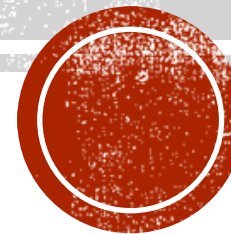


CONSERVATION STRATEGY UPDATES

Yellowstone Ecosystem Subcommittee – YES

11/09/2023



CONSERVATION STRATEGY UPDATE

- **Review of related documents and processes**
- **Review background and timeline since the 2016 CS update**
- **Discuss next steps**



CONSERVATION STRATEGY UPDATE

REVIEW OF RELATED DOCUMENTS AND PROCESSES

- Recovery Plan
 - ✓ USFWS document
- Delisting Rule
 - ✓ USFWS - published in Federal Register (June 2017)
 - Court challenges
- Conservation Strategy (CS)
 - ✓ Post delisting population and habitat management plan
 - ✓ YES – IGBC – Agencies
 - ✓ Updated Ch. 3 Habitat Standards in 2022
- Tristate MOA
 - ✓ Last updated by the MT, ID, and WY in 2021
 - ✓ State document – Coordinate management of GYE population
- State Management Plans (Commissions), Rules/Regulations (Commissions), and Statutes (State Legislatures)



CONSERVATION STRATEGY UPDATE

- **Recovery Plan**
 - USFWS document
- **Delisting Rule**
 - USFWS document - published in Federal Register June 2017
 - Court challenges
- **Conservation Strategy (CS)**
 - Post delisting management plan
 - YES – IGBC – Agencies
 - Updated Ch. 3 Habitat Standards in 2022
 - *Ready to update Ch. 2 – Population/demographic Objectives and Monitoring*
- **Tristate MOA**
 - Last updated by the MT, ID, and WY in 2021
 - State document – Coordinate management of GYE population including mortality management
- **State Management Plans (Commissions), Rules/Regulations (Commissions), and Statutes (State Legislatures)**



CONSERVATION STRATEGY UPDATE

- Chapter 2 - Population Demographic Criteria and Monitoring
Keeping up with the science



CONSERVATION STRATEGY UPDATE

- 2017 Delisting Rule challenged
- Courts determined:
 - Remnant analysis necessary
 - Commitment to recalibrate should a new method to estimate the population is developed
 - Commitment to translocate bears for genetic health
- 2021 – States of MT/ID/WY move forward with a new Tristate MOA



CONSERVATION STRATEGY UPDATE

- YES began discussion on Ch. 2 back in 2022
 - Concerns raised regarding the status of vital rates and ratios used in the refined chao2 estimate – they had not been updated since 2012
 - Concerns raised regarding Table 2 mortality rates – no assessment of population trends if mortality occurred at the higher rates (i.e. 22% annual male mortality)
 - How long would it take to detect population impacts at this level?
- IGBST continued development of new Integrated Population Model (IPM)
- YES “small team” assigned to work on Ch. 2 updates
- IGBST conducted demographic workshops late 2022 and in early 2023
- YES “small team” incorporated the work of the IGBST into a new framework
- NOW ready to move forward with a revised Ch. 2



CONSERVATION STRATEGY UPDATE

- New draft of Chapter 2 incorporating the best available science
 - IPM as adopted by IGBST
- Demographic Criterion 1 and 2
 - Unchanged
- Demographic Criterion 3
 - Maintain the population in the DMA within or above a range of 800-950
 - Modify Table 2
 - Annually estimate the population size and establish mortality limits to maintain within the range of 800-950.
 - Agreement not to exceed 5% annual population decrease



CONSERVATION STRATEGY UPDATE

Table 2. Management Framework based on DMA Population Size (IPM Population Size Estimate)	
<p style="text-align: center;">800* – 950</p> <ul style="list-style-type: none"> ➤ Manage to maintain the population within or above this range. ➤ Use IPM to determine mortality limits for population stability, slight increase, or slight decrease, remaining within or above the population range: $0.98 \leq \lambda \leq 1.02$ ➤ Manage conflict and authorize hunting at individual state discretion, based on allocated mortality limits. The Parties' choices may result in $\lambda > 1.02$. 	<p style="text-align: center;">> 950</p> <ul style="list-style-type: none"> ➤ Manage to maintain/reduce population. ➤ Use IPM to determine mortality limits for population stability or decrease. $0.95 \leq \lambda \leq 1.00$ <i>If mortality limits are determined for a population decrease, the decrease will not exceed 5% ($\lambda \geq 0.95$).</i> ➤ Manage conflict and authorize hunting at individual state discretion, based on allocated mortality limits. The Parties' choices may result in $\lambda > 1.00$.

* See below for management strategies if the population falls below the 800 IPM population size estimate.

Note: Lambda (λ) denotes the change in population size from one year to the next: $\lambda = 1.0$ represents no change in population size between two years: $\lambda > 1.0$ indicates population increase and $\lambda < 1.0$ indicates population decrease.



CONSERVATION STRATEGY UPDATE

As described in Appendix O, if the IPM population size estimate for the population within the DMA is less than 800, which should not occur due to interagency commitments, the States will:

- Manage the population for increase above 800. (Use the IPM to determine mortality limits based on $\lambda > 1.0$).
- Request an IGBST biology and monitoring review, and consider the results of the IGBST review in determining appropriate changes to the management framework.
- Close the DMA within their respective jurisdictions to hunting until the population increases above 800 grizzly bears.

Process for Determining Annual Mortality Limits



CONSERVATION STRATEGY UPDATE

- Next steps for YES
 - Approve this draft of Chapter 2 for public input
 - Approve process for feedback

