

# Wildlife Management Division Rule Development

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Bear & Cougar Rule  
19.31.11 NMAC

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August 28, 2010

NM State Game Commission Meeting

Albuquerque

# Public Comment

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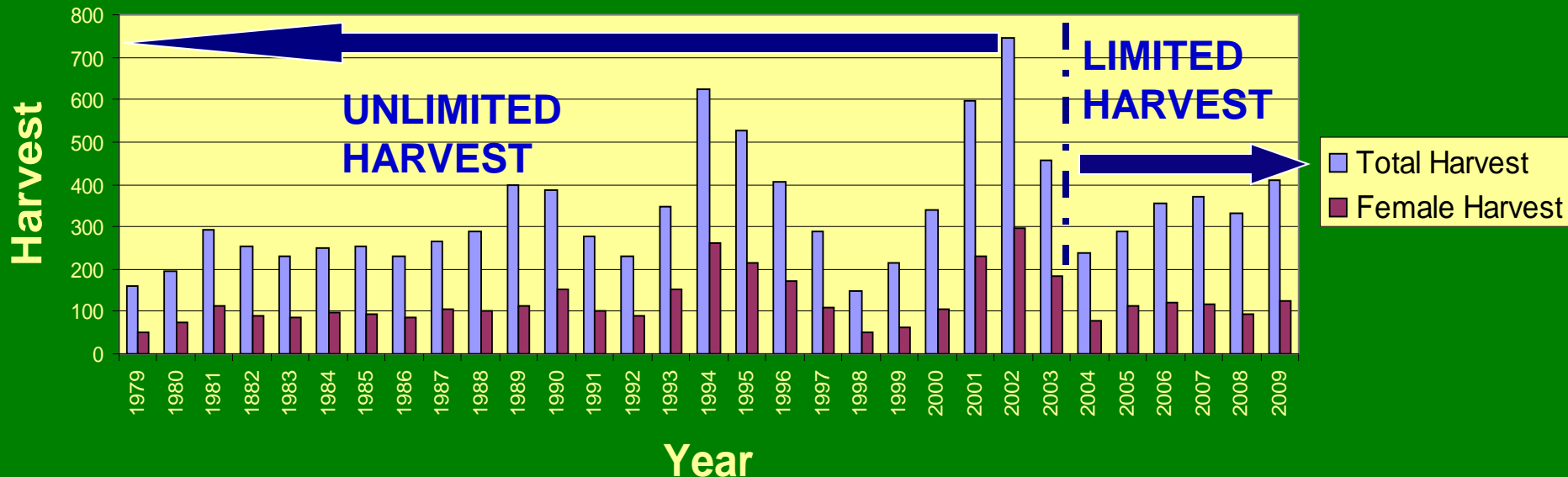
- 16 public meetings – August 2010
  - 407 participants
- E-mail and letters –
  - Bear proposal – 18 pro; 69 con
  - Cougar proposal – 12 pro; 16 con
  - Robo e-mail opposed - 517

# Black Bear Management in New Mexico

# History - Pre-Harvest Limits

- 1927 – Black bears protected as a game animal in NM
- 1927 – 2004 – No harvest limits (Spring hunts until 1992)

## 1979 - 2009 Bear Harvest



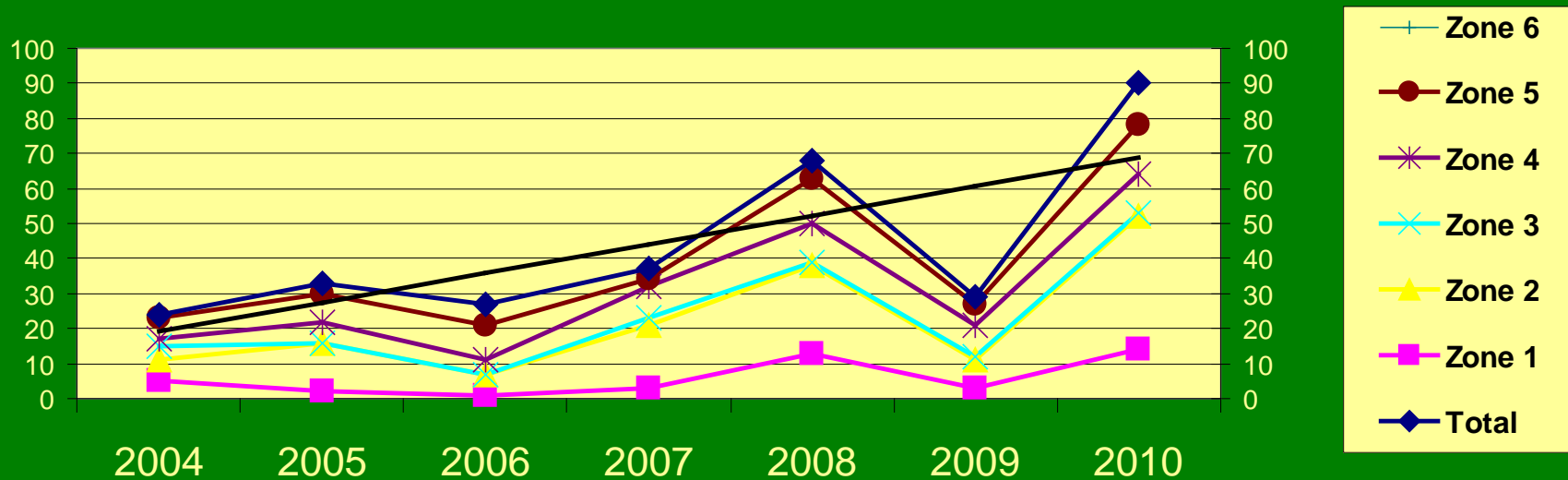
# Current (2004 – 2010) Bear Management Strategy

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- Conservative population estimates and mortality limits
- Maximum mortality of 7% of the population with a 40% maximum harvest of females
- All known mortalities included in harvest limits
- 369 females 'saved'
- Stable population management objective for all Bear Management Zones (BMZ)

