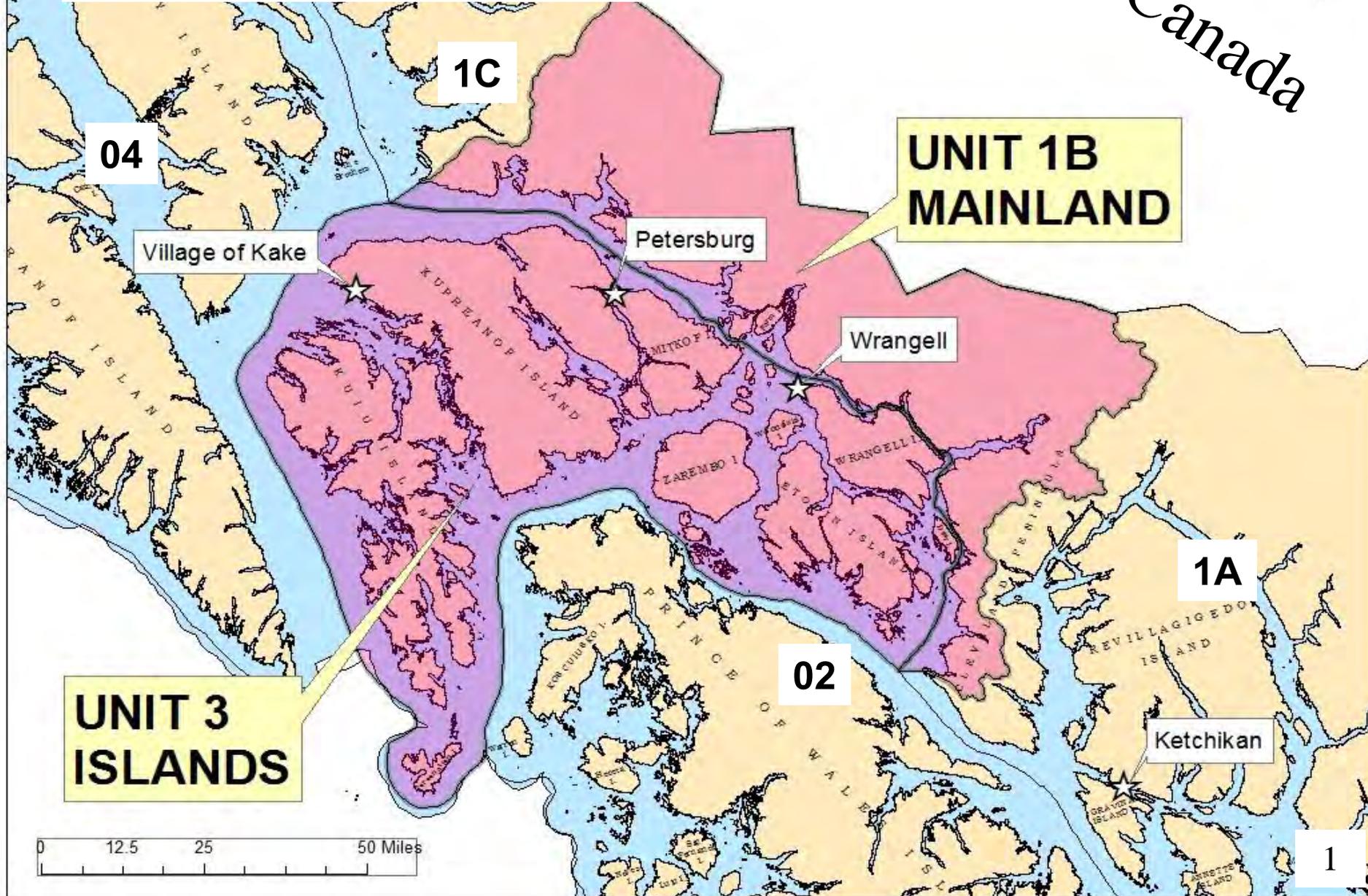


Petersburg Management Area



Canada



UNIT 3 ISLANDS

UNIT 1B MAINLAND

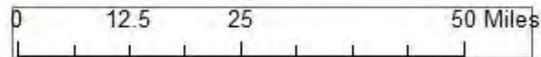
1A

02

04

1C

1







Commercial Fishing & Processing

Big Game Guiding



Charter Fishing



Tourism & Wildlife Viewing

Forest Management



BIG GAME SPECIES

- **Deer**
- **Moose**
- **Mtn. Goat** (1B only)
- **Elk** (Unit 3 only)
- **Black Bear**
- **Brown Bear**
- **Wolf**



FURBEARERS

- Marten *
- River Otter *
- Wolves *
- Beaver
- Mink
- Ermine
- Wolverine

No Mgmt. Concerns



SMALL GAME SPECIES



Waterfowl

No Mgmt. Concerns

Grouse/Ptarmigan



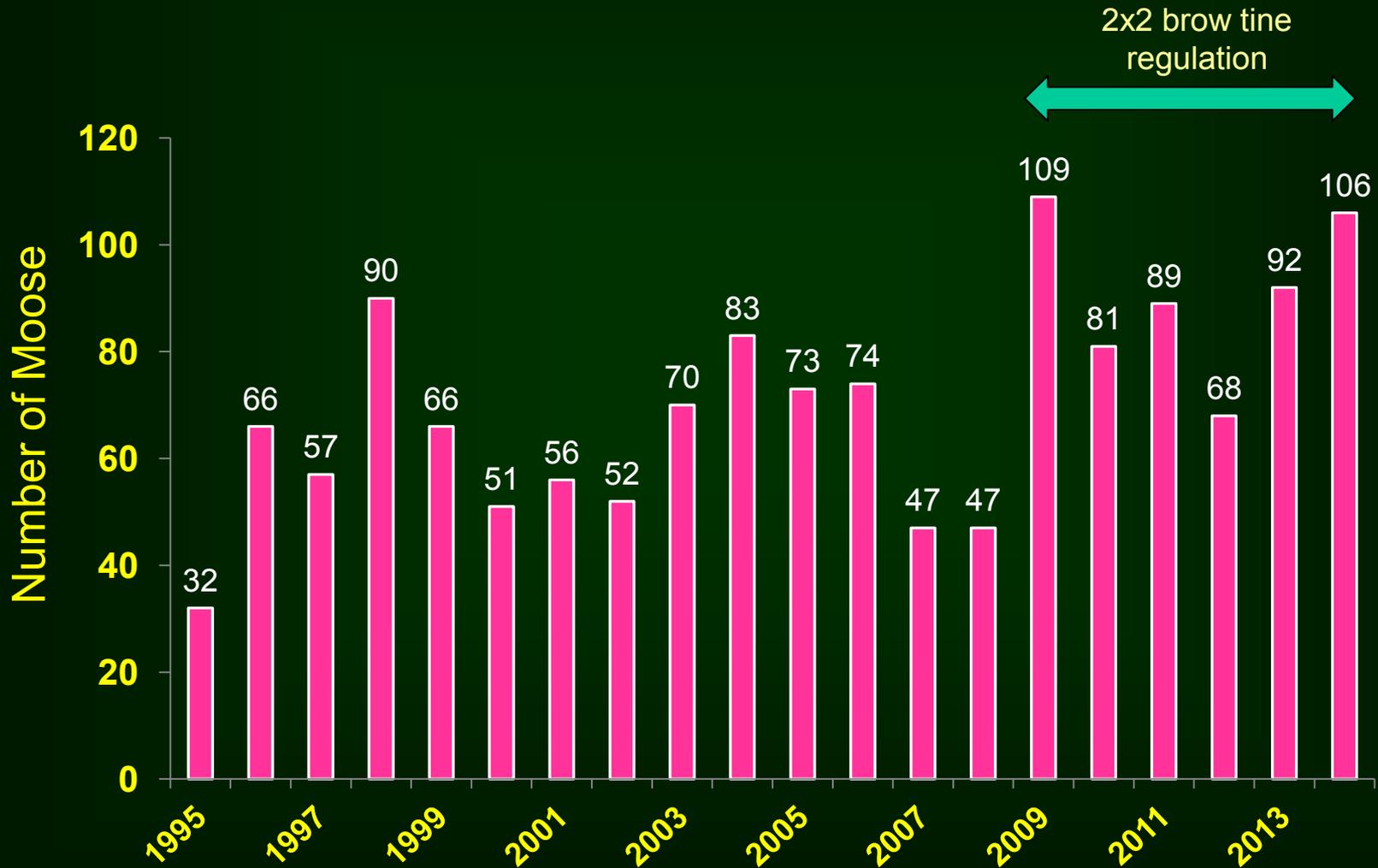
RM038 Moose Hunt

Unit 1B, 3 and southern 1C

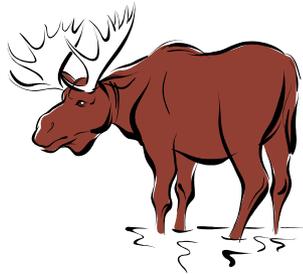
- Increasing popularity
- Over 1000 people register
- Gaining regionwide interest



RM038 Moose Harvest



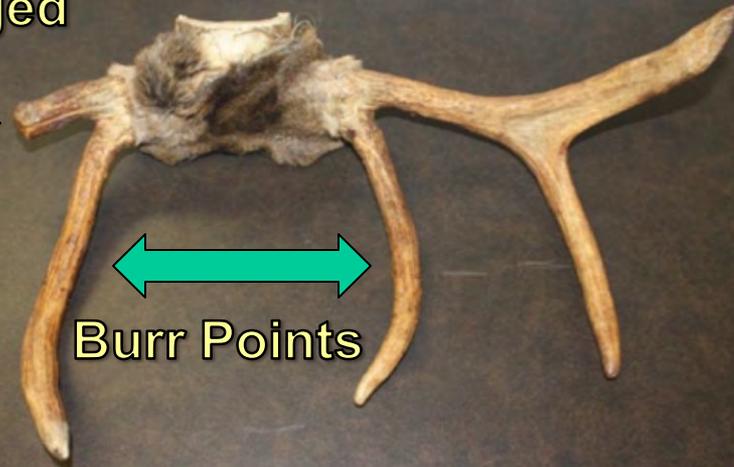
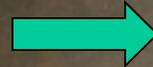
RM038 Moose Antler Restrictions



?



Broken /
Damaged



Burr Points

Further discussion
during Proposals 6 & 7

Brown Bear

Brown bears most prevalent on Unit 1B Mainland

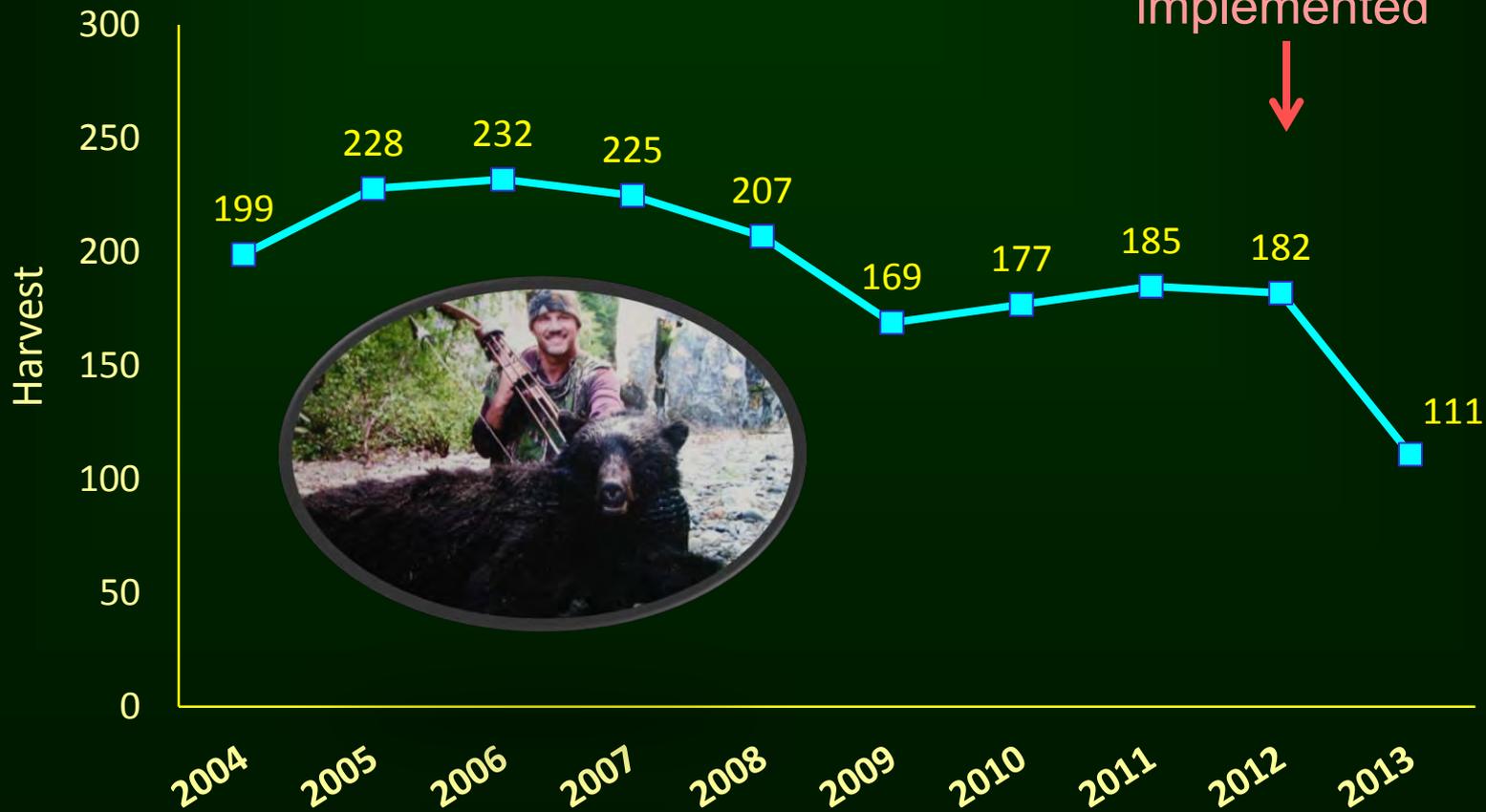
- **Low numbers occur in Unit 3, but only on those islands adjacent to mainland**
- **Uncertainty regarding Unit 3's ability to support a sustainable harvest**

Further discussion during proposals 1 -2 - 3



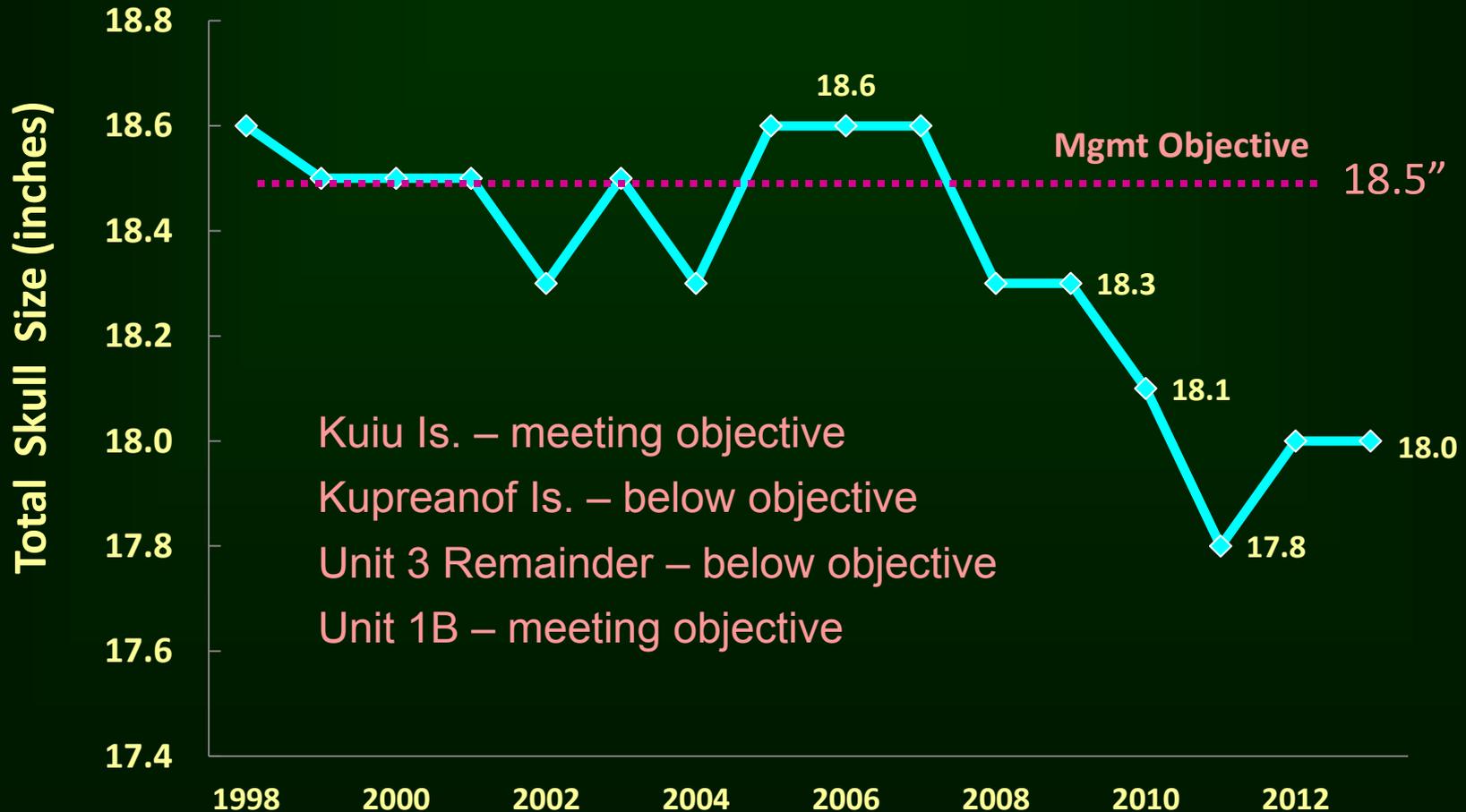
Unit 3 Black Bear Harvest (2004-2013)

