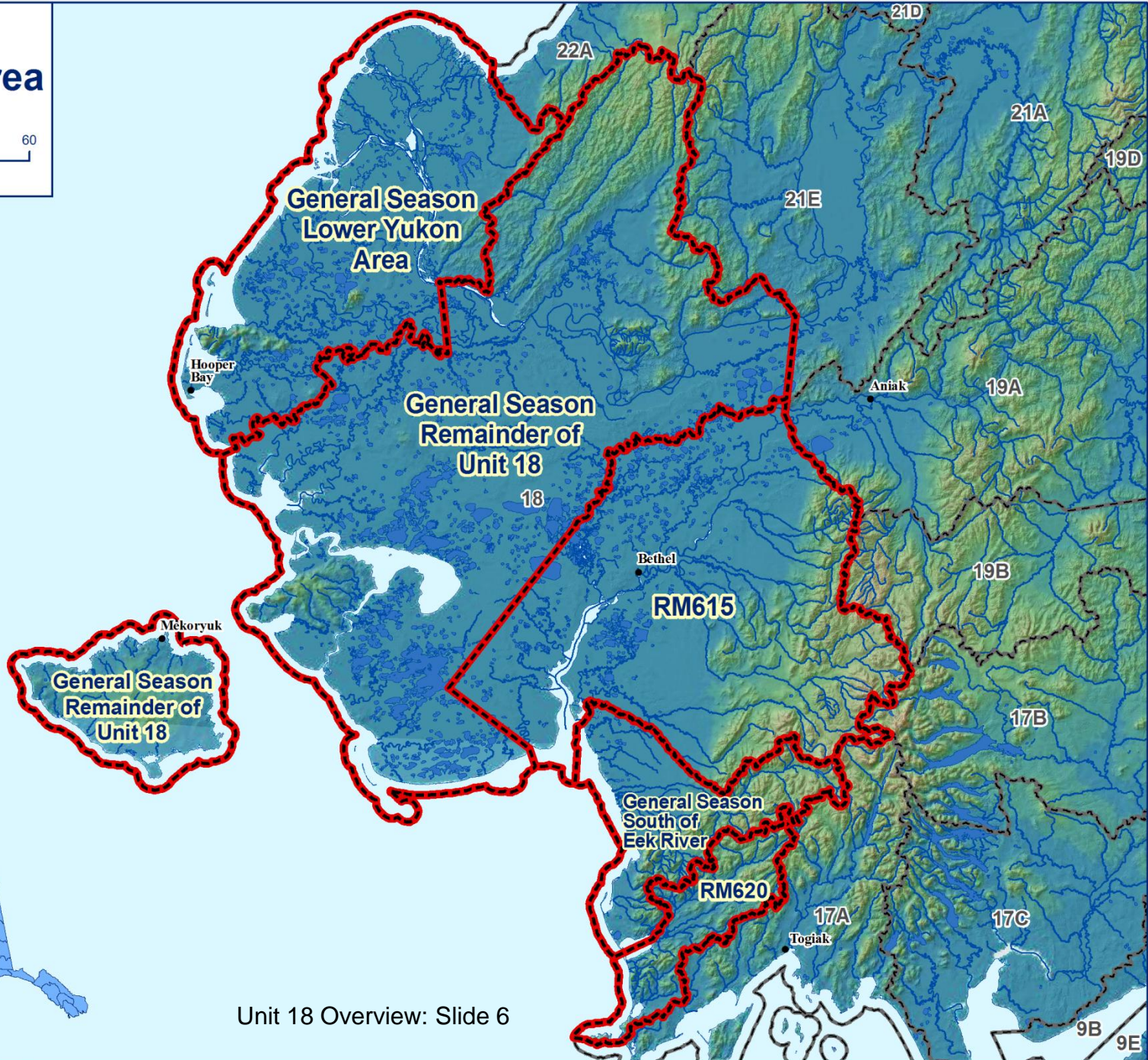
Unit 18 Overview: Slide 4



Kalskag CUA



Unit 18 Moose Hunt Area



Unit 18 Overview: Slide 6

Moose Population Unit 18

Yukon River Drainage (3 areas)

Lowest Yukon Survey Area

3,320 ± 13% (2008 GSPE)
48:100 calf:cow ratio (2013)

Andreafsky Survey Area

2,748 ± 16% (2012 GSPE)
36:100 calf:adult ratio

Paimiut Survey Area

5,597 ± 15% (2013 GSPE)
36:100 calf:adult ratio

Kuskokwim River and Drainages

Mainstem Kuskokwim

672 ± 21% (2011 GSPE)