# Bear Complaint Trend – Spring (April – June) Current Management Strategy

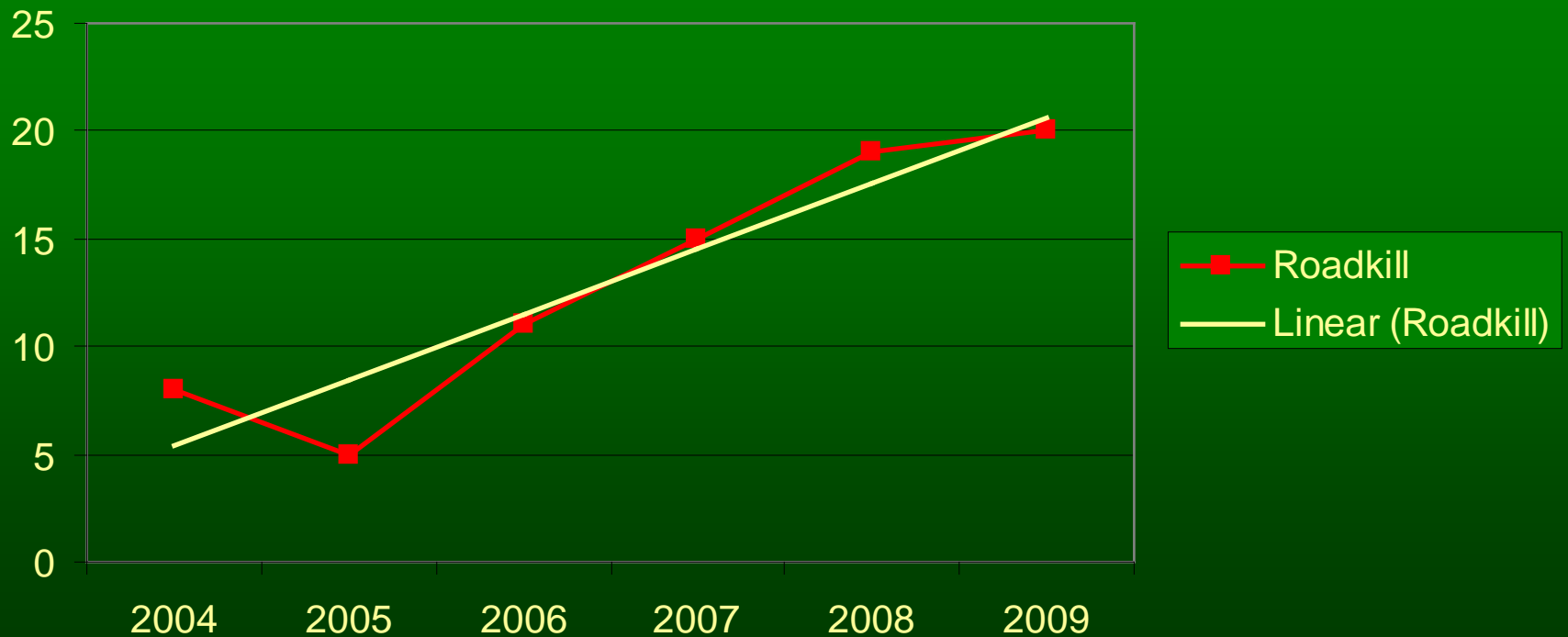
## Bear Complaints by Zone



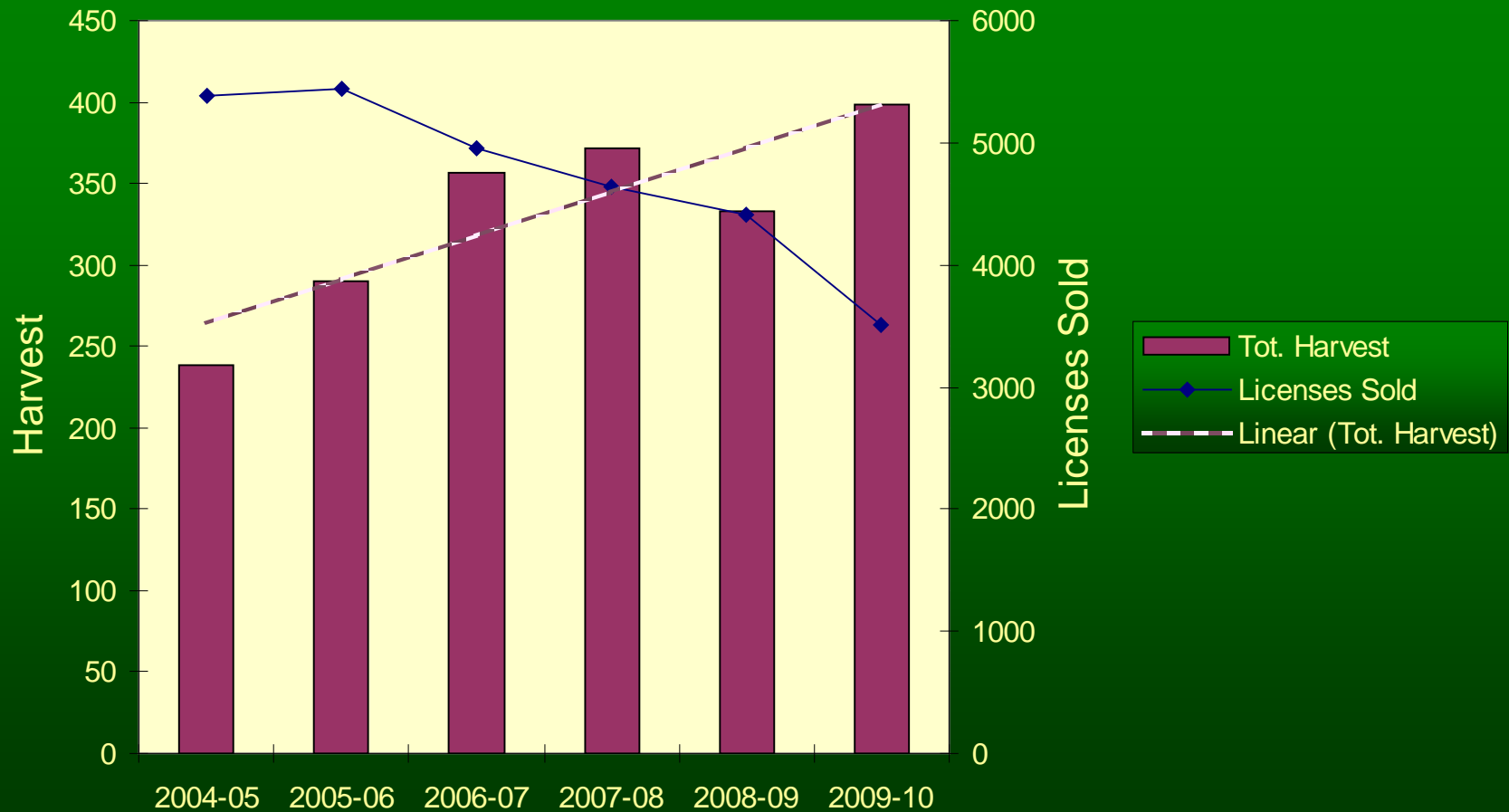
# Black Bear Roadkill Trend

## Current Management Strategy

2004-09 Bear Roadkill Statewide

