

# **BEAR AND COUGAR RULE - PROPOSED CHANGES SUMMARY**

**(Updated: 8/1/2023; these proposals will be updated throughout the rule development process)**

## **PURPOSE**

Maintain sustainable bear and cougar populations and hunting opportunities throughout New Mexico using bear and cougar biology, modern monitoring and analytical methods, harvest data, and public input.

## **BEAR AND COUGAR BIOLOGY, MANAGEMENT, AND RESEARCH**

Bear and cougar populations are distributed across the state where suitable habitat exists, and both species have been documented in nearly all of the habitat types present in the state. The disjunct mountain ranges of the state serve as clusters of preferred habitats for both species, which can drive localized population dynamics. Given these spatial dynamics, both species are managed at a Bear or Cougar Management Zone (BMZ or CMZ) level, with zones being comprised of multiple Game Management Units that encompass areas of habitat that presumably have localized population dynamics. However, both species are capable of long-distance movements, resulting in mixture and recruitment patterns at a statewide population level. Thus, population dynamics are also understood to occur at a statewide level and monitored as such.

Unregulated hunter harvest can have a negative impact on populations, therefore the Department restricts harvest so that the number of individuals harvested in a year does not exceed a harvest limit. The harvest limit is a percentage of the total population estimate for a zone. For bears the harvest limit is 8-12% of the independent-age population estimate (no harvest of cubs or females accompanied by cubs is allowed), and for cougars is 17-24% of the independent-age population estimate (no harvest of spotted-kittens, or females accompanied by spotted-kittens is allowed). In addition to the total harvest limit, the Department also restricts the number of females that can be taken by imposing a female harvest limit (40% of the total harvest limit for bears, 30% for cougars), to limit impact on the reproductive capacity of the population. Once either the total or female harvest is within 10% remaining on the limit, a zone closes to bear or cougar hunting. To ensure these harvest limits are not exceeded, it is mandatory that all hunters must present their harvested animal to a Department official.

To ensure harvest limits are set at an appropriate number, we estimate population size for each BMZ or CMZ using the best available data. Since 2012 for bears we have been using non-invasive genetic sampling techniques in combination with advanced statistical modeling to estimate zone-specific population size (for more information see: <https://www.wildlife.state.nm.us/hunting/information-by-animal/big-game/bear/>). Starting in 2017 for cougars we have been using GPS-tracking collars, trail cameras, and statistical models to estimate zone-specific population size (for more information see: <https://www.wildlife.state.nm.us/hunting/information-by-animal/big-game/cougar/>). For both species we have also recently begun building Integrated Population Models that incorporate all available data sources (survival from collared animals, age and sex data from harvested animals, hunter effort, etc.) to have annual modelling capability to keep track of these populations. By incorporating these modern techniques to generate contemporary estimates we have robust data from which to make management decisions.

## **PROPOSED CHANGES**

### **General Statewide Proposed Changes**

- 1) Change zone closure requirements such that zones close when the female harvest limit is reached, in response to updated pelt tag reporting procedures

Bear-specific Changes

- 1) Increase bear harvest limits based on population estimates from new NMDGF research from 2019-2021 in BMZs 1 and 10, as detailed in table below (research findings can be found at <https://www.wildlife.state.nm.us/download/hunting/species/bear/publications/Bear-NGS-and-SCR-Research-Summary-2019-2021.pdf> ).