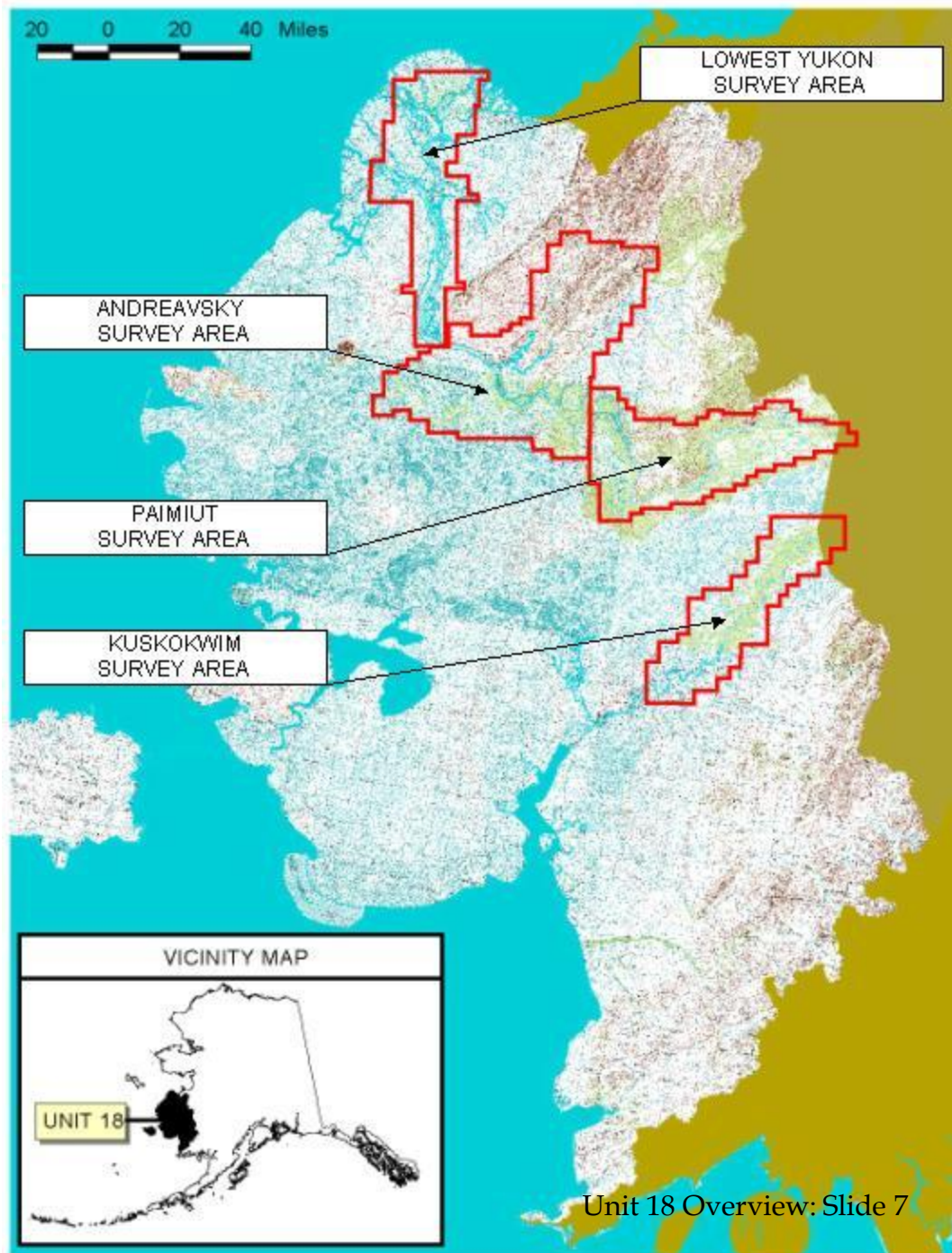
Tributaries

340 (2009)

South of the Kuskokwim

Goodnews Drainage

194 (2011 Minimum count)



Unit 18 Moose Summary

2013 Population Size

Unit 18 estimate= 11,800 – 14,800 moose

Harvestable surplus..... = 1,450 moose (approximate)

5-yr average harvest.... = 580 (RY2008-RY2012)

