

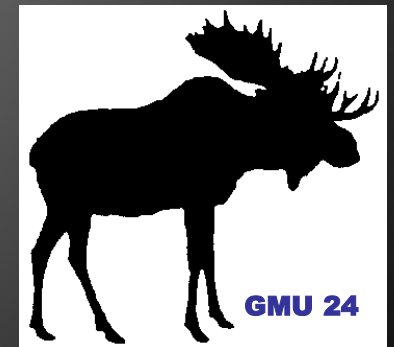
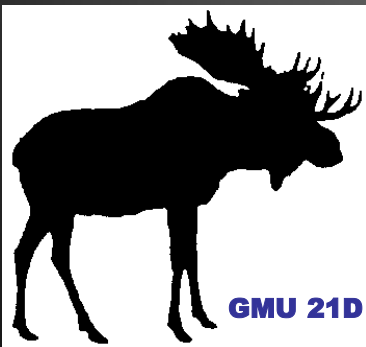
Galena Management Area Overview

Glenn Stout – Area Biologist

Nate Pamperin – Assistant Area Biologist

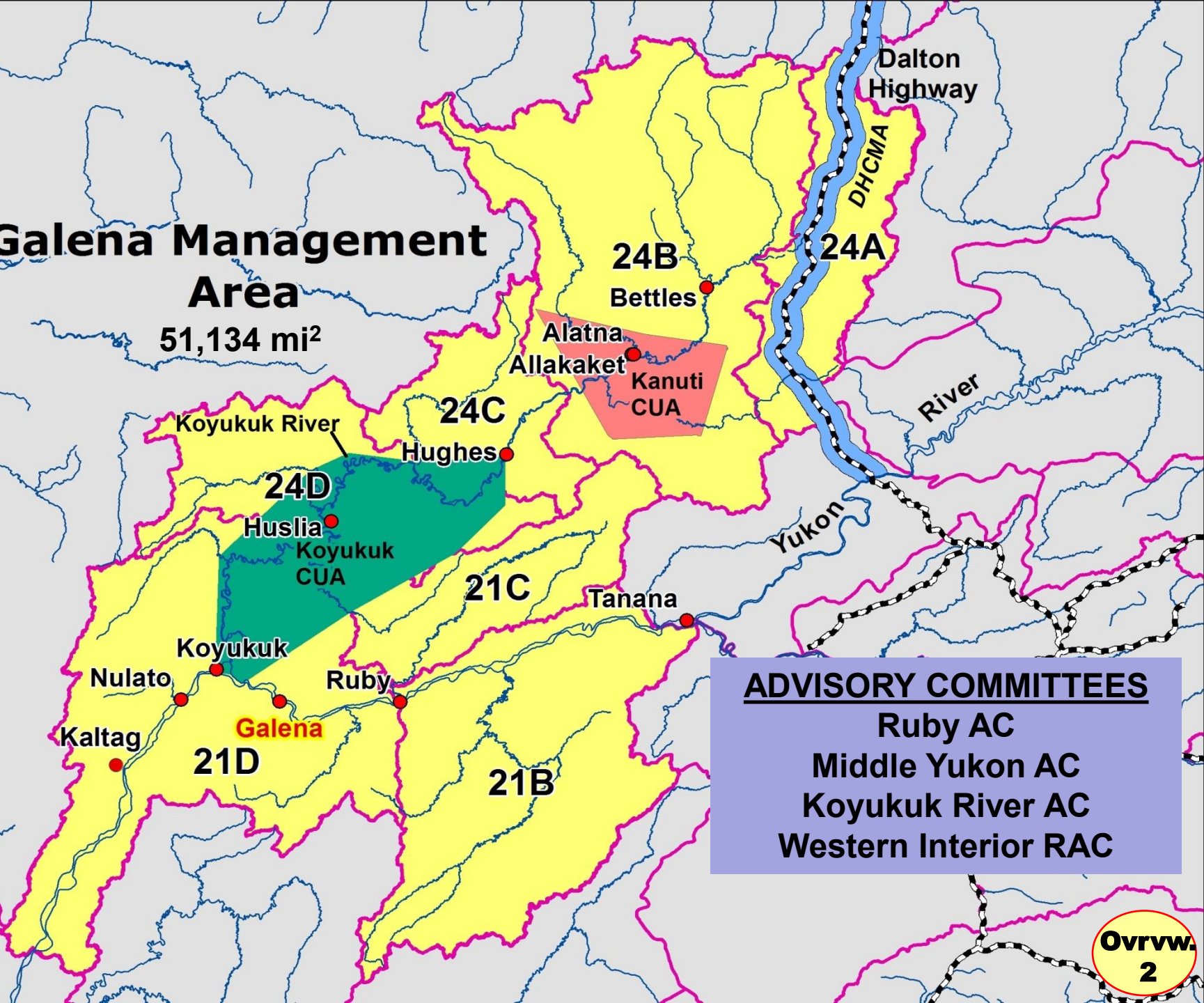
Carl Roberts – Wildlife Technician

Stephanie Sweetsir – Off. Asst.



Galena Management Area

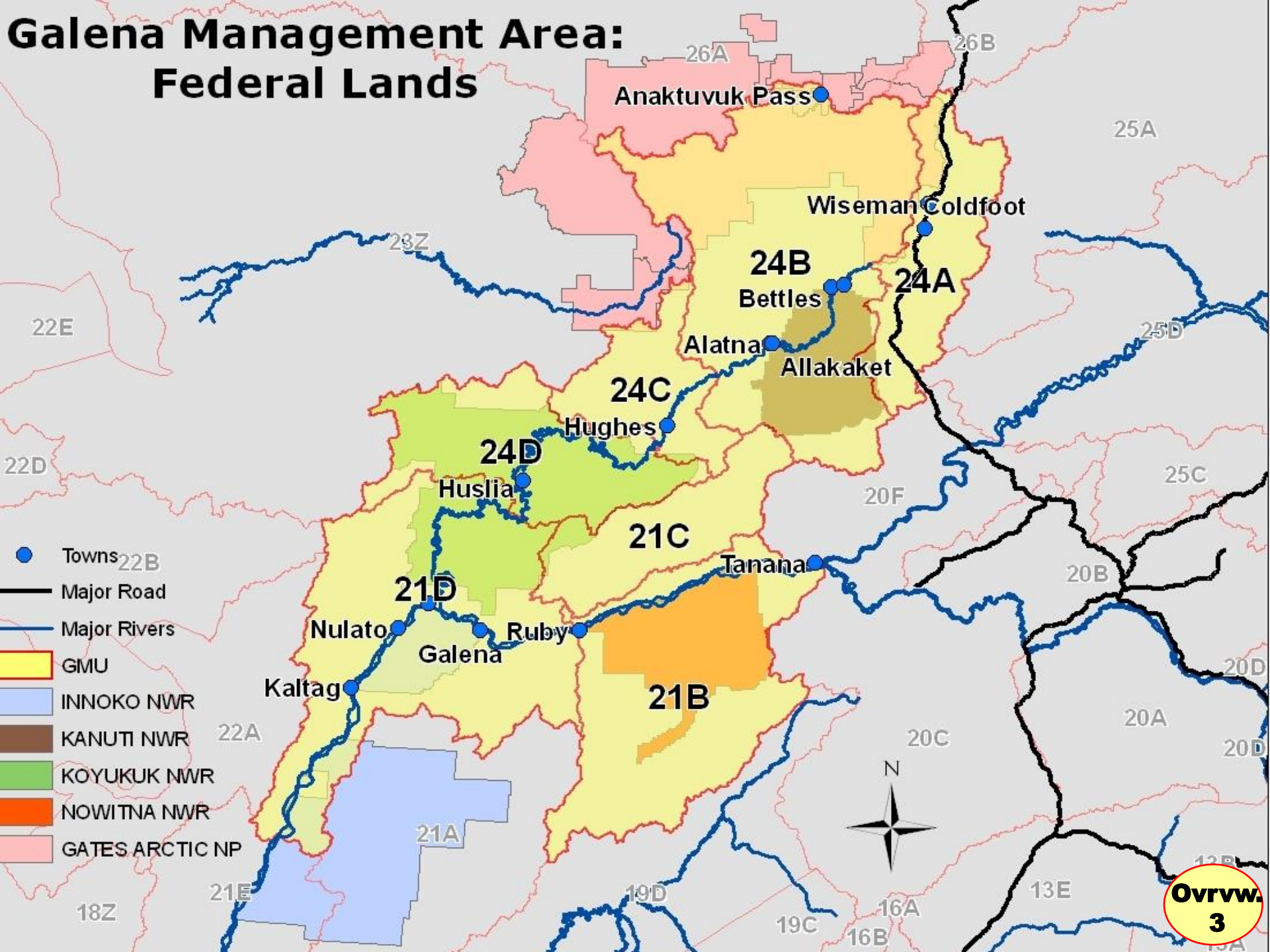
51,134 mi²



ADVISORY COMMITTEES


- Ruby AC
- Middle Yukon AC
- Koyukuk River AC
- Western Interior RAC

Galena Management Area: Federal Lands



- Towns
- Major Road
- Major Rivers
- GMU
- INNOKO NWR
- KANUTI NWR
- KOYUKUK NWR
- NOWITNA NWR
- GATES ARCTIC NP

Galena Area Overview

<u>Species</u>	<u>Status</u>	<u>Proposals</u>
Black Bears	Stable?	1
Grizzly Bears	Stable?	1
Caribou	Stable	0
Moose	Stable-declining	4 
Sheep	Stable	0
Wolves	Stable	0
Furbearers	Stable (marten low)	1
Small Game	Stable (down cycle)	0

Galena Area Overview

Moose Management Issues

- **Intensive Management in 24B (UKMA)**
- **Moose declines in Lower Koyukuk and Lower Nowitna**
 - **Reduced Koyukuk CUA permits**
- **Hunter Compliance with Antler Cutting**
- **Increasing nonlocal resident hunters**

Galena Area Moose Surveys 1999-2011

35,320 mi²/51,134 mi² = 69%


Legend

 GMU

Number of Observed Moose

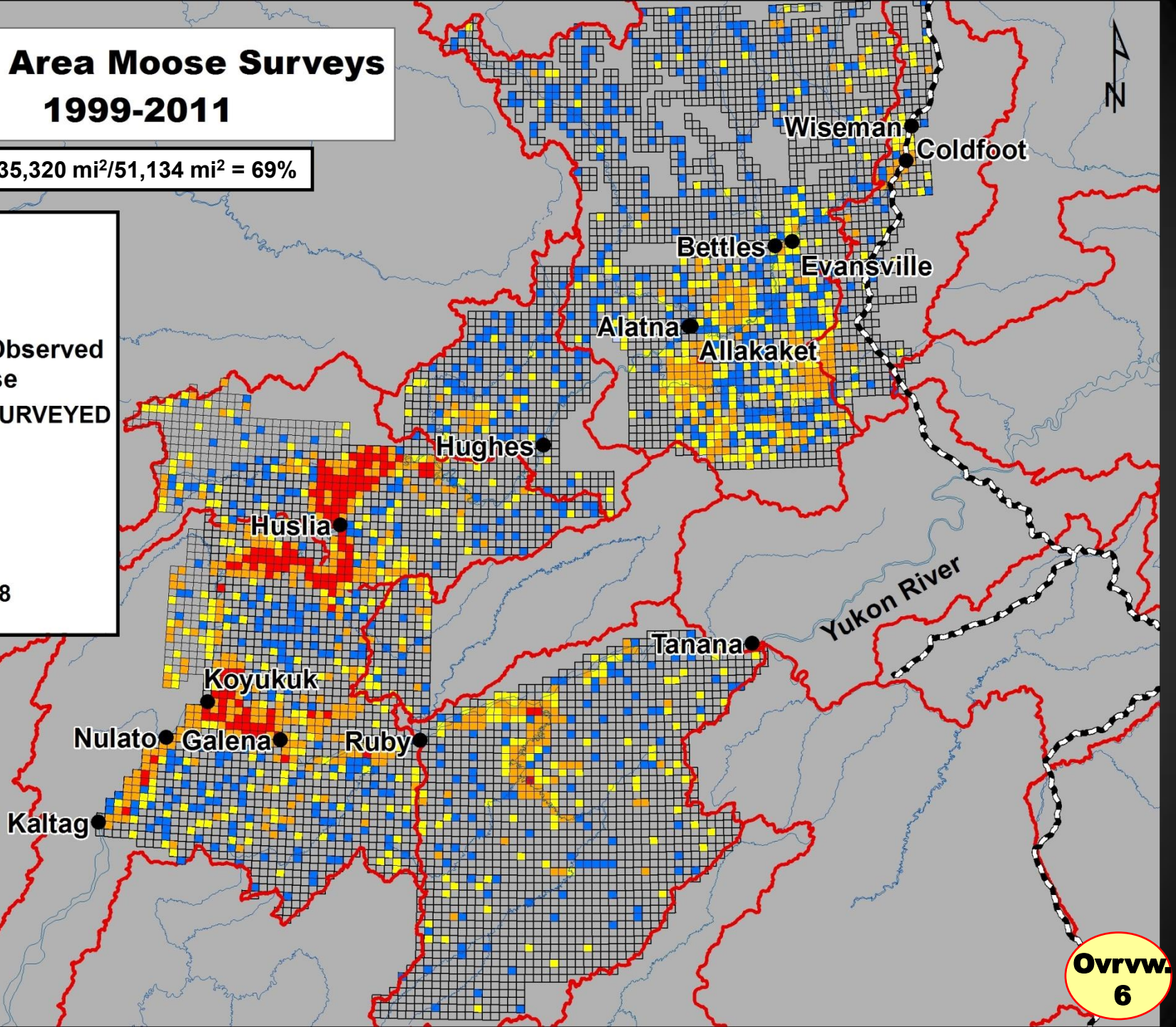
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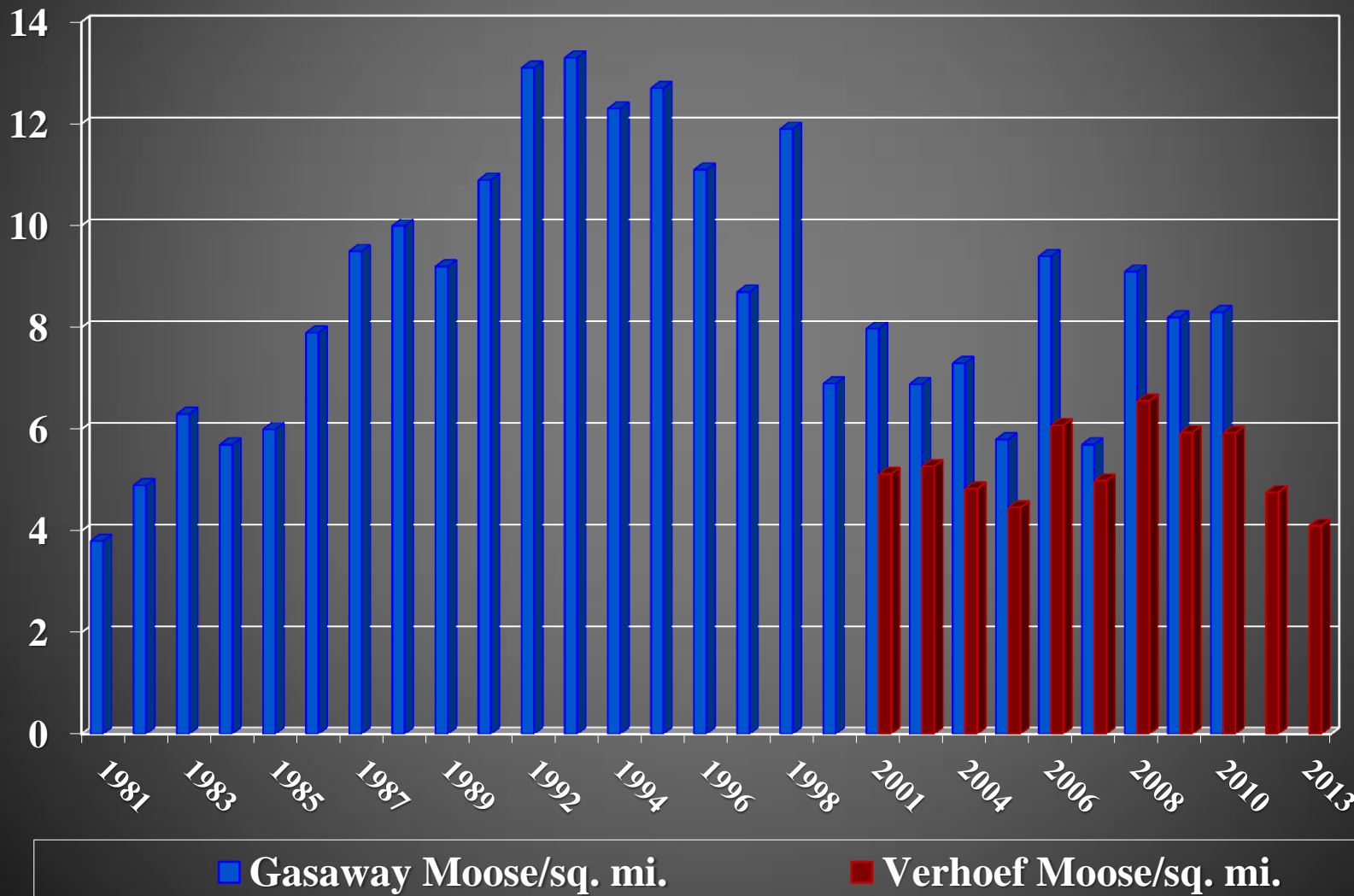
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 5 - 30

