











# 2018 NCDE Grizzly Bear Capture and Mortality Summary

12/11/18

PRELIMINARY DATA – DO NOT CITE

## Number of individuals captured 2018

		Se		
	Ageclass	Female	Male	Total
Research	Dependent	0	2	2
	Independent	9	9	18
	Total	9	11	20
Management	Dependent	4	5	9
	Independent	10	12	22
	Total	14	17	31
Grand total		23	28	51

#### Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem

June 2018



- Occupancy threshold for females with cubs
- Independent female survival threshold
- Independent female and male mortality thresholds



ROB CHANEY rchaney@missoulian.com Aug 4, 2018

TRY 1 MONTH FOR 990



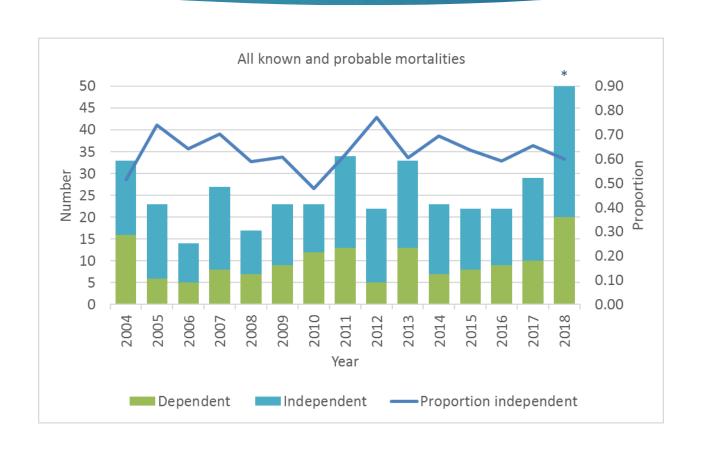




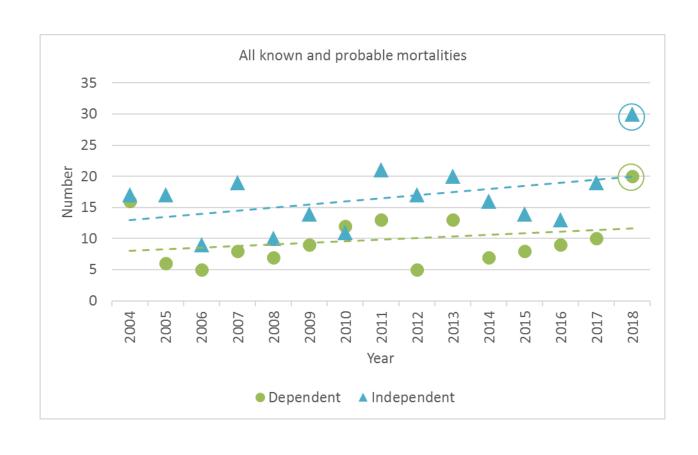
#### All documented mortalities

		Sex				
	Ageclass	Female	Male	Unknown	Total	
Inside DMA	Dependent	4	12	2	18	
	Independent	10	15	0	25	
	Total	14	27	2	43	
Outside DMA	Dependent	1	1	0	2	
	Independent	3	3	0	6	
	Total	4	4	0	8	
Grand total		18	30	2	51	

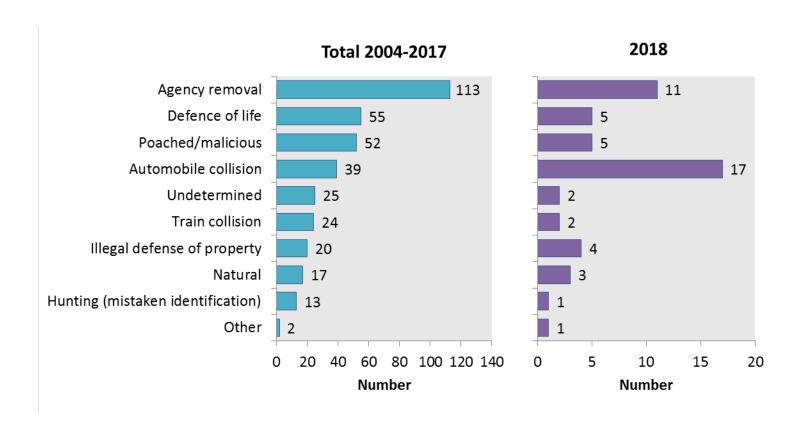
#### All documented mortalities 2004-2018