Subsistence

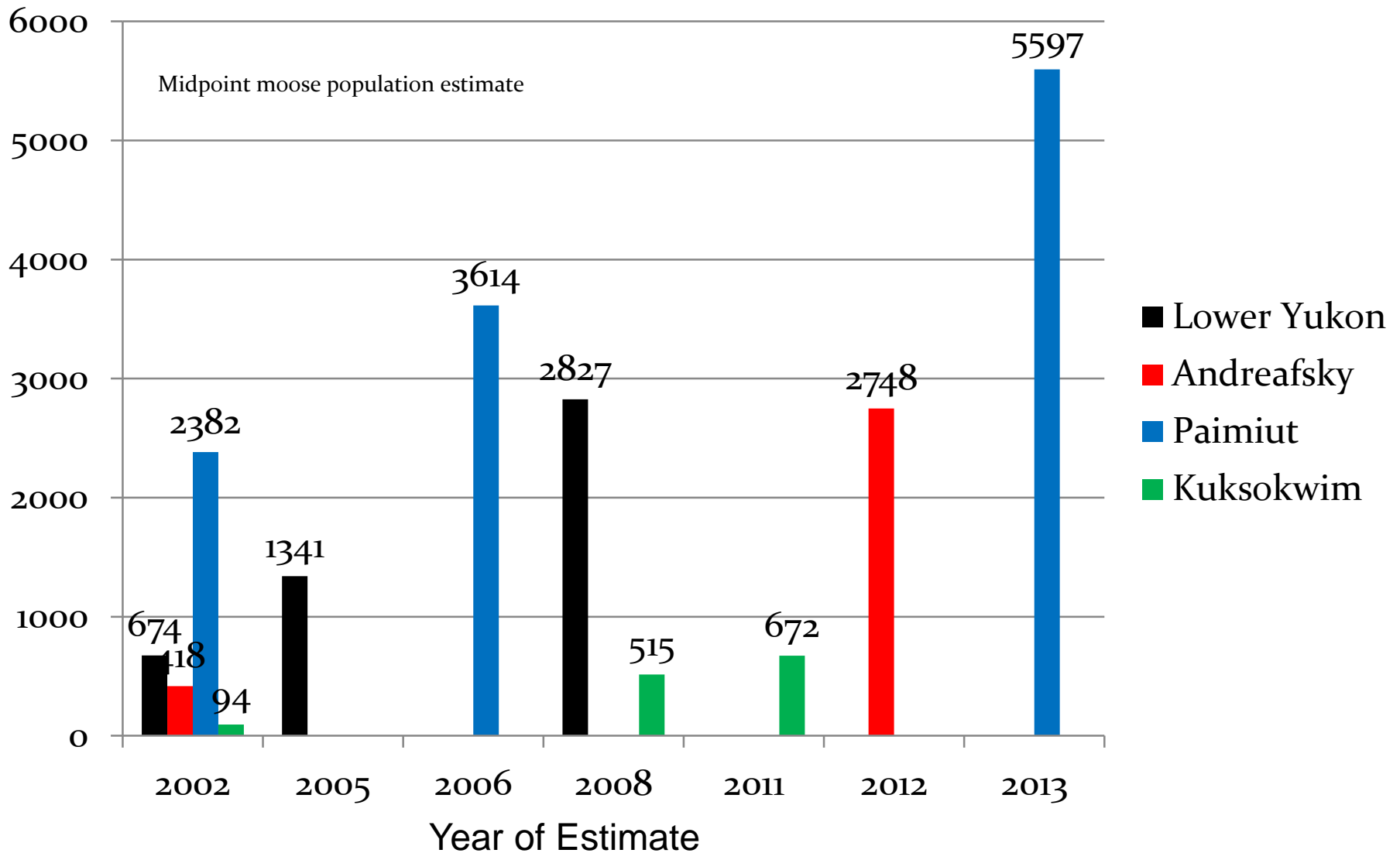
Amount necessary..... = 200 – 400 moose

Intensive Management

Population objective..... = 1,000 – 2,000 moose

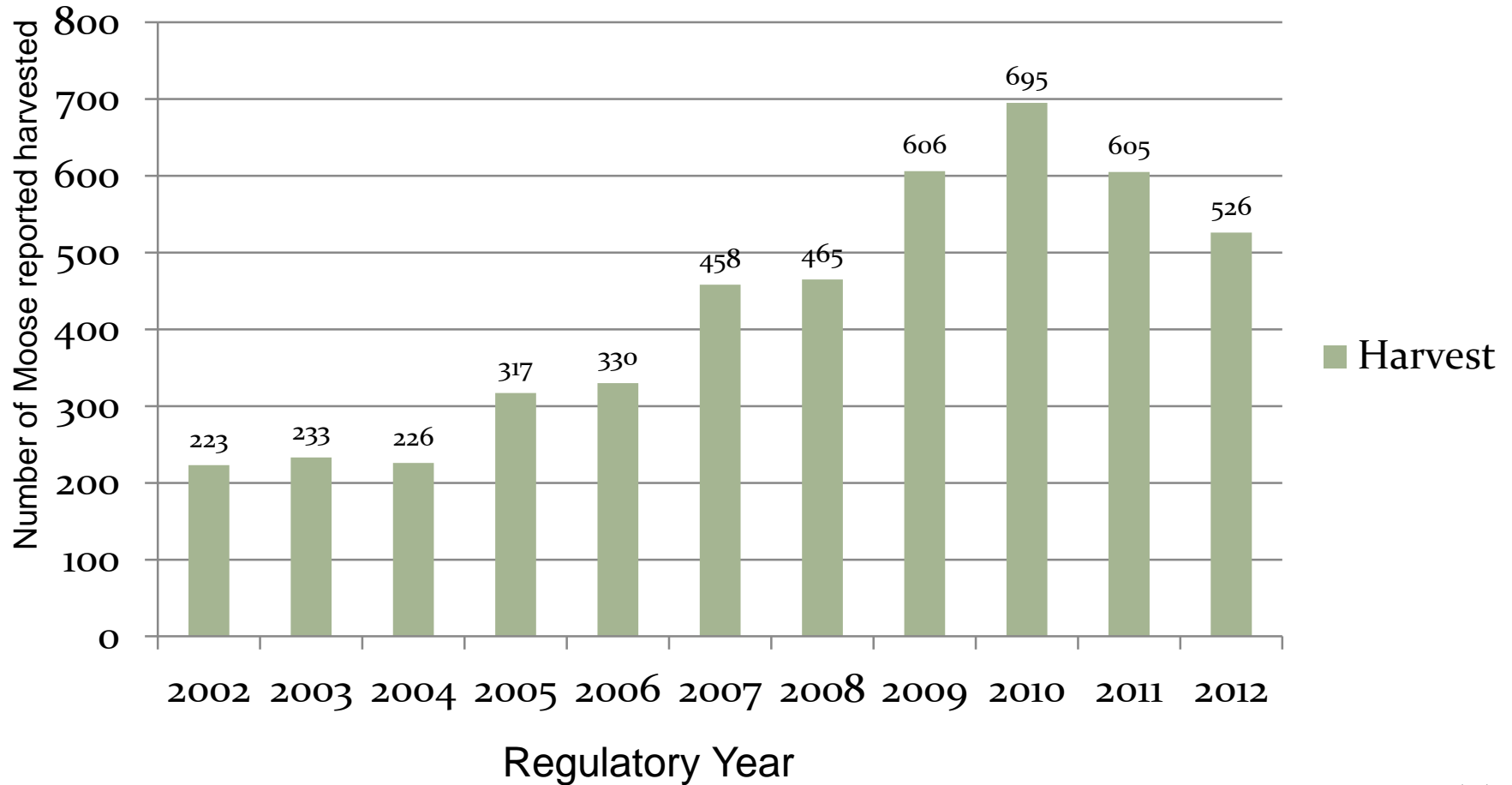
Harvest objective..... = 60 – 200 moose

Moose Population Estimates 2002-2013



Unit 18 Moose Harvest 2002 – 2012