Nonresident
draw permits
implemented



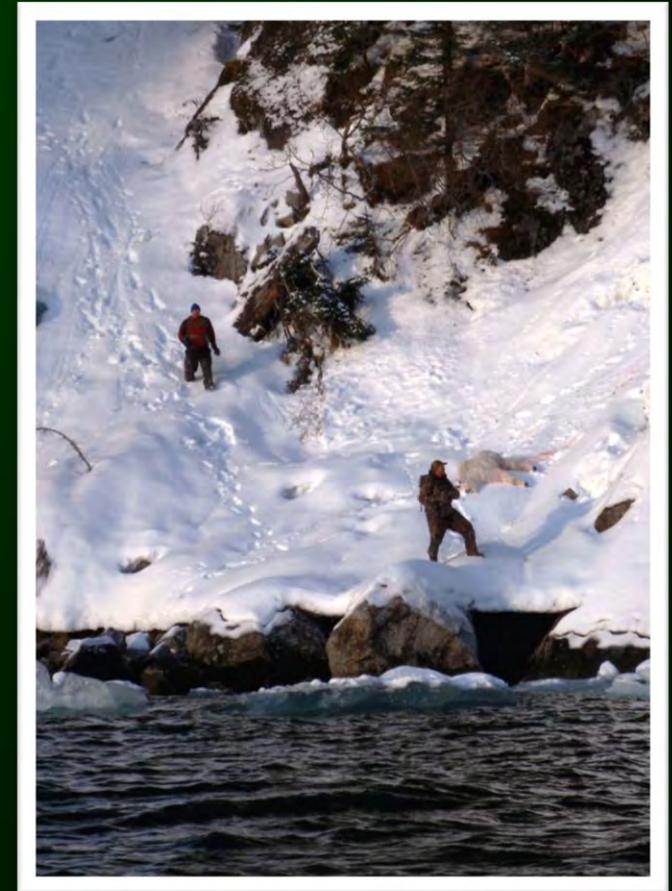
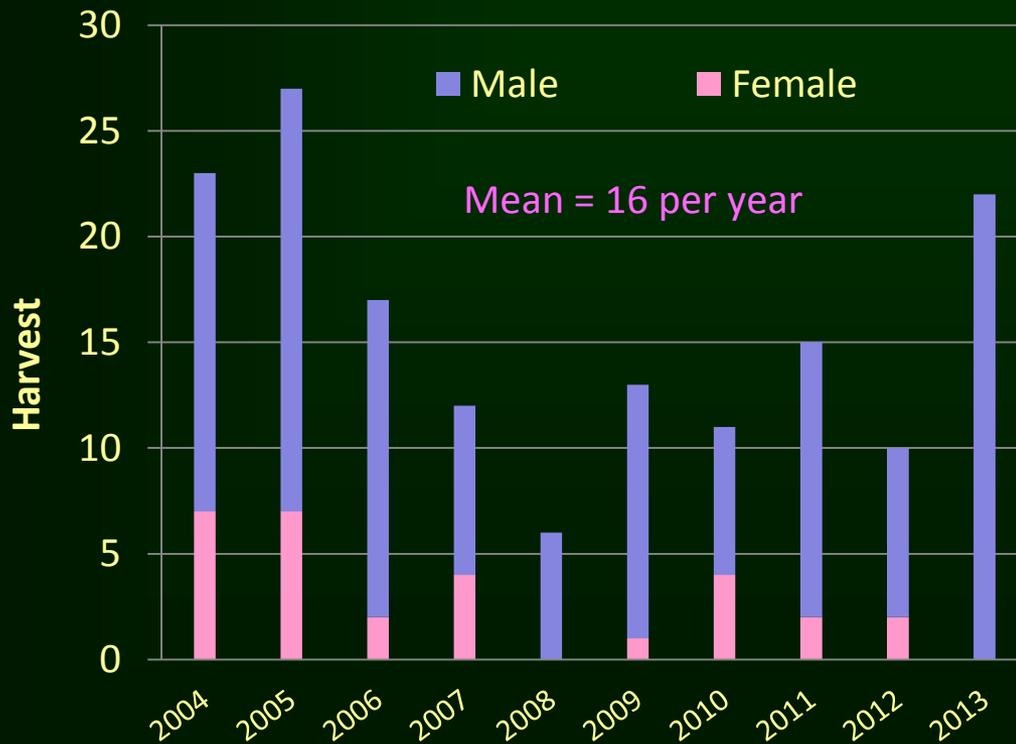
Black Bear Mgmt. Concern

Unit 3 Mean Male Skull Size

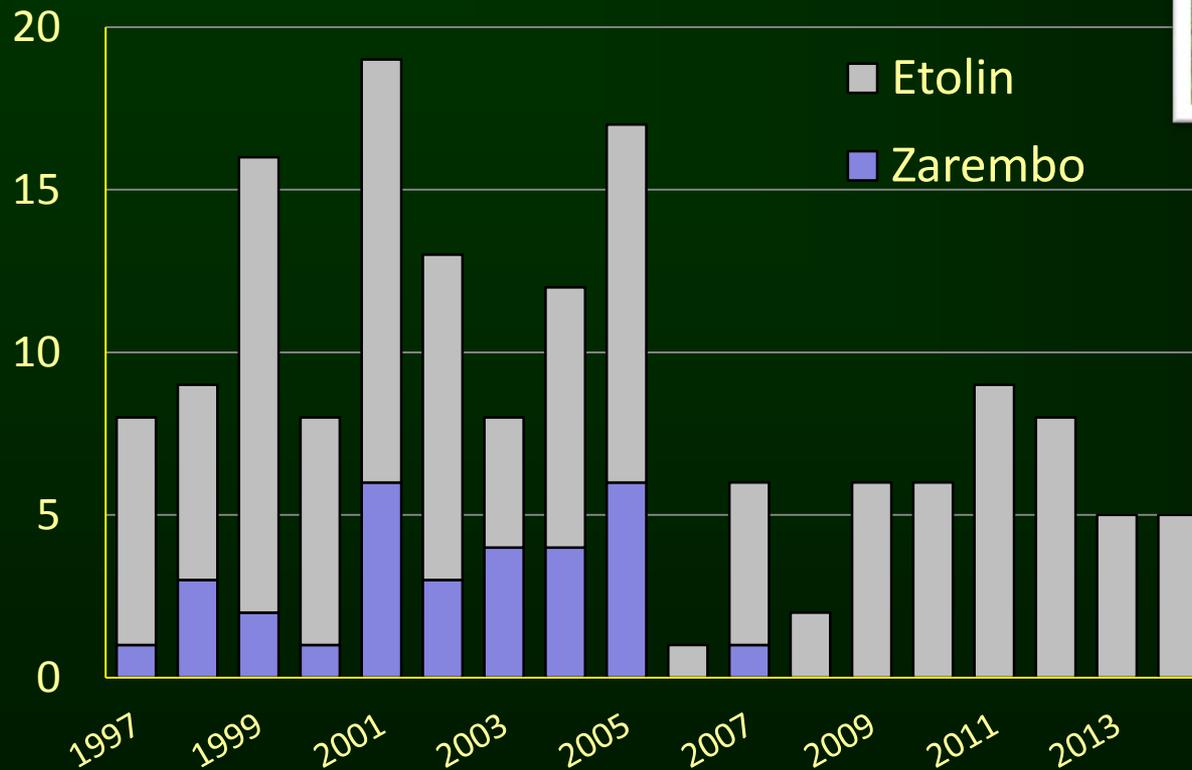


Mountain Goats (Unit 1B)

Unit 1B Goat Harvest (2004-2013)



Unit 3 Elk Harvest (1997-2014)

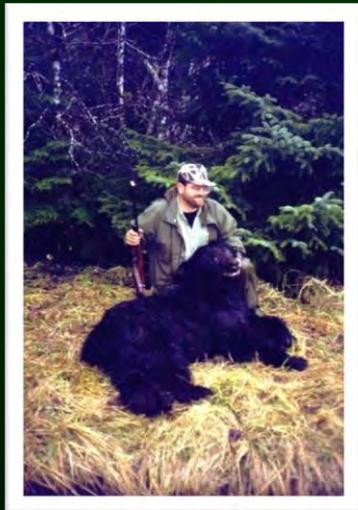


Long-term average = 9/year

Recent 10-year average = 6.5/year

← Zarembo closed To elk hunting →

Big Game Management Concerns





Habitat Alteration

**LINDENBERG
PENINSULA
1954
ORIGINAL CONDITION**

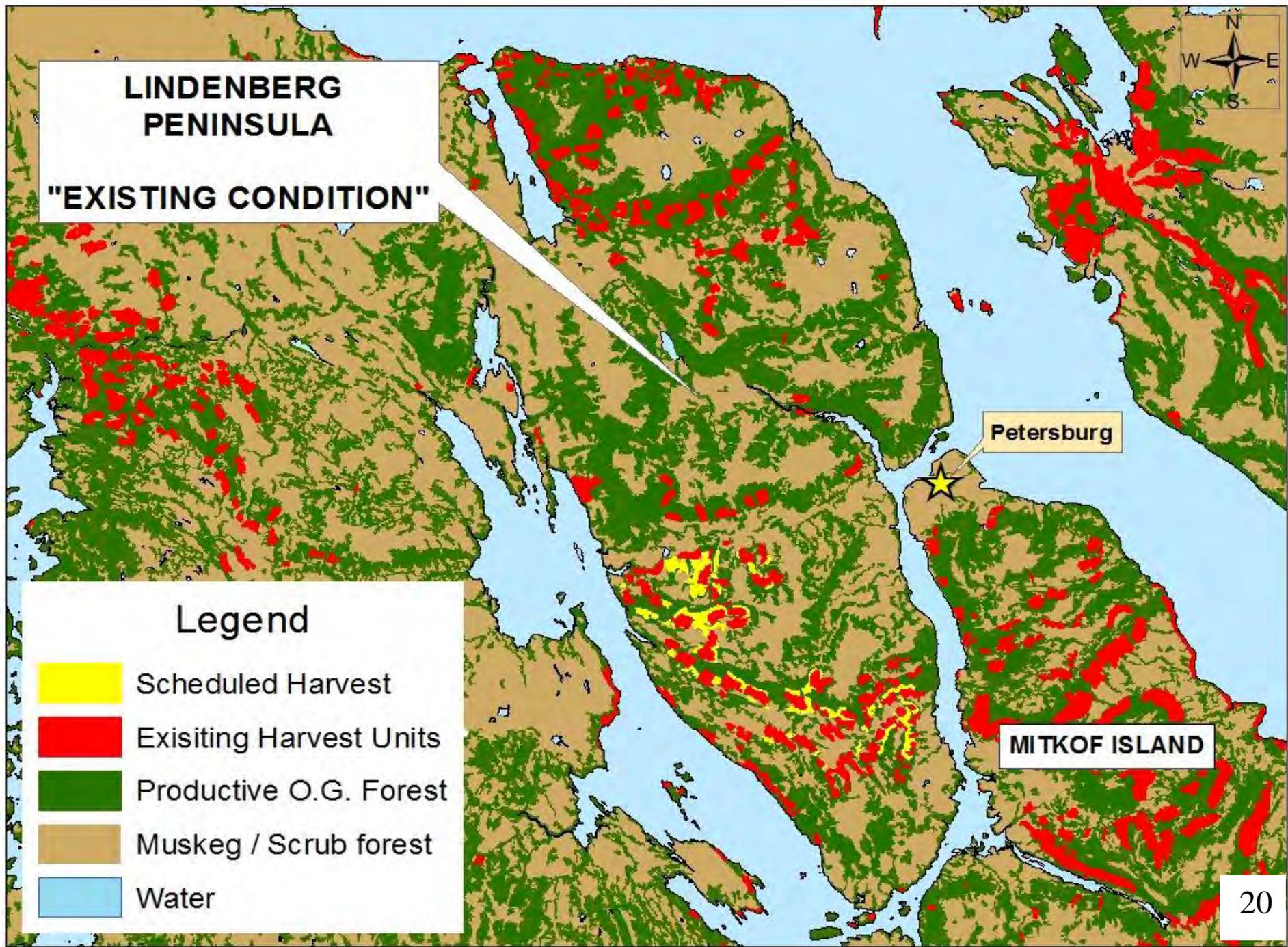


Petersburg

MITKOF ISLAND

Legend

-  Productive O.G. Forest
-  Muskeg / Scrub forest
-  Water



**LINDENBERG
PENINSULA**
"EXISTING CONDITION"

Petersburg

MITKOF ISLAND

Legend

- Scheduled Harvest
- Existing Harvest Units
- Productive O.G. Forest
- Muskeg / Scrub forest
- Water







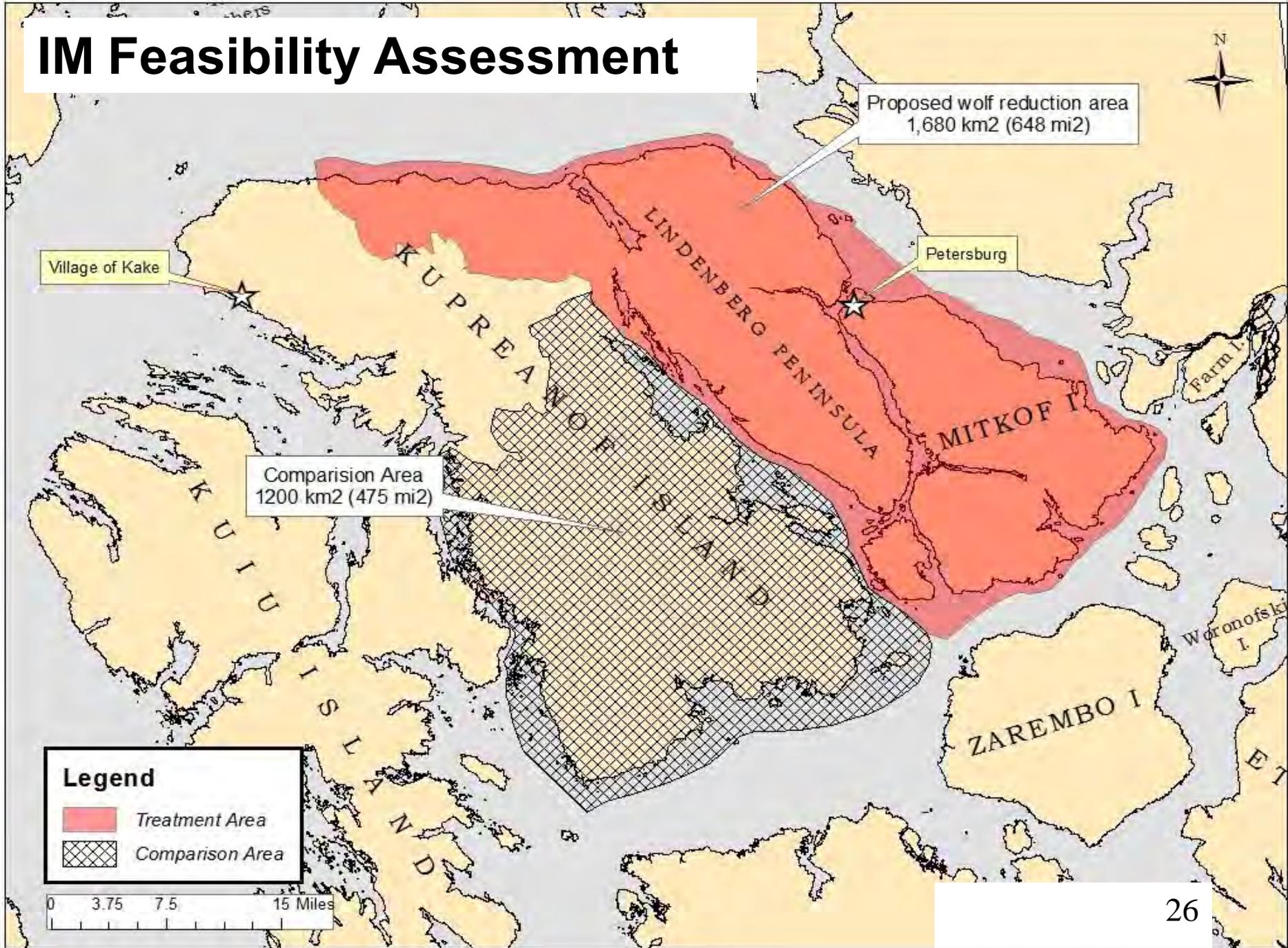
Impacts to deer habitat capability are long term!