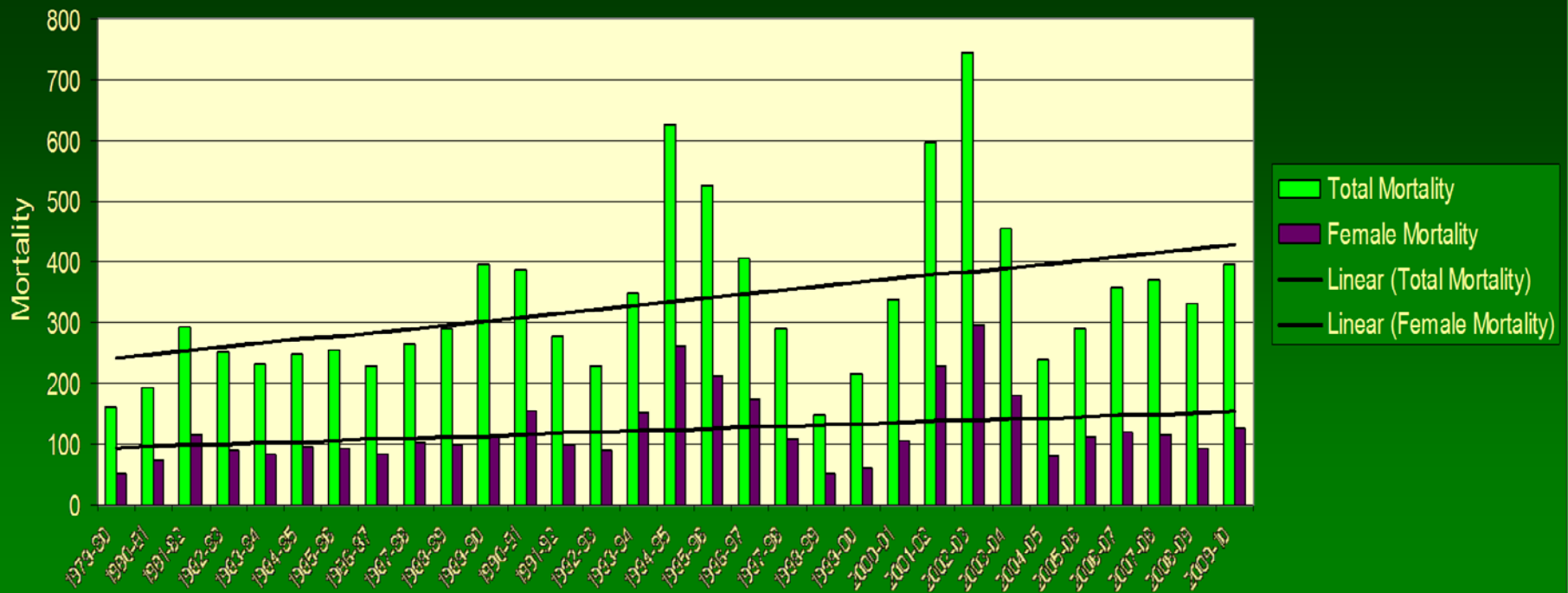


# Black Bear Harvest & License Sales

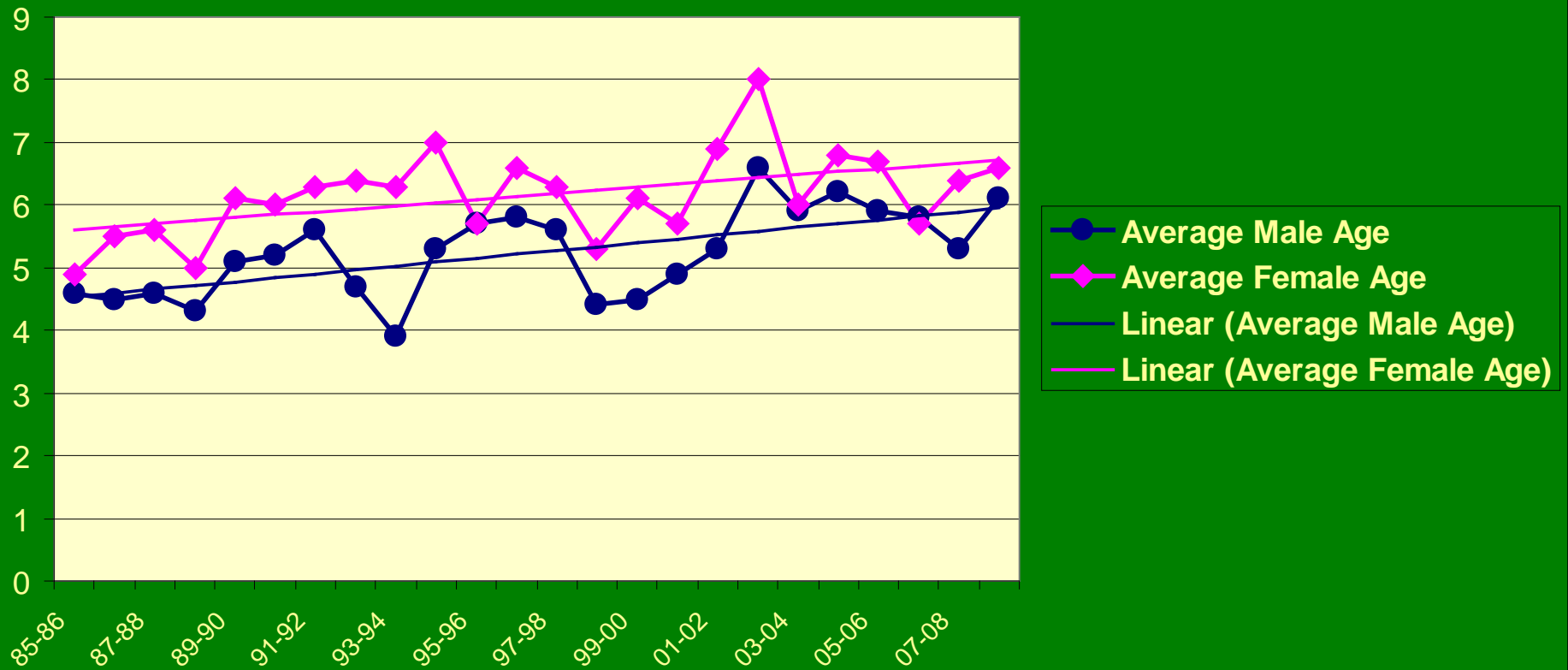




# Black Bear Mortality 1979 - Present



# Average Black Bear Ages 1979 - 2009



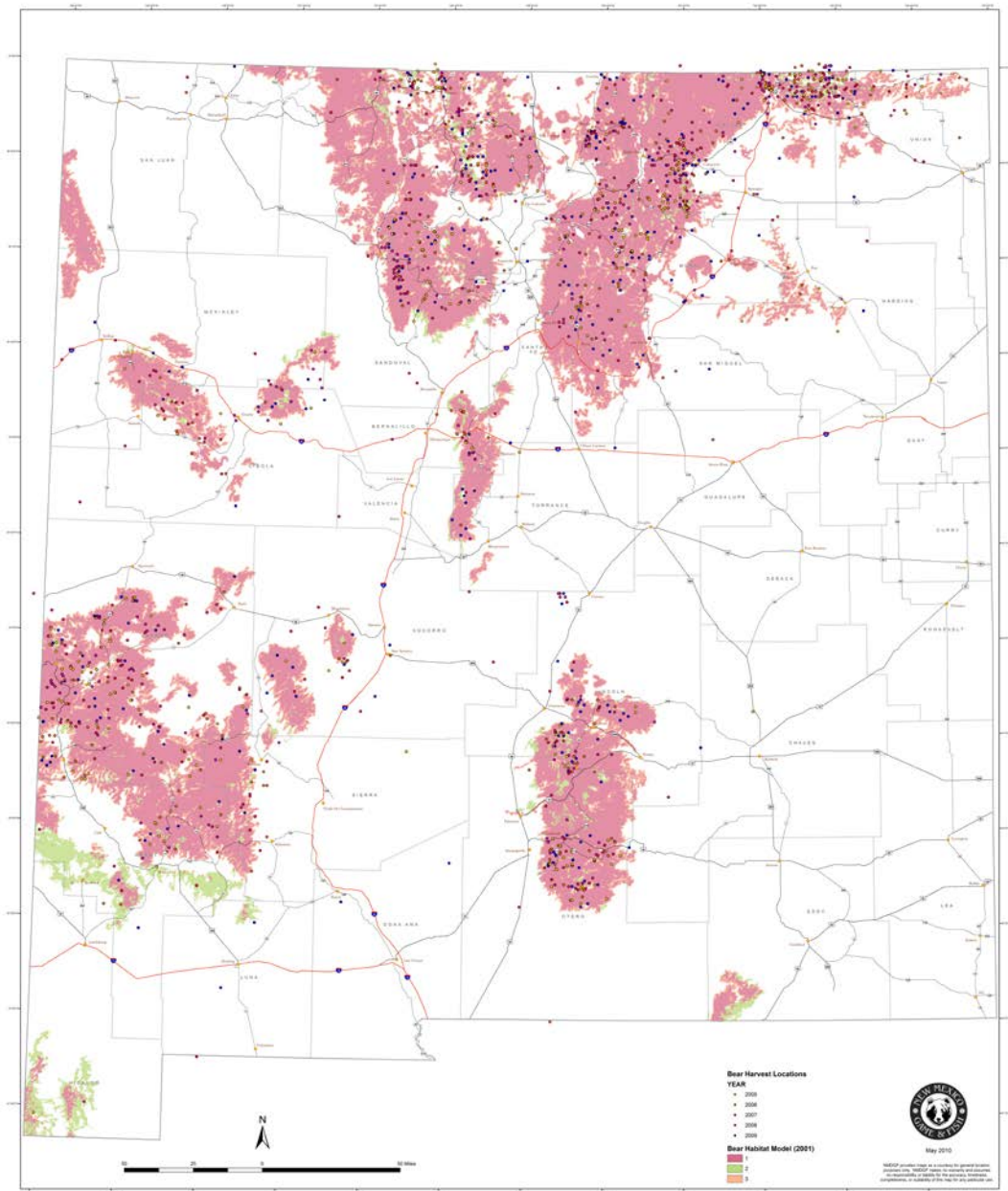
# Proposed 2011-2014 Bear Management Strategy