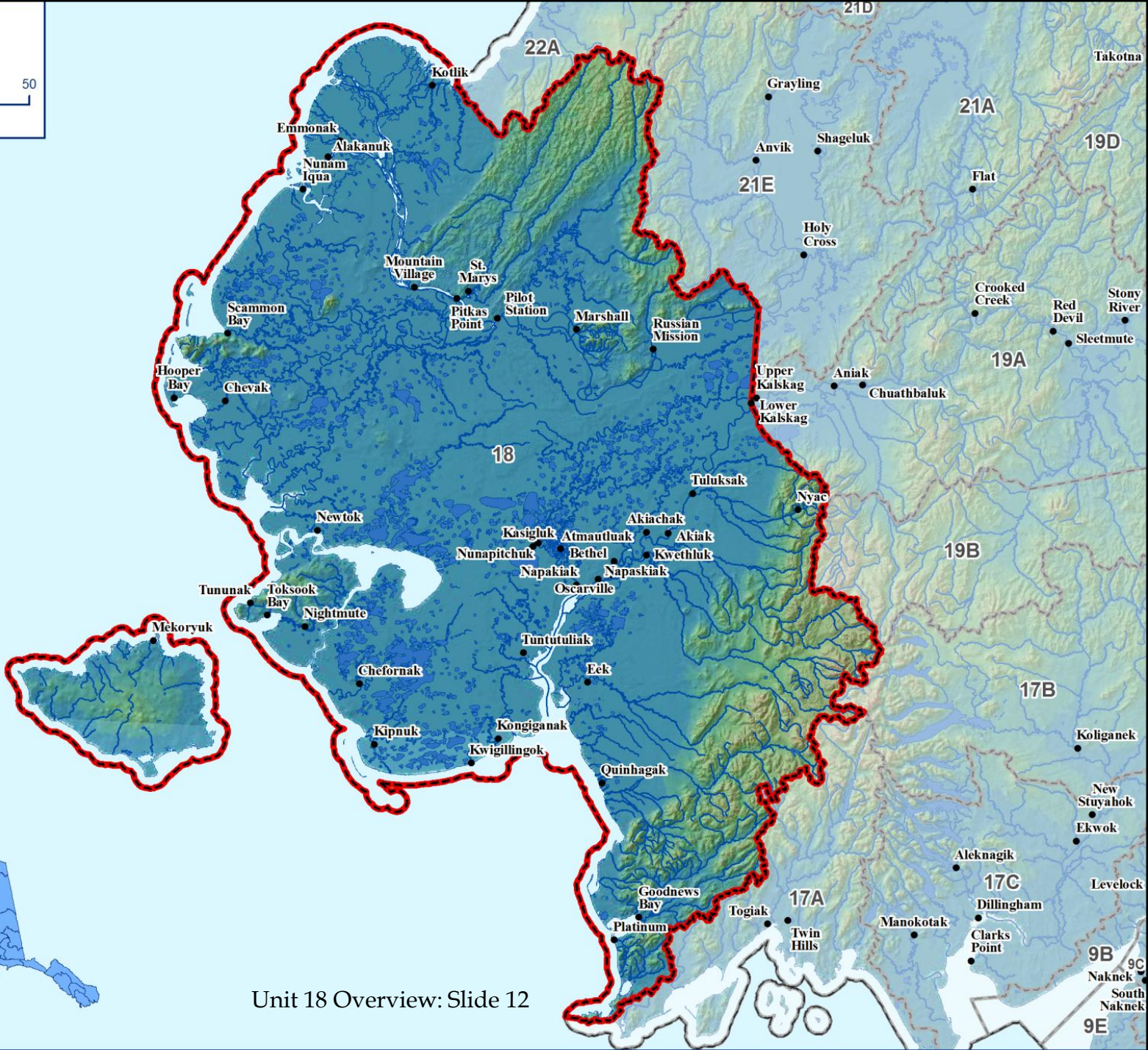
Harvest



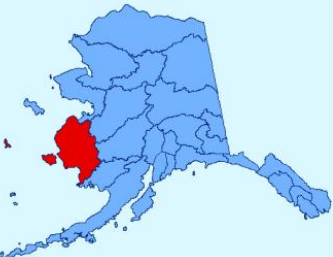
RM615 Moose Hunt Summary

<u>Year</u>	<u>Permits Issued</u>	<u>Hunted</u>	<u>Harvest</u>	<u>Length of Season (days)</u>
2009	1397	1042	110	10
2010	1530	1150	102	8
2011	1570	1171	117	7
2012	1454	1128	101	8
2013	1453	1111	119	6