~45 year old second growth stand

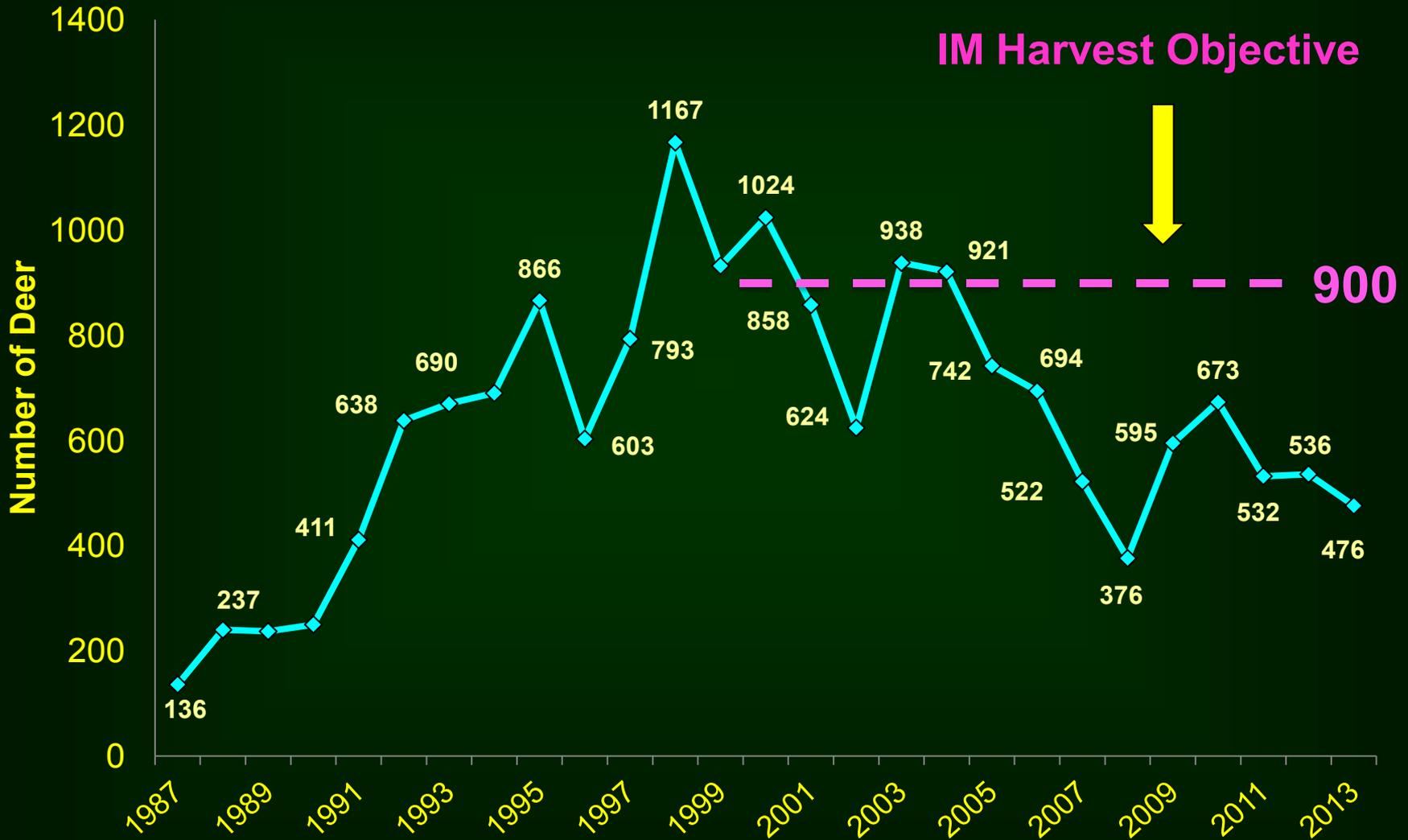
Unit 3 Deer



IM Feasibility Assessment



Estimated Unit 3 Deer Harvest



Factors Affecting Deer Populations

- **Winter severity (snowfall)**
- **Predation**
 - **Wolves**
 - **Bears**
- **Reductions in deer habitat capability and important winter habitat**
- **Increased moose distribution & abundance**



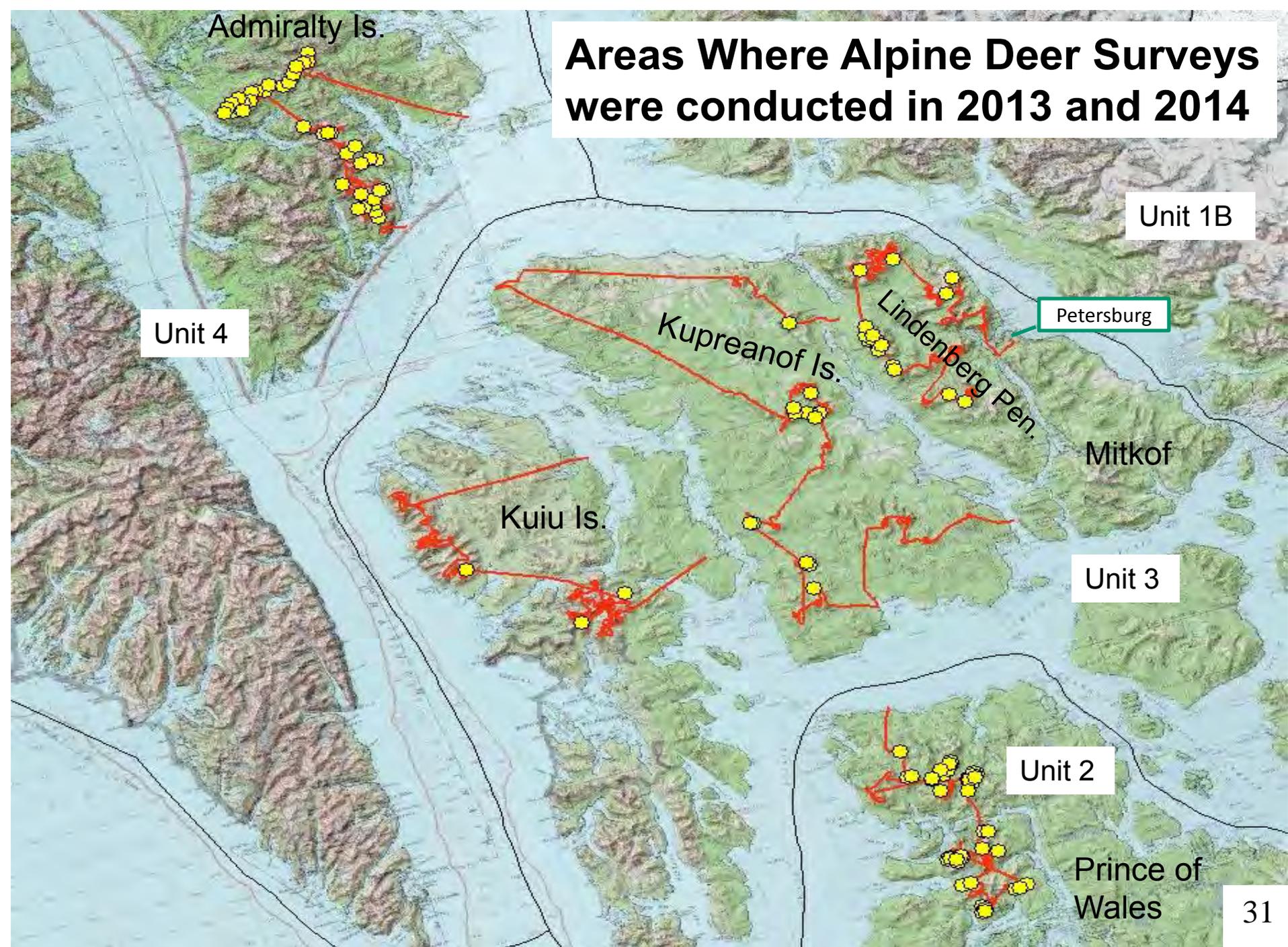
Unit 3 Wolf Harvest (1985–2013)



Alpine Deer Surveys

- One problem we face with regard to implementing IM in Region 1 is how to efficiently assess changes in deer abundance over time? (pre- and post-treatment)
- During late-July and early August of 2013 and 2014 we conducted 13 individual aerial, alpine deer surveys in 5 areas in central SE Alaska:
 - 3 areas in GMU 3 (Lindenberg Peninsula (7 surveys), Western Kupreanof Is., and Kuiu Is.)
 - 1 area in GMU 2 (northern POW and Kosciusko Is.)
 - 1 area in GMU 4 (southern Admiralty Is.)

Areas Where Alpine Deer Surveys were conducted in 2013 and 2014



2013-2014 Deer Surveys

Area (No. of Surveys)	Deer/Survey	Deer/hour
Lindenberg Pen (7) IM Treatment Area	Mean = 33	17 (1.59 SE)
West Kupreanof (1) IM Comparison Area	17	8
North Kuiu (1)	5	3
North POW (1)	85	44
South Admiralty (2)	Mean = 204	114

All surveys were 1.5-2.3 hours in duration

Advantages

- Advantages of alpine deer surveys include ...
 - Provide a direct measure of deer observed in the alpine (as opposed to “indirect” measures)
 - Results instantly available
 - Don’t have to wait to receive data back from lab
 - Relatively inexpensive
 - Doesn’t require excessive staff time
 - Can cover large areas quickly
 - Can compare different areas, provided they have suitable alpine habitat

UNIT 3 RESEARCH ACTIVITIES

Elk



Finishing a multi-year elk collaring effort

17 radiocollared elk with over 55,000 GPS locations

Data analysis & write-up will occur this winter

Deer



Traditional and DNA based population assessments

Browse veg. surveys

Alpine surveys

Wolf



Genetic Sampling

Tissue collection



Any Questions?

PROPOSAL 1

Establish a fall brown bear season for residents in
Unit 3

Petersburg AC Proposal

Department Recommendation:

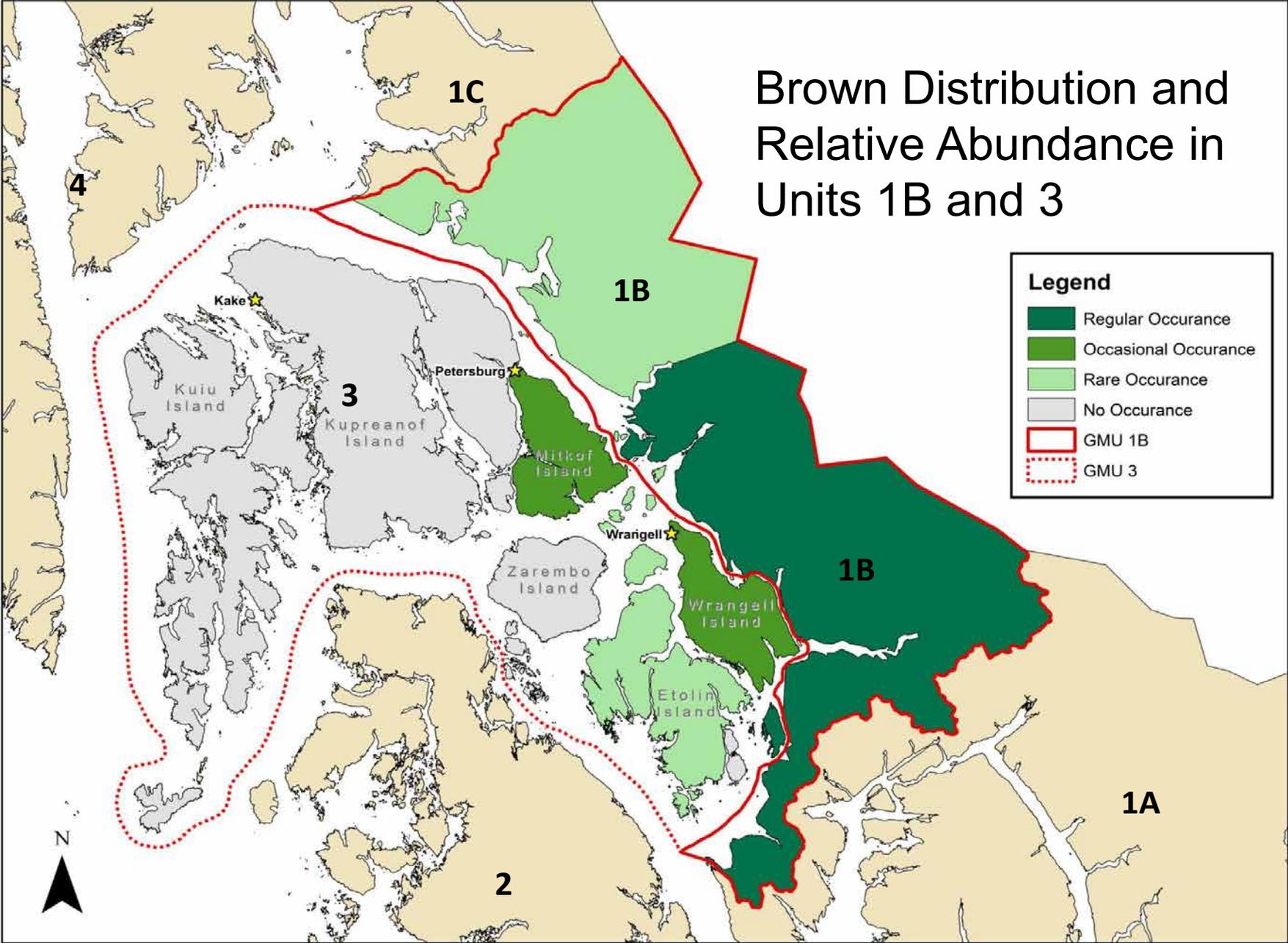
Oppose

AC Recommendations:

Petersburg Support (6 – 4)

Wrangell Support (11 - 0)

Brown Distribution and Relative Abundance in Units 1B and 3



Discussion

- Brown bears inhabit only a few Unit 3 islands adjacent to the mainland
- No precise population estimates for Unit 3 islands
- Population believed to be low on islands where brown bears do occur

Background

- No open season for brown bear in Unit 3 prior to 2005
- In 2004 Board adopted a public proposal to open a resident-only brown bear season in Unit 3 ...proposal included only spring season dates
- Board adopted the proposal as submitted, therefore, since 2006 there has been a spring season but no fall season for brown bear in Unit 3

Background

- Prior to 2004, the Dept. opposed a brown bear season in Unit 3 citing:
 - low bear numbers
 - uncertainty regarding Unit's ability to support a sustainable harvest
- Dept. later reversed position citing high likelihood of population interchange between Unit 1B mainland and Unit 3 bear populations
- Dept. cited that a hunting season might be sustainable if Unit 3 bears were managed as segment of the adjacent Unit 1B population

Current Regulations

Brown Bear		Bag limit	Permit	Season Dates
R	Unit 3	One bear every 4 regulatory years by registration permit only	RB075	15 Mar–31 May
N		No open season		

Discussion

- Despite existing spring season ... few brown bears harvested since 2006
 - 4 bears in 9 years (2006-2014)
 - 0 bears harvested last 6 years (2009-2014)
- Mostly females harvested

RB075 Hunt Summary

Reg. Year	Permits Issued	Hunted	Male Killed	Female Killed	Total Harvest
2013-14	25	9	0	0	0
2012-13	24	3	0	0	0
2011-12	28	7	0	0	0
2010-11	17	2	0	0	0
2009-10	25	11	0	0	0
2008-09	25	9	0	0	0
2007-08	14	6	0	2	2
2006-07	16	8	0	1	1
2005-06	9	5	1	0	1
Average	20	7	0.1	0.3	0.4

Discussion

- **Since 2006:**
 - 3 of 4 bears taken by hunters were females (75%)
 - 1 additional female taken as DLP in 2013
 - 1 additional male killed illegally in 2012
 - Overall, 4 of 6 bears killed were females (67%)
- **DLPs**
 - 4 documented DLPs in last 20 years (2 M, 2 F)
- **Illegal Harvest**
 - 1 documented illegal kill in last 20 years (male)

Unit 1B & 3 Harvest vs. Guidelines

GMU 1B Land Area (mi ²)	Total Brown Bear Habitat (mi ²) ^a	Est. brown bear pop. @ density = .3/mi ²	Max. annual mortality @ 4%	Max. female mortal. @1.5%
3000	353	134	5.4	2.0
Unit 1B & Unit 3 combined: Average annual harvest (2005-2013)			4.4 bears/yr	1.7 Sows/yr
Range			2 - 8 bears/yr	0 - 4 sows/yr

^a Habitat includes clearcuts, seed/sap stands 6-25 yrs, and VC 4 and VC 5+ forested acres

Issues and Concerns

- Questions remain regarding ability of Unit 3 to support a sustainable harvest
- Fall season would likely lead to increased harvest given large numbers of hunters afield
- Higher percentage of female bears typically taken during fall seasons
- Additional harvest (particularly of females) could result in emergency closure of Unit 3 and 1B brown bear hunts

PROPOSAL 1

Establish a fall brown bear season for residents in
Unit 3

Petersburg AC Proposal

Department Recommendation:

Oppose

AC Recommendations:

Petersburg Support (6 – 4)

Wrangell Support (11 - 0)

PROPOSAL 2

Establish a fall brown bear season for residents in Unit 3 (Mitkof Island)

Petersburg AC Proposal

Department Recommendation:

