

**MEMORANDUM OF UNDERSTANDING REGARDING THE MANAGEMENT
AND ALLOCATION OF DISCRETIONARY MORTALITY OF GRIZZLY
BEARS IN THE GREATER YELLOWSTONE AREA**

Among

**Wyoming Game and Fish Department,
Montana Department of Fish, Wildlife and Parks
Idaho Department of Fish and Game
*[Placeholder for Joint Business Council of the Eastern Shoshone and Northern
Arapaho Tribes of the Wind River Reservation]***

This Memorandum of Understanding (MOU) is made and entered into by and between the Wyoming Game and Fish Department (WGFD), Montana Department of Fish, Wildlife and Parks (MFWP) and the Idaho Department of Fish and Game (IDFG), *[and the Joint Business Council of the Eastern Shoshone and Northern Arapaho Tribes of the Wind River Reservation (JBC),]* collectively referred to as the Parties.

I. Purpose

The purpose of this MOU is to define the process by which the Parties will coordinate the management and allocation of discretionary mortality of grizzly bears in the Greater Yellowstone Area (GYA). The Parties enter into this MOU in support of the delisting of Distinct Population Segment of GYA grizzly bears from the federal Endangered Species Act. The Parties intend this MOU to be consistent with the 2015 interagency *Final Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Area* (Strategy) and individual state or tribal management plans, along with revisions the Parties anticipate to these documents in conjunction with the delisting process. Upon issuance of a final delisting rule by the U.S. Fish and Wildlife Service (USFWS) the Parties will review this MOU and make modifications as appropriate to resolve inconsistencies, if any, between this MOU and the delisting rule.

II. Background

Prior to delisting in 2007, the management agencies finalized the 2007 Conservation Strategy following public comment and scientific peer review to demonstrate commitment that adequate regulatory mechanisms are in place to ensure continued recovery of the GYA grizzly bear. That strategy has been updated in 2015 to incorporate new information and commitments. The Strategy's key mechanisms for maintaining a recovered GYA grizzly population are its population and habitat standards, which are based on the recovery criteria originally set forth in the USFWS Recovery Plan. The Strategy incorporated the Parties' individual state management plans that have different, but compatible management objectives.

The Strategy's population standards are (1) manage the GYA grizzly bear population within the 95% CI of the 2007 estimated Chao2 population level.; (2) at least 16 of 18 Bear Management Units occupied by at least one female with cubs over a six-year period, with no two adjacent Bear Management Units unoccupied; and (3) annual mortality limits as described below to ensure the above standards are always met. The Parties note that the 2007 Conservation Strategy adopted a conservative minimum population size of at least 500 GYA bears based on the Miller and Waits (2003) recommendation of a total population size of at least 400 bears to adequately mitigate the potential effects of genetic drift and inbreeding depression in light of the relative isolation of the GYA population. The 2015 Conservation Strategy exceeds this commitment and continues to apply conservatism to female occupancy and mortality standards to ensure long-term recovery.

In 2011, in the case of *Greater Yellowstone Coalition v. Servheen*, the Ninth Circuit of Appeals directed the entry of summary judgment in favor of the Service's determination that existing regulatory mechanisms are adequate to protect a recovered GYA grizzly population.

The National Forest Plans and National Park Compendia make legally binding the Strategy's standards on 98% of the critical PCA [Primary Conservation Area] and are buffered by the legal protections afforded by the Wilderness Act on a significant portion of grizzly habitat outside the PCA. In light of these measures, we believe the Service could reasonably conclude that adequate regulatory mechanisms exist to protect the Yellowstone grizzly bear.

The Ninth Circuit determined it did not need to consider the breadth of other multi-jurisdictional regulatory mechanisms because of the adequacy of the federal mechanisms applicable to the national parks and national forests. Nevertheless, the Parties recognize the value in having a multi-state framework to coordinate regulation of discretionary mortality to support achievement of the Strategy's population objectives.

In doing so, the Parties call attention to another component of the Ninth Circuit's decision:

Importantly, we recognize that delisting cannot require the imposition of legal protections commensurate with those provided by the ESA itself. After all, the ESA expressly aims for species recovery to the point where its own measures are "no longer necessary," 16 U.S.C. § 1532(3), thus contemplating that something less can be enough to maintain a recovered species.

The Parties also note that the Interagency Grizzly Bear Study Team (IGBST) has addressed the single weakness the Ninth Circuit found in the 2007 delisting rule, namely that USFWS did not articulate a rational connection between the data before it and USFWS' conclusion that white bark pine declines were not likely to threaten GYA grizzly bears.