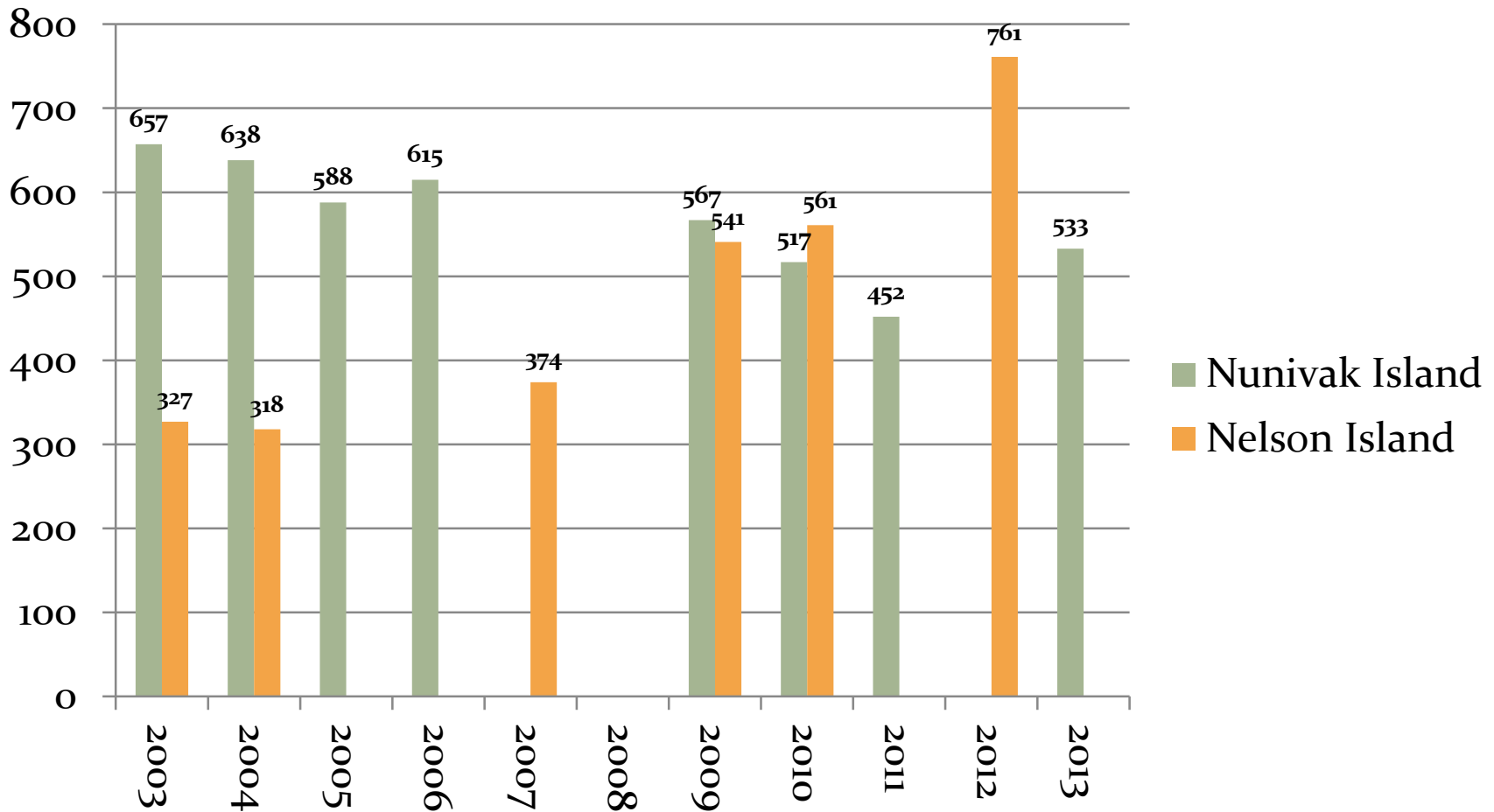
Unit 18



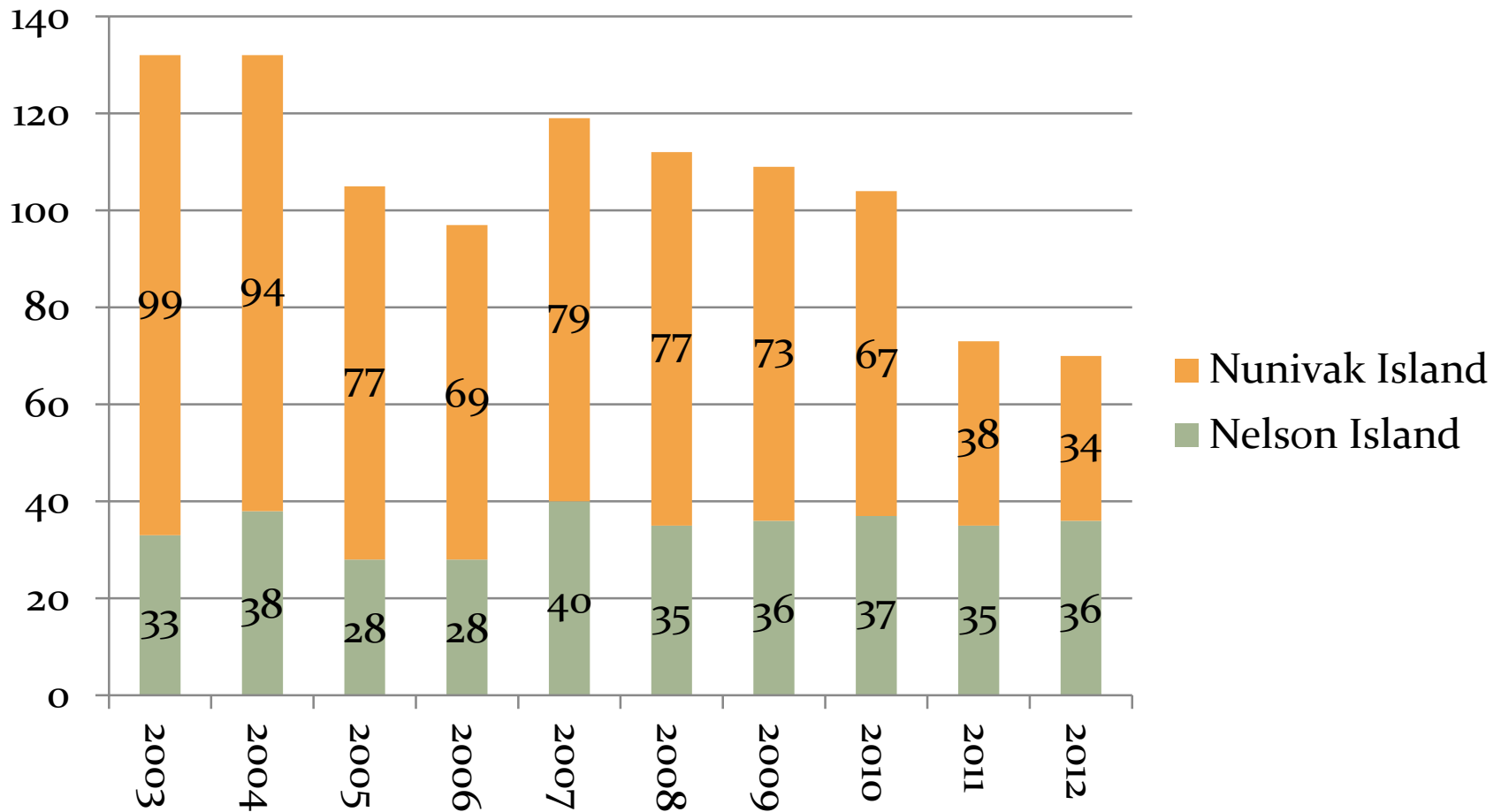
Unit 18 Overview: Slide 12



Nunivak & Nelson Island – Muskox Counts



Nunivak & Nelson Island – Harvests