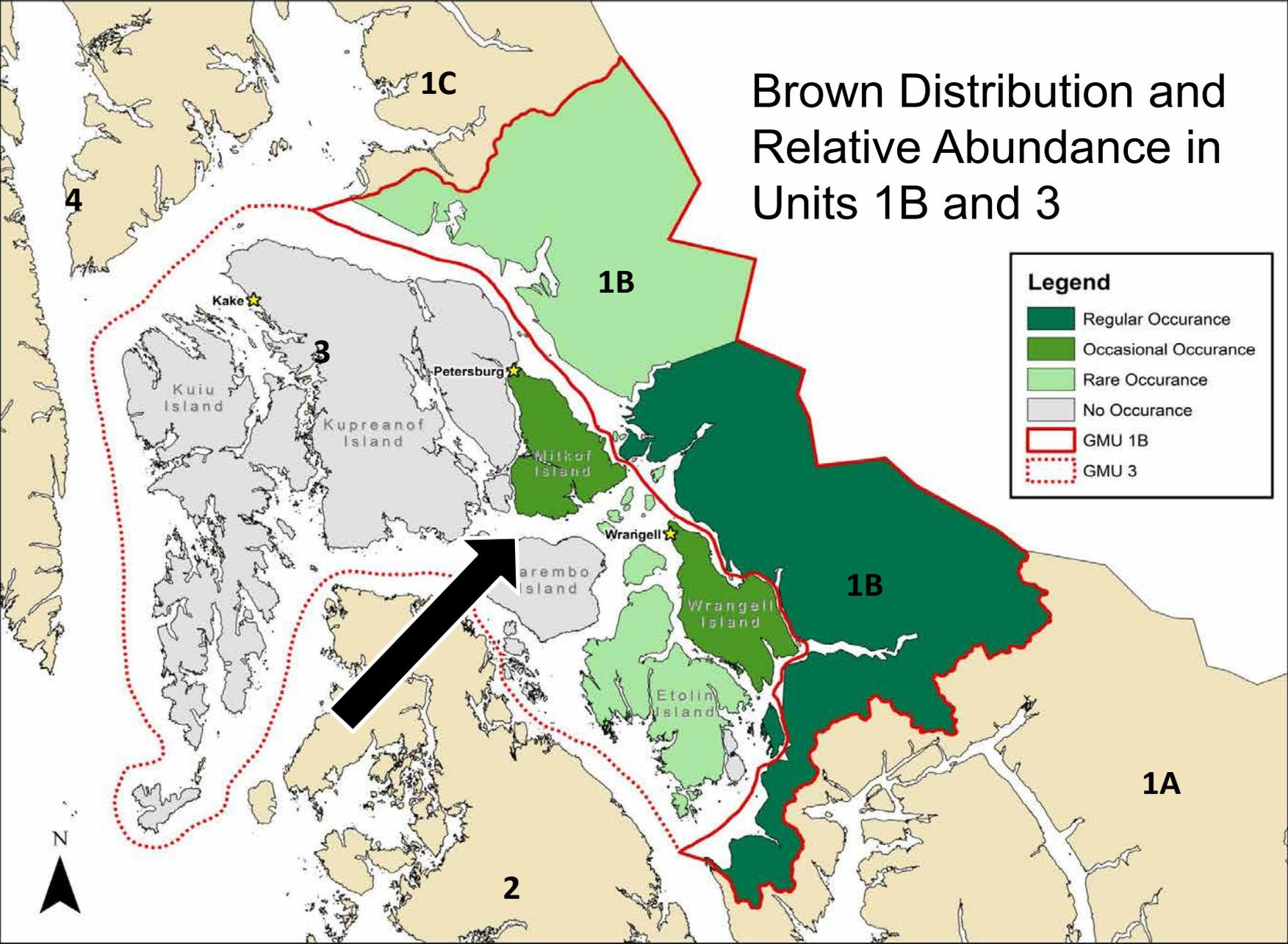
Oppose

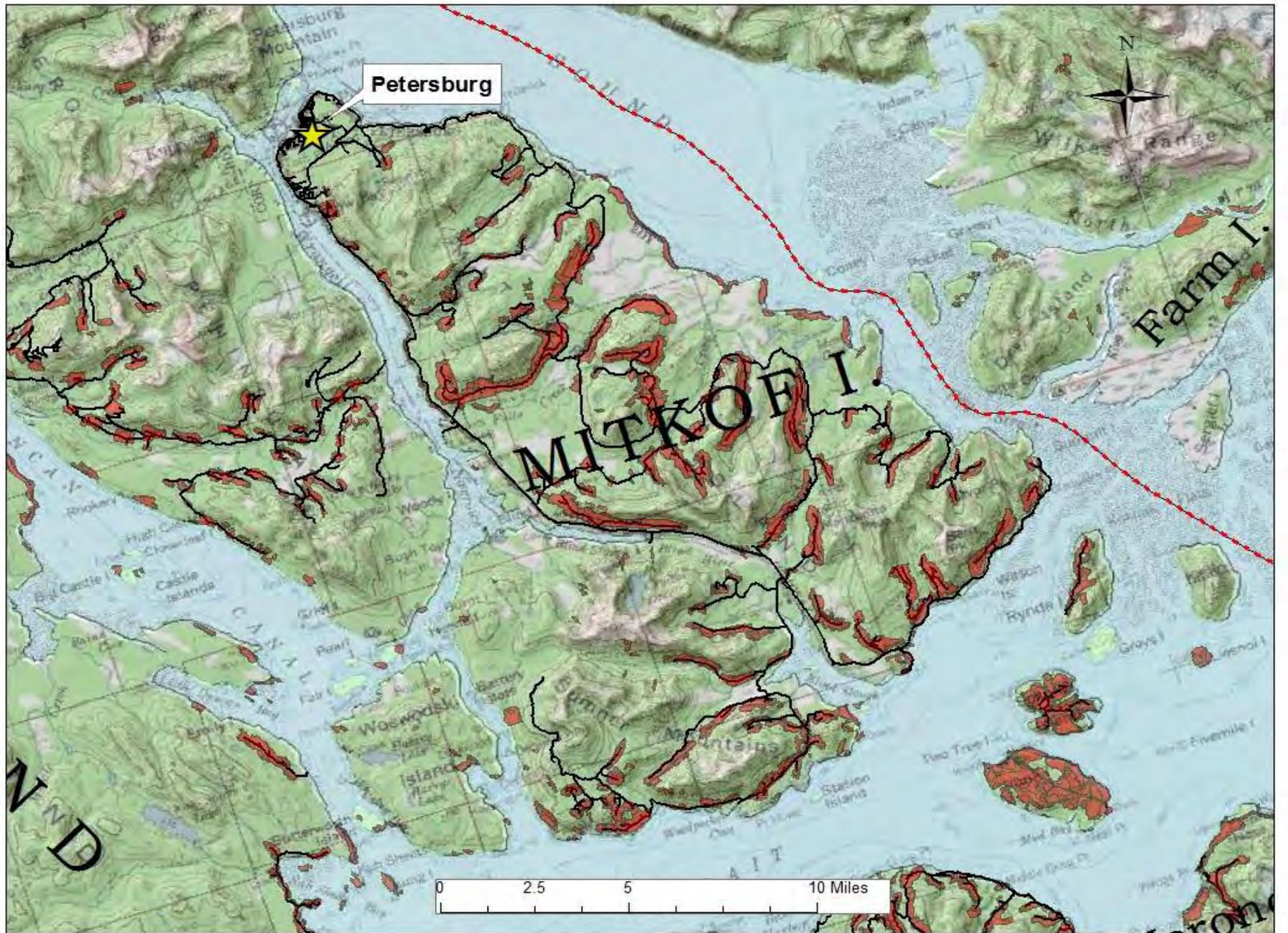
AC Recommendations:

Petersburg Support (8 – 2)

Wrangell Took No Action

Brown Distribution and Relative Abundance in Units 1B and 3





Current Regulation

Brown Bear		Bag limit	Permit	Season Dates
R	Unit 3	One bear every 4 regulatory years by registration permit only	RB075	15 Mar–31 May
N		No open season		

Mitkof Is. Historical Harvest

Hunter Harvest

- Despite spring season since 2006 ... no brown bears legally harvested on Mitkof Is.

DLPs

- 1 documented DLP since 1954
(male in 1998)

Illegal Harvest

- 1 documented illegal kill since 1954
(male in 2012)

Issues and Concerns

- Island-wide population unknown, believed to be no more than a few bears (< 10 bears)
- Fall season would likely lead to increased harvest given large number of hunters afield
- Higher percentage of female bears typically taken during fall seasons
- Ability of Mitkof to support a sustainable harvest by itself is unlikely

PROPOSAL 2

Establish a fall brown bear season for residents in Unit 3 (Mitkof Island)

Petersburg AC Proposal

Department Recommendation:

Oppose

AC Recommendations:

Petersburg Support (8 – 2)

Wrangell Took No Action

PROPOSAL 3

Establish a fall brown bear season for residents in Unit 3

Wrangell AC Proposal

Department Recommendation:

Oppose

AC Recommendations:

Petersburg AC Took No Action

Wrangell AC Support (11 - 0)

Proposal 3

See background and department comments
for Proposal 1

PROPOSAL 3

Establish a fall brown bear season for residents in Unit 3

Wrangell AC Proposal

Department Recommendation:

Oppose

AC Recommendations:

Petersburg AC Took No Action

Wrangell AC Support (11 - 0)

PROPOSAL 4

Clarify the boundaries of the Petersburg Closed Area and Petersburg Management Area

Department Proposal

Department Recommendation:

Support

AC Recommendations:

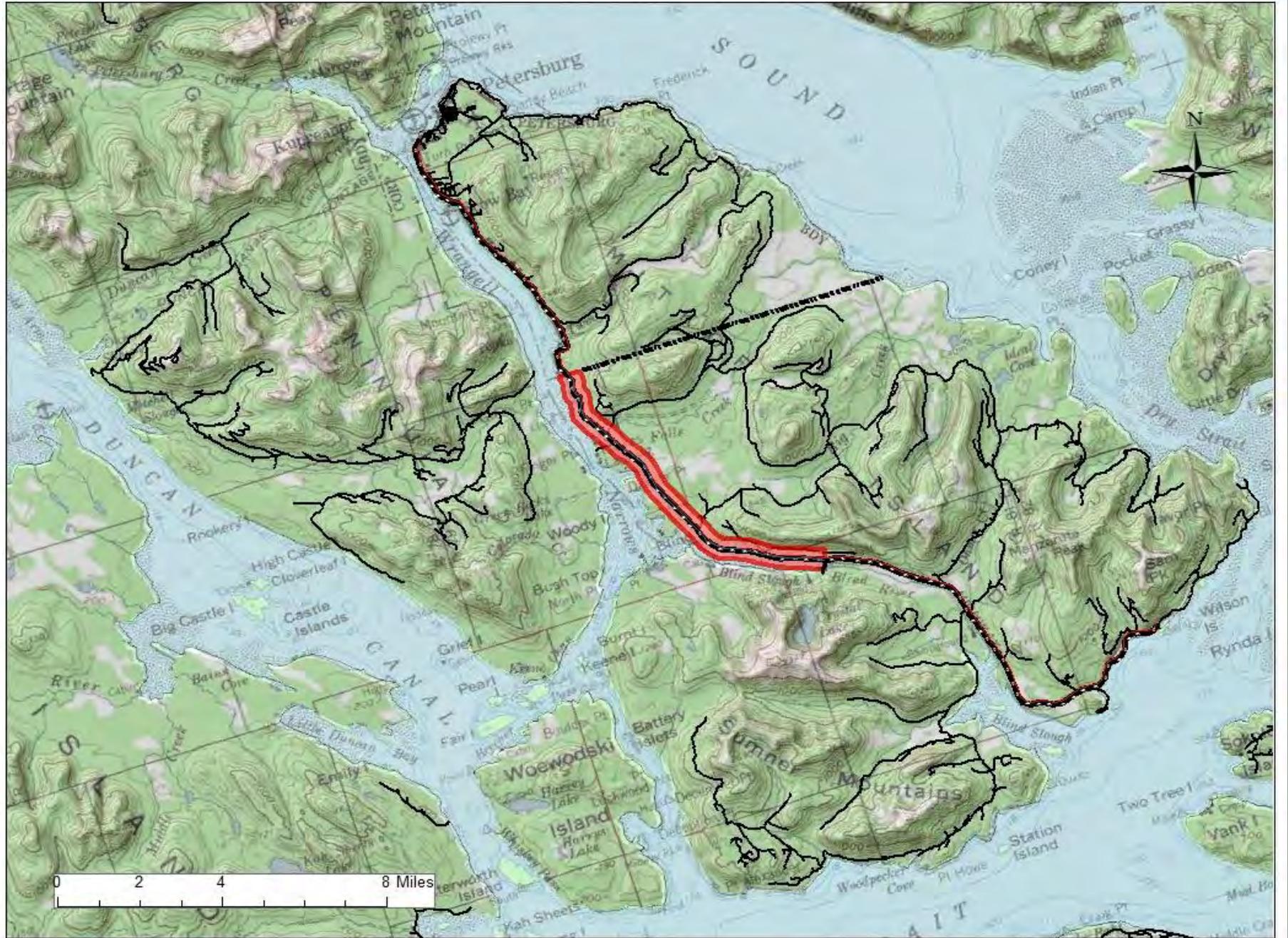
Petersburg AC *Support (10 – 0)*

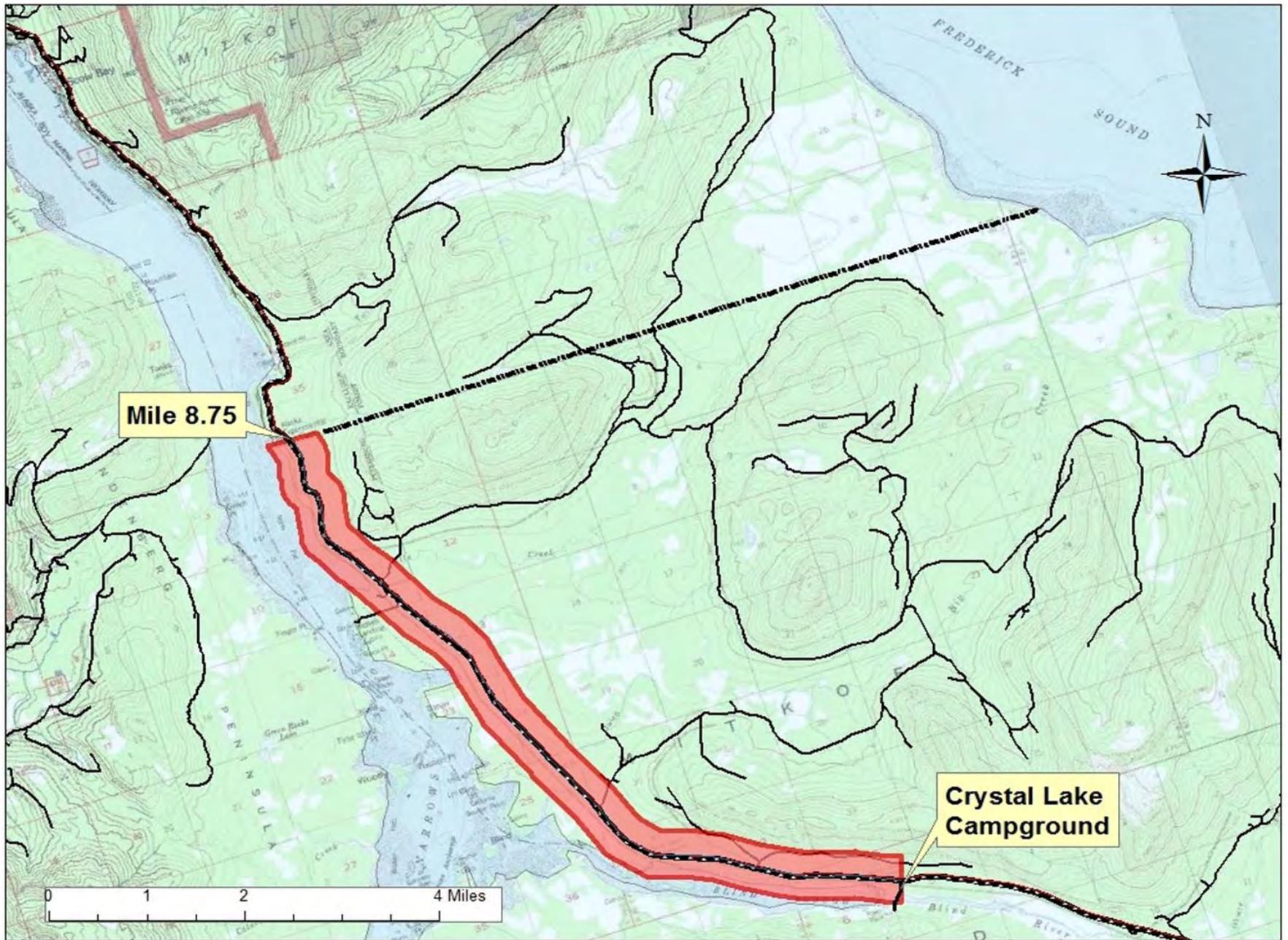
Wrangell AC *Took No Action*

Issue Statement

The Petersburg Borough's recent transition from "city limits" to expanded borough boundaries has resulted in the need to revise the boundary descriptions for the Petersburg Closed Area and the Petersburg Management Area, both of which reference Petersburg city limits.

**Recommended revisions will not change the size or shape of the existing closed areas*





Recommended Revision

5 AAC 92.510. Areas closed to hunting.

(5) Unit 3:

(B) in the Petersburg vicinity, a strip one-fourth mile wide on each side of the Mitkof Highway from mile 8.75 of Mitkof Highway [or] 56° 42' 24"N latitude [THE PETERSBURG CITY LIMITS] to Crystal Lake campground is closed to the taking of big game, except wolves;

Petersburg Management Area

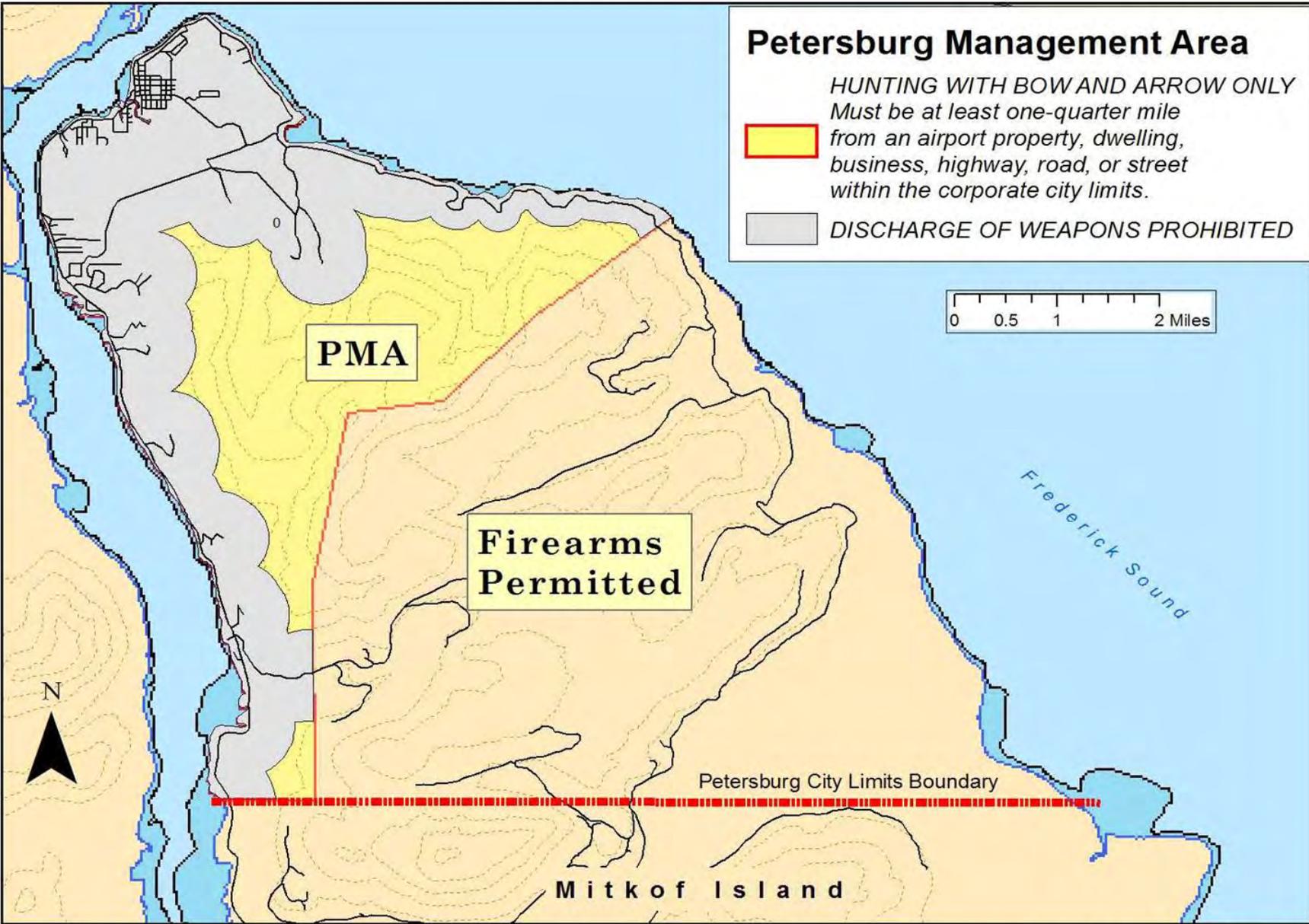
Archery-only area established in 2003 to both provide additional hunting opportunity and help alleviate nuisance deer problems and deer/vehicle collisions within Petersburg residential areas.