IGBST reviewed the potential effects of changes in food resources, including whitebark pine, and concluded the GYA grizzly bear population has shown notable resilience in the face of decline of white bark pine and natural stochasticity of other food resources within the Greater Yellowstone Ecosystem. “[W]hite bark pine decline has had no profound negative effects on grizzly bears at the individual or population level.” *Response of Yellowstone Grizzly Bears to Changes in Food Resources: A Synthesis* (IGBST 2013).

On March 21, 2013, USFWS published for public comment a draft Supplement to Demographic Recovery Criteria, but USFWS has not yet finalized any such Supplement. For purposes of this MOU, the Parties assume adoption of the Demographic Monitoring Area (DMA) identified in the 2013 draft Supplement as the geographic area used to monitor continued achievement of GYA population and distribution objectives. The Parties also assume a “best available science” adaptive management approach will incorporate provisions allowing the adjustment of mortality rates in response to changes in population vital rates to ensure maintenance of a recovered population.

III. Definitions

1. “Discretionary mortality” is the amount of human-caused grizzly bear mortality over which agencies have discretionary authority, such as management removals and regulated harvest.
2. “Non-Discretionary mortality” is documented loss over which agencies do not have discretionary authority, such as naturally occurring mortality or human-caused mortality such as illegal shootings, defense-of-human-life shootings, and vehicle collisions.
3. “Greater Yellowstone Area” (GYA) is defined as that portion of Idaho that is east of Interstate Highway 15 and north of U.S. Highway 30; that portion of Montana that is east of Interstate Highway 15 and south of Interstate Highway 90; that portion of Wyoming south of Interstate Highway 90, west of Interstate Highway 25, Wyoming State Highway 220, and U.S. Highway 287 south of Three Forks (at the 220 and 287 intersection), and north of Interstate Highway 80 and U.S. Highway 30. This definition of GYA was used in the 2007 USFWS rule to designate a distinct population segment (DPS) of grizzly bears under the Endangered Species Act, and to delist that DPS; in 2010 USFWS vacated this rule in response to a court decision. The Parties assume USFWS will redesignate a grizzly bear DPS for the GYA geographic area as defined herein.
4. “The Recovery Zone,” also known as the “Primary Conservation Area” (PCA), is the area whose boundaries are approximately depicted on the map attached hereto as Attachment A; the Recovery Zone is divided into 18 Bear Management Units depicted on the map attached hereto as Attachment B.

5. "Demographic Monitoring Area" (DMA) is area which includes the Recovery Area and an additional area surrounding the Recovery Area, whose boundaries are approximately depicted on the map attached hereto as Attachment A.
6. Bear Management Unit (BMU) (recovery zone) – (page 18 of 2007 conservation strategy) – geographical units within the Recovery Zone in which female grizzly bear occupancy will be measured.

IV. The Parties will:

1. Employ best science and adaptive management approaches to collectively manage grizzly bears within the GYA.
2. Cooperate in carrying out the purpose and objectives of this MOU to achieve population standards to support a recovered GYA grizzly bear population:
 - a. Ensure that 16 of 18 Bear Management Units are occupied by at least one female with cubs over a six-year period, with no two adjacent Bear Management Units unoccupied over a six-year period.
 - b. Ensure that annual agreed upon mortality rates are not exceeded within the DMA for independent males and independent females as outlined below:

OBJECTIVE: Manage the GYA population within the DMA within the 2007 Chao2 estimate 95% confidence interval (609-757). To meet this objective, the states of MT, ID, and WY agree to the following:

- Manage the GYA population above the lower 95% confidence limit of the 2007 Chao2 estimate (609). At the lower 95% CI (609), no discretionary mortality would be allowed unless necessary to address conflict/human health and safety issues.
- At or below the 2007 Chao2 point estimate level (683) mortality limits will not exceed 7.6% for adult females, and will not exceed 15% for adult males.
- Between the 2007 Chao2 point estimate and the upper 95% CI level of the 2007 Chao2 point estimate (683-757), female mortality limits will not exceed 9% and male mortality will not exceed 20%.
- Above the upper 95% CI of the 2007 Chao2 point estimate (757), female mortality limits will not exceed 10% and male mortality will not exceed 22%.
- Allocation of discretionary mortality will be determined among the 3 states each year based on population monitoring and total mortality the previous year.