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## OVERALL GOAL

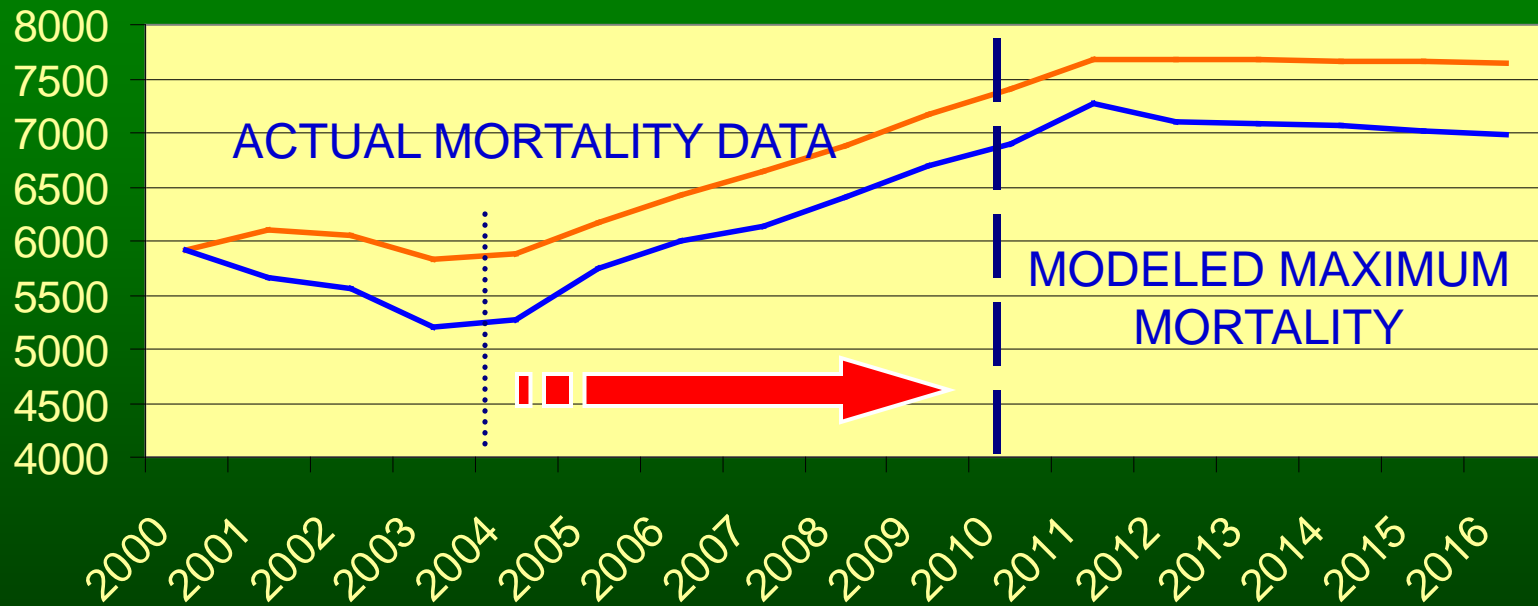
- Sustain black bear populations throughout all suitable habitats in New Mexico while maintaining recreational opportunity and managing bear damage and human/bear conflicts

# Black Bear Habitat Model with Harvest Locations (2005 – 2009)



# Population Growth

## New Mexico Black Bear Model Comparisons



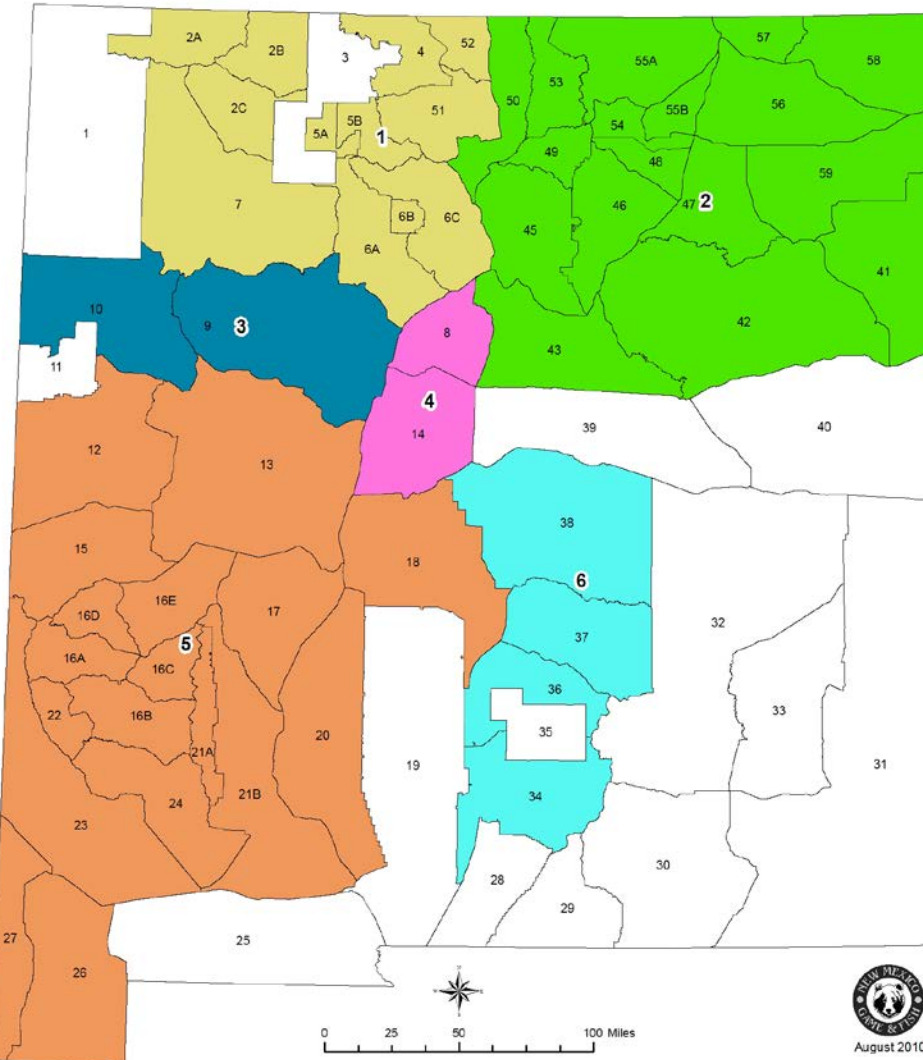
- SBW Model, Proposed Harvest, 5919 starting pop.
- NMDGF Model, 14% Harvest, 5919 starting pop.

# Proposed 2011-2014 Bear Management Strategy

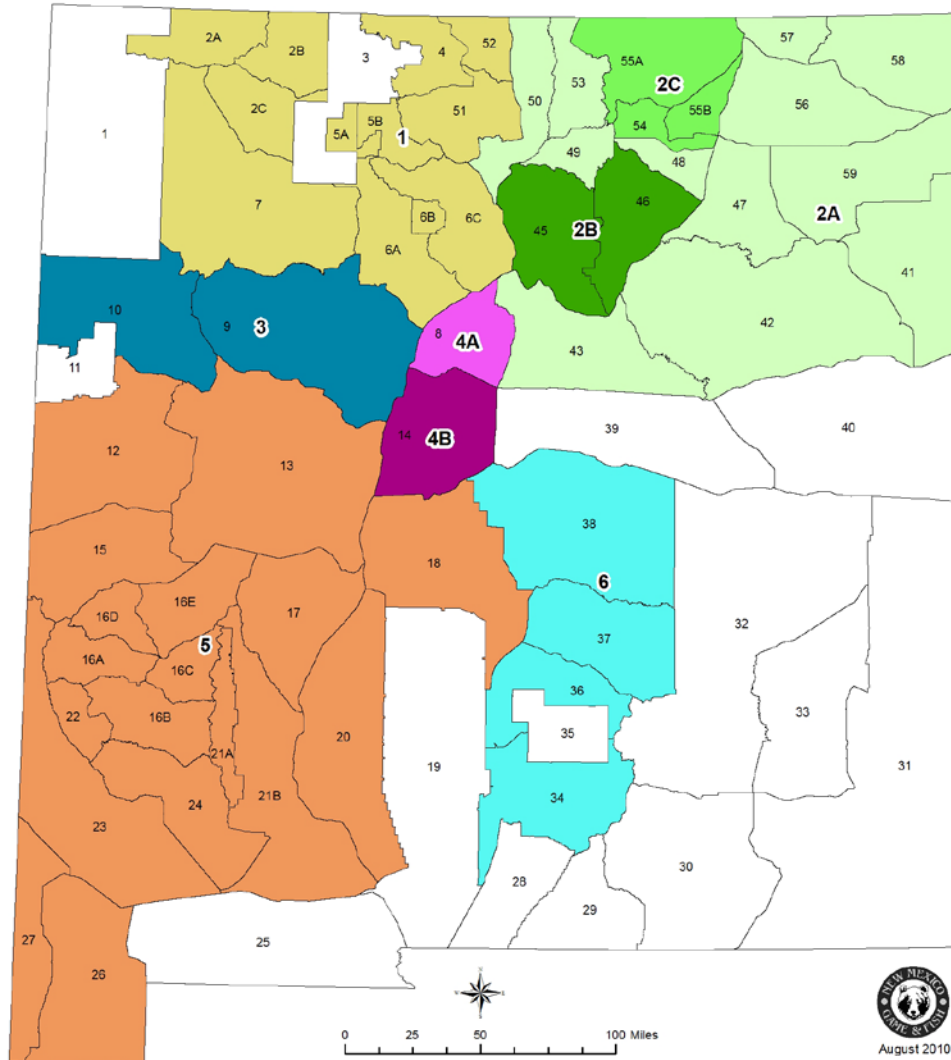
- Redistribute hunting pressure and harvest in some BMZs
  - BMZ 2 – Split into 3 zones
    - Create BMZ 2A – GMUs 41-43, 47-50, 53, 56-59
    - Create BMZ 2B – GMUs 45 & 46 – Santa Fe, Las Vegas
    - Create BMZ 2C – GMUs 54 & 55 – Taos, Raton
  - BMZ 4 – Split into 2 zones
    - Create BMZ 4A & 4B – GMUs 8 & 14
  - Sub-limits for GMUs 34 and 36 in BMZ 6