Petersburg Management Area

HUNTING WITH BOW AND ARROW ONLY
Must be at least one-quarter mile
from an airport property, dwelling,
business, highway, road, or street
within the corporate city limits.



DISCHARGE OF WEAPONS PROHIBITED

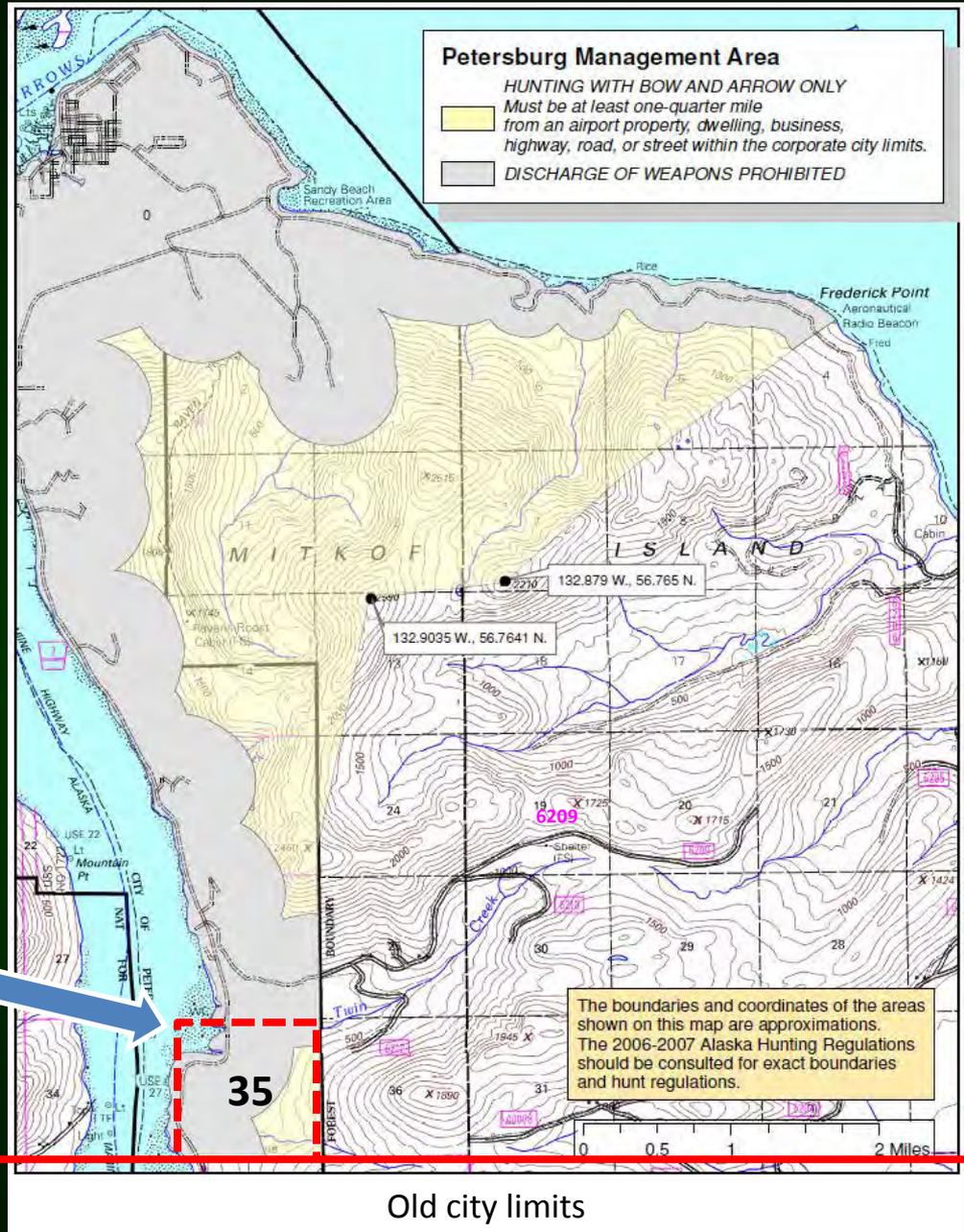


Created: Nov. 2006. ADFG-DWC Petersburg

Southern boundary of
Section 35, T59S, R79E

Or

56° 42' 24 N latitude



Recommended Revisions

5 AAC 92.510. Management Areas.

(24) the Petersburg Management Area:

- (A) the areas consists of that portion of Unit 3 on Mitkof Island north and west of a line from Frederick Point to the highest point in Section 8, T59S, R90E, to the highest point in Section 7, T59S, R80E, to the highest point in Section 13, T59S, R90E, to the highest point in Section 23, T59S, R79E, then due south to the southern boundary of Section 35, T59S, R79E [or] 56° 42' 24 N latitude [THE PETERSBURG CITY BOUNDARY]; and at least one-quarter mile from any airport property, dwellings, businesses, highways, roads or streets within Petersburg Borough's Service Area 1 [THE CORPORATE CITY LIMITS];

PROPOSAL 4

Clarify the boundaries of the Petersburg Closed Area and Petersburg Management Area

Department Proposal

Department Recommendation:

Support

AC Recommendations:

Petersburg AC *Support (10 – 0)*

Wrangell AC *Took No Action*

PROPOSAL 5

Clarify the boundaries of the Wrangell Closed Area

Department Proposal

Department Recommendation:

Support

AC Recommendations:

Petersburg *Took No Action*

Wrangell *Support (11 - 0)*

Issue Statement

The City and Borough of Wrangell's recent transition from city limits to expanded borough boundaries has resulted in the need to revise the boundary description for the Wrangell Road System Closed Area.

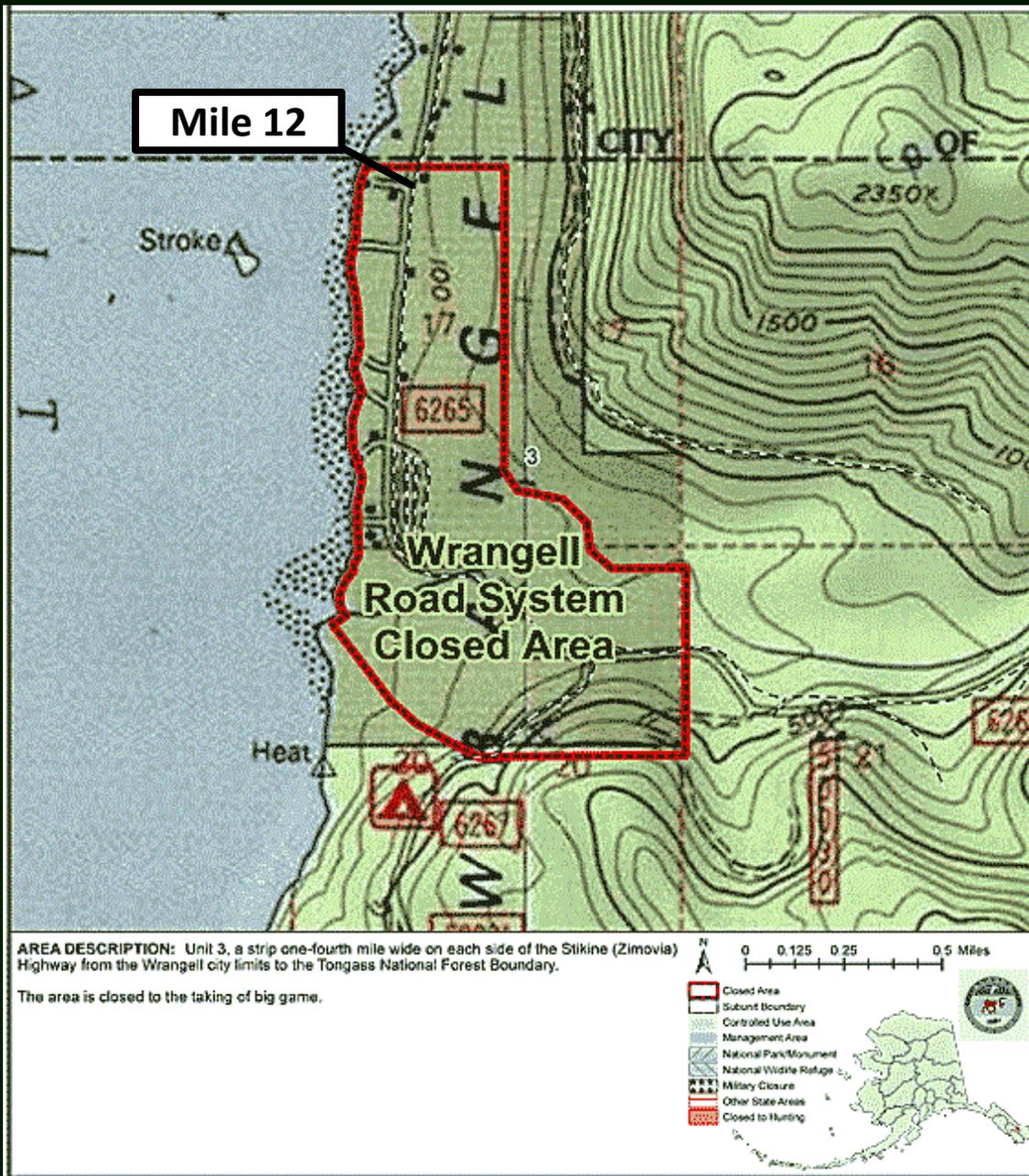
**Although recommended revision will result in a slight enlargement of the closed area (0.1 mile), it will not result in any additional loss of hunting opportunity due to overlap with an existing Borough ordinance prohibiting weapons discharge in the enlarged portion.*

Wrangell Closed Area

Wrangell Road System Closed Area:

a strip $\frac{1}{4}$ mile wide each side of the Stikine (Zimovia) Highway from the Wrangell city limits to the Tongass National Forest boundary

Reference to “city limits” is problematic



U:\WC\Operations\ArcView\ACL_wrangellroads.mxd 3/23/05 11:04 1068 3282012.sxd

Recommended Revision

5 AAC 92.510. Areas closed to hunting.

(5) Unit 3:

(A) a strip one-fourth mile wide on each side of the Stikine (Zimovia) Highway from mile marker 12.0 of Stikine (Zimovia) Highway [THE WRANGELL CITY LIMITS] to the Tongass national Forest Boundary is closed to the taking of big game;

PROPOSAL 5

Clarify the boundaries of the Wrangell Closed Area

Department Proposal

Department Recommendation:

Support

AC Recommendations:

Petersburg *Took No Action*

Wrangell *Support (11 - 0)*

PROPOSAL 6

Redefine “broken antler” for moose in
Units 1 and 3

Wrangell AC Proposal

Department Recommendation:

Oppose

AC Recommendations:

Petersburg Oppose (0 – 10)

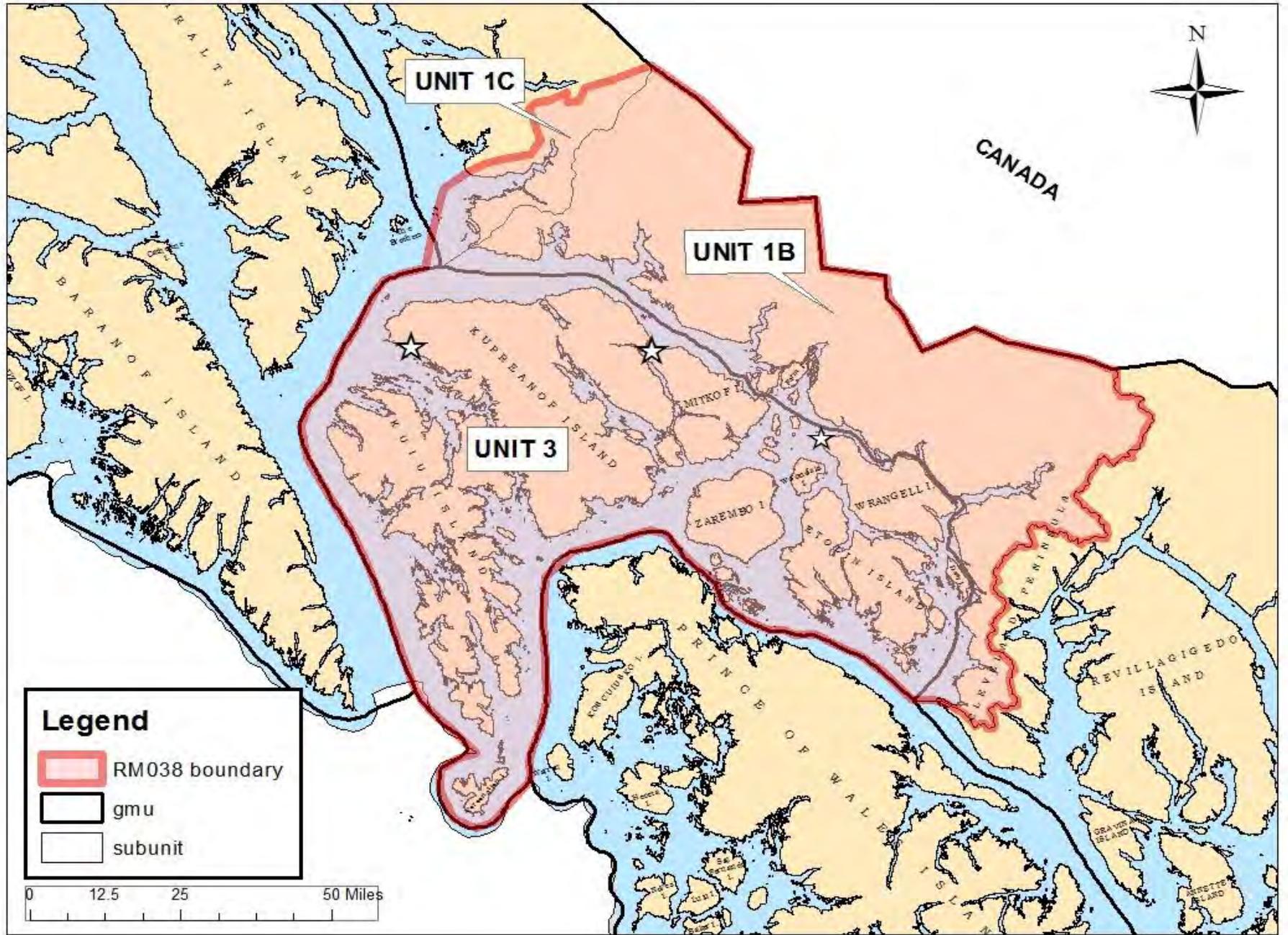
Wrangell Support (11 - 0)

Clarification

It was the intent of the proponent (Wrangell AC) that the proposed regulation apply to the entire RM038 hunt area, not just the Unit 1 and Unit 3 portions.

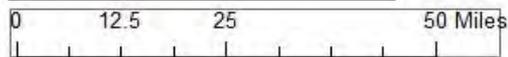
Note also; the existing “damaged, broken, or altered” antler regulation only applies in the subunit 1(B) and 1(C) portions of the RM038 hunt area and not the remainder of GMU 1. The proponent is not requesting expansion of the damaged antler regulation to the remainder of Unit 1.

Therefore, the affected area should be the RM038 hunt area which includes Unit 1(B), that portion of Unit 1(C) south of Port Hobart, including all Port Houghton drainages, and Unit 3.



Legend

- RM038 boundary
- gm u
- subunit



Clarification

Redefine “broken antler” for moose in the RM038
hunt area [UNITS 1 AND 3]

The proponent recommends revising the existing RM038 “damaged, broken, or altered” antler regulation so that an antler that was damaged naturally while developing is not considered illegal under the “damaged, broken, or altered” antler regulation.



Issue Statement

- The existing “*damaged, broken, or altered*” regulation was implemented in 2007 to prevent the intentional modification of antlers to achieve compliance with the specified point requirements.
- The proponent seeks to have the department and AWT personnel disregard older “healed over” breaks when evaluating compliance with the “damaged, broken or altered” antler regulation.

Existing RM038 Antler Regulations

The RM038 antler regulations are already the most liberal and complex in the state

One bull with a ...

- Spike – Forked antler
- 50” Spread
- 3 or more brow tines on one antler
- 2 brow tines on both antler
- *A damaged, broken or altered antler is not considered a spike or fork in the RM038 hunt*

Discussion

- In some cases it may be possible to differentiate between obviously “old” vs. obviously “recent” antler damage.
- However, the proposed regulation would create a gray area in which making such a determination becomes difficult or impossible.
- It may be possible to intentionally modify antlers to make recent damage appear older than it is.
- This proposal would open a loophole in the existing damaged antler regulation.