 31 - 128

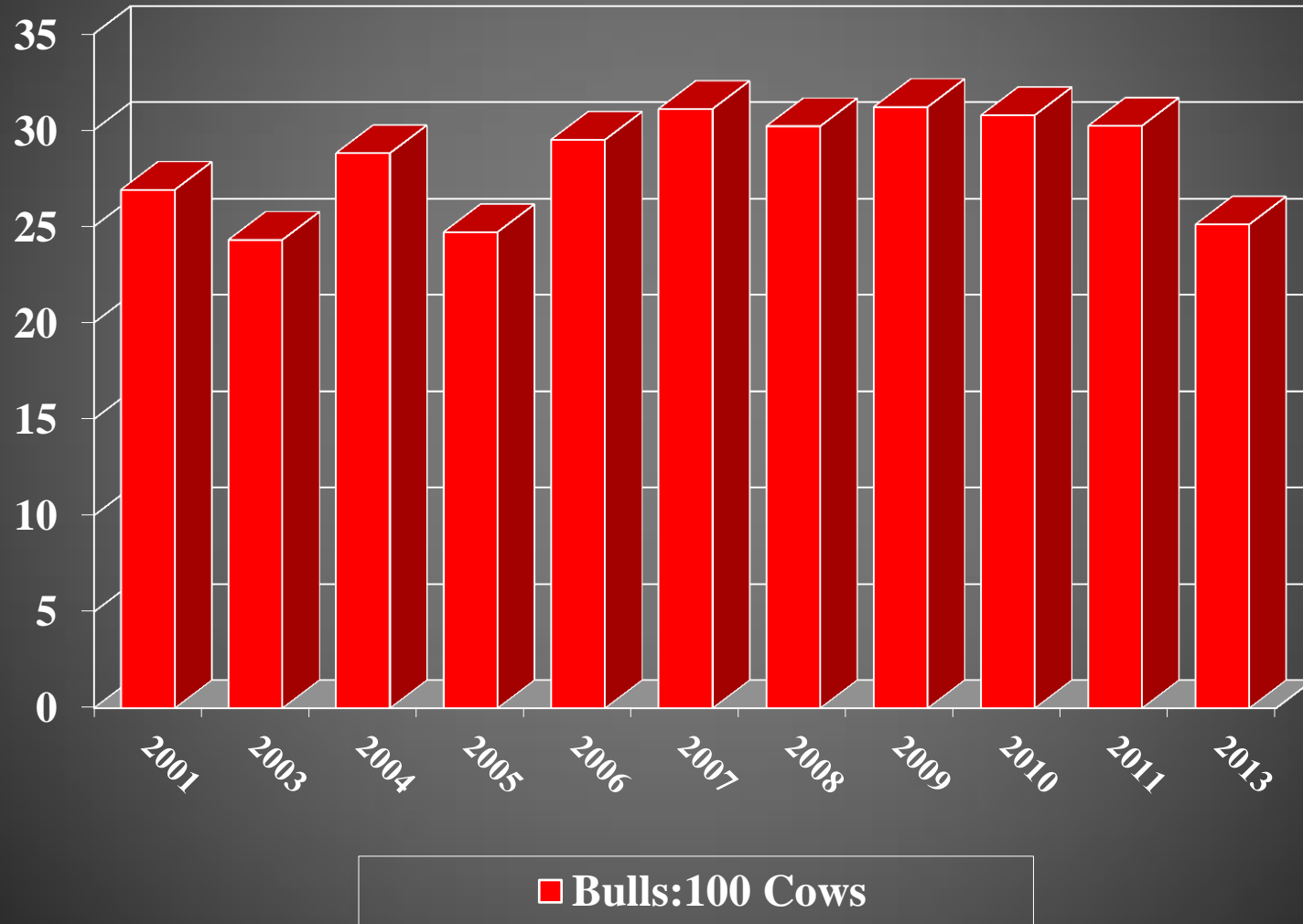


GMU 21D - Three-Day Slough Trend Count Area, Aerial Survey Density



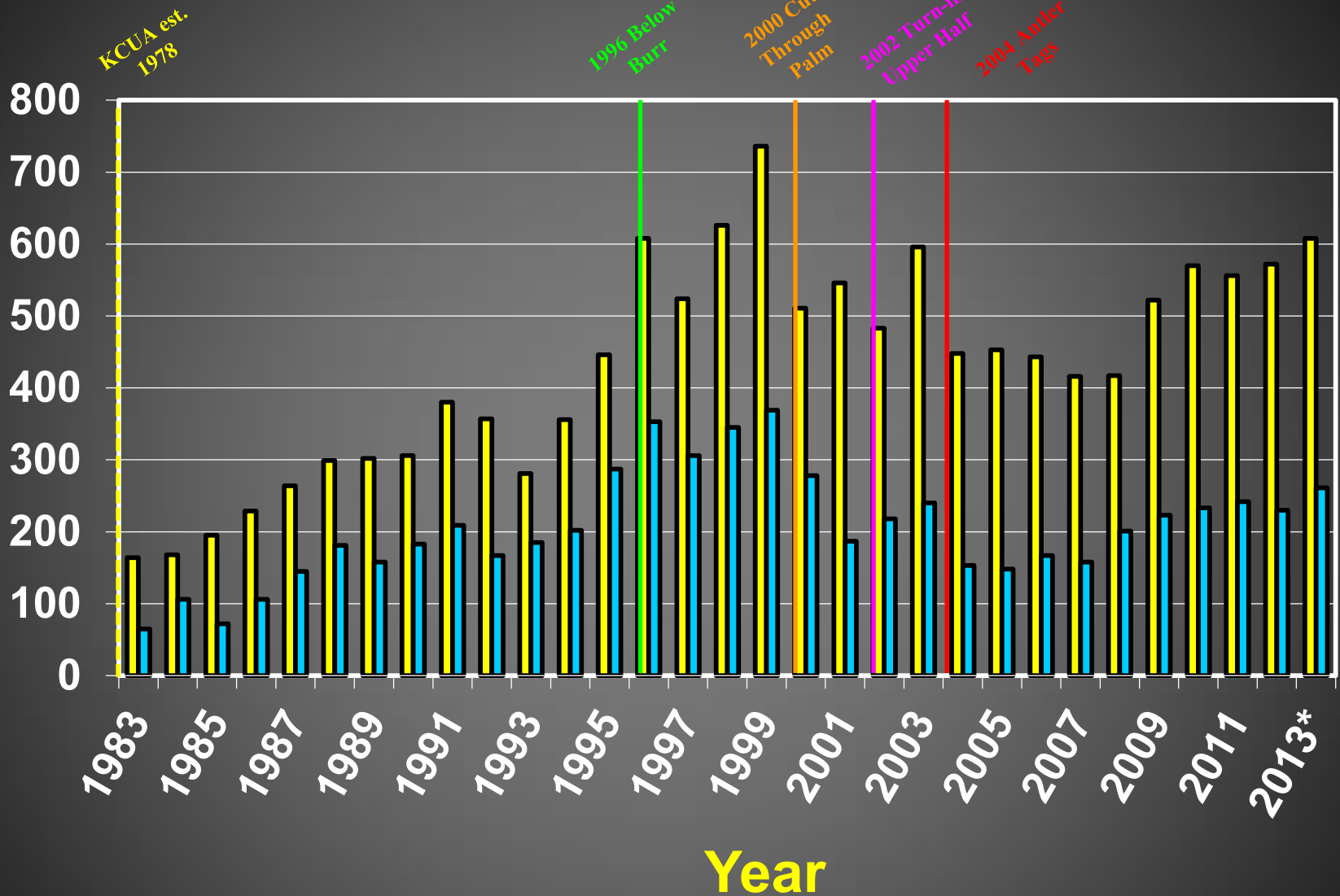
GMU 21D - Koyukuk Controlled Use Area – “Core 5” Trend Count Areas