# Bear Management Zones

Current Bear Zones



Proposed Bear Zones

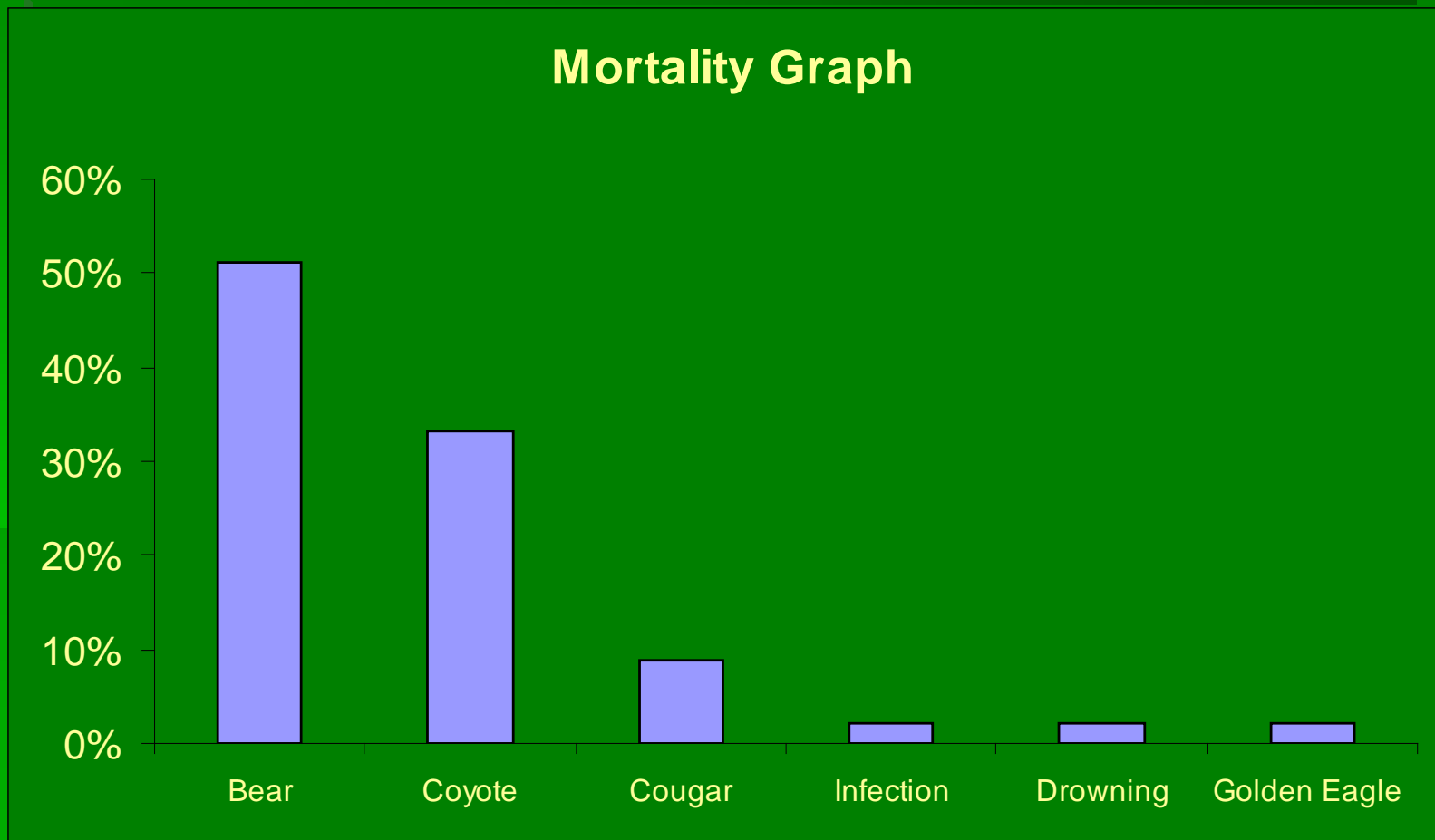


# Bear Strategy Cont'd

- Stabilize populations – BMZ 1, 2A, 3, 5 and BMZ 6 (except GMU 36 portion)
  - Increase maximum harvest limits from 7% to 10% of the population with no more than 40% female
- Decrease populations – BMZ 2B, 2C, 4A, 4B, 6 (GMU 36)
  - Increase maximum harvest limits from 7% to 15% of the population with no more than 50% female



# 2009-10 Valle Vidal & Vermejo Elk Calf Mortality Study



# Bear Strategy Cont'd

- Spring bear hunt opportunity (April 1-14) in BMZ/GMUs where management objective is to decrease populations
  - Target males
  - Avoid take of females with cubs
  - No dogs during spring season
  - All spring harvest would be included in overall harvest limits
- Proposed draw hunts on Valle Vidal
  - Spring – 10 licenses – April 1-14
  - Fall - 10 licenses – August 1-31

# Education & Outreach

- Education
  - Individual contacts (personal, phone and meetings)
  - Programs each spring and summer
  - Media
  - 2000-2006 Dept contract in SE Area
- Outreach
  - Over \$200K grants matched over past 8 years to improve trash disposal with communities
    - Red River, Angel Fire, Philmont, campgrounds
  - City Council of Raton voted 'NO' to matching a \$100K grant and \$60K private offer to bear-proof dumpsters
  - Continued work with various communities to address trash management

# Summary of Bear Proposal

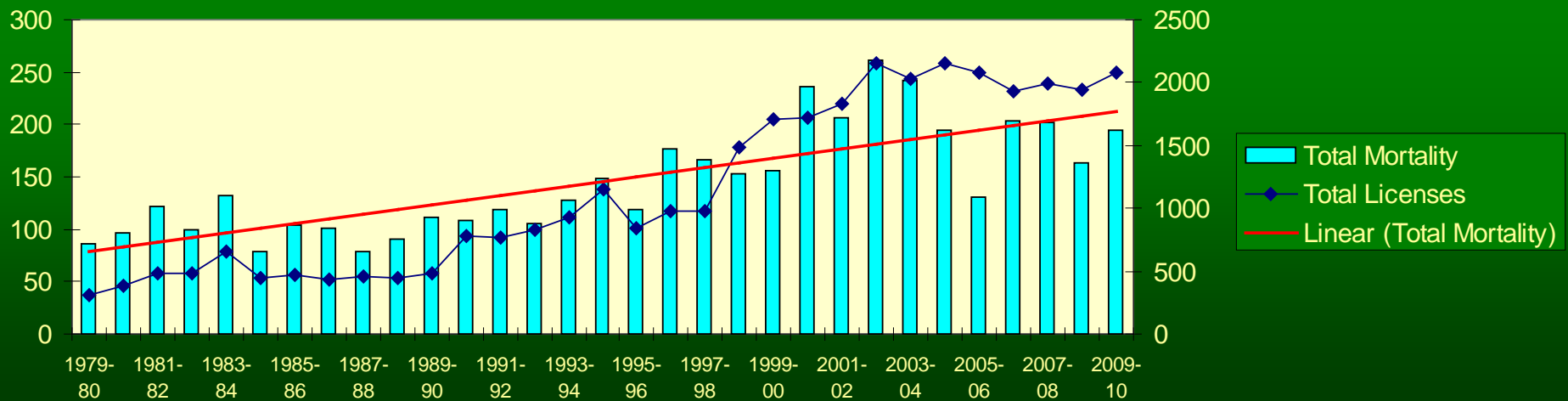
- Most BMZs and GMUs managed for stable populations
- Continue to protect females
- Address human safety, high elk calf predation, and depredation/nuisance issues in some BMZs by managing for decreased populations
- Management strategy and data will be assessed throughout the rule cycle
- Adjustments to management strategies will be proposed as objectives are met