Discussion

- The existing RM038 selective harvest strategy provides an appropriate level of harvest
- RM038 moose harvest is increasing
- Moose distribution and abundance appear to be increasing

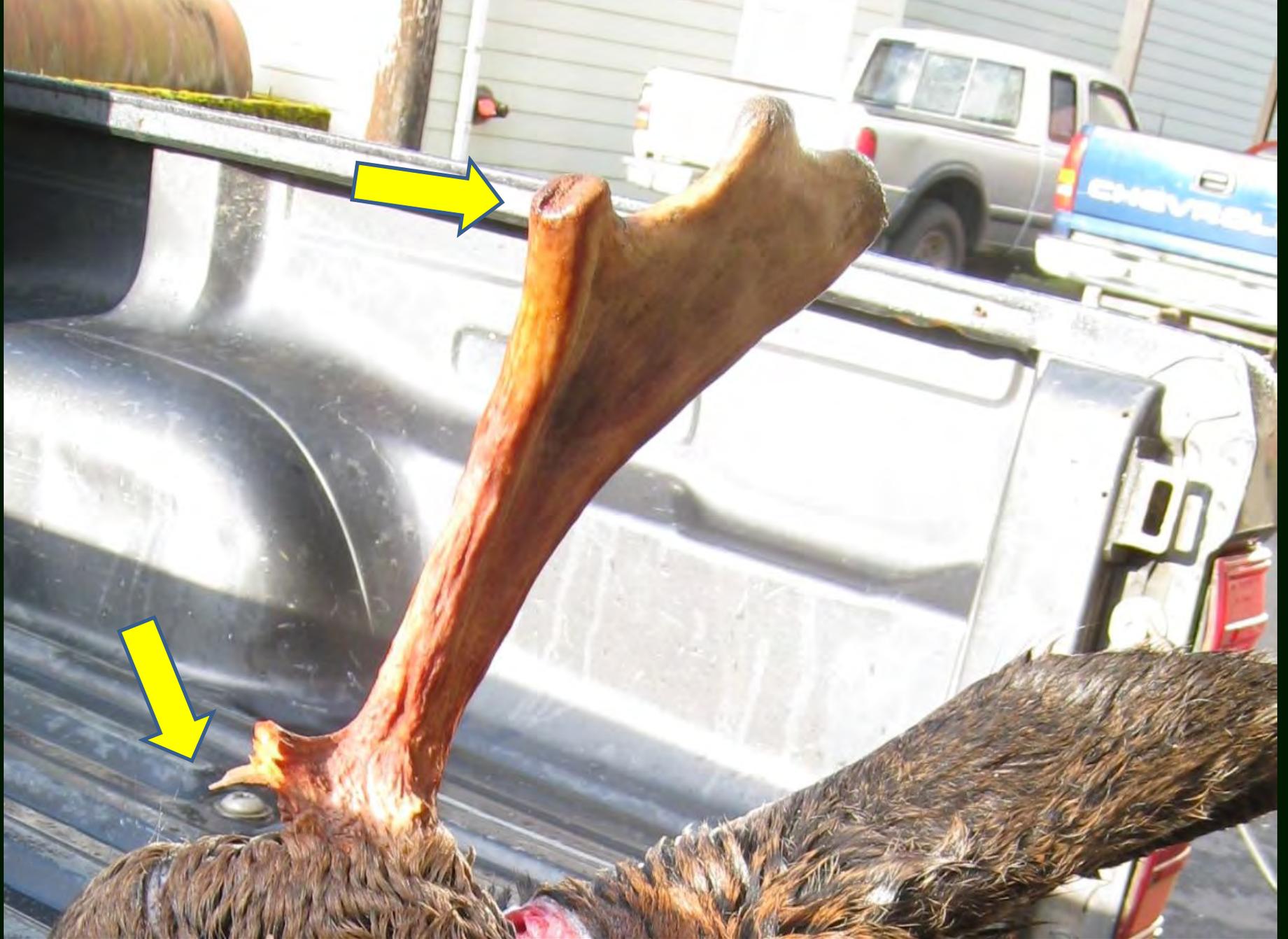
RM038 Moose Harvest













Discussion

- The existing damaged, broken, or altered antler regulation remains a necessary component of the RM038 antler restrictions.
- Has been effective in deterring the intentional modification of antlers.
- Noncompliance with existing damaged antler regulation is a relatively rare occurrence.
 - Since 2007, 12 of ~639 antlers disqualified due to damage or breaks

Issues and Concerns

- Proposed regulation would require that hunters, hunt managers, and enforcement personnel be able to reliably determine when an antler was damaged (not always possible).
- Would further complicate already complex antler regulations.
- Would create a loophole in the existing regulation.
- Could result in additional violations as hunters attempt to determine if antler damage is old or recent.

PROPOSAL 6

Redefine “broken antler” for moose in
Units 1 and 3

Wrangell AC Proposal

Department Recommendation:

Oppose

AC Recommendations:

Petersburg Oppose (0 – 10)

Wrangell Support (11 - 0)

PROPOSAL 7

Define “points” for forked moose antlers for
the RM038 registration hunt in Unit 1C

Wrangell AC Proposal

Department Recommendation:

Oppose

AC Recommendations:

Petersburg Oppose (0 – 10)

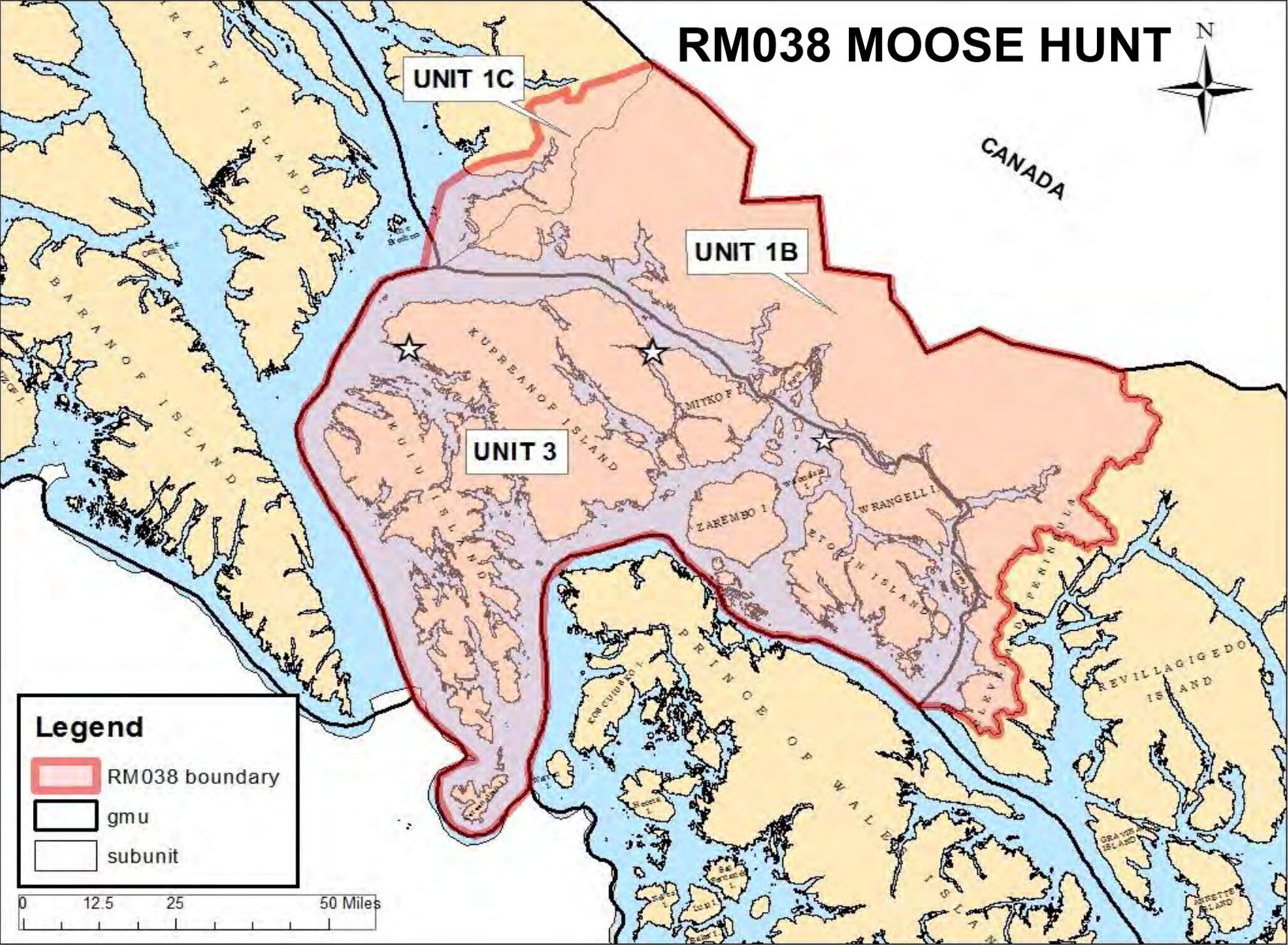
Wrangell Support (11 - 0)

Clarification

It was the intent of the Wrangell AC that the proposed regulation apply to the entire RM038 hunt area, not just the Unit 1(C) portion

Therefore, the affected area should include Unit 1(B), that portion of Unit 1(C) south of Port Hobart, including all Port Houghton drainages, and Unit 3

RM038 MOOSE HUNT



Clarification

The proposal requests that ...

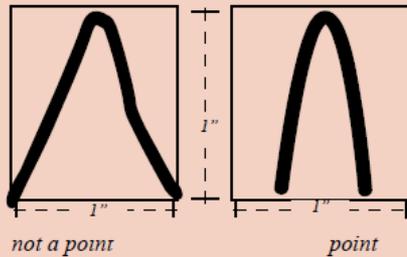
- When evaluating compliance with the RM038 forked antler provision, disregard (do not count) moose antler points that emerge from base of the antler (or antler burr) that are shorter than the moose's ear.



Discussion

- The existing “point” and “fork” antler definitions are statewide regulations

Identifying a point or tine:



A point or tine is an antler projection at least one inch long, and longer than it is wide, with the width measured one inch or more from the tip.

A spike-fork bull is legal if it has one antler on either side that is a SPIKE (1 point) or a FORK (2 points). The antler on the other side can be any configuration. Bulls with palmated antlers (paddles) seldom are legal under the “spike or fork” requirement.

If antlers must be salvaged, they may not be altered prior to completion of all salvage requirements. A damaged, broken or altered antler is not considered a spike-fork antler in Units 1B, that portion of 1C south of Point Hobart, including all Port Houghton drainages, and 3.



2014-2015 Alaska Hunting Regulations 31

- Area specific definitions are problematic

Existing RM038 Antler Regulations

The RM038 antler regulations are already the most liberal (and complex) in the state

One bull with ...

- Spike – Forked antler
- 50" Spread
- 3 or more brow tines on one antler
- 2 brow tines on both antlers
- A damaged, broken or altered antler is not considered a spike or fork

Issue Statement

- Points emerging from moose antler burrs (at base of antler) often meet the legal definition of a point or tine (*1" long and longer than wide*).
- These projections can be little more than an inch long, and nearly impossible to detect until an animal has been killed and approached.
- However ... burr points can also be large conspicuous points measuring 12 or more inches in length.







Issues and Concerns

- The existing definitions of a “point,” and “a forked antler,” are statewide regulations.
- Area specific antler definitions are problematic.
- The RM038 antler restrictions are the most liberal in the state.
- Proposed regulation adds additional complexity.
- The existing RM038 selective harvest strategy provides the appropriate level of harvest.

Issues and Concerns

- Violations related to burr points emerging from the base of the antler are exceedingly rare.
 - Approximately 4 of 640 sets of antlers evaluated since 2007 had burr points that resulted in illegal harvests.
- Ignoring burr points of a specified length may increase number of violations as hunters attempt to gauge whether a projection off the base will, or will not count

PROPOSAL 7

Define “points” for forked moose antlers for
the RM038 registration hunt in Unit 1C

Wrangell AC Proposal

Department Recommendation:

Oppose

AC Recommendations:

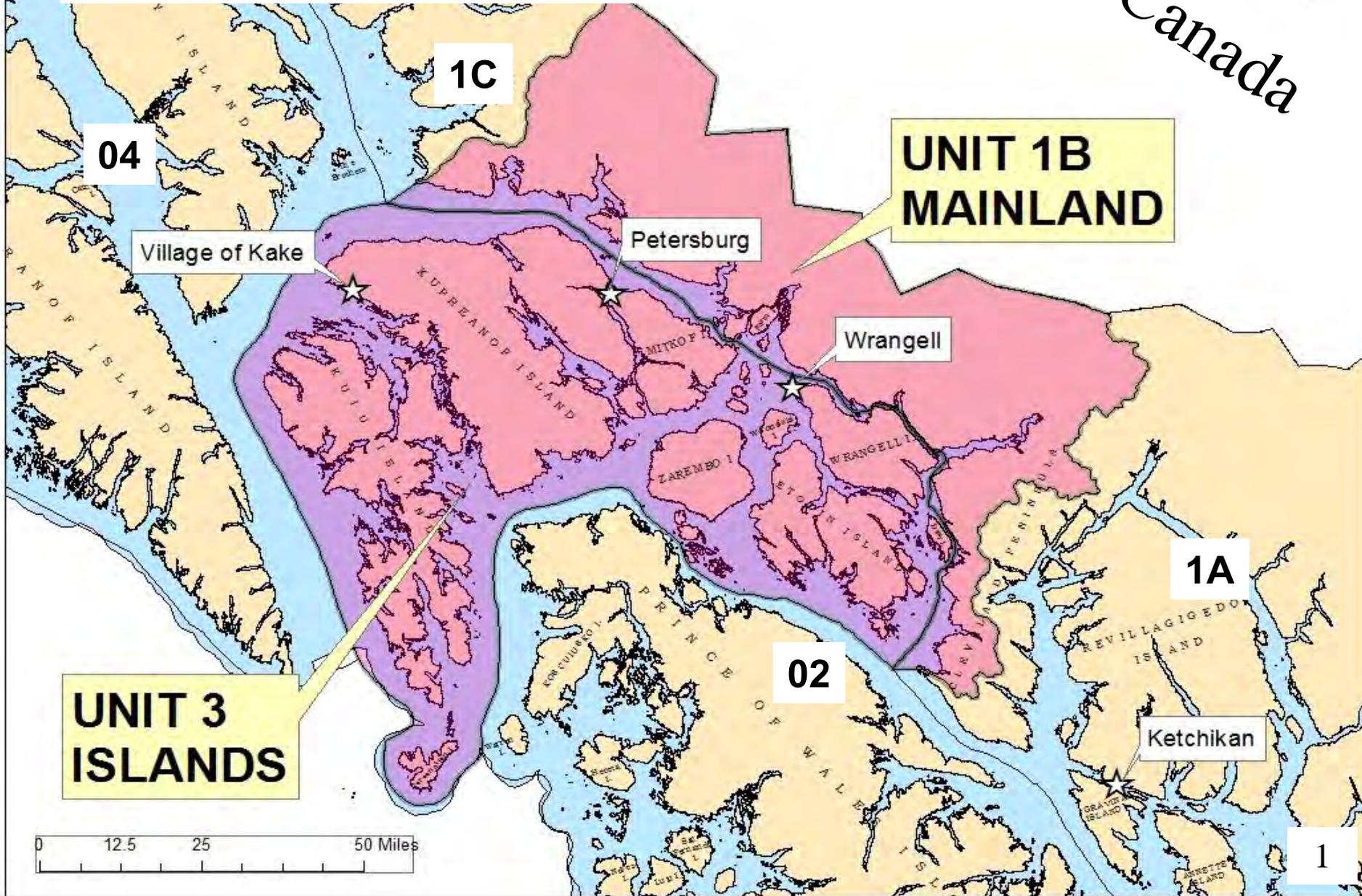
Petersburg Oppose (0 – 10)

Wrangell Support (11 - 0)

Petersburg Management Area



Canada



1C

04

Village of Kake

Petersburg

UNIT 1B
MAINLAND

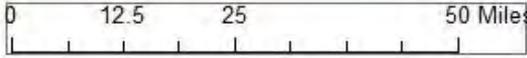
Wrangell

1A

02

UNIT 3
ISLANDS

Ketchikan



1





Commercial Fishing & Processing

Big Game Guiding



Charter Fishing



Tourism & Wildlife Viewing

Forest Management



BIG GAME SPECIES

- **Deer**
- **Moose**
- **Mtn. Goat** (1B only)
- **Elk** (Unit 3 only)
- **Black Bear**
- **Brown Bear**
- **Wolf**



FURBEARERS

- Marten *
- River Otter *
- Wolves *
- Beaver
- Mink
- Ermine
- Wolverine

No Mgmt. Concerns



SMALL GAME SPECIES



Waterfowl

No Mgmt. Concerns

Grouse/Ptarmigan



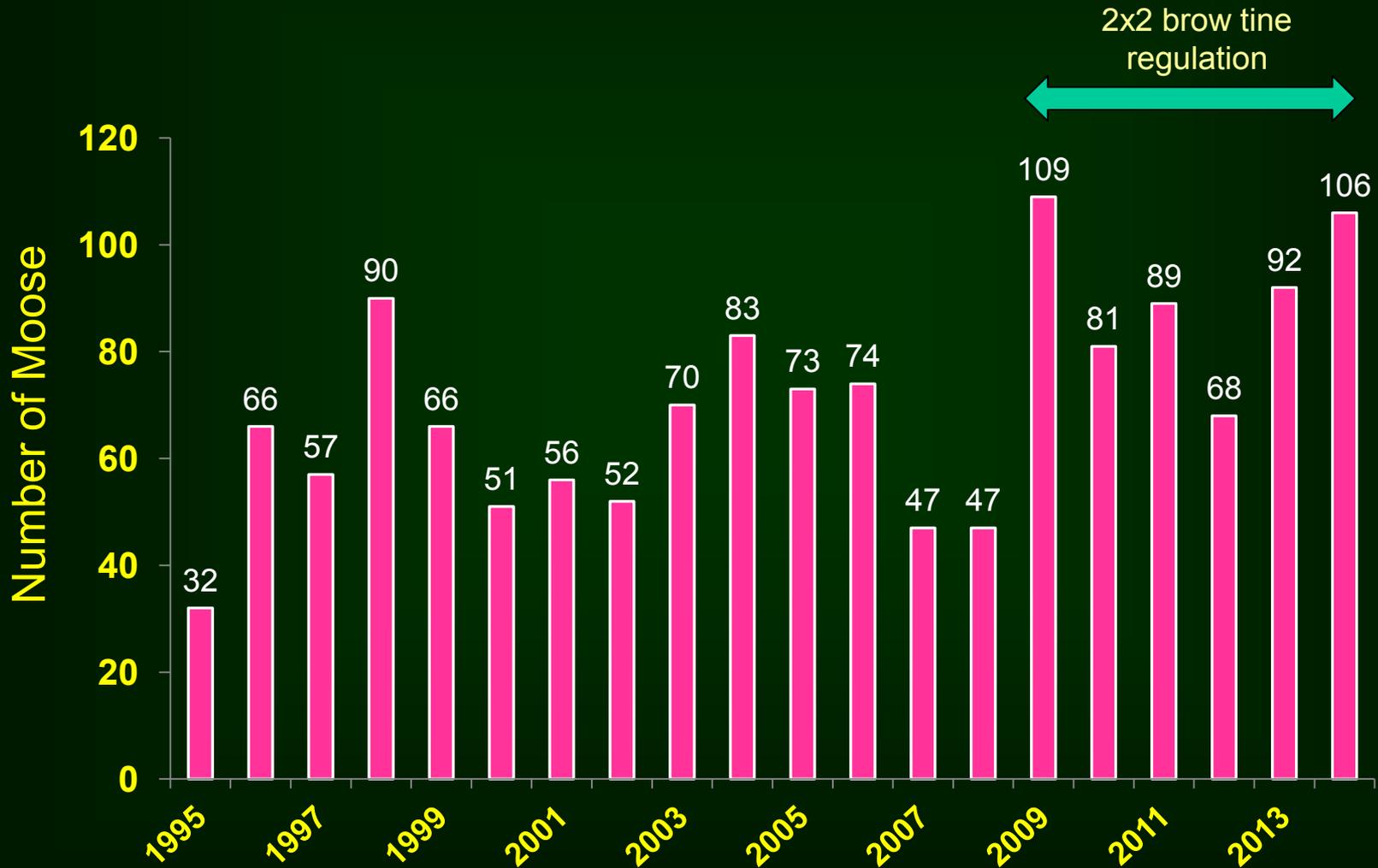
RM038 Moose Hunt

Unit 1B, 3 and southern 1C

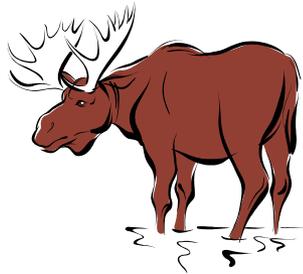
- Increasing popularity
- Over 1000 people register
- Gaining regionwide interest