Unit 18 Muskox Summary

2013 Population Size

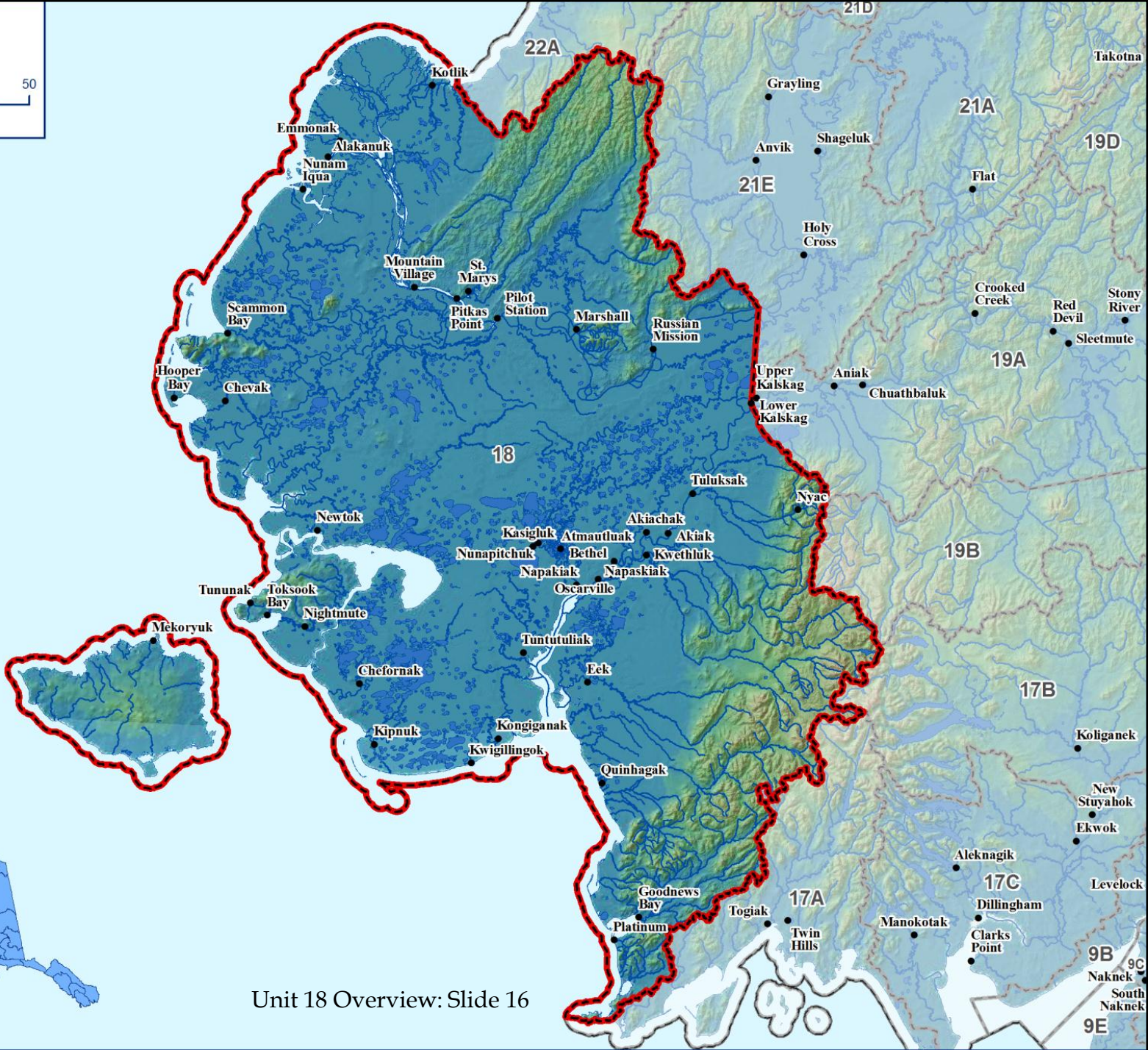
Unit 18 estimate	= 1,400 – 1,600 muskox
Harvestable surplus.....	= 125 muskox (approximate)
5-yr average harvest.....	= 94 (RY2008-RY2012)