# Cougar Management in New Mexico

# Cougar Management History

- Unprotected until 1972
- Unlimited harvest until 1999

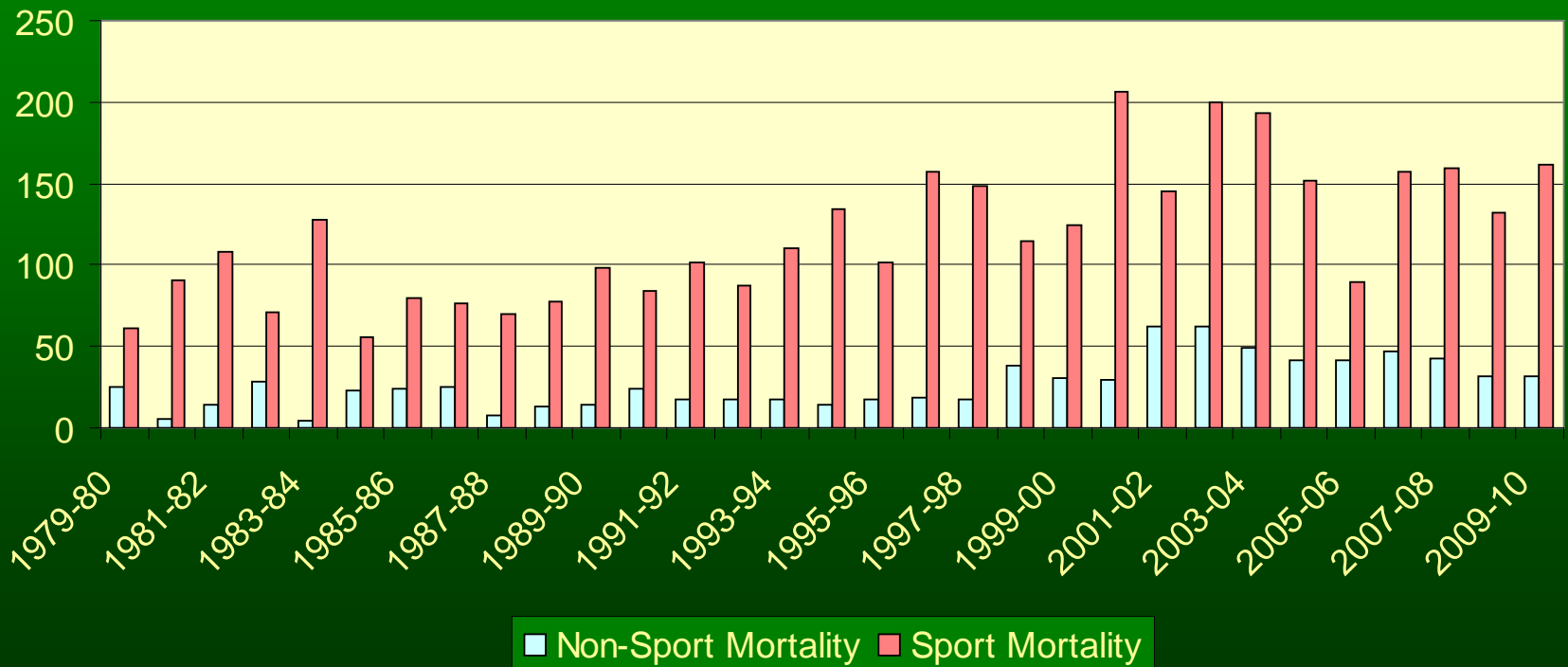
Cougar Mortality and License Sales (1979 – 2009)



# Current (2004 – Present) Cougar Management Strategy

- Based upon previous cougar habitat model and density estimates
- Harvest location data not used in predictive cougar habitat model
- Conservative population estimates and harvest limits including all mortalities
- Maximum harvest of 20% of the population with a 25% maximum harvest of females
- Stable population management objective for all Cougar Management Zones (CMZ)

# Cougar Mortality History





# Proposed 2011-2014 Cougar Management Strategy

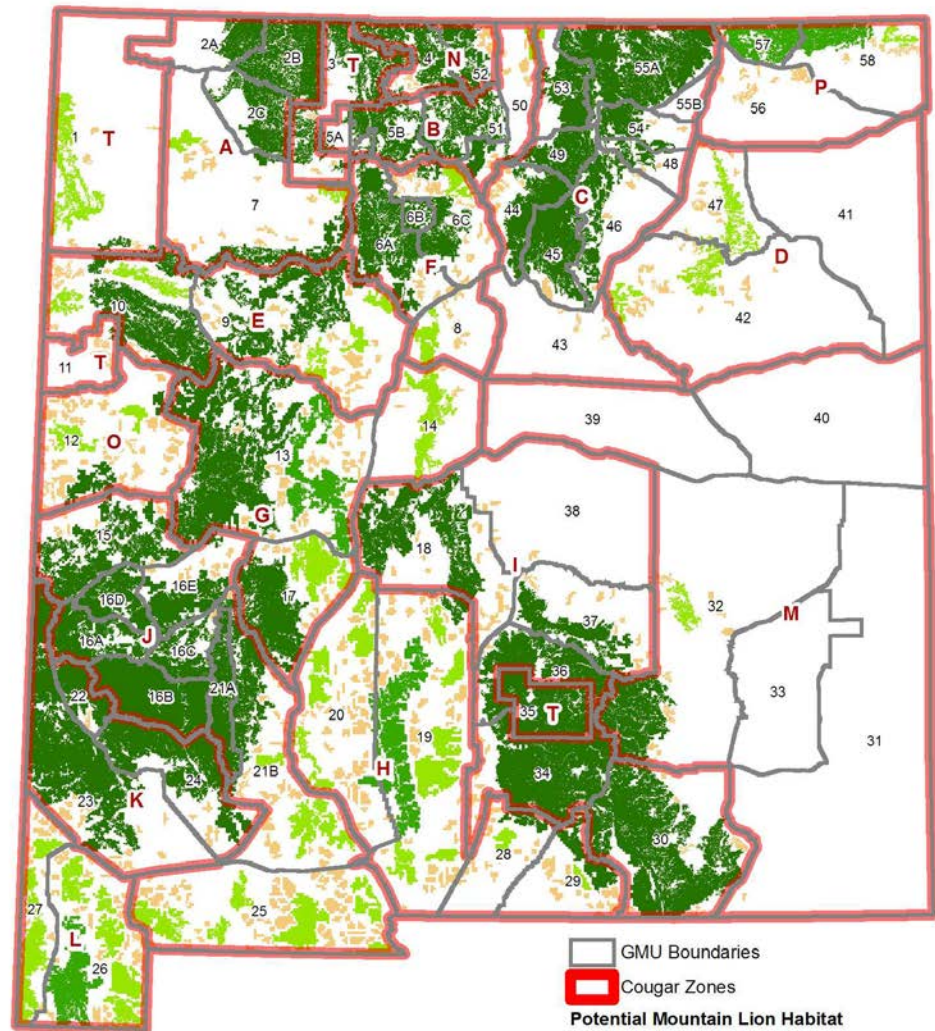
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## OVERALL GOAL

- Sustain cougar populations throughout all suitable habitats in New Mexico while maintaining recreational opportunity and managing cougar damage and human/cougar conflicts