Bulls:100 Cows



KCUA Check Station 1983-2013

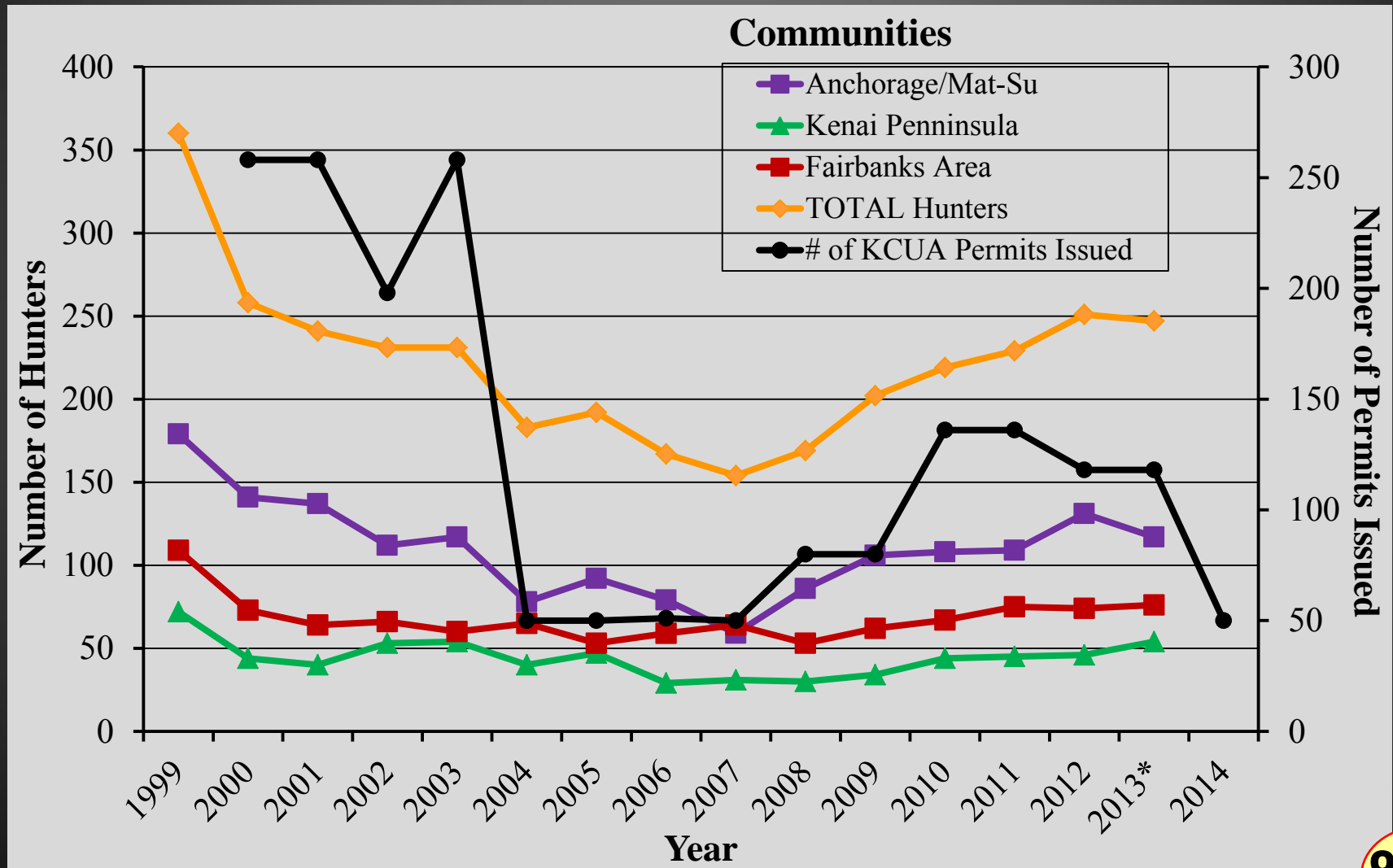
Number of Hunters & Moose



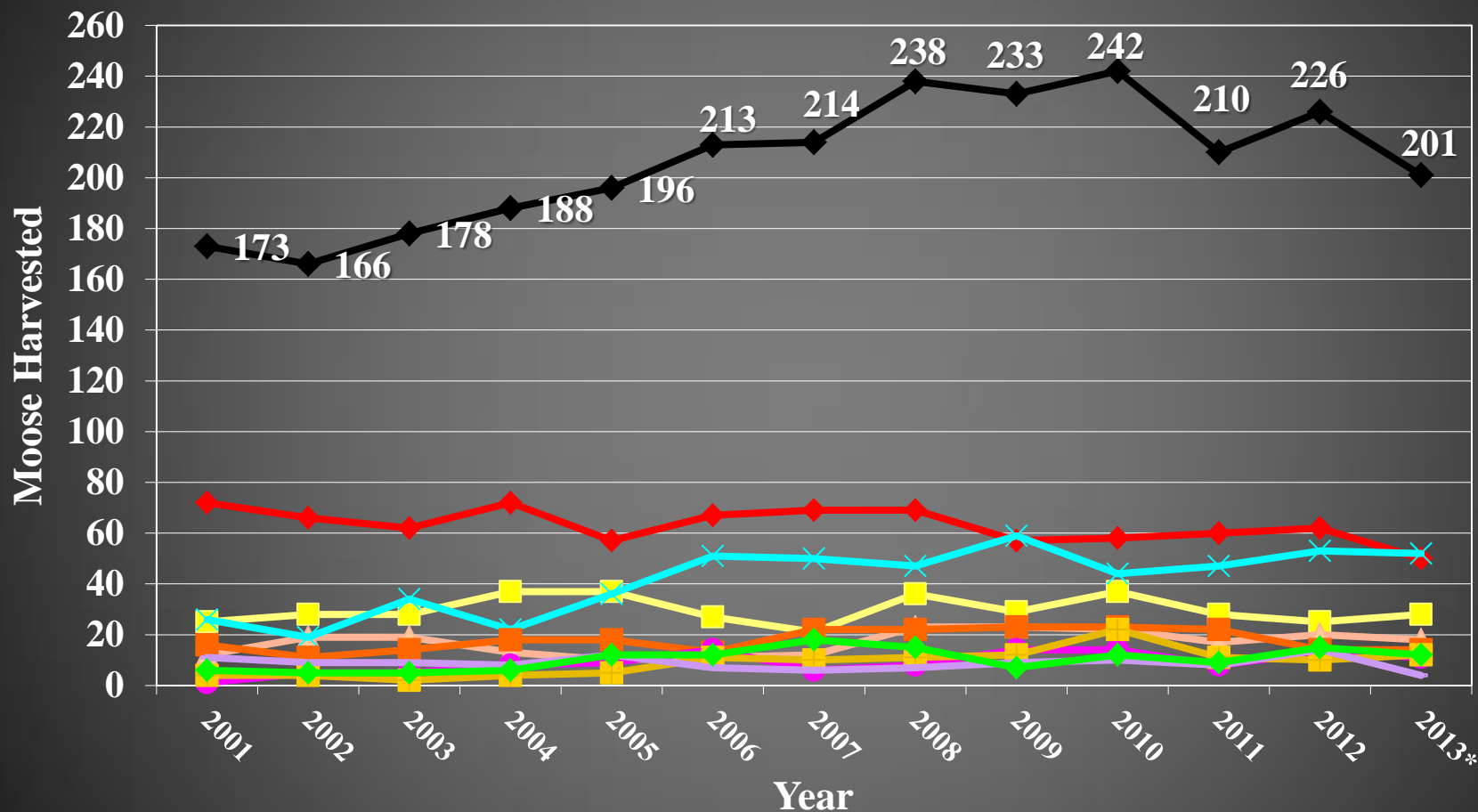
■ Hunters

■ Moose

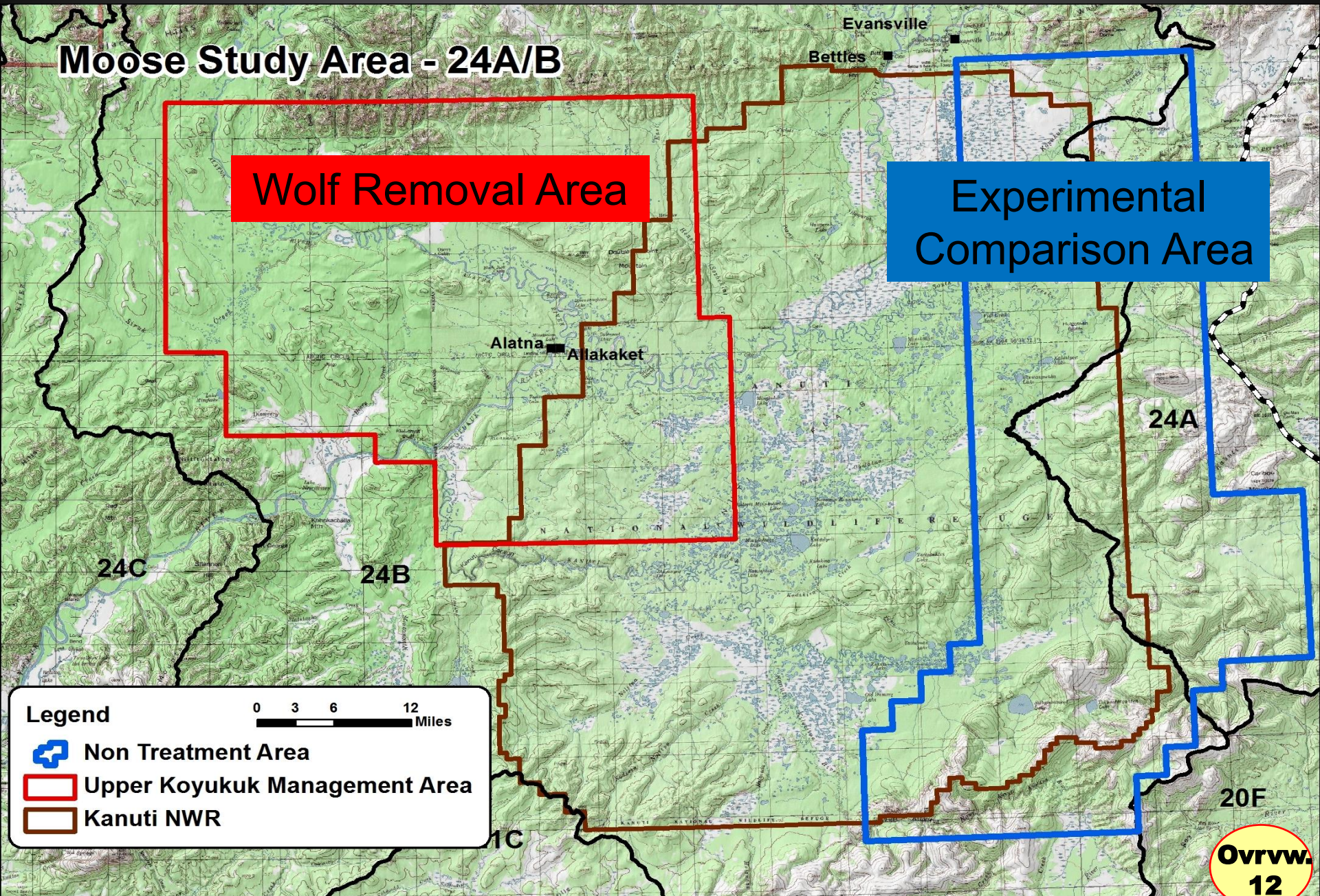
Galena Area - Nonlocal Resident Moose Hunters 1999-2014



Preliminary ^(01/16/14) Local Resident Reported Moose Harvest 2001-2013



Intensive Management - 24B UKMA






Moose Study Area - 24A/B

Wolf Removal Area

Experimental Comparison Area

Legend

0 3 6 12 Miles

-  Non Treatment Area
-  Upper Koyukuk Management Area
-  Kanuti NWR

24B Upper Koyukuk Management Area

- **Activities Completed 2011-14**
 - **Subsistence Household Harvest Surveys**

RY	(1)				(2)			(3) UKMA Calculated Harvest ^e
	Allakaket/Alatna Household Surveys ^a				Harvest Reports ^b			
	“Catch-per-unit-effort”			Estimated Harvest ^c	Allakaket/Alatna harvest ^c	24B Harvest (all other hunters)	24B Total Harvest ^d	
Miles per Trip	Cost per Trip	Hours per Trip						
2011	65.8	\$86.37	13.2	16.2	4	28	31	16
2012	58.1	\$99.99	14.4	18.7	13	24	33	16
2013	n/a	n/a	n/a	14*	2	25	26	<14*

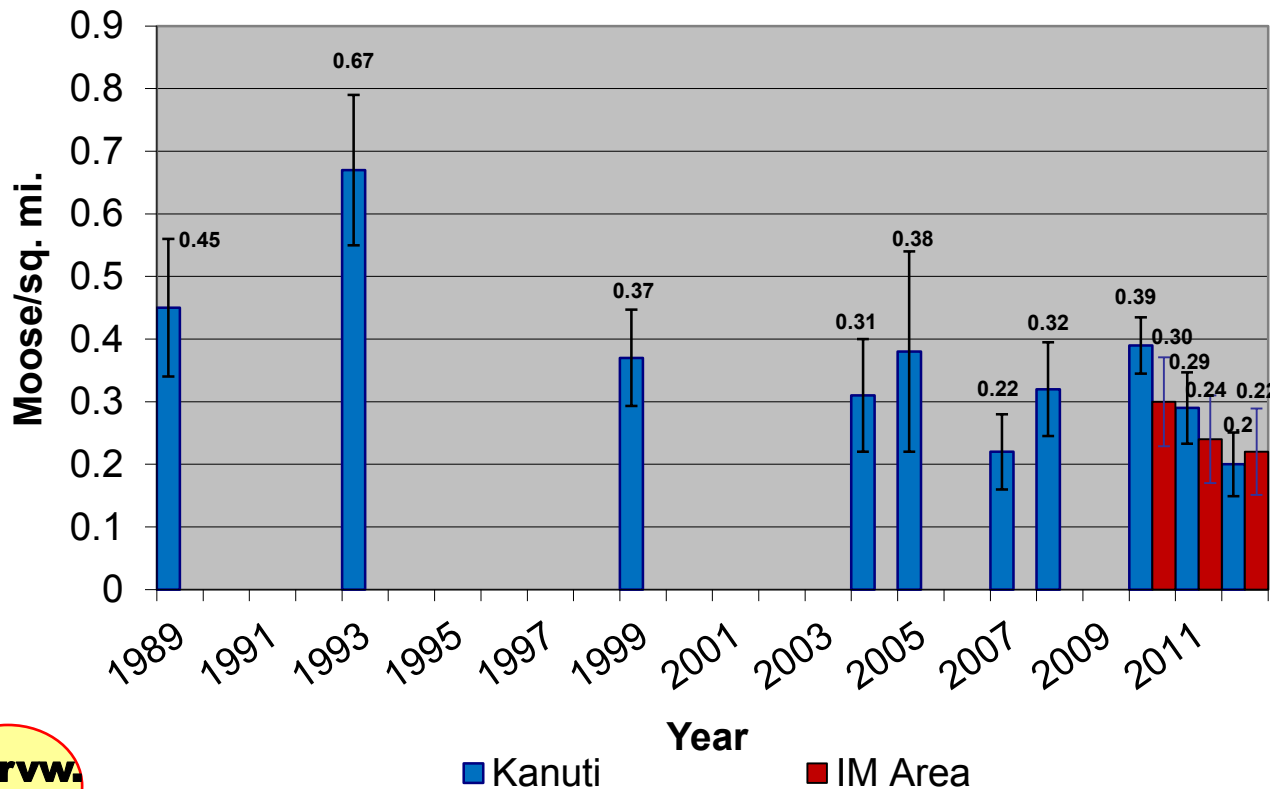
- **Moose Twinning Rate/Population Estimation Surveys**
- **Calf and Yearling Survival Rate**
- **Predation Control**

24B Upper Koyukuk Management Area

Moose Population/Twinning Surveys

24B Moose Density Estimates

Moosepop '89 & '93, w/o SCF in '93, GSPE in '99 through '13
Adjusted for Survey Area Size



Twinning Rates (%)

2008	35
2009	60
2010	58
2011	37
2012	52
2013	43

2013 Results

67 Bulls:100 Cows

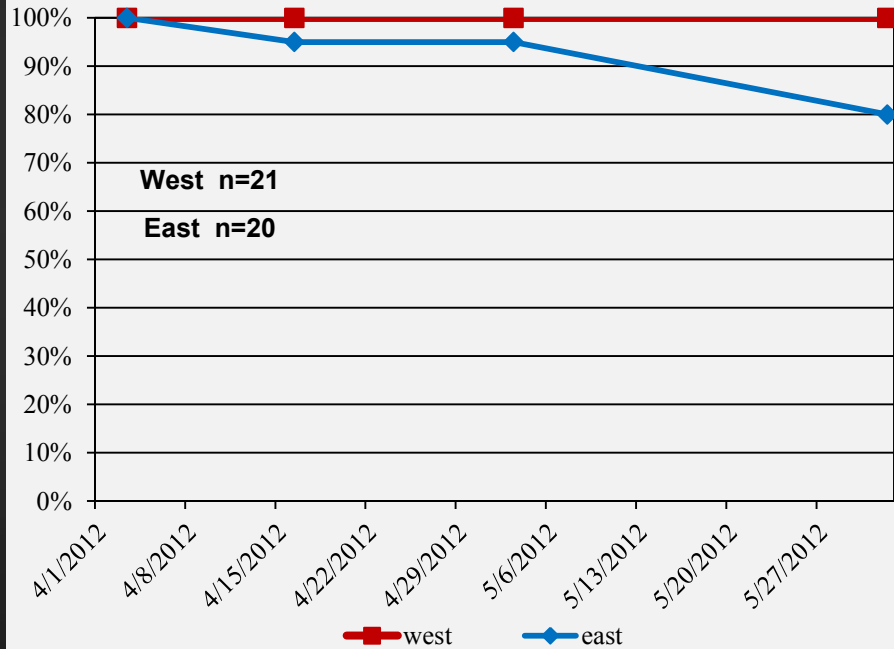
11 Yrlg bull:100 Cows

35 calv.:100 Cows

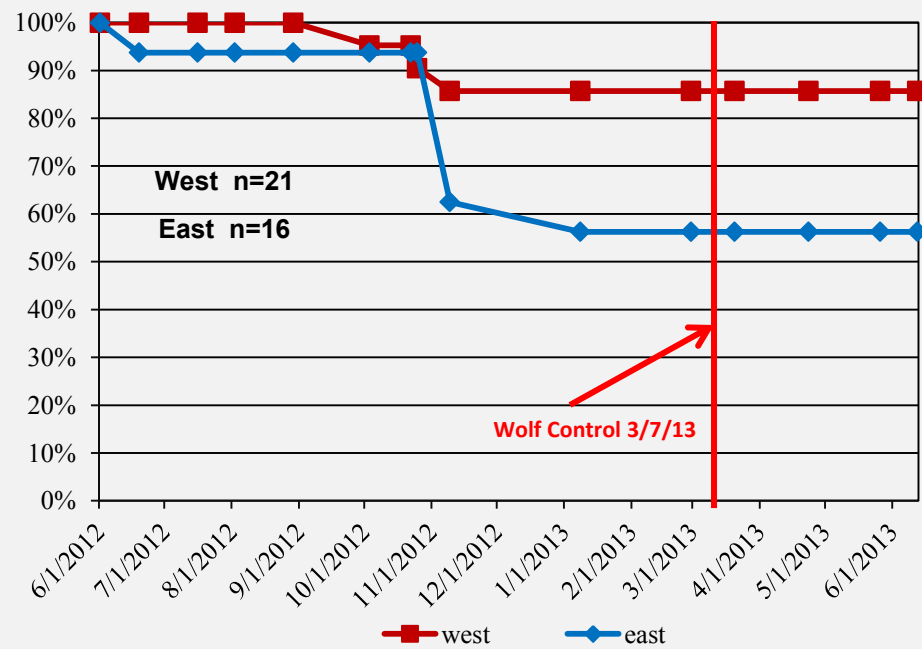
24B Upper Koyukuk Management Area

Survival Rate Assessment

Calf Survival (2011 cohort)



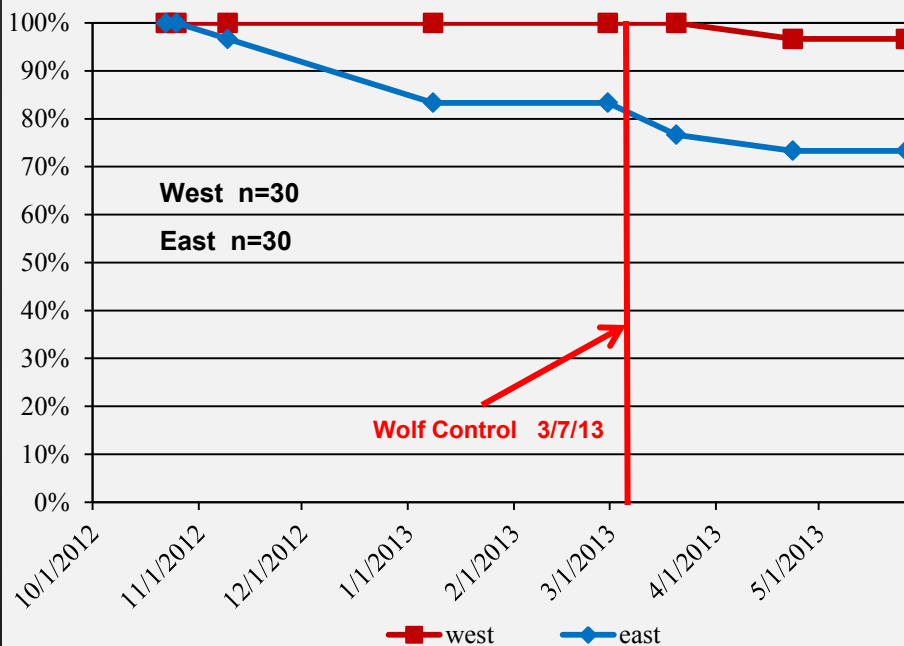
Yearling Survival (2011 cohort)



