Notes on WY draft plan in response to Chris' question on population size required within the DMA.

Page 2: "The adaptive framework for post-delisting management (Appendix I) is designed to ensure the GYA DPS of grizzly bears is maintained at or above current demographic recovery criteria…..Management objectives will ensure the population is managed within the range stipulated in Demographic Recovery Criterion 3 and will ensure Demographic Recovery Criterion 1 and 2 are met or exceeded. In March of 2016, the USFWS proposed updated Demographic Recovery Criteria as listed below:

 Demographic Recovery Criterion 1: Maintain a population size of at least 500 bears and at least 48 females with cubs in the demographic monitoring area (DMA) as indicated by methods established in published, peer-reviewed scientific literature and calculated by the IGBST using the most updated protocol as posted on their website. ….

Demographic Recovery Criterion 2: Sixteen of 18 grizzly bear management units (BMUs; Fig. 2) within the Recovery Zone must be occupied by females with young, with no 2 adjacent bear management units unoccupied, during a 6-year sum of observations….

Demographic Recovery Criterion 3: Maintain the population around the 2002-2014 Chao 2 modeled average (X= 674; 95% CI = 600-747; 90% CI = 612-735) by maintaining annual mortality limits for independent females, independent males, and dependent young as shown in Table 1.

Page 4:
Table 1. Total mortality rates used to establish annual mortality limits for independent females, independent males, and dependent young grizzly bears inside the DMA (from USFWS proposed 2016 Demographic Recovery Criteria).

Annual Grizzly Bear Population Estimate		
<674	675-747	>747
Total mortality rate for independent FEMALES.		
<7.6%	9%	10%
Total mortality rate for independent MALES.		
15%	20%	22%
Total mortality rate for dependent young.		
<7.6%	9%	10%

Demographic Recovery Criterion 1 is met with a minimum population of at least 500 grizzly bears within the DMA. Fig. 3 depicts annual population estimates with an overall increasing population since 2000. The GYA DPS of grizzly bear has exceeded this criterion since at least 2002. [they go on to say the current estimate is about 600] and then say: "In addition, achievement of Recovery Criterion #3 ensures the population remains above 500 grizzly bears within the DMA."