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Briefing paper – National parks and grizzly population management

We have developed management systems to allocate mortality within ecosystems by removing the proportion of the population within national parks from the discretionary mortality available within each ecosystem. This has been done to assure that we do not overharvest each ecosystem. The rationale is as follows:

- Ecosystem discretionary mortalities are allocated by the percentage of area of each management entity within the demographic monitoring area. These management entities are national park lands and reservation lands, with all other lands being the state allocation. Each management entity is responsible for managing within the mortality limits for their proportion of the ecosystem.
- Parks have traditionally managed the bears within their population segment for maximum survival since their constituency (visitors) wants to view bears. This approach serves the constituency of the national parks. The parks will argue that their "need" is just as legitimate as the states. The NPS "need" is their large and vocal constituency of people who come to YNP and GTNP to see bears and who wants "park" bears to be managed carefully. This approach serves the constituency of the national parks. This is not a trivial issue. The constituency who wants to see park bears managed carefully is very, very large and vocal.
- The parks have little mortality but occasionally have a need to remove a nuisance bear. Natural mortalities do occur in parks. All park mortalities do count against the ecosystem mortality limits.
- Yellowstone National Park is basically at carrying capacity with little or no population growth within the park. This is due to density dependent population regulation. The result is that Yellowstone does not produce many bears and the park is not a source of dispersing subadult bears for other areas of the ecosystem. A similar situation exists in Glacier National Park in the NCDE.
- The majority of the park's bear population lives within the park most of the time, but some bears on the periphery go in and out of the park seasonally. It is difficult to precisely know how many bears are only "inside the park" bears. Since bears living on the edge do go in and out of the parks (both ways), a reasonable assumption is to assume that the percentage of the area of the parks is a rough estimate of the percentage of the population that can be considered park bears.
- If you take portion of the bears "outside" the park area as if all the bears are there using the total population estimate, you will over harvest the outside population and drive the "outside" population down. This is especially true if the population inside the parks is growing very little if at all, which is the case in YNP. Taking only part of a population at the sustainable rate for the entire population will result in managed population decline for the part that

is over harvested. The result would be continued population decline for the non-park population.

- There are reservation lands inside the DMAs in both the Yellowstone and the NCDE. Some of these reservations may decide to implement discretionary mortality through hunting while some will likely decide not to hunt. If we decide to “allocate” “unused” discretionary park mortality to the non-park population, will we also decide to attempt to allocate the reservation discretionary mortalities to the non-reservation population? The result would be continual overharvest of the non-reservation population and likely concern (to put it mildly) from the reservation management authorities.
- The parks make a good argument that there is a legitimate need for special status for wildlife "inside" the parks because the parks are a special place with bears having no fear of people and being very visible and "available" to park visitors. This availability is based on their lack of fear of humans. The constituency who wants to see park bears managed carefully is very large and vocal. British Columbia is on the verge of losing their grizzly hunt due to the special status that their mostly urban population places on grizzly bears. The vast majority of the American public feels that grizzly bears in national parks deserve special status, just like the majority of British Columbians feel about grizzly bears in BC.

In summary, the parks have maintained that the discretionary mortality for park grizzly populations is within the management authority of the national parks and cannot be allocated to non-park populations.