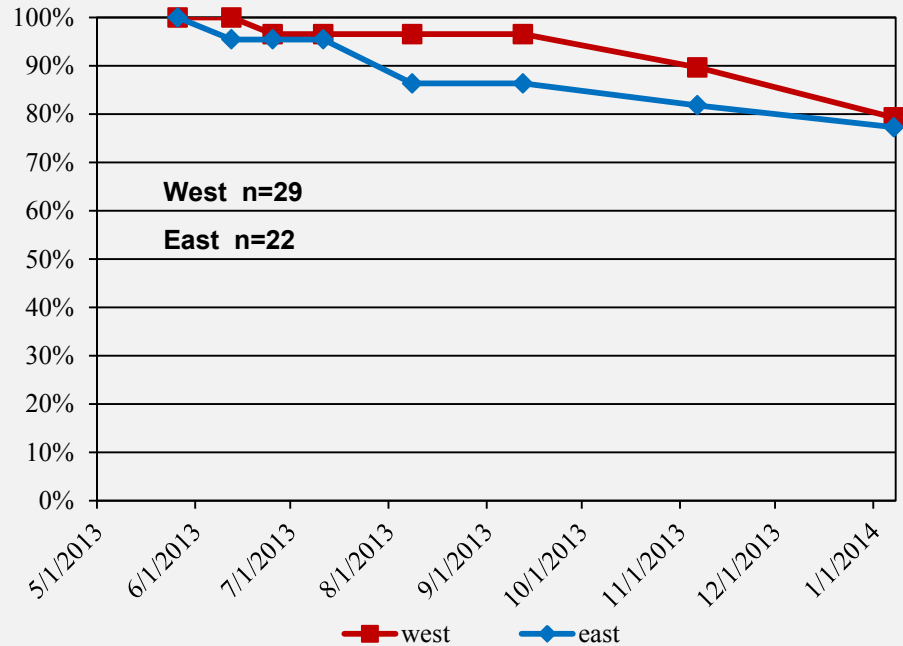
24B Upper Koyukuk Management Area

Survival Rate Assessment

Calf Survival (2012 cohort)



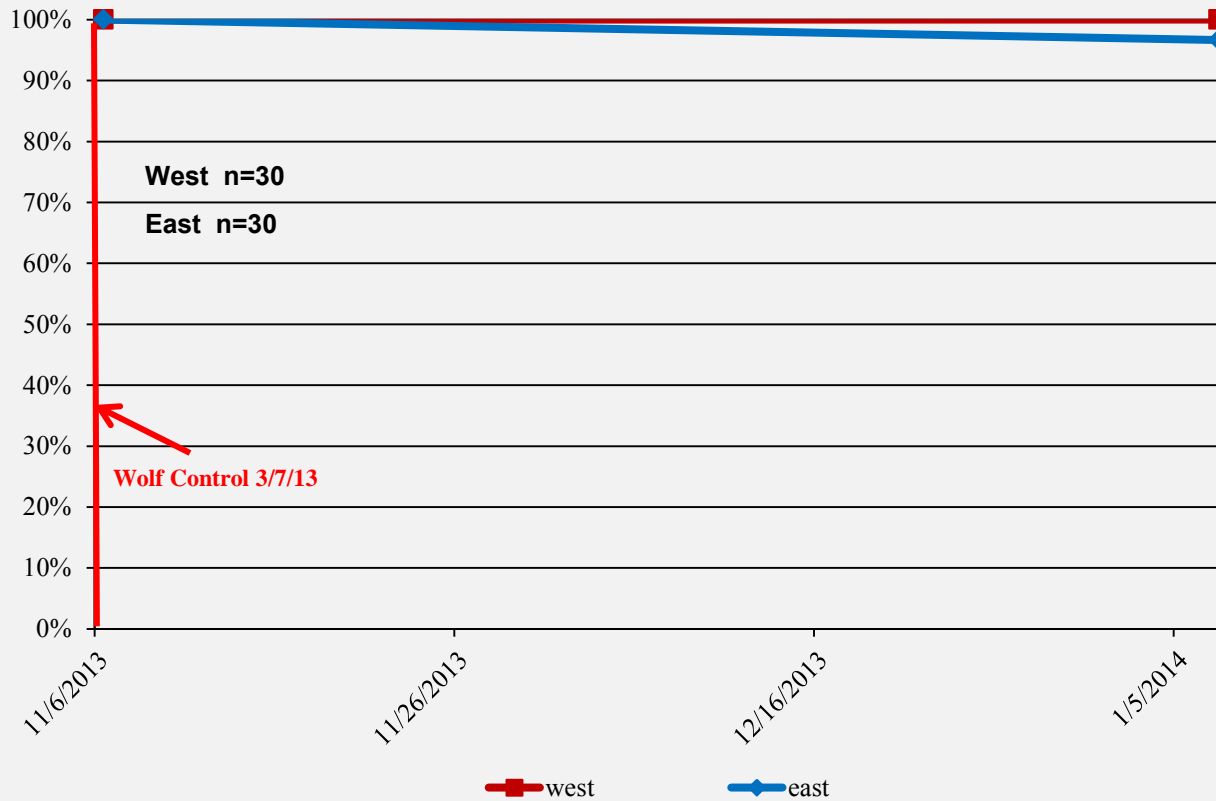
Yearling Survival (2012 cohort)



24B Upper Koyukuk Management Area

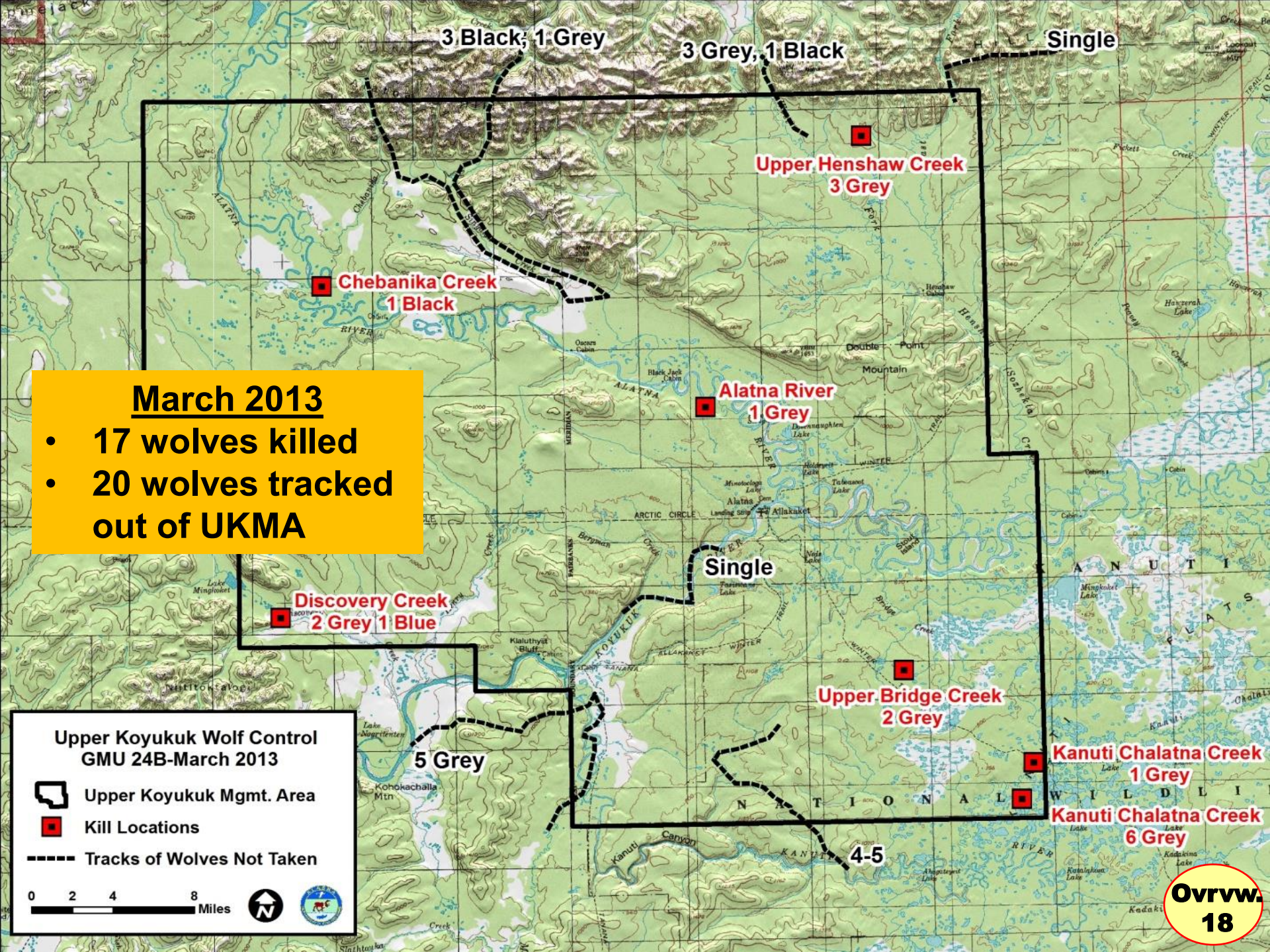
Survival Rate Assessment

Calf Survival (2013 cohort)



Mortality Factors

Wolves	21
Bears	2
Unknown Predator	7
Unknown	9
TOTAL	39



3 Black, 1 Grey

3 Grey, 1 Black

Single

Upper Henshaw Creek
3 Grey

Chebanika Creek
1 Black

Alatna River
1 Grey

Discovery Creek
2 Grey 1 Blue

Single

Upper Bridge Creek
2 Grey

Kanuti-Chalatna Creek
1 Grey

5 Grey

Kanuti-Chalatna Creek
6 Grey

4-5

March 2013

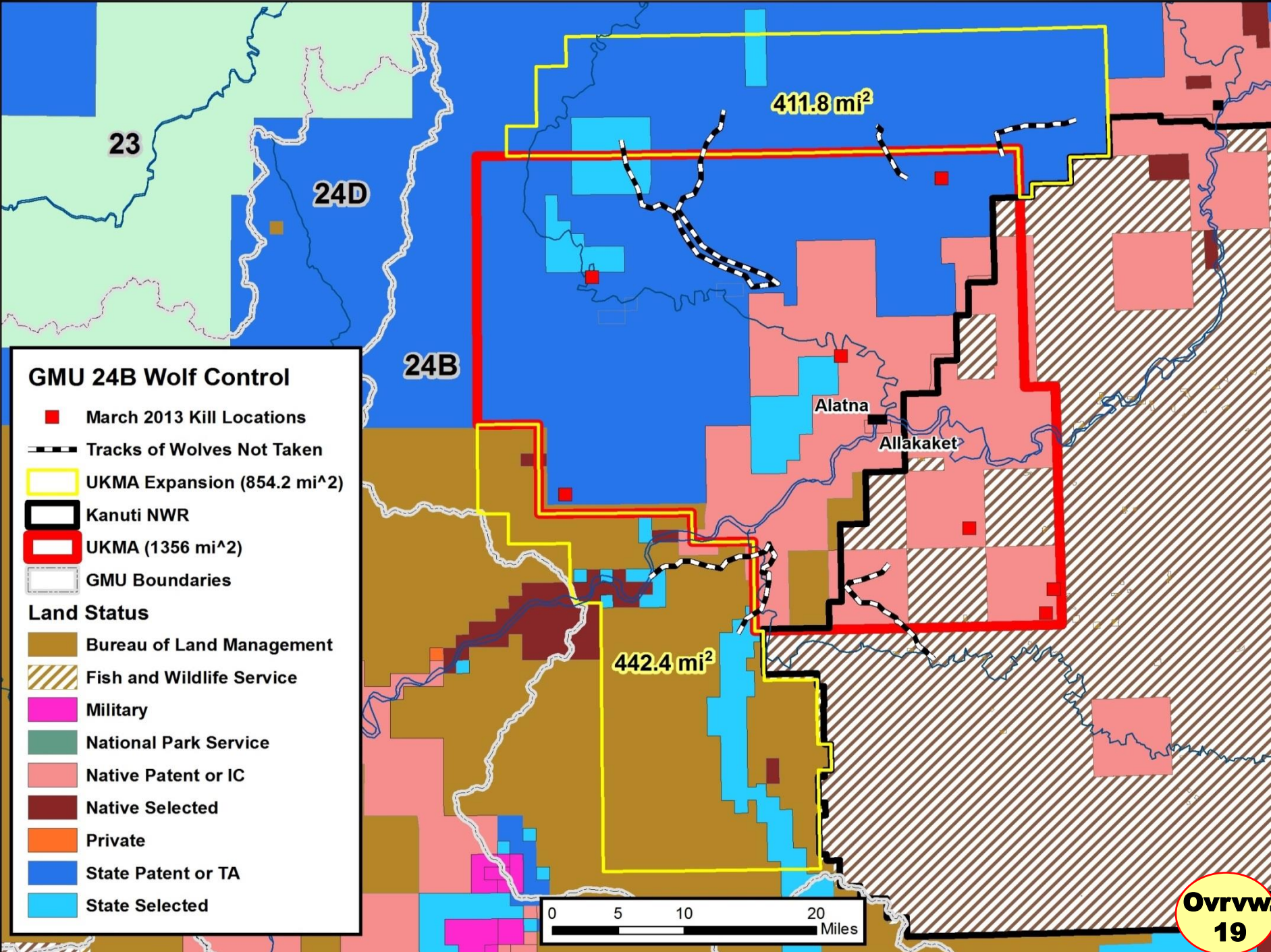
- 17 wolves killed
- 20 wolves tracked out of UKMA

**Upper Koyukuk Wolf Control
GMU 24B-March 2013**

- Upper Koyukuk Mgmt. Area
- Kill Locations
- Tracks of Wolves Not Taken

0 2 4 8 Miles

**Ovrww.
18**

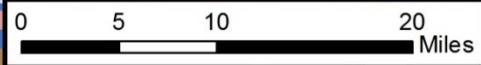


GMU 24B Wolf Control

- March 2013 Kill Locations
- Tracks of Wolves Not Taken
- UKMA Expansion (854.2 mi²)
- Kanuti NWR
- UKMA (1356 mi²)
- GMU Boundaries

Land Status

- Bureau of Land Management
- Fish and Wildlife Service
- Military
- National Park Service
- Native Patent or IC
- Native Selected
- Private
- State Patent or TA
- State Selected



April 2013

- 6 wolves killed
- 8 wolves tracked out of UKMA

**Chebanika Creek
2 Black, 4 Grey**

**Chebanika Creek
1 Black**

**Upper Henshaw Creek
3 Grey**

**Alatna River
1 Grey**

**Discovery Creek
2 Grey 1 Blue**

**Upper Bridge Creek
2 Grey**

**Kanuti Chalatna Creek
1 Grey**

**Kanuti Chalatna Creek
6 Grey**

Upper Koyukuk Wolf Control
GMU 24B-March/April 2013



Upper Koyukuk Mgmt. Area



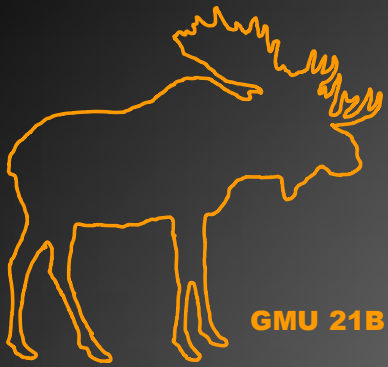
Kill Locations

0 3 6 12 Miles

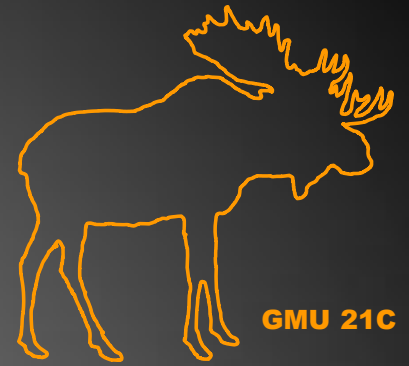


Wolf Skinning

- 23 wolves turned over to Allakaket Tribal Council
- TCC contributed \$100/wolf
- Doyon and K-Corp authorized access