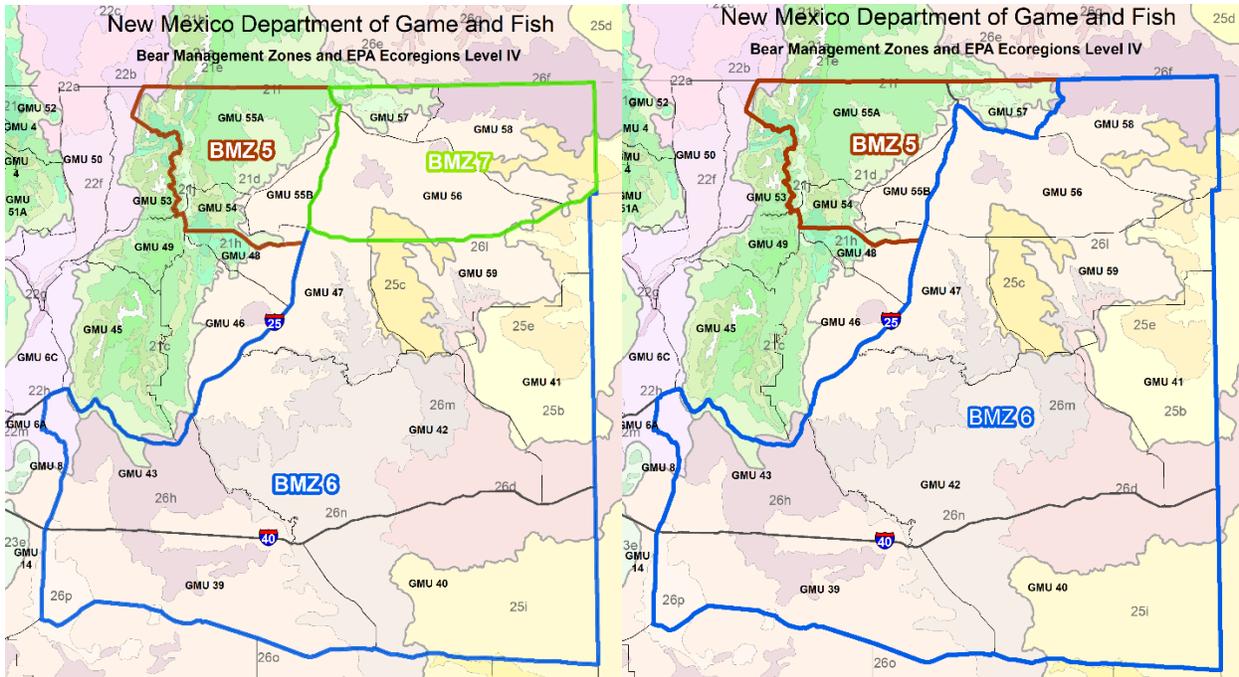
BMZ	Current 2020-2024 Total Limit (Female Sub-limit)	Proposed 2024-2028 Total Limit (Female Sub-limit)
1	158 (63)	168 (67)*
2	15 (6)	15 (6)
3	65 (26)	65 (26)
4	109 (43)	109 (43)
5	92 (37)	108 (43) <sup>+</sup>
6	33 (13)	51 (20) <sup>+</sup>
7	35 (14)	--- <sup>#</sup>
8	11 (4)	11 (4)
9	36 (14)	36 (14)
10	146 (58)	197 (79)*
11	36 (14)	36 (14)
12	33 (13)	33 (13)
13	16 (6)	16 (6)
14	19 (7)	19 (7)

\*Change in harvest limit reflects new research findings

+Change in harvest limit reflects GMUs being added or removed from zone

#Bear Management Zone 7 will no longer be a zone

- 2) Adjust BMZs 5, 6, and 7 such that GMU 57 will be moved from BMZ 7 into BMZ 5, and GMUs 56 and 58 will be moved from BMZ 7 into BMZ 6, thus dissolving BMZ 7 into those zones (see maps below). Harvest limit allocations from those GMUs in previous BMZ 7 will be re-allocated to the new BMZs of which they are a part (as seen in above table).



Current 2020-2024 BMZ Boundaries

Proposed 2024-2028 BMZ Boundaries

- 3) Increase number of permits for bear draw permit BER-1-104 from 32 permits to 60 permits to increase opportunity. Draw hunters will still be subject to the existing harvest limit structure.
- 4) Increase number of permits for bear draw permit BER-1-103 from 5 permits to 10 permits, in recognition of the Department's acquisition of the LBar property. Draw hunters will still be subject to the existing harvest limit structure.
- 5) Allow licensed deer or elk hunters who draw WMA hunts to harvest a bear or lion during their hunt if the zone is open and they possess a Bear and/or Cougar license.
- 6) Move the season start date for BMZs 12 and 13 from September 1<sup>st</sup> back to August 16<sup>th</sup>.

### Cougar-specific Changes

- 1) Adjust harvest limits for CMZ Q based on research studies and statistical modelling efforts, as detailed in table below (research reports can be found at <https://www.wildlife.state.nm.us/download/publications/wildlife/Cougar-SMR-Research-Summary-2018-2021.pdf> ).

CMZ	Current 2020-2024 Total Limit (Female Sub-limit)	Proposed 2024-2028 Total Limit (Female Sub-limit)
A	42 (13)	42 (13)
B	25 (8)	25 (8)
C	57 (17)	57 (17)
D	15 (5)	15 (5)
E	42 (13)	42 (13)
G	50 (15)	50 (15)
H	29 (9)	29 (9)
I	24 (7)	24 (7)
J	84 (25)	84 (25)
K	45 (14)	45 (14)
L	19 (6)	19 (6)
M	25 (7)	25 (7)
N	15 (5)	15 (5)
O	17 (5)	17 (5)
P	14 (7)	14 (7)
Q	34 (11)	17 (6)
R	26 (8)	26 (8)
S	17 (5)	17 (5)

### **PUBLIC INVOLVEMENT**

The Department encourages the public to comment on the proposals by sending an email to: [DGF-Bear-Cougar-Rules@state.nm.us](mailto:DGF-Bear-Cougar-Rules@state.nm.us).