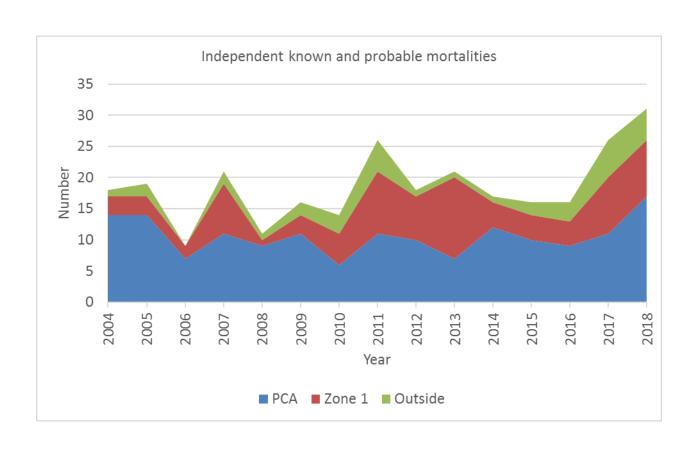
### Trend in documented mortalities 2004-2018



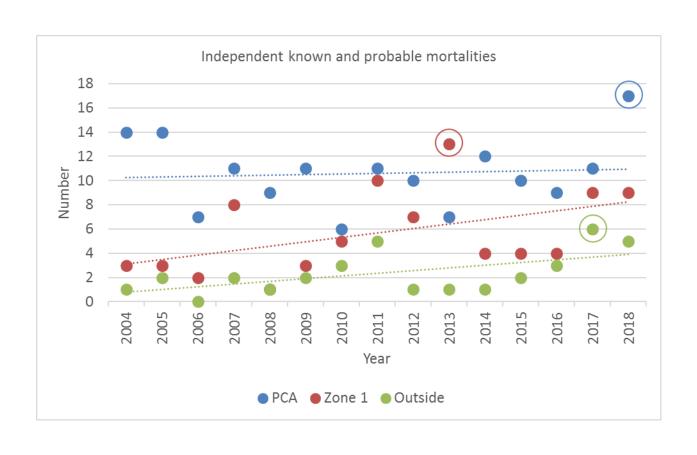
#### Cause of death for documented mortalities



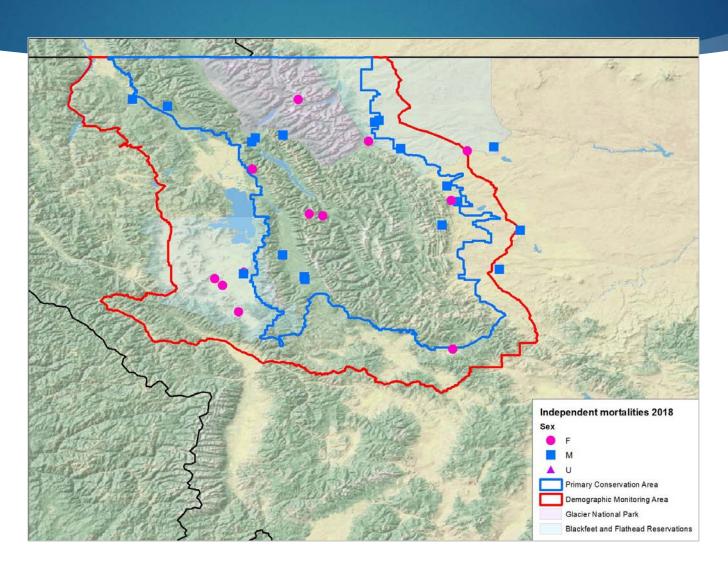
### Zone for independent documented mortalities