GMU 21B



GMU 21C

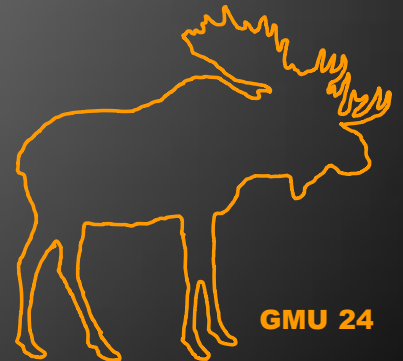
Galena Mgt. Area

BOG Proposals

2014



GMU 21D



GMU 24



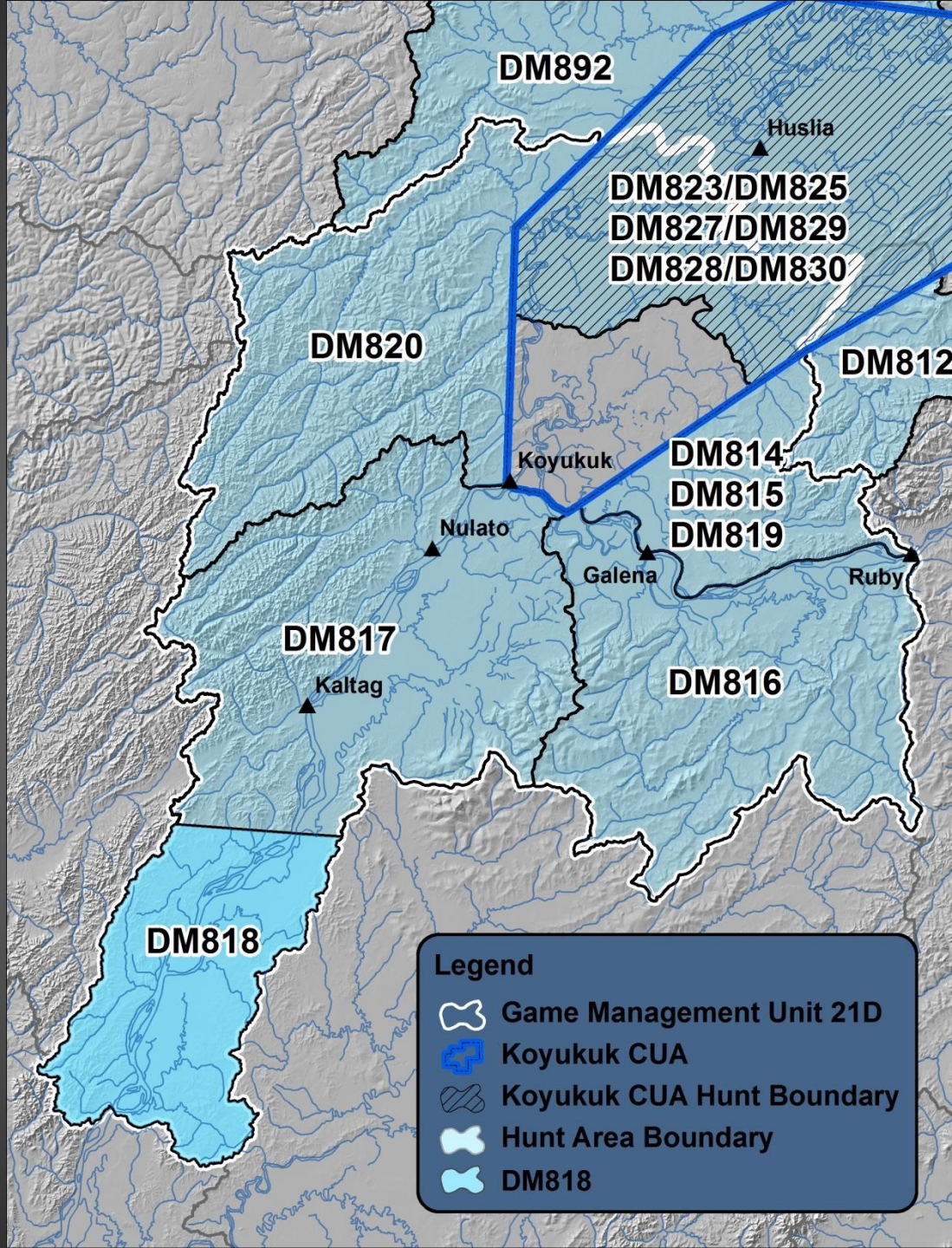
Proposal #68

**Change DM818 hunt,
Papa Willie Creek
GMU21D, to General
season hunt**






ADF&G – Opposed

KRAC – Take No Action MYAC – Opposed

RAC – Opposed



Legend

-  Game Management Unit 21D
-  Koyukuk CUA
-  Koyukuk CUA Hunt Boundary
-  Hunt Area Boundary
-  DM818

Galena Mgt. Area – Moose Management Strategy

- **Drawing Permit/Registration Permit system implemented in 2000, 2004, and 2006 (DM818 in 2006)**
- **Key Issues: 1) Moose population was below objective or declining, 2) declining bull:cow ratios, 3) declining local hunter success, 4) hunter conflicts, 5) illegal guiding**
- **Hunter Distribution, Bootlegging, High-grading**
- **Strategy has been successful**

Population Est.

(1,456 mi²)

(360 mi² @ 1.30
moose/mi²) = 468

moose

(1,096 mi² @ 0.35
moose/mi²) = 383

moose

Total = 851 moose

Harvest

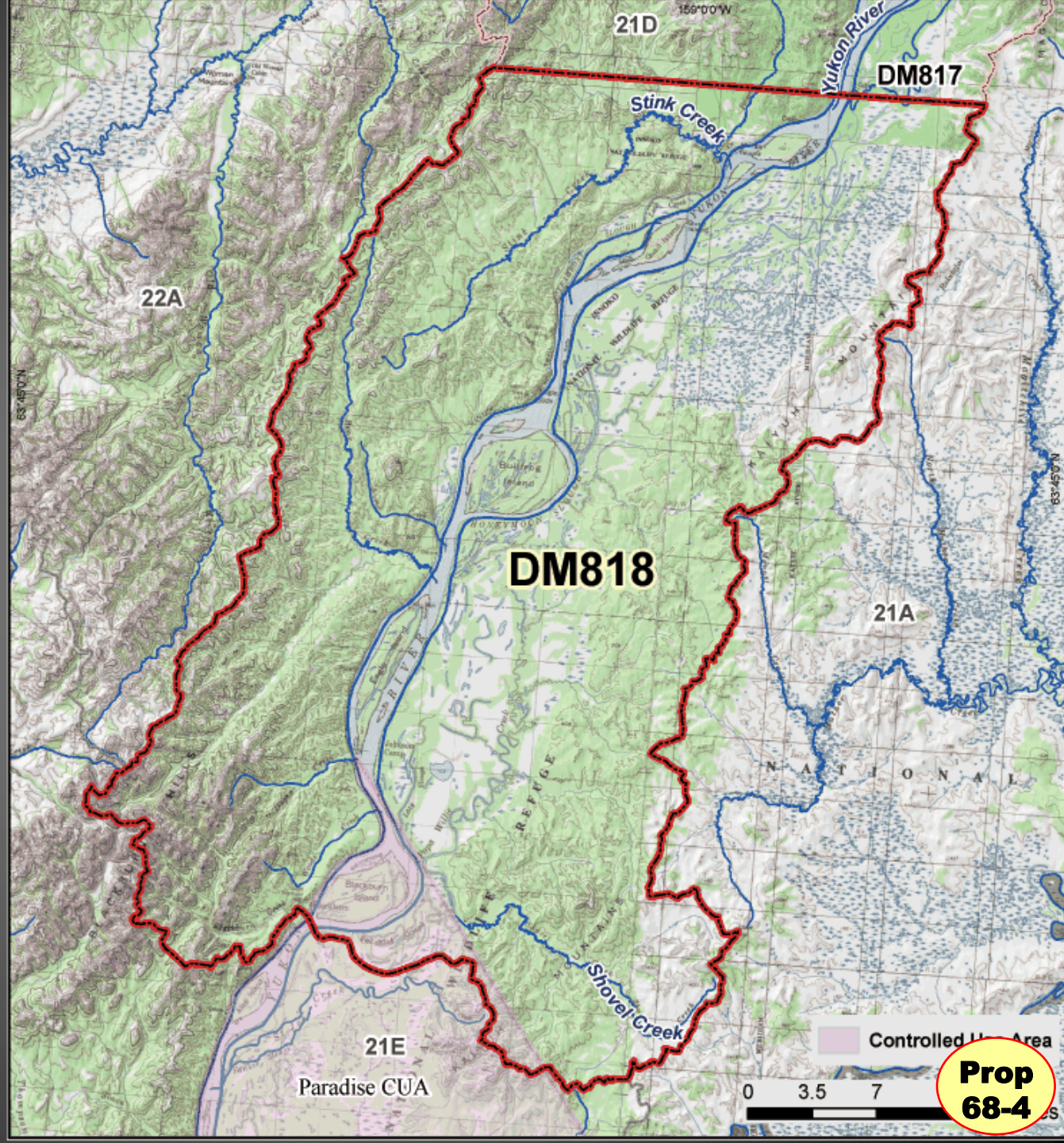
Allocation

851 x 0.04 = 34
moose

RM834 = 17.8 (3.8
local + 2 non-local +
12 unrep.)

DM818 = 16 moose
harvestable surplus

@ **25 DM818 permits**



Galena Area Moose Surveys 1999-2011

Legend

 GMU

Number of Observed
Moose

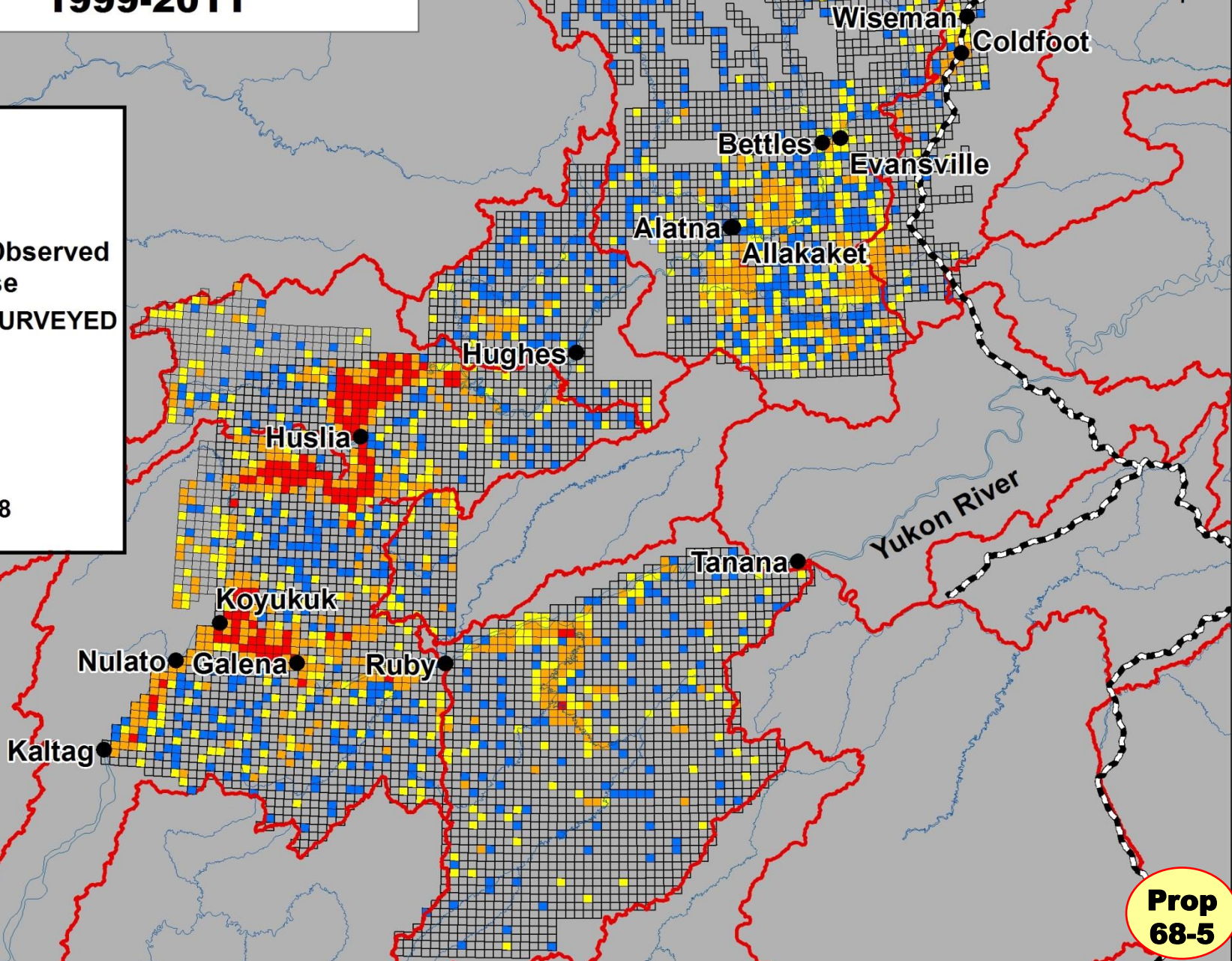
 NOT SURVEYED

 0

 1 - 4

 5 - 30

 31 - 128

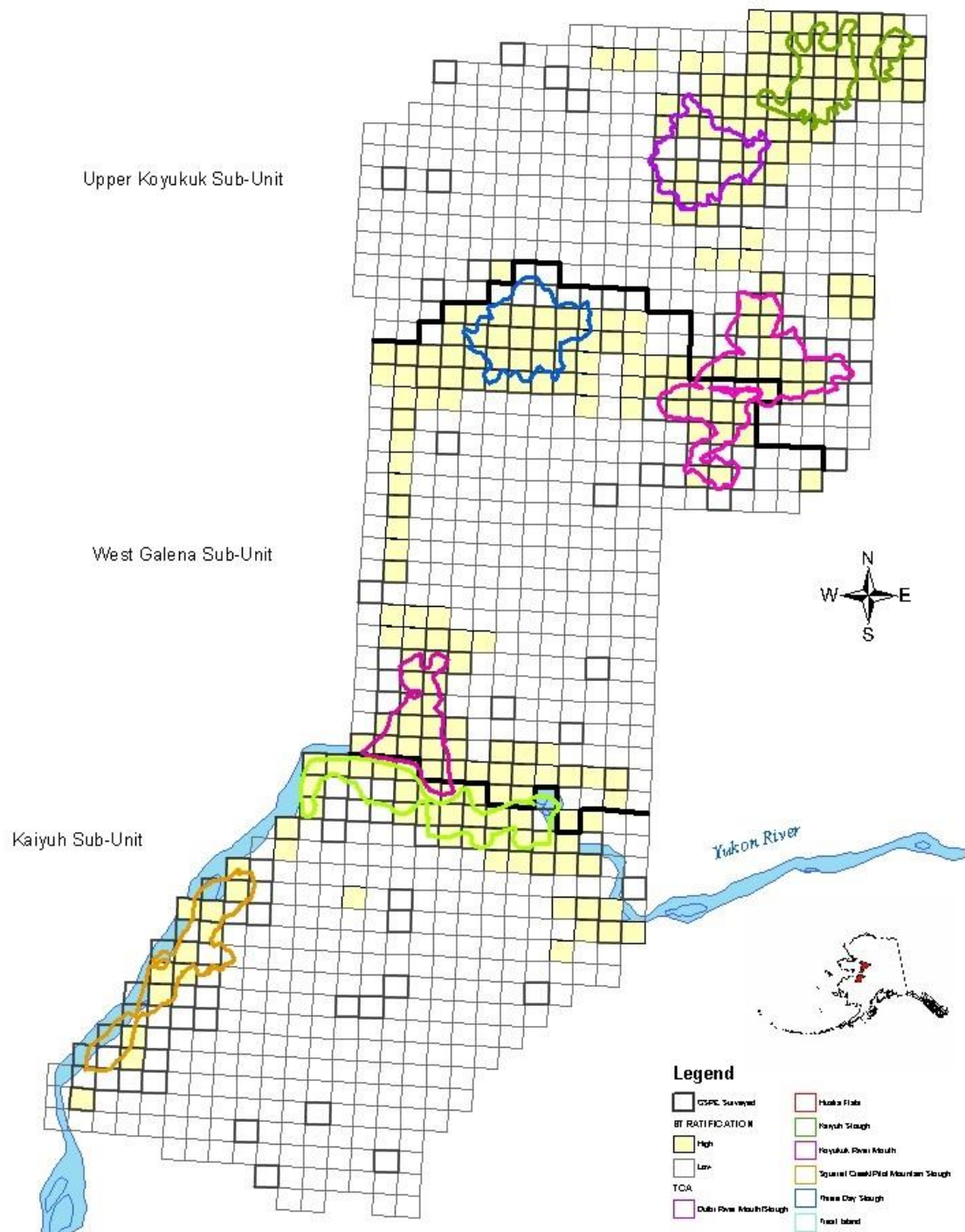


Population Estimation Survey Data

Kaiyuh Slough “Sub-Area”