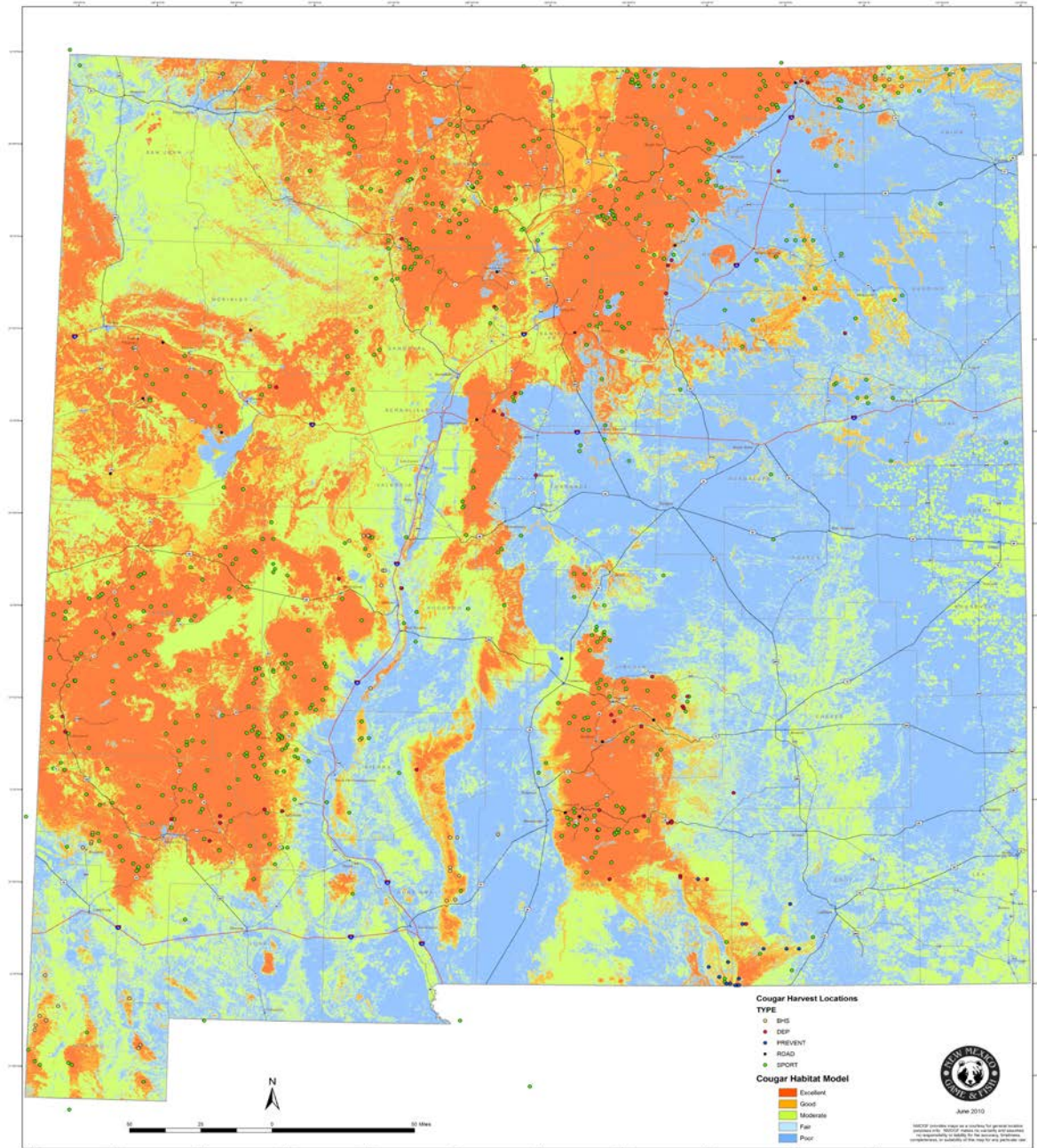
# 2006 Cougar Habitat Model

## Potential Mountain Lion Habitat *Puma concolor*



Analysis and Cartography: Kurt Menke -  
Bird's Eye View (505-362-1776)  
Data Sources: NMDGF, US Census,  
NM-RGIS, NM-GAP, WAFMA  
Date: September 27, 2006

# 2010 Cougar Habitat Model with Mortality Locations (2005-2009)



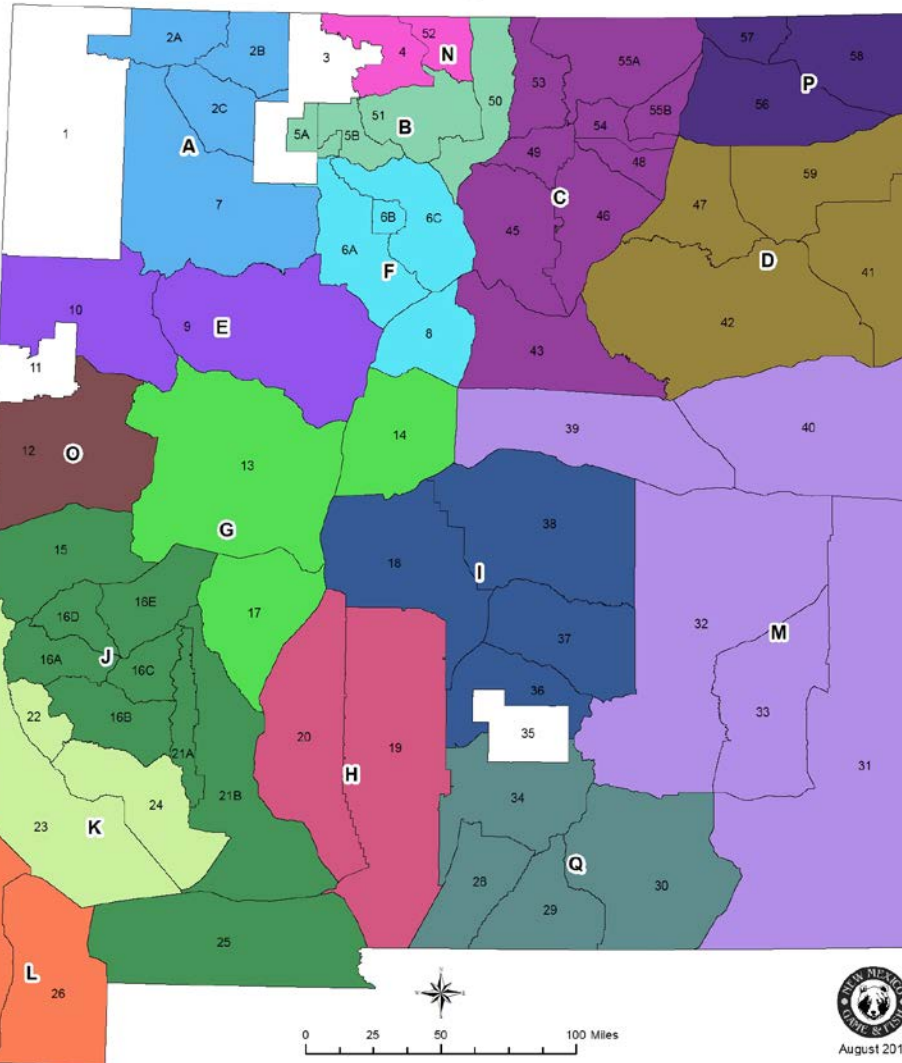
# Proposed 2011-2014 Cougar Management Strategy

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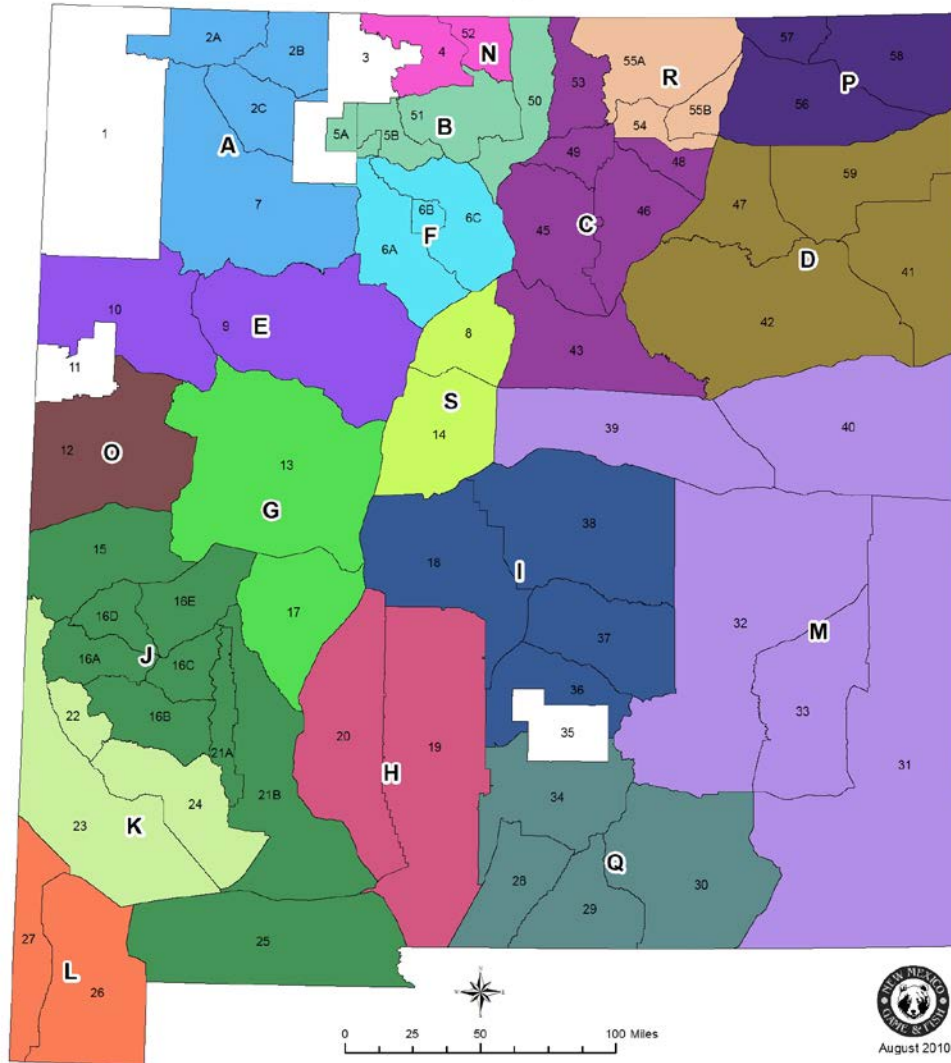
- Create new Cougar Management Zones (CMZ) to distribute hunting pressure
    - CMZ R – GMUs 54 & 55 (Taos and Raton)
    - CMZ S – GMUs 8 & 14 (Sandias and Manzanos)
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# Cougar Management Zones