### Trend by zone for independent documented mortalities



#### Locations of independent mortalities



#### Estimated reported and unreported

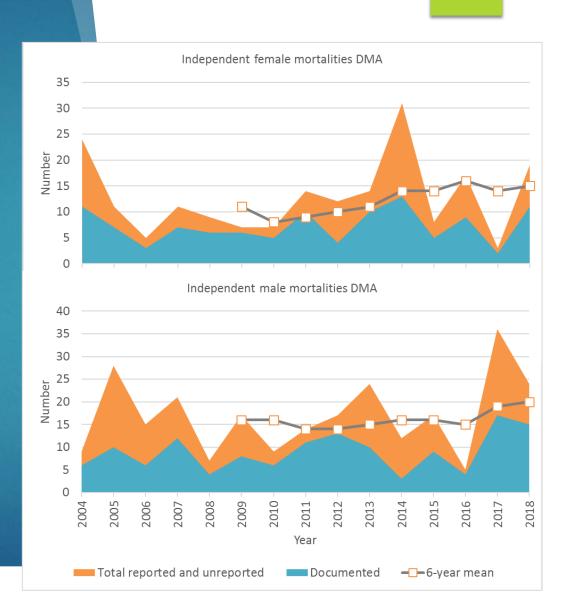
DMA, independent only

Sex	Agency removal (A)	Telemetry (B)	Reported (high)	Reported (low)	Estimated reported and unreported (C)	Estimated total mortality (A+B+C)
Female	1	6	2	2	12	19
Male	6	1	6	2	17	24
Total	7	7	8	4	29	43

#### Documented

### Estimated reported & unreported

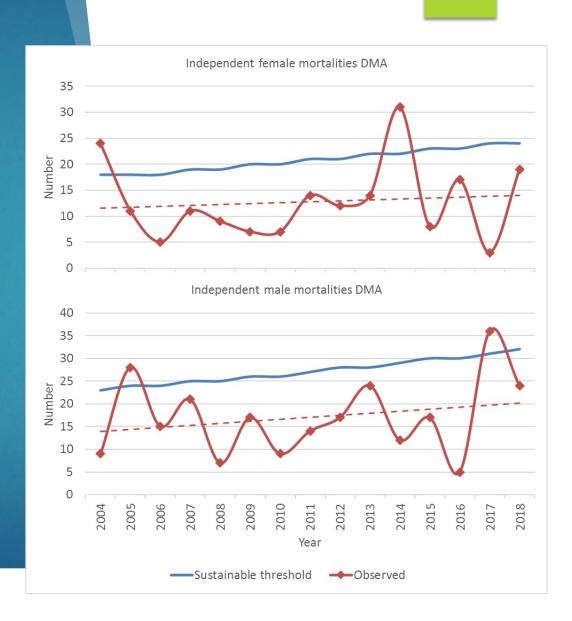
DMA, independent only



### Estimated reported & unreported

DMA, independent

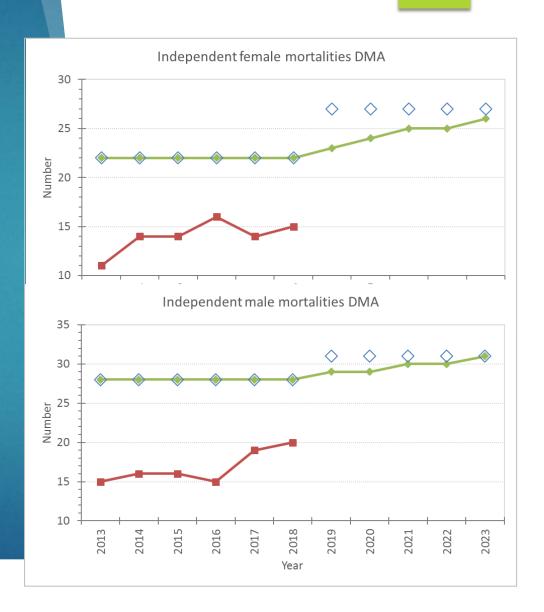
Thresholds for stable trajectory – 2016 report



### Estimated reported & unreported

DMA, independent

Thresholds for maintaining 90% probability population above 800 bears – Conservation Strategy 2018



#### Summary

- WILL REPORT
  OCCUPANCY AND
  INDEPENDENT
  FEMALE SURVIVAL
  BY SPRING
- MORTALITY BELOW THRESHOLDS