Regulatory Year	Population Estimate (90% C.I.)	Density
1987–1988*	1790±18%	1.13
1997–1998*	1335±17%	0.84
2001–2002	1800±32%	0.98
2004–2005	1487±10%	0.81
2011–2012	1897±11%	1.03

*The survey area in 1987 and 1997 was smaller than the 2001-2011 surveys



Upper Koyukuk Sub-Unit

West Galena Sub-Unit

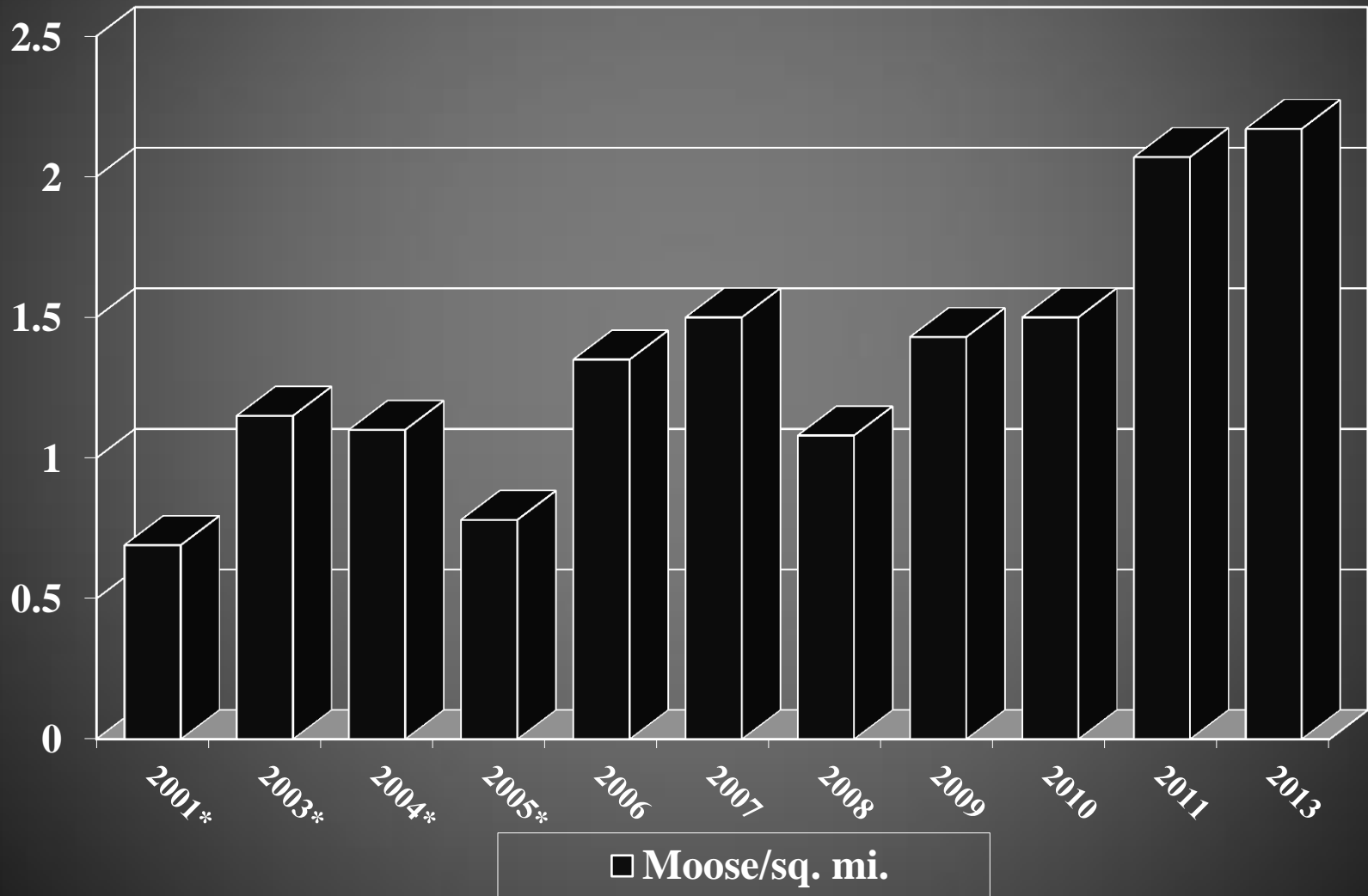
Kaiyuh Sub-Unit

Yukon River

Legend

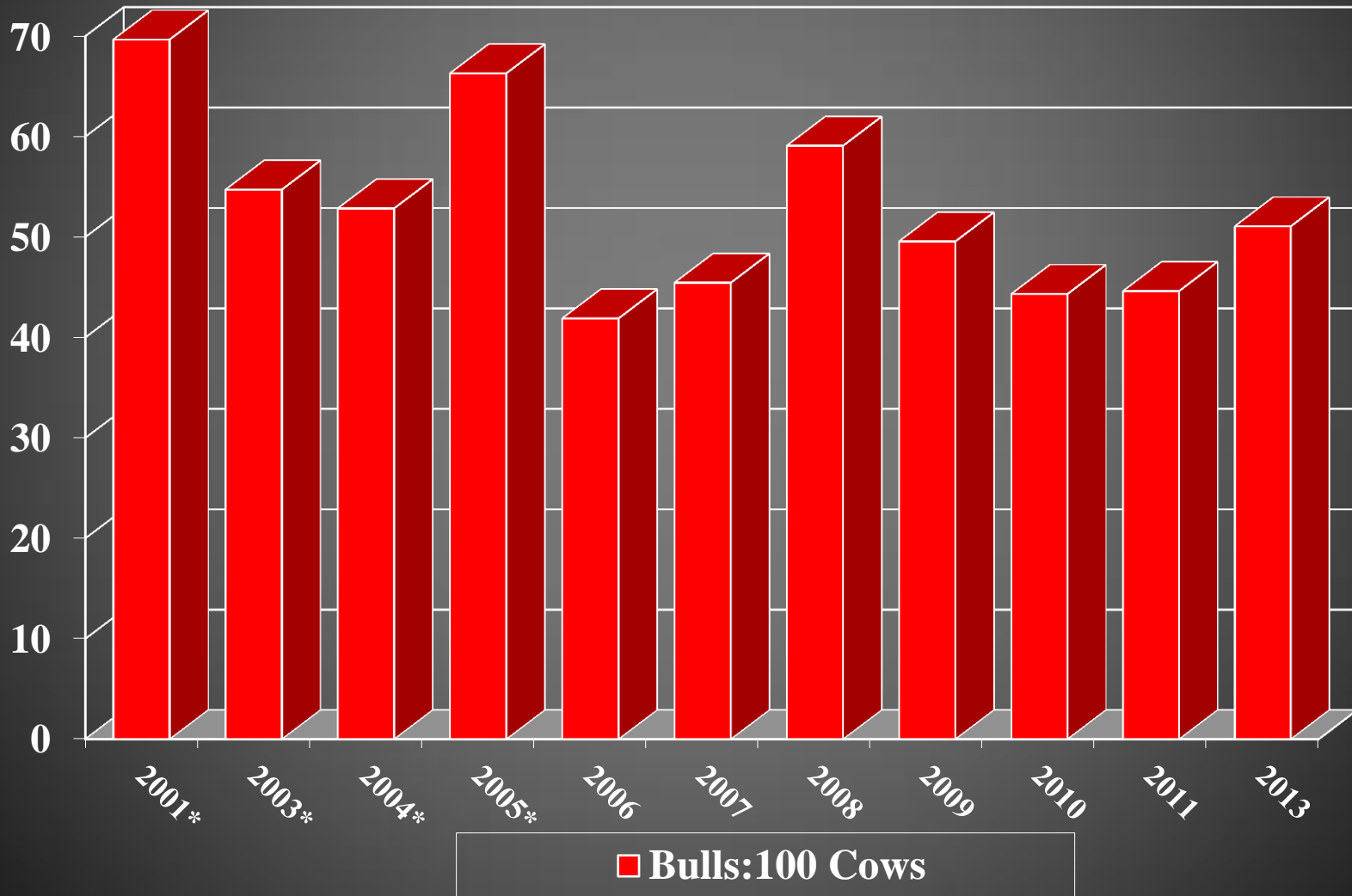
- CSPC Surveyed
- BT RATICIFICATION
- High
- Low
- TCA
- Duhai River Mouth Slough
- Koyuk Slough
- Koyukuk River Mouth
- Squirrel Creek/Pit of Mountain Slough
- TCA
- Pit of Mountain Slough
- Pit Island

GMU 21D - Kaiyuh Slough "Trend Count Area", Aerial Survey Density



GMU 21D - Kaiyuh Slough "Trend Count Area", Aerial Survey

Bulls:100 Cows



Moose Harvest Data

DM818

- 25 permits offered all 8 years
- 16 moose is estimated harvestable surplus

Ry	# Applied	# Hunted	# Moose
2006–2007	10	3	1
2007–2008*	41	2	0
2008–2009*	52	5	2
2009–2010	21 + 1	11	0
2010–2011	19 + 1	4	2
2011–2012	16 + 0	0	0
2012–2013	19 + 3	7	3
2013–2014	9 + 6	8	6

*2007 and 2008 were the only years DM818 was fully subscribed

*Surplus permits

Proposal #68

Surplus Permit Protocol

- Application period ~ April10-**June10** (State-wide drawing mail-out in July)
- Permit applications/instructions are available on-line
- Faxed to RIII office, awarded in the order they are received
- Eligibility verification
- Two-week notification to successful applicants (phone/email)
- **Permits issued and Antler tags mailed by July**



Proposal #68

Summary

- **Maintain current regulations that are working effectively**
- **Resident hunters have the opportunity to hunt every year on the RM834 and at least every alternate year on the DM818**
- **Under current demand, DM818 is annually undersubscribed, therefore hunters can obtain the undersubscribed drawing permits in successive years**

ADF&G – Opposed

KRAC – Take No Action MYAC – Opposed

RAC – Opposed



Proposal #69












**Allow guides to
select alternate
hunters in 21D & 24
drawing hunts**

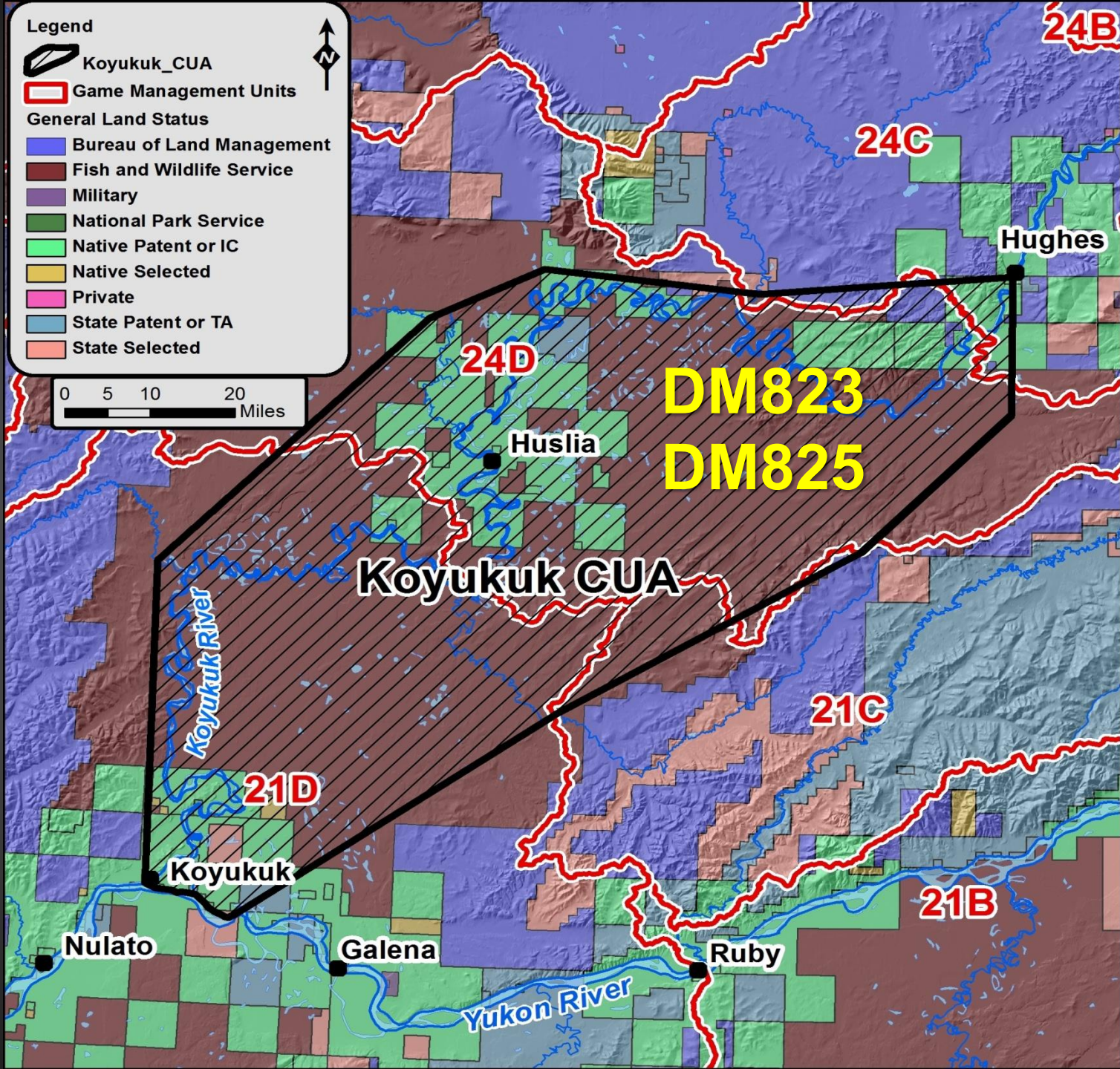
ADF&G – Neutral

KRAC – Adopt MYAC – Opposed

RAC – Opposed

Legend

-  Koyukuk_CUA
-  Game Management Units
- General Land Status**
 -  Bureau of Land Management
 -  Fish and Wildlife Service
 -  Military
 -  National Park Service
 -  Native Patent or IC
 -  Native Selected
 -  Private
 -  State Patent or TA
 -  State Selected



DM823
DM825

Koyukuk CUA

Analysis of 2014 KCUA Permits

- 2014 Allocation = **50 Total** Drawing Permits (2 Hunts)
 - 40 Resident : 10 Nonresident
 - DM828 = 20 R-early hunt
 - DM830 = 20 R-late hunt
 - DM823 = 2 NR, guided, early
 - DM825 = 3 NR, guided, late
 - DM827 = 3 NR, non-guided, early
 - DM829 = 2 NR, non-guided, late
 - **Total = 50**
- KCUA Permits Affected
 - DM828/830 = 0 permits
 - DM823/825 = 5 permits (5-14 permits since 2005)
 - DM827/829 = 0 permits

Proposal #69

Summary

- **Allocation Issue**
- **Permits are non-transferable [5 AAC 92.050 (a)(5)]**
- **This proposed regulation change would create a cost for the Department to develop and administer this unique permitting system**
- **Allowing guides to issue permits would circumvent the “order of the draw”**

