

Criterion 3

- Criterion 3: Maintain a stable ~~the~~ population around the 2002-2014 Chao 2 modeled average ($\bar{X}$ = 674; 95% CI = 600-757; 90% CI = 612-735) by maintaining annual mortality limits for independent females, independent males, and dependent young as shown in Table 2. (These adjustable mortality rates were calculated as those necessary to manage the population around ~~to~~ the Chao2 modeled average of 674 bears, which occurred during the time period that this population's growth stabilized. ~~occurred during the time period that this population's growth stabilized.~~) If mortality limits are exceeded for any sex/age class for three consecutive years and any annual Chao2 modeled average population estimate falls below 612 (the lower bound of the 90% confidence interval), the IGBC Study Team will produce a Biology and Monitoring Review to inform the appropriate management response. If any annual Chao2 modeled average population estimate falls below 600 (the lower bound of the 95% confidence interval), this criterion will not be met and there will be no discretionary mortality, except as necessary for human safety. Adoption of a different population estimator will require adjustment of the associated population objectives and standards that are based upon the population estimator. ~~If another population estimator is used (other than Chao2) to establish annual mortality limits and/or set population objectives, the population objective and associated mortality limits must be adjusted to reflect the goal of managing the population around stability as measured from 2002 to 2014.~~

Table 2. Total mortality rates used to establish annual mortality limits for independent females, independent males, and dependent young inside the DMA.

	Total Grizzly Bear Population Estimate*		
	≤ 674	675-747	> 747
Total mortality rate for independent <u>FEMALES</u>.	$\leq 7.6\%$	9%	10%
Total mortality rate for independent <u>MALES</u>.	15%	20%	22%
Total mortality rate for dependent young.	$\leq 7.6\%$	9%	10%

* using model-averaged Chao 2