Subsistence

Negative C&T

Amount necessary..... = N/A

Unit 18



Unit 18 Overview: Slide 16

- End -

Questions?

GAME MANAGEMENT UNIT 18

(Yukon drainage downstream from Paimiut and Kuskokwim drainages downstream of Kalskag)

Area Biologist: Phillip Perry
Assistant Area Biologist: Patrick Jones

Arctic and Western Region, Board of Game Meeting, Kotzebue, Jan. 2014

(Slide 1) Introduction

(Slide 2)

DESCRIPTION: (See Unit 18 map). Unit 18 is a 42,000 square mile roadless area at the mouth of the Yukon and Kuskokwim Rivers. These major rivers roughly divide the Unit into thirds. The middle third between the rivers is largely flat, wet, and dotted with many lakes. The portion north of the Yukon River and the portion south and east of the Kuskokwim River are mostly upland to mountainous and some extensive areas with trees exist near the rivers and in sheltered valleys.

The habitat in Unit 18 is largely intact and will remain so. The boundaries of the Yukon Delta National Wildlife Refuge and the Togiak National Wildlife Refuge approximate the Unit 18 boundary. Naturally, we work closely on many projects with each of these refuges.

(Slide 3)

This map shows the land ownership in Unit 18. There is very little state land in Unit 18. Local and regional corporation lands are the majority of private lands within Unit 18, with the remaining lands being parts of the Yukon Delta and Togiak Refuges. {Show approximate boundary with pointer}. There are also some small parcels of BLM land.

(Slide 4)

HUMAN POPULATION: Unit 18 is inhabited by over 23,000 people in over 40 villages making Unit 18 Alaska's most densely populated rural unit. Most residents are Yup'ik Eskimo and in many of the villages, Yup'ik is the dominant language and nearly all of the people here would describe themselves as subsistence hunters.

Currently there are three Fish and Game Advisory Committees; the Central Bering Sea, the Lower Yukon and the Lower Kuskokwim. In October 2013 the Joint Board split the Lower Yukon into two committees and the new Bethel Advisory Committee was split out of the Lower Kuskokwim. We also have the Yukon Kuskokwim Delta Federal

Subsistence Regional Advisory Council and we have had a strong history of working with villages in other capacities.

(Slide 5)

SPECIAL AREAS: (show slide of Kalskag CUA) The only controlled use area in Unit 18 is the Kalskag CUA bounded by a line from Kalskag on the Kuskokwim to Russian Mission on the Yukon then following the Yukon to the Unit 18 boundary at Paimiut and back to Kalskag. It was established for the 1977-78 season to address conflicts between boat borne hunters and those using aircraft. In this area, hunting big game using is closed to the use of aircraft, including transportation of hunters, their gear, and/or parts of big game.

(Slide 6)

MOOSE: Moose are recent colonizers in Unit 18, arriving within living memory. They have quickly become a vital component of the economy of the area.

Along the Yukon and Kuskokwim Rivers, moose have become well established. Much of the credit given for the establishment of these populations has been attributed to a moose hunting moratorium in the area below Mt. Village(also referred to as the Lower Yukon Hunt area) between RY1988 – RY1993 and a similar moratorium on the Kuskokwim from RY2004 – RY2008. Since then, the population has grown considerably. In 1992, the estimated number of moose along the Yukon was approximately 1,000 – 1,200, most of those upriver of Russian Mission. Currently, the same area supports over 12,000 moose. Ten years ago on the Mainstem of the Kuskokwim we had at or below 100 moose, and now we estimate about 1,300 in the Kuskokwim drainage.

We will refer to the Lower Kuskokwim moose Hunt area (point it out), the area south of and including the Goodnews River drainage, the Lower Yukon hunt area (point it out), and the Remainder of Unit 18, which includes the important moose hunting area along the main stem of the Yukon. You'll see this map again, but this brief orientation to these boundaries will probably help.