ADF&G – Neutral

KRAC – Adopt MYAC – Opposed

RAC – Opposed



Proposal #70

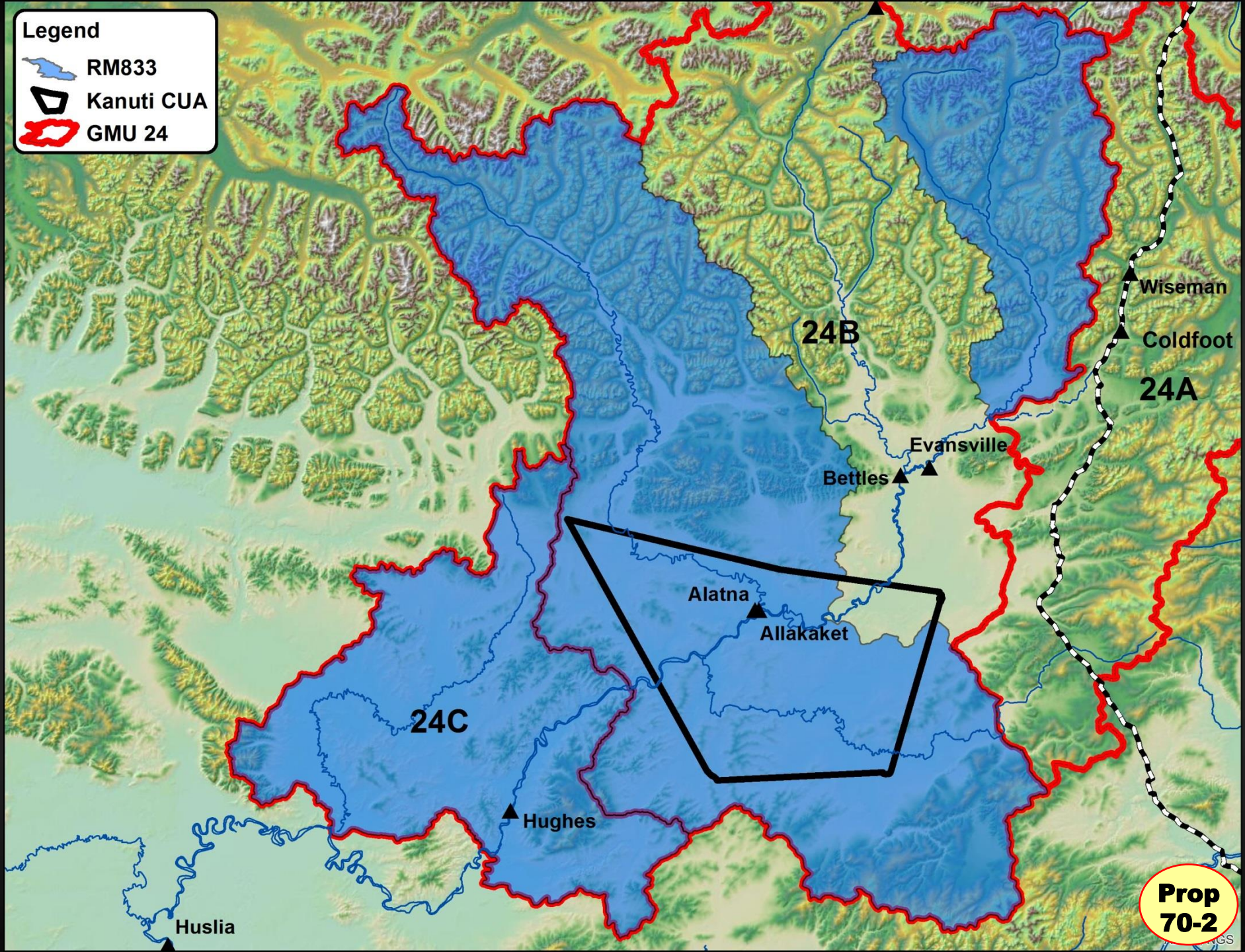
**Retain RM833 winter
hunt, GMU 24B/C**

ADF&G - Supports

KRAC - Adopt

Legend

- RM833
- Kanuti CUA
- GMU 24



**Prop
70-2**

2010 Amended Proposal #90A

Regulation

- December 15 to April 15; antlered bulls only
- Registration permit, subsistence hunt
- ~~4 year "sunset" on regulation (June 30, 2014)~~

Permit Hunt Conditions

- Permits available at vendors or online
- Aircraft not allowed
- 5-day reporting requirement at vendor/ADFG

Proposal #70

Moose Management Statistics

24B/C

- **Low density moose population (0.20-0.25 moose/mi² ≈ 2,000-4,000 moose)**
- **High Bull:Cow ratios (50-70 bulls:100 cows)**
- **Large area (24B + 24C = 16,572 mi²)**
- **Few small villages (Hughes 69, Allakaket 85, Alatna 32, Bettles/Evansville 59, Coldfoot/Wiseman 35 = 280 people)**
- **RM833 Since 2010 (3 seasons); 48 permits issued, 17 hunted, 0 moose harvested**

Unit 24C, 24D Survey Fall 2007

Legend

4,295 mi²

GMU

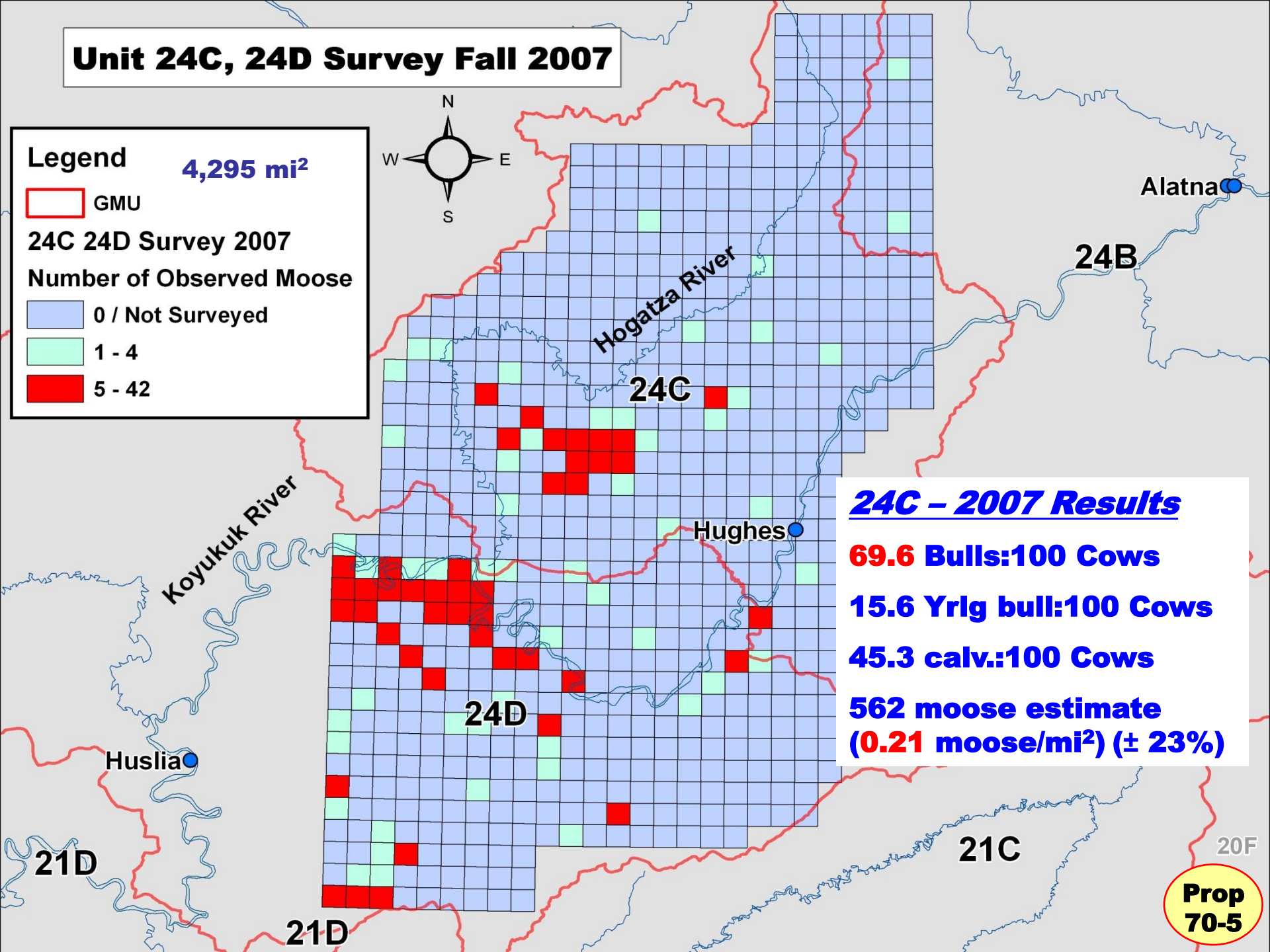
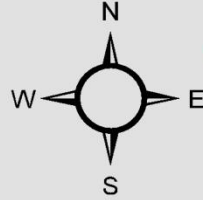
24C 24D Survey 2007

Number of Observed Moose

0 / Not Surveyed

1 - 4

5 - 42



24C - 2007 Results

69.6 Bulls:100 Cows

15.6 Yrlg bull:100 Cows

45.3 calv.:100 Cows

562 moose estimate

(0.21 moose/mi²) (± 23%)

2013 Results

67 Bulls:100 Cows

11 Yrlg bull:100 Cows

35 calv.:100 Cows

**768 moose estimate
(0.21 moose/mi²) (± 23%)**

Legend

-  Moose Groups
-  Wolf Observations
-  24B Intensive Management Area
-  Surveyed
-  Kanuti NWR

Kanuti 2010 Survey

STRATA

-  H
-  L



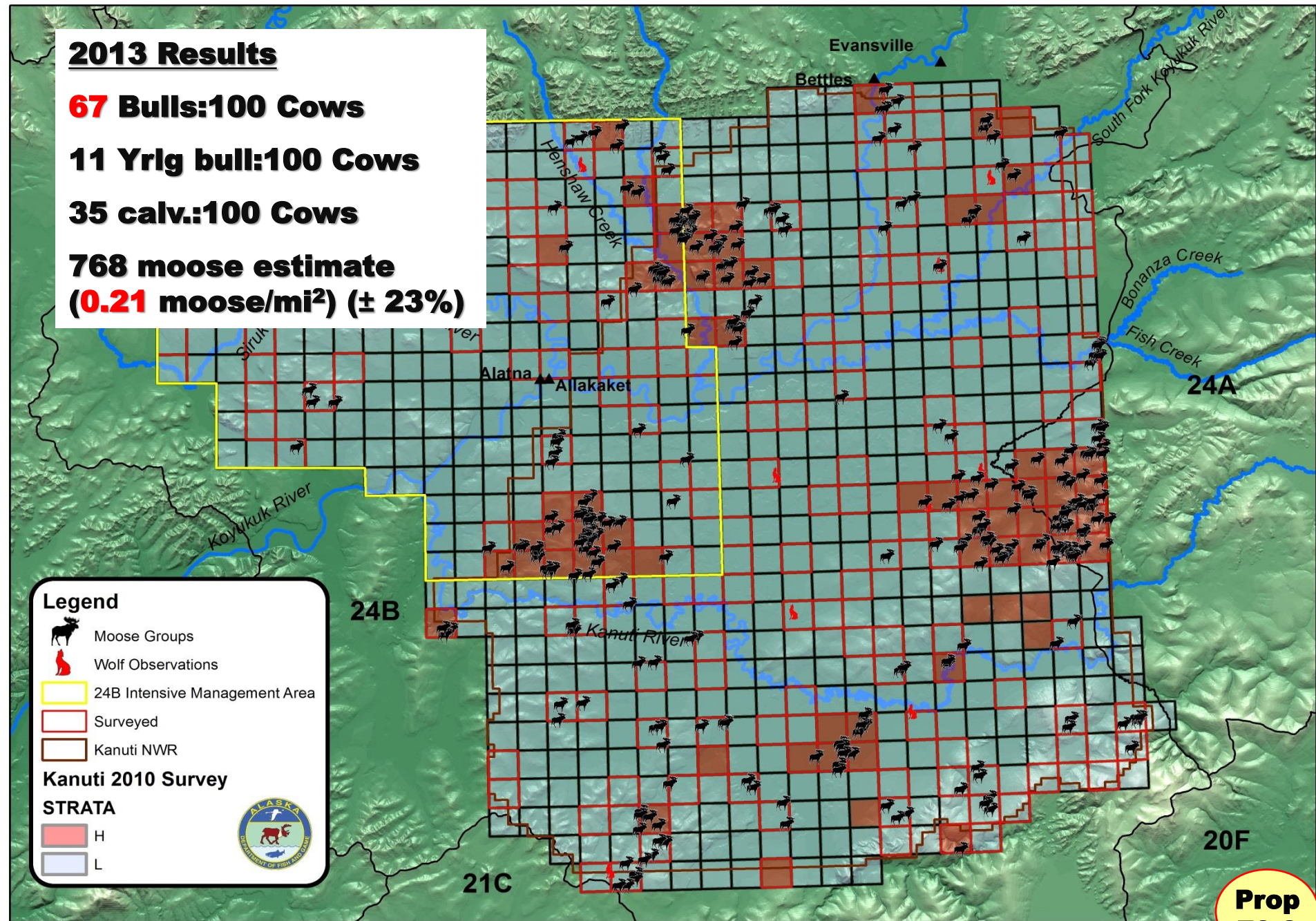
21C

24B

24A

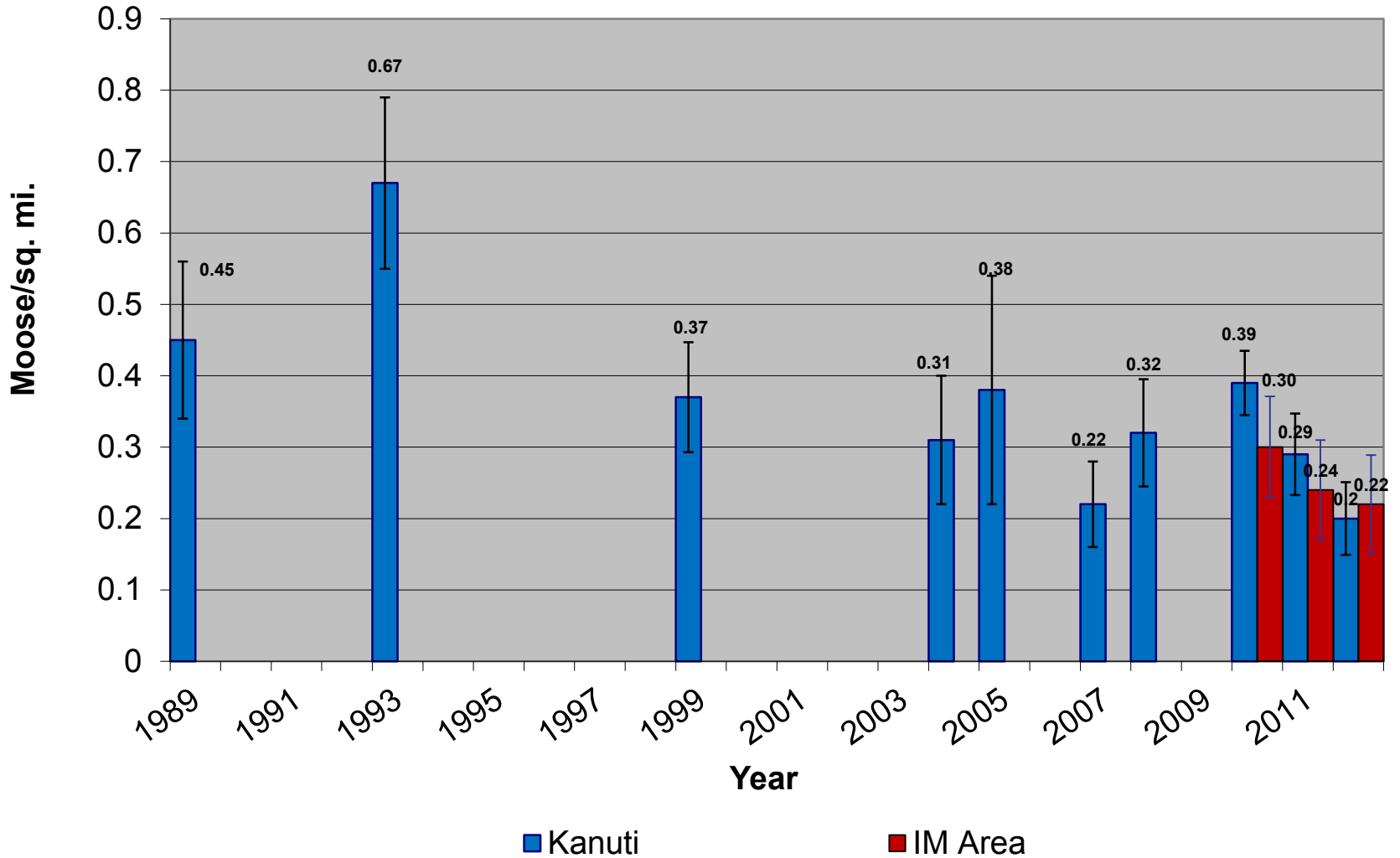
20F

**Prop
70-6**



24B Moose Density Estimates

Moosepop '89 & '93, w/o SCF in '93, GSPE in '99 through '13
Adjusted for Survey Area Size