RM038 Moose Harvest



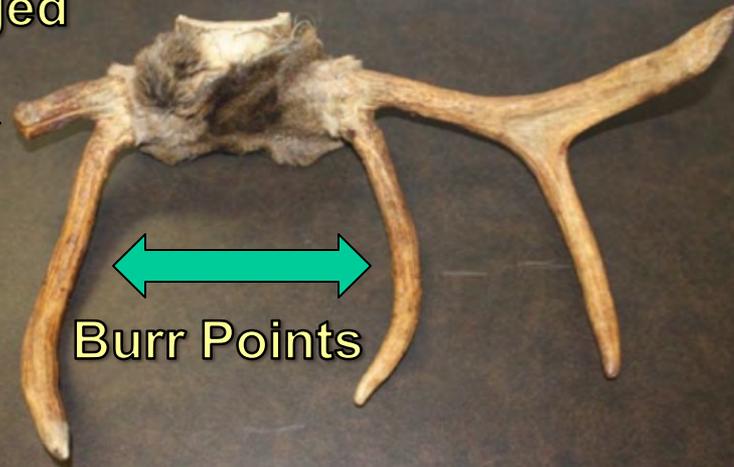
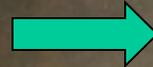
RM038 Moose Antler Restrictions



?



Broken /
Damaged



Burr Points

Further discussion
during Proposals 6 & 7

Brown Bear

Brown bears most prevalent on Unit 1B Mainland

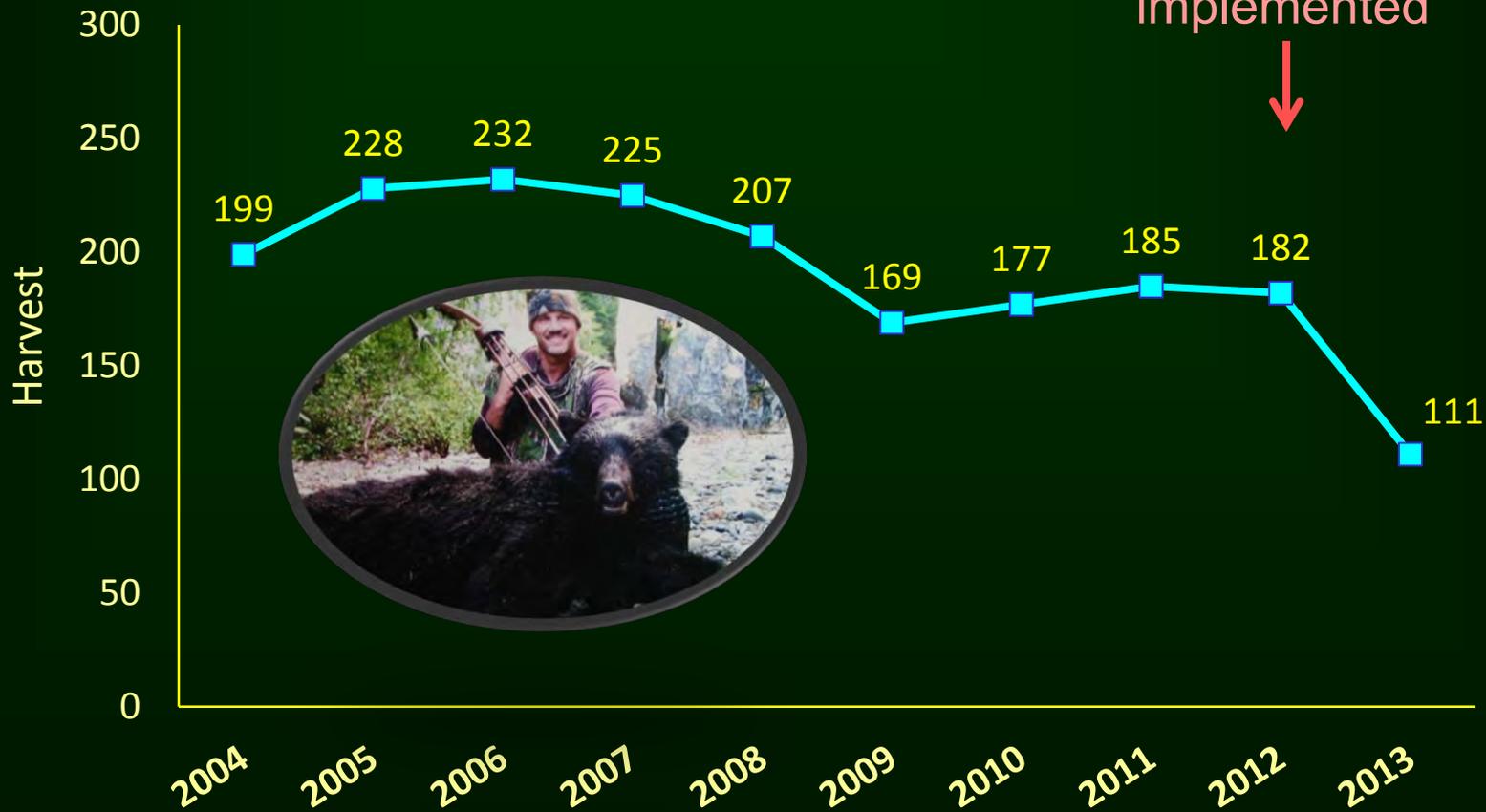
- **Low numbers occur in Unit 3, but only on those islands adjacent to mainland**
- **Uncertainty regarding Unit 3's ability to support a sustainable harvest**

Further discussion during proposals 1 -2 - 3



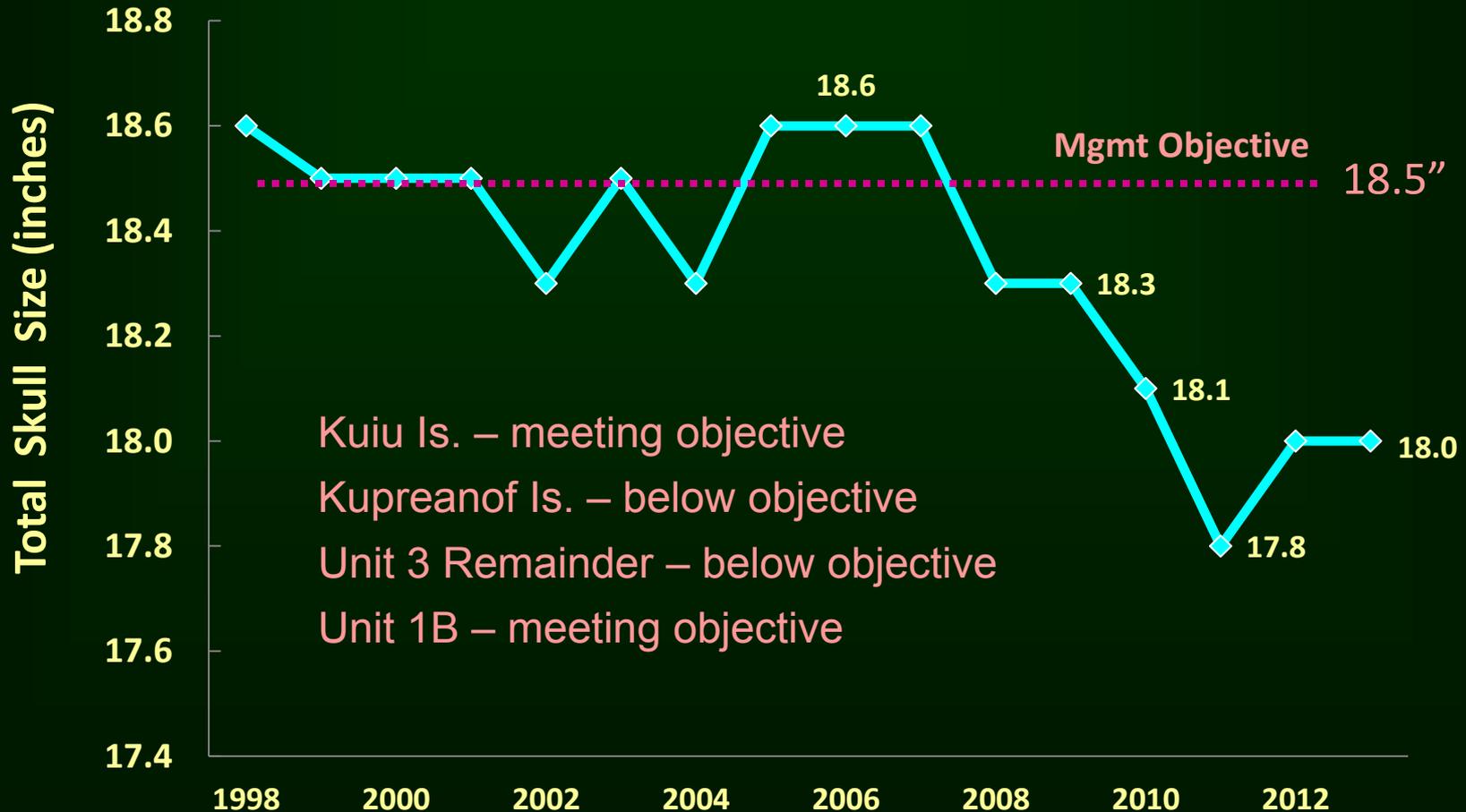
Unit 3 Black Bear Harvest (2004-2013)

Nonresident
draw permits
implemented



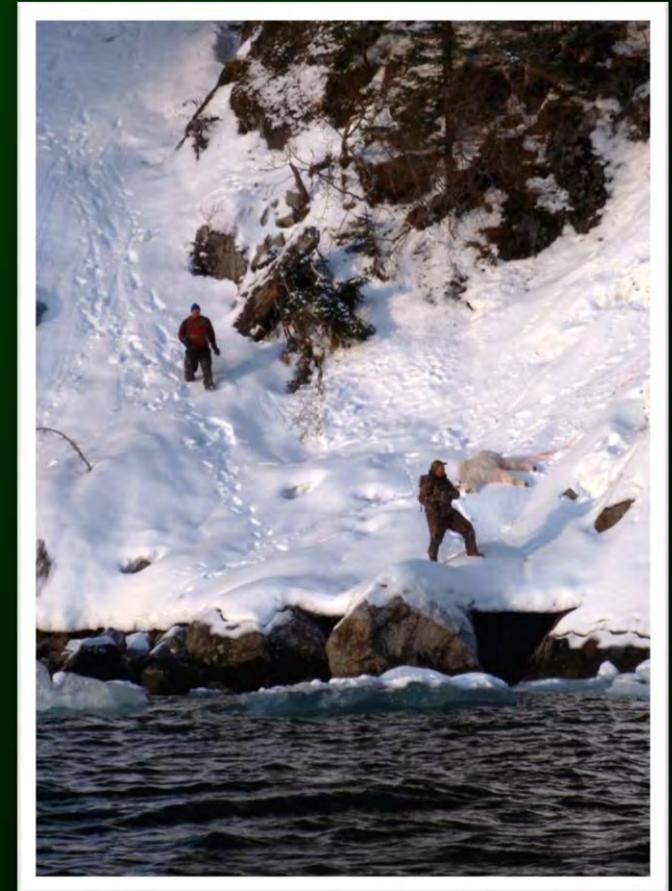
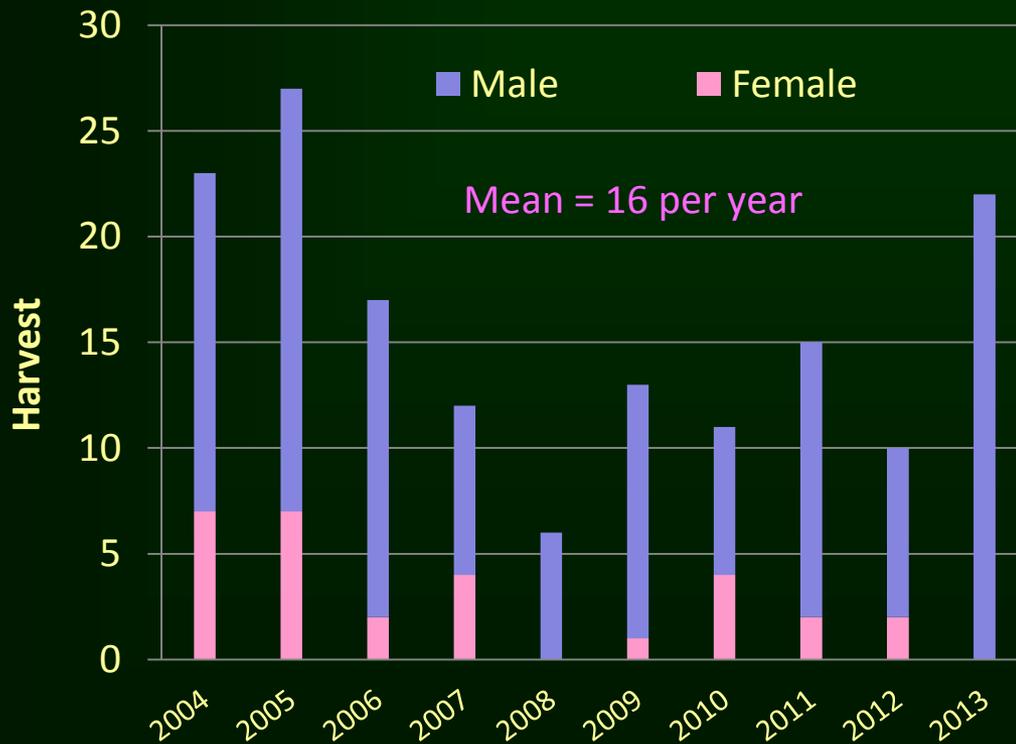
Black Bear Mgmt. Concern

Unit 3 Mean Male Skull Size

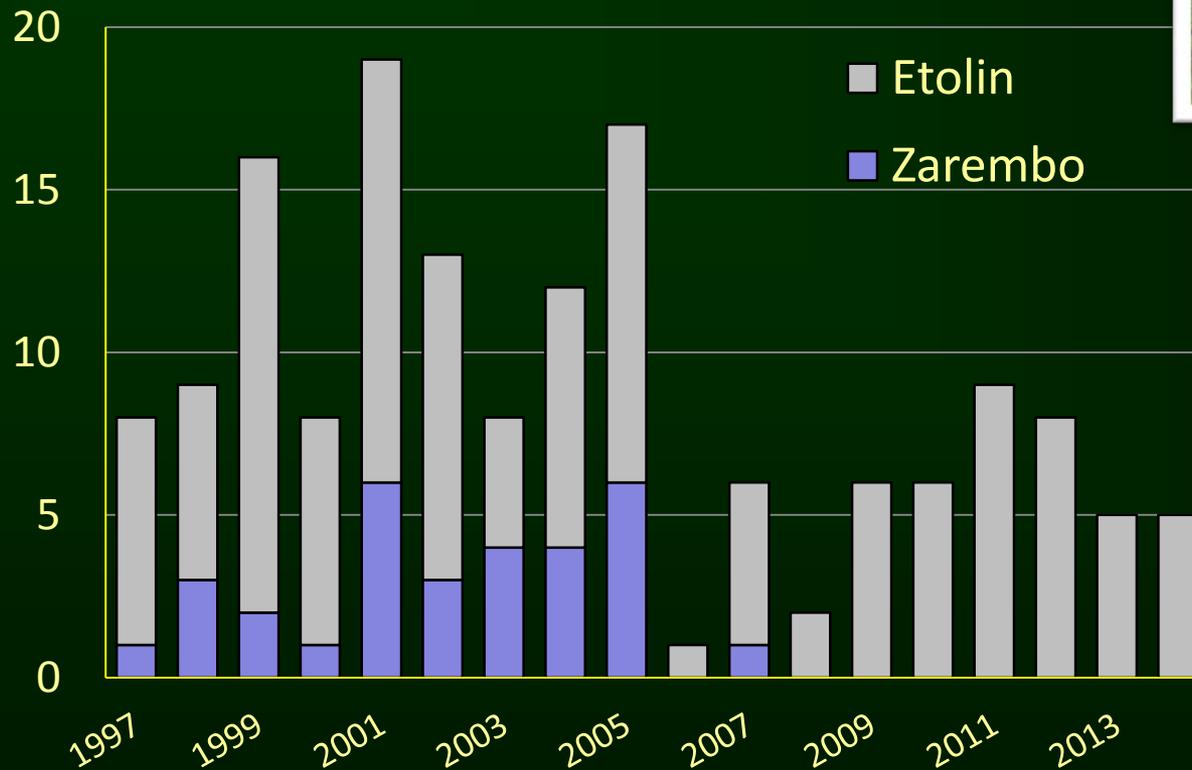


Mountain Goats (Unit 1B)