(Slide 7 moose survey area slide)

We conduct annual moose population estimates during the winter; ideally, within survey areas along the Yukon River one year and along the Kuskokwim River the next. We completed a Geospatial Population Estimate (GSPE) in the Andreafsky survey area in February of 2012 and in the Paimiut survey area in February of 2013. The next area due for an estimate is the Lower Kuskokwim area. We conduct spring twinning nearly every year and during the rare years when survey conditions allow, we conduct fall composition surveys.

(Slide 8)

This slide summarizes the current population, harvest, Amounts Necessary for Subsistence and Intensive management objectives.

(Slide 9)

In general, moose populations in Unit 18 are doing well. The trend in all areas is range expansion and growth, with some of the growth very rapid. All indicators, such as twinning rates and calf to cow and calf to adult ratios, point to a continuation of this trend.

(Slide 10)

April 2013 we captured 23 female moose calves along the Kuskokwim River. The weights ranged from 330 – 490 pounds with an average weight of 384 lbs, or 175 kilograms.

(Slide 11)

In the past decade, moose harvest in Unit 18 has increased along with moose populations. Most hunts have been incrementally liberalized both in season length and bag limits. The five year average of harvest in the most recent five years is 579 moose. The previous five years the average was only 313 moose.

(Slide 12)

This is the fifth year that we have hunted moose on the Kuskokwim Drainage using the RM615 Moose Registration permit. The number of permits issued has remained relatively stable as well as the number of hunters reporting that they hunted. The quota was 75 in the first year and has been 100 for the past 4 years.

There are four proposals addressing the moose hunting seasons in Unit 18. All four of these proposals address the seasons in the northern portion of the unit, the Lower Yukon Hunt area and the Remainder of Unit 18 (Proposals 1, 2, 3, and 4).

(Slide 13)

MUSKOX: Muskox are found on Nunivak and Nelson Islands (point out where they are on the map) where they are legally hunted. In the winter, Nelson Island is connected to the mainland when Baird Inlet freezes over. When this happens, muskox are able to move on and off of Nelson Island for 5 to 6 months.

(Slide14)

We try to count muskox on both islands every year. Some years we do, many years only one or the other island is counted. You can see our current counts as well as the past 10 years on the slide. There are currently 533 muskox on Nunivak Island and in 2012 761

were counted on Nelson Island. We would like to have 600-650 muskox on Nunivak Island and 350- 450 on Nelson Island. I think it is important to point out that both of these islands are essentially predator free and that populations are held in check by harvesting bulls and cows at a fairly high rate.

(Slide 15)

We harvest about 70 to 120 muskox a year on these two islands in two drawing hunts and four Registration hunts. The actual exploitation rate on these two islands is 5 to 15 % depending on how close we are to the upper end of our populations goals.

(Slide 16)

This is a quick summary of muskox in Unit 18. The population estimate is developed from adding the two counts of the islands (approximately 1400 right now) and adding 100-200 muskox on the mainland. Since the population is managed right now with a negative Customary and Traditional use determination, hunting occurs using a mix of Drawing and Registration permits.

There are 2 proposals, Proposals 5 and 6, addressing muskox hunting in Unit 18.

(Slide 17)

CARIBOU: Caribou are found in Unit 18 mainly south and east of the Kuskokwim River. These are part of the Mulchanta Herd. Occasionally caribou from the Western Arctic herd winter in the extreme northern part of Unit 18. There are no proposals dealing with caribou in Unit 18 at this meeting.

BROWN BEAR: Brown bears are also found in Unit 18. There is general season hunt and a registration subsistence hunt for brown bears in Unit 18. Harvest in the most recent 5 years has averaged 28 bears. Brown bear harvested using the Subsistence Brown bear permit must have their trophy value destroyed in they leave the unit or are commercially tanned. We have not needed to destroy the trophy value on any bears from this hunt. The only proposal addressing brown bears at this meeting is the reauthorization of a tag fee exemption (Proposal 38).

BLACK BEAR: Black Bears are found primarily in the eastern portions of Unit 18. We do not require harvest tickets at this time nor do we require sealing. Black bear are seen frequently during moose calving surveys, especially in the Paimiut area, but increasingly in other areas. We see bears seen more frequently on the lower portions of the Kuskokwim and Yukon Rivers than in the past.

WOLF: Wolves and other furbearers are found throughout the unit. Wolves are well established along the Yukon and Kuskokwim Rivers and south of the Kuskokwim River in the Kilbuck Mtns. Harvest in the most recent five years has averaged 54 wolves, with about half being shot and the other half trapped. The harvest is highly variable, mostly because of snow conditions. Good snow conditions allow trappers and hunters to access a lot more areas that wolves are found. There are no proposals dealing with hunting and trapping wolves at this meeting

FURBEARERS: Furbearers such as mink, beaver, otter, wolverine, lynx, red and arctic foxes and muskrats are also abundant in Unit 18 and in the past where a vital part of the economy. With low fur prices, trapping effort is low compared to historical levels, but effort has increased in the past 2 years due to slightly better prices and increased availability of local fur buyers.

Most harvest occurs close to the communities with a few exceptions. At this meeting, there are two proposals addressing lynx hunting seasons (Proposals 8 and 9), one addressing wolverine hunting (Proposal 7), and one addressing bear snaring in the Arctic/Western Region which includes Unit 18 (Proposal 35).

SMALL GAME: Small game such as ptarmigan and snowshoe hares are found throughout Unit 18. Ptarmigan and waterfowl are important species that are harvested when they are available. There is a proposal asking to change the salvage requirements for wildfowl at this meeting (Proposal 12).