Proposal #70

Rationale for Retaining Hunt

- **Largest bulls have lost antlers by Dec. 15th**
- **Hard antlered bulls are mostly younger in early winter**
- **Palatability of moose and antler status coincide**
- **Low encounter rates will be offset by longer season**
- **Hunters will have all winter to look for a bull, so there will be less pressure of a short season, and the risk of shooting a cow will be decreased**
- **No direct cost because hunting occurs during normal winter activities**
- **Land status and starting dates will not be an issue**
- **Hunters are more likely to meet needs**

Proposal #70

Summary

- **Monitoring period demonstrated concerns about cow harvest and reporting were addressed**
- **Low density moose and low number of people translates to: → low encounter rates and therefore low harvest**
- **Maintaining the RM833 hunt will provide an opportunity for a very low number of hunters that may need a late winter moose**

ADF&G – Supports KRAC - Adopt



Proposal #71

Change boundaries of the Kanuti CUA

ADF&G – Neutral

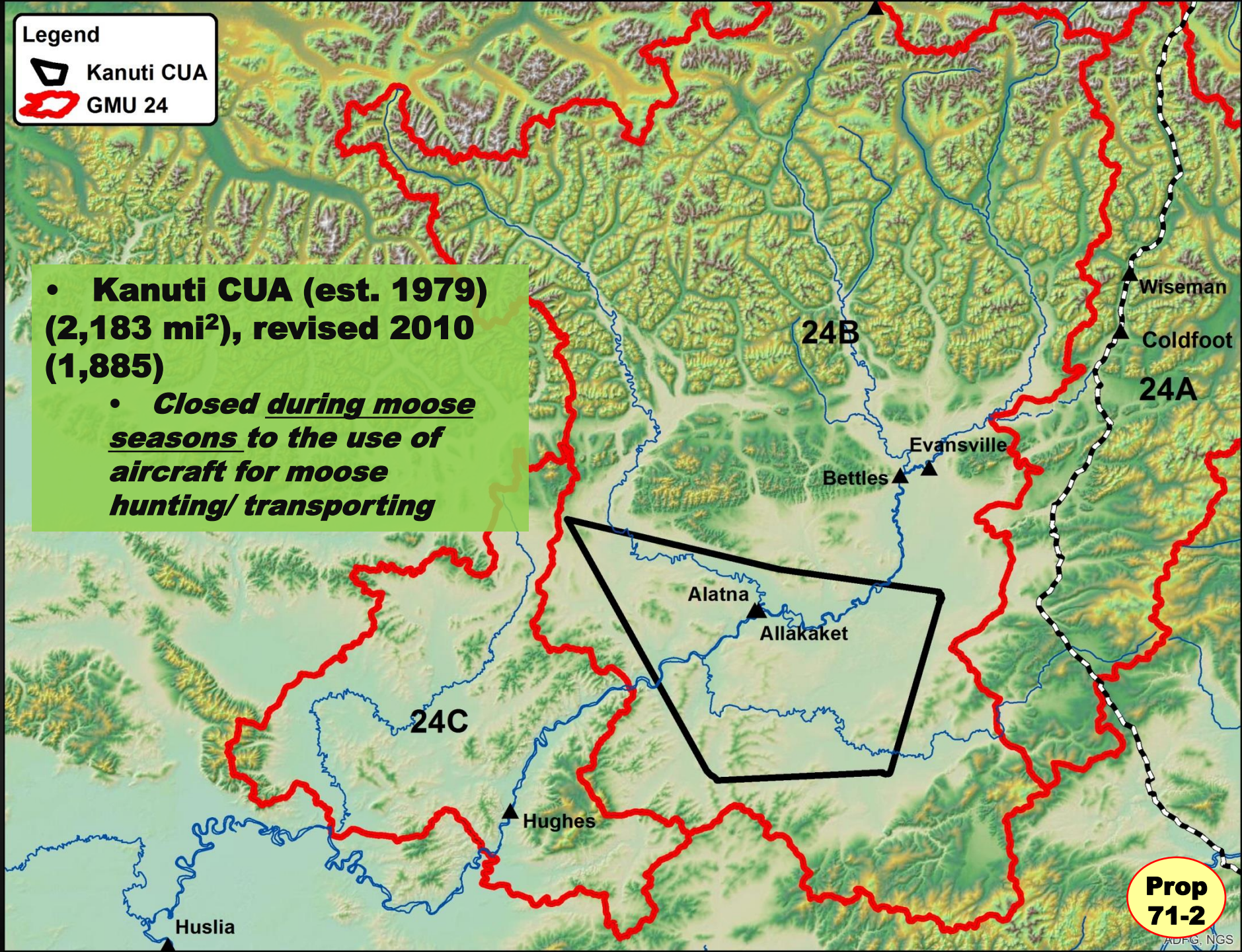
KRAC – Adopt

Legend

-  Kanuti CUA
-  GMU 24

- Kanuti CUA (est. 1979) (2,183 mi²), revised 2010 (1,885)**


- Closed during moose seasons to the use of aircraft for moose hunting/ transporting***




Prop 71-2










- **Federal land closure to moose hunting within Kanuti CUA (1992) (non-federal qual.)**
- **Primary effect would be ~23 mile stretch of Koyukuk R. would be restricted**
- **Proposed change would increase size of Kanuti CUA by (298 mi²)**

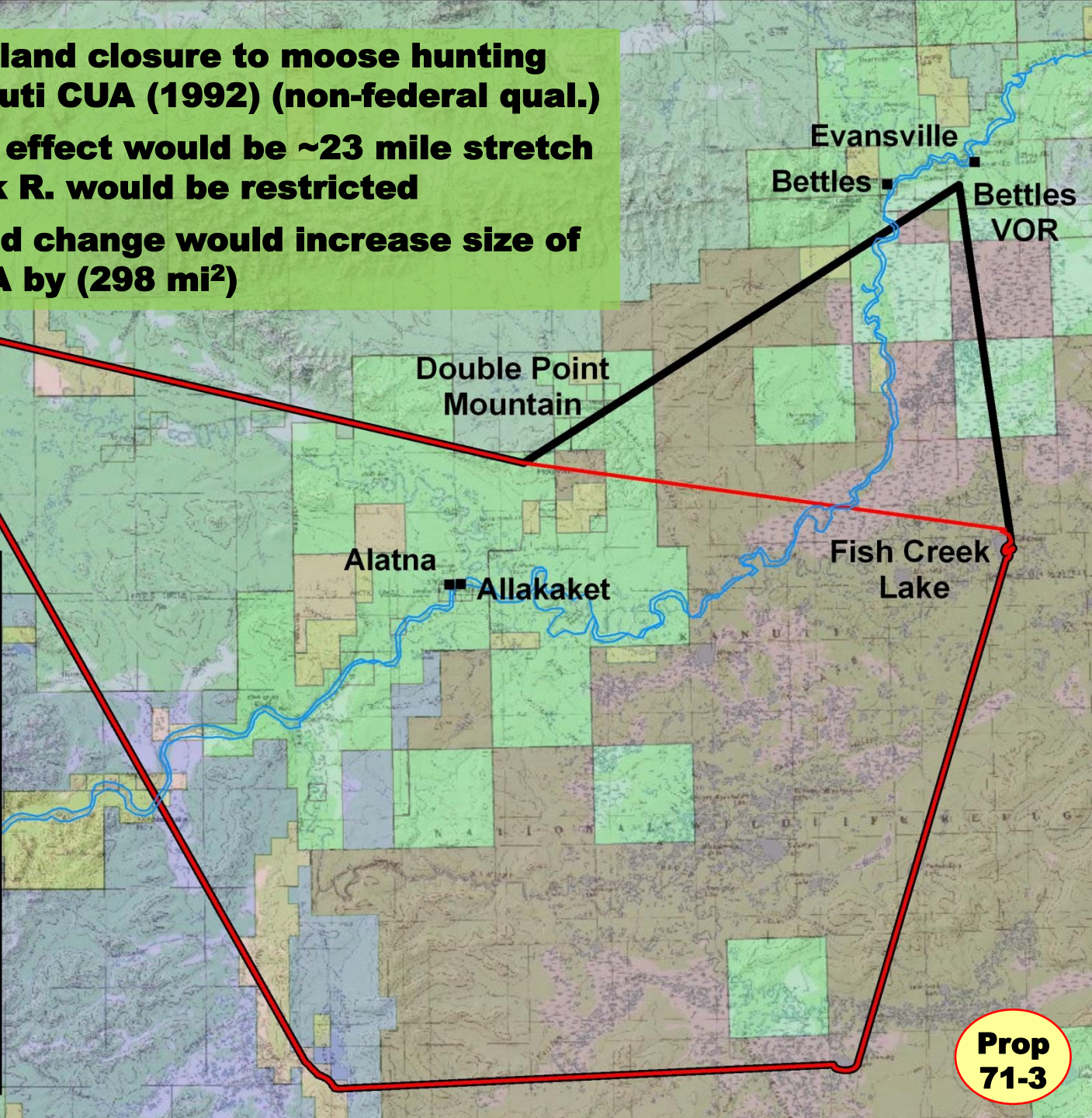
Legend

 Kanuti CUA **Current**

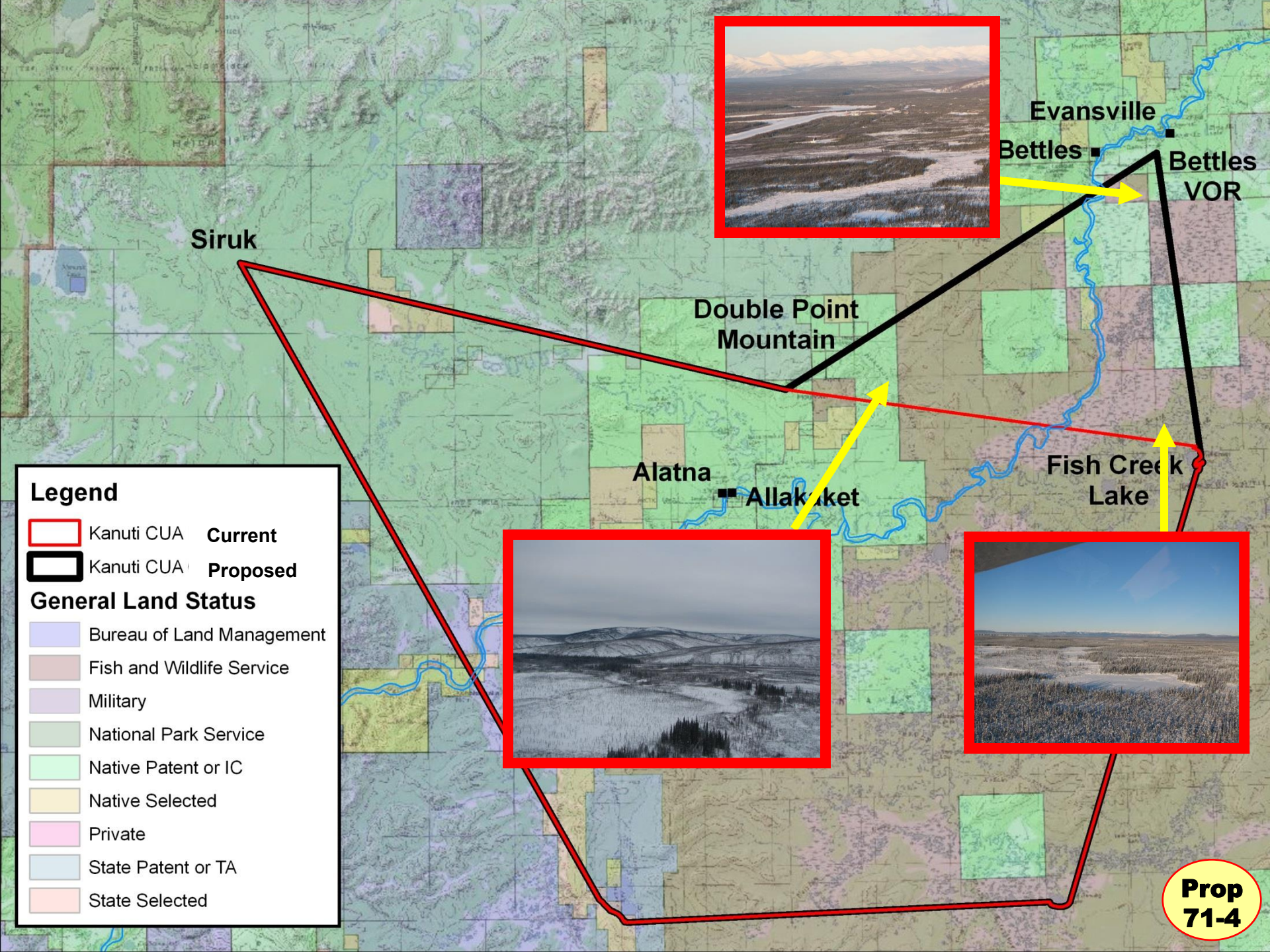
 Kanuti CUA **Proposed**

General Land Status

-  Bureau of Land Management
-  Fish and Wildlife Service
-  Military
-  National Park Service
-  Native Patent or IC
-  Native Selected
-  Private
-  State Patent or TA
-  State Selected



**Prop
71-3**



Legend

- Kanuti CUA **Current**
- Kanuti CUA **Proposed**

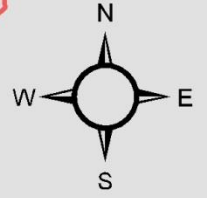
General Land Status

- Bureau of Land Management
- Fish and Wildlife Service
- Military
- National Park Service
- Native Patent or IC
- Native Selected
- Private
- State Patent or TA
- State Selected

**Prop
71-4**

Unit 24A, 24B Survey 1999, 2001, 2004, 2005, 2007, 2008

Bettles ★ Evansville



24C

Alatna River

Allakaket ★

24B

Koyukuk River

Kanuti River

24A

Legend

- Kanuti CUA
- Proposed Kanuti CUA
- GMU

24AB Kanuti Survey

Number of Observed Moose


- 0 / Not Surveyed
- 1 - 4
- 5 - 32

**Prop
71-5**

Contemporary Resource Use Patterns in Upper Koyukuk River

(Marcotte & Haynes 1985)

Legend

 Alatna Bear, Moose Subsistence

 Kanuti CUA Proposed

 Kanuti CUA Current

General Land Status

 Bureau of Land Management

 Fish and Wildlife Service

 Military

 National Park Service

 Native Patent or IC

 Native Selected

 Private

 State Patent or TA

 State Selected

Siruk

Double Point Mountain

Alatna
Allakaket

Fish Creek Lake

Evansville

Bettles

Bettles

VOR

Hughes

Prop
71-6

Proposal #71

Summary

- **Allocation Issue**
- **The proponent of the 2010 change, supports the current boundary**
- **The KRAC supports the original boundary of this proposal**

ADF&G – Neutral KRAC – Adopt

Galena Mgt. Area

2014



The End