

Suggested edits to State Grizzly Bear Management MOA

The following represents changes that the Service believes **must be changed** in the interest of accuracy or for consistency with other documents and our proposed rule.

- Global change throughout the document regards how Chao2 is described. Whenever Chao2 is used it should be written as the “model-averaged Chao2”. This is the method described and used by the IGBST to make the annual population estimates since it stabilizes the annual estimates.
- On page 1 - we believe the appropriate reference would be the 2016 Conservation Strategy since the 2007 Strategy version is being replaced by the 2016 version.
- On Page 3 Number 5 - the wording “Recovery Area” should be changed to “Recovery Zone” in two places as Recovery Zone is the accepted term.
- On Page 4 bullet b. - “females with cubs” should be changed to “females with offspring”
- On Page 4 bullet c. - Should read as follows:

Ensure the following **annual** total mortality rates are not exceeded within the DMA **for three consecutive years** for independent males, independent females and dependent young, as set forth in the following table, based on the 2002-2014 **model-averaged Chao2 average point**-estimate for the total population with 95% confidence intervals (600-747).

(The three year criterion is actually dealt with appropriately later in the document regarding response to exceedances of mortality over a three year period (page 5 fourth bullet under number 4)).

- On page 4 the table column 1 should be <674 and <7.6% for FEMALES and <7.6% for dependent young.
- Page 5 in the table the 58% should be changed to 54% to accurately reflect the footnote.

Suggested edits to areas of the document that the Service believes may not be accurately described and will likely be addressed in the Service documents differently:

- Page 2, third paragraph, third line “of at least 500 bears” should be changed to “at least a stable population...”

The 2013 Recovery Plan Supplement had three criteria, roughly stated 500 bear minimum for genetic health, bear occupancy standards, and a demographic mortality structure to ensure a stable population after delisting.

- Page 2, fourth paragraph, 6th line - strike "...of a minimum of 500 bears" and put a period after the word "criterion".

Page 2, last paragraph, third line from the bottom - strike for the ... "for the post-delisting monitoring period" and put a period after the word "size".

Chao 2 is intended to be the operative population estimator until changed. "Post-delisting monitoring period" has specific regulatory meaning for the Service and we are not intending the Chao 2 method to be constrained to the 5 years identified in our regulations.

- Page 5, bullet d. we would recommend inserting ..."based on the best available science" after "mortality rates".

All other documents refer to this clause when discussing adjustments to mortality rates.