Unit 1B Goat Harvest (2004-2013)



Unit 3 Elk Harvest (1997-2014)



Long-term average = 9/year

Recent 10-year average = 6.5/year

← Zarembo closed To elk hunting →

Big Game Management Concerns





Habitat Alteration

**LINDENBERG
PENINSULA
1954
ORIGINAL CONDITION**

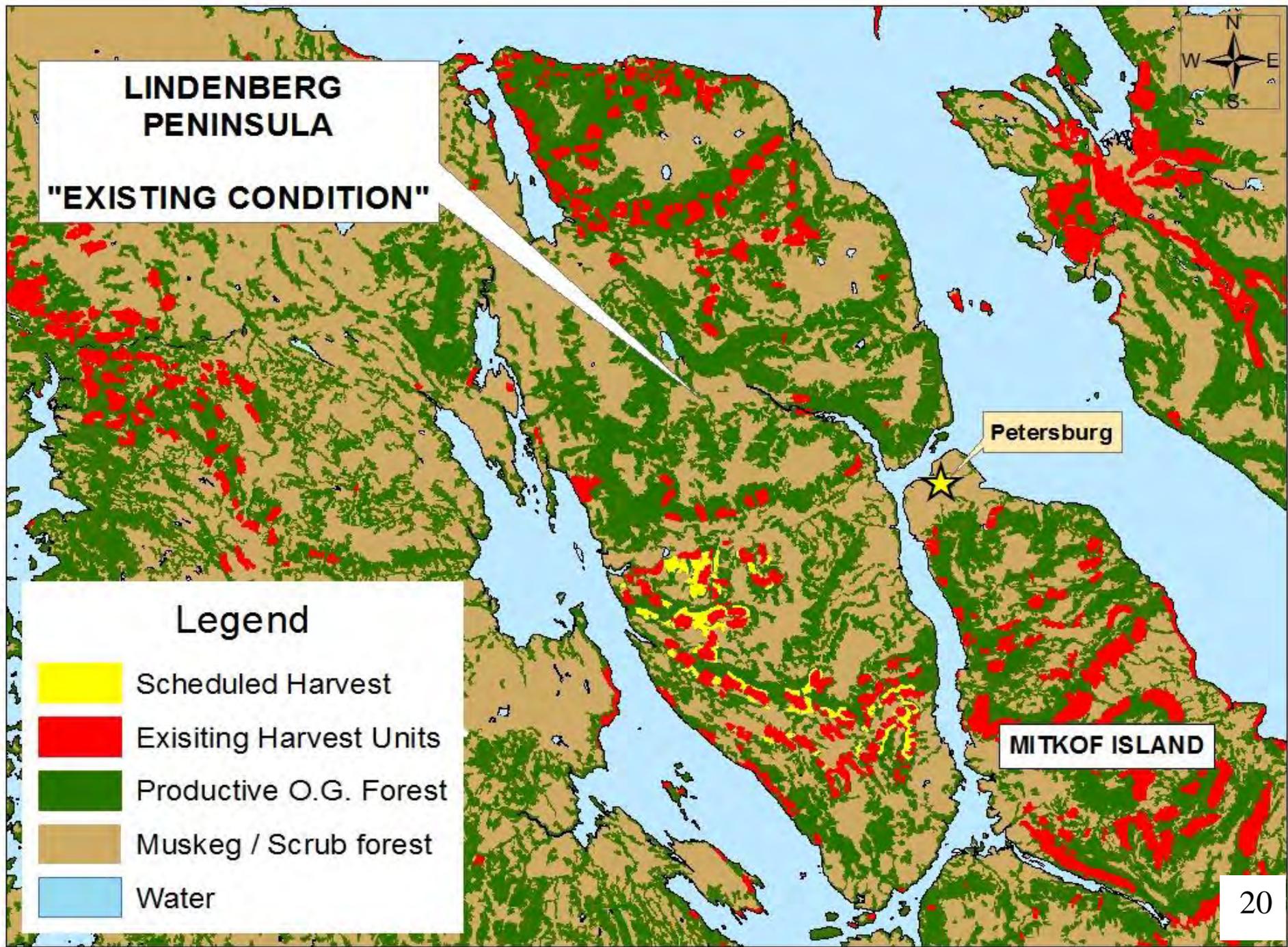


Petersburg

MITKOF ISLAND

Legend

-  Productive O.G. Forest
-  Muskeg / Scrub forest
-  Water

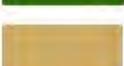


**LINDENBERG
PENINSULA**
"EXISTING CONDITION"

Petersburg

MITKOF ISLAND

Legend

-  Scheduled Harvest
-  Existing Harvest Units
-  Productive O.G. Forest
-  Muskeg / Scrub forest
-  Water







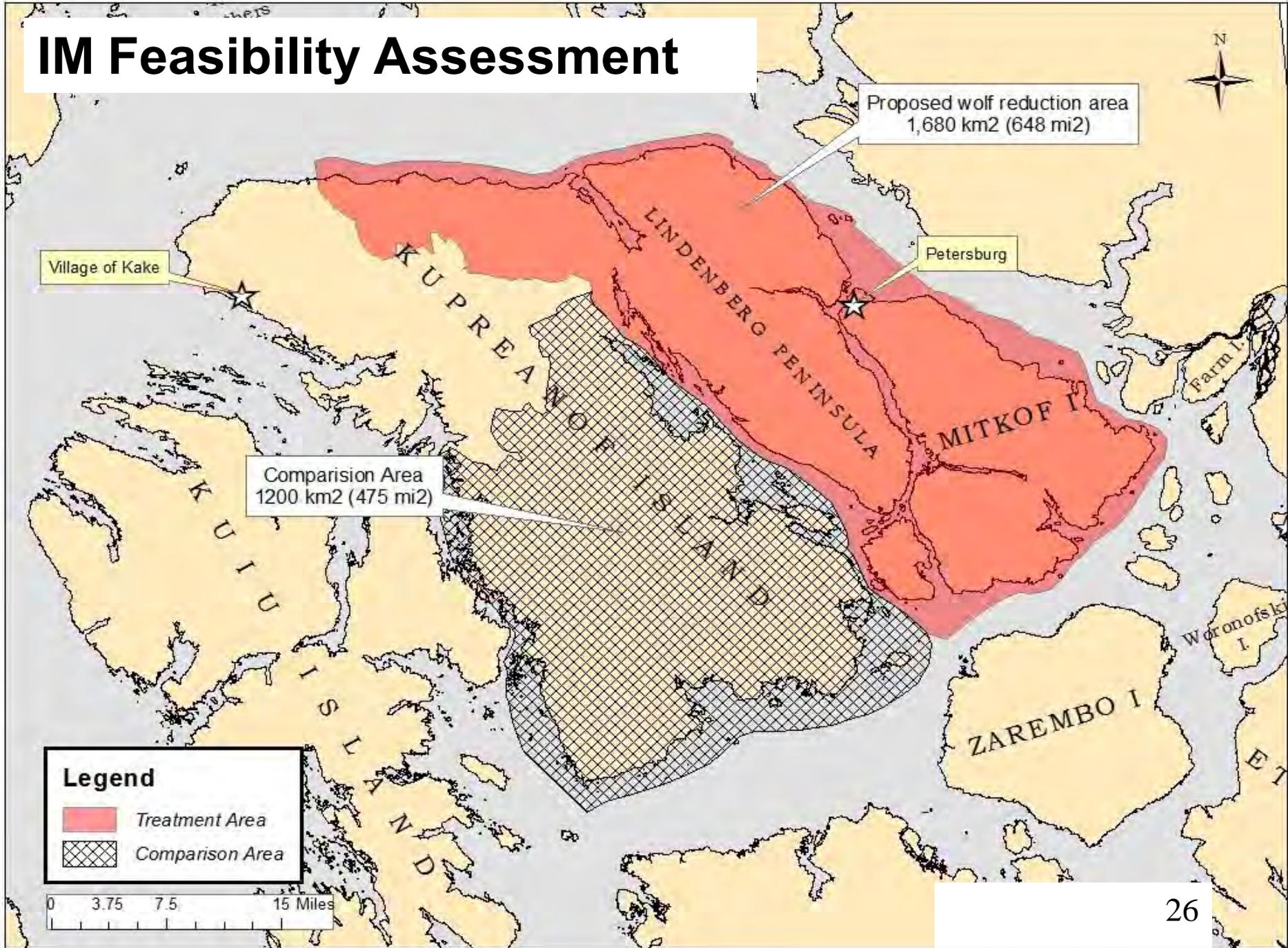
Impacts to deer habitat capability are long term!

~45 year old second growth stand

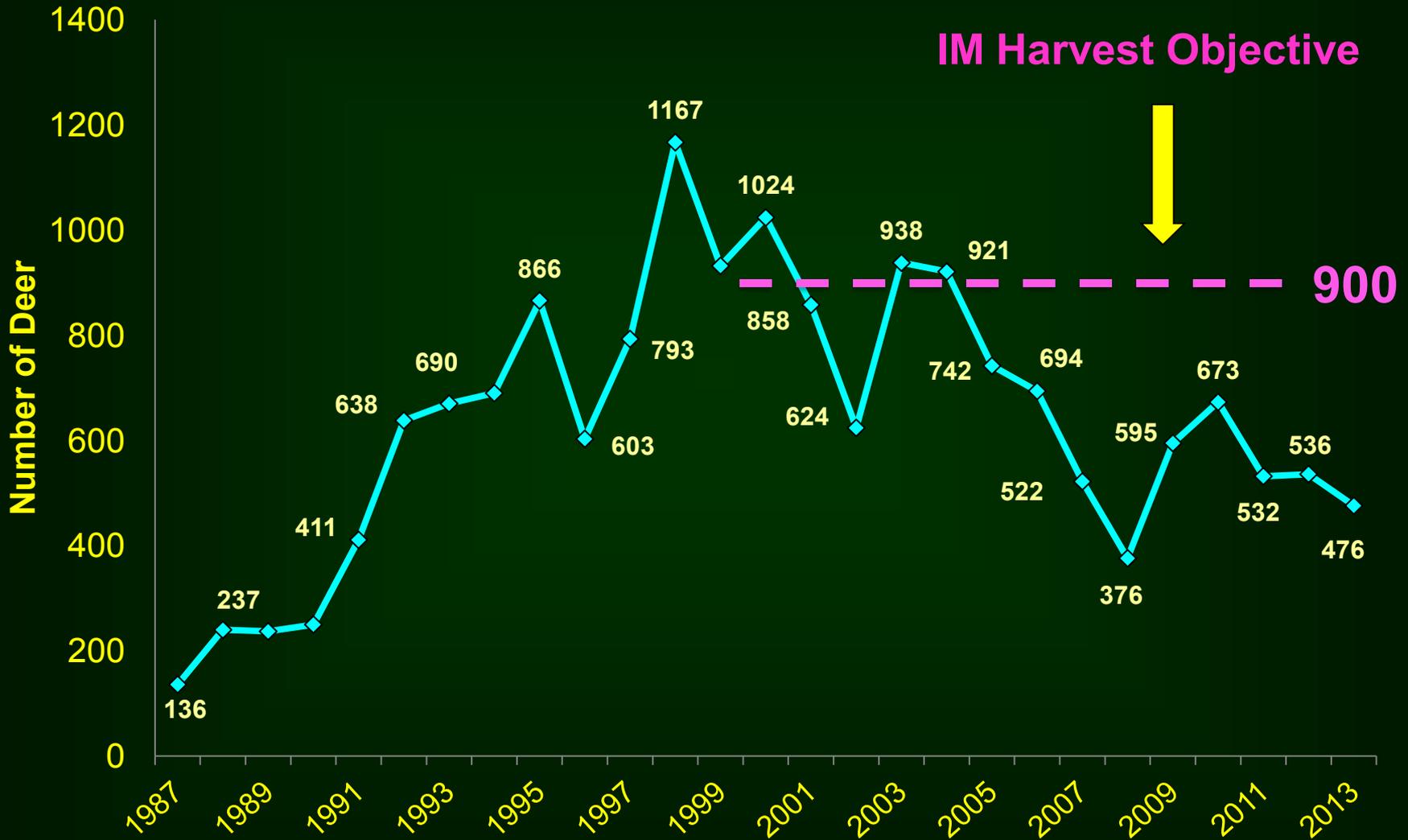
Unit 3 Deer



IM Feasibility Assessment



Estimated Unit 3 Deer Harvest



Factors Affecting Deer Populations

- **Winter severity (snowfall)**
- **Predation**
 - **Wolves**
 - **Bears**
- **Reductions in deer habitat capability and important winter habitat**
- **Increased moose distribution & abundance**



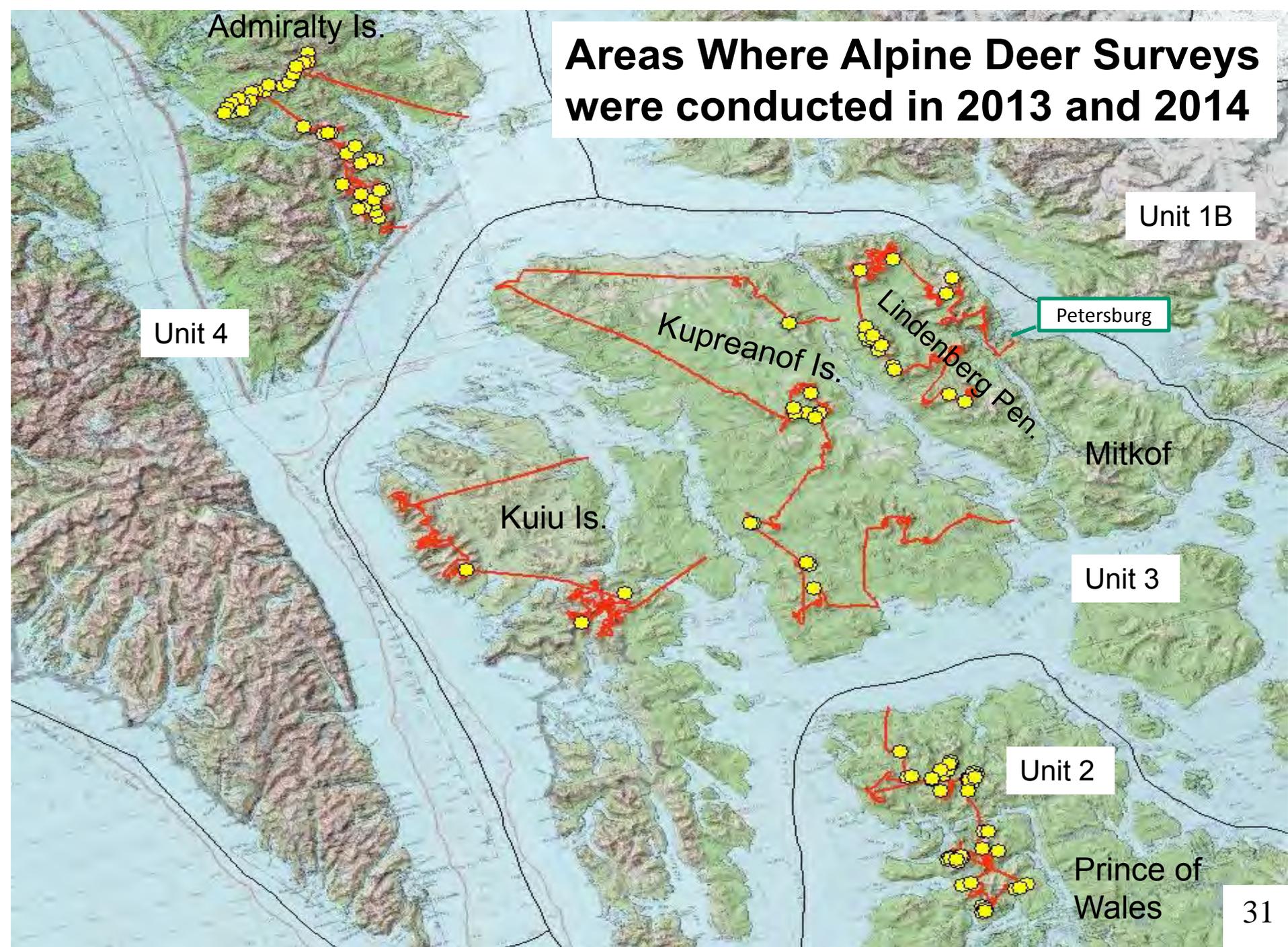
Unit 3 Wolf Harvest (1985–2013)



Alpine Deer Surveys

- One problem we face with regard to implementing IM in Region 1 is how to efficiently assess changes in deer abundance over time? (pre- and post-treatment)
- During late-July and early August of 2013 and 2014 we conducted 13 individual aerial, alpine deer surveys in 5 areas in central SE Alaska:
 - 3 areas in GMU 3 (Lindenberg Peninsula (7 surveys), Western Kupreanof Is., and Kuiu Is.)
 - 1 area in GMU 2 (northern POW and Kosciusko Is.)
 - 1 area in GMU 4 (southern Admiralty Is.)

Areas Where Alpine Deer Surveys were conducted in 2013 and 2014



2013-2014 Deer Surveys

Area (No. of Surveys)	Deer/Survey	Deer/hour
Lindenberg Pen (7) IM Treatment Area	Mean = 33	17 (1.59 SE)
West Kupreanof (1) IM Comparison Area	17	8
North Kuiu (1)	5	3
North POW (1)	85	44
South Admiralty (2)	Mean = 204	114

All surveys were 1.5-2.3 hours in duration

Advantages

- Advantages of alpine deer surveys include ...
 - Provide a direct measure of deer observed in the alpine (as opposed to “indirect” measures)
 - Results instantly available
 - Don’t have to wait to receive data back from lab
 - Relatively inexpensive
 - Doesn’t require excessive staff time
 - Can cover large areas quickly
 - Can compare different areas, provided they have suitable alpine habitat

UNIT 3 RESEARCH ACTIVITIES

Elk



Finishing a multi-year elk collaring effort

17 radiocollared elk with over 55,000 GPS locations

Data analysis & write-up will occur this winter

Deer



Traditional and DNA based population assessments

Browse veg. surveys

Alpine surveys

Wolf



Genetic Sampling

Tissue collection



Any Questions?