- If the total allowable annual mortality is exceeded in one year, the number exceeding the allowed mortality will be subtracted from the next year's discretionary mortality.
- Any mortality in National Park System Lands in one year will be subtracted from discretionary mortality the following year
- Taking of females with cubs by hunting will be prohibited by regulation

Trigger: When the population is between 609 and 683, and female mortality limits are exceeded in 3 consecutive years, or when the population is at or below 609 and female mortality limits are exceeded in any year, the study team will prepare a Biology and Monitoring Review to inform the appropriate management response.

3. The Parties assume that IGBST will make recommendations for establishment of such rates to maintain the population standards in 2a and 2b above, based on demographic data and applying scientific methods; and that IGBST will review and recommend any appropriate adjustments to such rates at least, but not limited to every five years.
4. Support the IGBST in the annual monitoring of the GYA grizzly bear population.
5. Meet annually in the month of January to review data supplied by IGBST and establish discretionary mortality limits for the DMA based upon the following protocol:
 - a. Annual mortality limits for independent females and independent males will consider individual state objectives and be established annually for the GYA
 - b. Annual grizzly bear mortality limits within the DMA will be calculated to meet overall population objectives described in above for two demographic classes: independent males and independent females. The annual DMA mortality limits will be calculated by applying the DMA mortality rate to the total DMA population estimate for each demographic class.
 - c. The DMA total mortality for the immediately preceding year ending December 31 will be subtracted from the DMA mortality limit for that year. If that difference is negative (*i.e.*, a DMA annual mortality limit is exceeded for any of the two classes), the number of mortalities above the limit will be subtracted from the corresponding DMA mortality limit for that class for the current year.

The default discretionary mortality for each management jurisdiction outside of National Park System lands will be allocated as follows, but may be adjusted by mutual consent of all parties based on spatial and temporal circumstances (e.g., in one year the parties may agree to allocate 20% of the discretionary mortality to ID, 28% to MT, 48% to WY, and 4% to WRIA. However, total discretionary mortality will not be exceeded):

Management Jurisdiction	% of DMA outside NPS lands
WY inside DMA	54%
MT inside DMA	34%
ID inside DMA	8%
Wind River Indian Reservation inside DMA	4%

- d. Each party has discretion as to how it applies its allocation of discretionary mortality pursuant to its respective regulatory processes and management plan.
6. Each party has discretion to manage grizzly bears within its jurisdiction in areas within the GYA that are outside the DMA pursuant to its respective regulatory processes and management plan.

IV. Authorities

This MOU is entered under the provisions of the following laws:

Title 87 Montana Code Annotated
Title 23 Wyoming Statutes Annotated
Title 36 Idaho Code
Tribal Legal Cites

V. It is mutually agreed and understood by the Parties:

1. The Parties will designate one representative each as a respective Point of Contact for purposes of achieving the objectives of this MOU.
2. This MOU in no way restricts the Parties from participating in similar activities with other states or agencies.
3. This MOU is neither a fiscal nor a funds obligation document. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the Parties will be handled in accordance with applicable laws, regulations, and procedures and such endeavors will be outlined in separate agreements or contracts that shall be made in writing by representatives of the Parties. This MOU does not provide such authority.

VI. Term and Modification

This MOU shall become effective upon the date of signature of all Parties. It shall remain in effect indefinitely, but will be subject to review and modification every 5 years. Any party may terminate its participation in the MOU by providing thirty (30) days written notice to the other Parties, which notice shall be transmitted by hand or other means of delivery confirmation.

Any modification to the MOU will only become effective upon the written consent of all Parties.

VII. Severability

Should any portion of this MOU be judicially determined to be illegal or unenforceable, the remainder of the MOU shall continue in full force and effect.

VIII. Sovereign Immunity

The states of Wyoming, Montana, and Idaho [*and the Northern Arapaho and Eastern Shoshone Tribes of the Wind River Reservation*] do not waive their sovereign immunity by entering into this MOU, and each fully retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this MOU.

In Witness Whereof, the Parties hereto have executed this Memorandum of Understanding as of the last written date below.

Chairman, Idaho Fish and Game Commission

Date

Director, Idaho Department of Fish and Game

Date

President, Wyoming Game and Fish Commission

Date

Director, Wyoming Game and Fish Department

Date

Chairman, Montana Fish and Wildlife Commission

Date

Director, Montana Fish, Wildlife and Parks

Date

Joint Business Council Signatory

Date

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ATTACHMENT A



Attachment B: Map showing Bear Management Units

To be inserted

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