Current Cougar Zones



Proposed Cougar Zones



# Cougar Strategy Cont'd

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- Stable Population Objective
  - Increase maximum harvest from 20 to 25% of the total estimated population with a increased maximum female harvest from 25% to 30%
  - CMZs A, B, E, I, J, M – R
  - Increases hunter opportunity (303 to 668) while still managing for current population levels

# Cougar Strategy Cont'd

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- Decrease Population Objective
  - Increase maximum harvest from 20 to 30% of the total estimated population with an increased maximum female harvest from 25 to 50%
  - CMZs C, D, F – H, K, L, S
  - Increase hunter opportunity (169 to 513) to address human safety, depredation and ungulate protection (bighorn sheep, deer and elk)

# Protecting Our Investment

- Desert bighorn sheep listed as state endangered in 1980
- 1990 – 2008 Bighorn Sheep Management
  - \$4M spent on transplants, surveys, Red Rock rearing facility, monitoring and **cougar control**
- Current proposal to delist desert bighorn sheep
- Continued cougar control in desert bighorn mountain ranges



# Mortality Rates from Lion Predation Only

**Pre-Lion Control: 0.17**

**Post-Lion Control: 0.05**

**\*71% decrease in lion-caused mortality\***

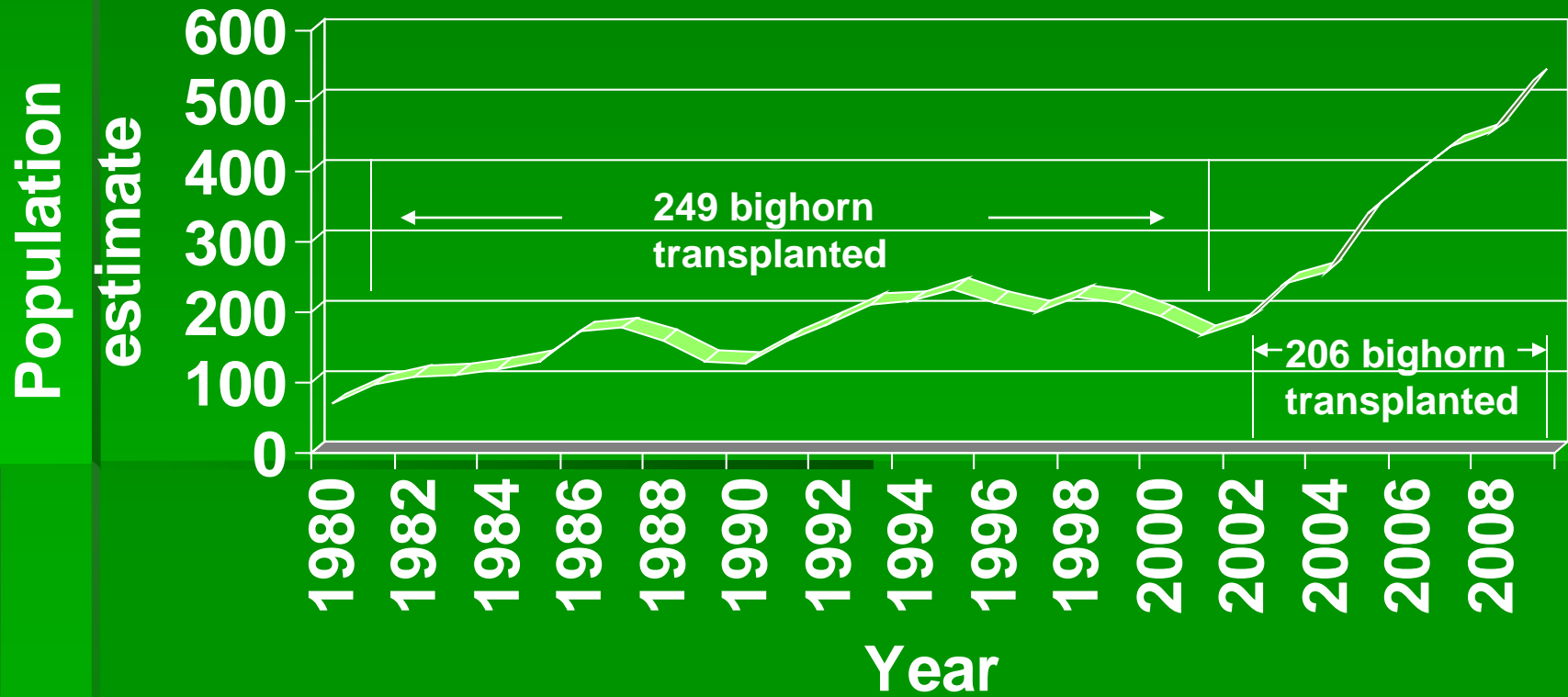
# Mortality Rates From All Causes of Mortality

**Pre-Lion Control: 0.23**

**Post-Lion Control: 0.11**

**\*\*\*\*\*52% decrease in mortality\*\*\*\*\***

# NM Statewide Desert Bighorn Sheep Population Estimates 1980-2009



# Cougar Management in BHS Country

- Proposal to continue management with decreased cougar population goals around herds
- Propose to remove arbitrary cougar control boundaries around desert bighorn sheep herds

# Summary of Cougar Proposal

- Most CMZs managed for stable populations
- Continue to protect females
- Address human safety, high ungulate predation (elk calve and bighorn sheep predation), and depredation/nuisance issues in some CMZs by managing for decreased populations
- Management strategy and data will be assessed throughout the rule cycle
- Adjustments to management strategies may be proposed as objectives are met

# General Proposed Changes for Both Bear and Cougar

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- Rule change from 2 to 4 years
- Extend legal shooting hours to ½ hour after sunset
- Strict penalty for fraudulent harvest reporting
- Legalize mechanical calls for both species
- Department management actions are independent of zone closures
- Release of dogs to pursue bears and cougars limited to legal shooting hours
- Legalize crossbows for hunting including the USFS Sandia Ranger District

# Conservative Management

- All mortalities are included in 'HARVEST LIMITS'
- Within 10% of zone 'HARVEST LIMITS' = shut down and result in saved bears/cougars
- Female sub-limits to protect breeding portion of populations
- Population estimates for bears based on prime habitat only
- Population estimates for both exclude tribal lands (refugia)
- 'Harvest' limits based on sound science versus unlimited harvest until 1999 (cougars) and 2004 (bears)
- Midpoint of population range used in calculation of population
- Harvest limits (% of total population) are conservative given literature review, best science and other western state's sustainable limits
- Prohibit take of females with young

# Unaddressed Issues

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- Pursuit season
- Allow dogs during spring season – boars only
- Year-round season on cougars statewide
- Mandatory cougar ID