**Tri-State Memorandum of Agreement**
**Regarding the Management, Genetic Health, and Allocation of Discretionary Mortality of Grizzly Bears in the Greater Yellowstone Ecosystem**
**Among**
**Wyoming Game and Fish Commission, Wyoming Game and Fish Department, Montana Fish and Wildlife Commission, Montana Fish, Wildlife and Parks, Idaho Fish and Game Commission, and Idaho Department of Fish and Game**

This Memorandum of Agreement (MOA) is made and entered into by and among the Wyoming Game and Fish Commission and the Wyoming Game and Fish Department (collectively WGFD), the Montana Fish and Wildlife Commission and Montana Fish, Wildlife and Parks (collectively MFWP), and the Idaho Fish and Game Commission and the Idaho Department of Fish and Game (collectively IDFG), collectively referred to as the Parties.

## I. Purpose

The purpose of this MOA is to define the process by which the Parties will coordinate management and allocation of discretionary mortality to ensure the long-term genetic health, viability, and sustainability of the grizzly bear population in the Greater Yellowstone Ecosystem (GYE). The Parties enter into this MOA in support of the designation of the Distinct Population Segment (DPS) of GYE grizzly bears and removal of the DPS from the Federal list of endangered and threatened wildlife under the Endangered Species Act (ESA). The Parties intend this MOA to be consistent with the *Conservation Strategy for the Grizzly Bear in the Greater Yellowstone Ecosystem* (Strategy) and individual state management plans, as these documents may be revised in conjunction with the delisting process and future grizzly bear conservation.

The Parties previously committed to adopt and implement appropriate revision to methods for GYE population estimation as new methods are scientifically vetted and accepted (i.e., a commitment to a recalibration process). Consistent with this commitment, the Parties amend our prior MOA to reflect the Interagency Grizzly Bear Study Team (IGBST) implementation of the integrated population model (IPM) as the population estimator for the GYE population.[1]

As detailed below, the Parties agree to manage the GYE population within the Demographic Monitoring Area (DMA) to be within or above a range of 800 – 950 grizzly bears (applying the IPM population size estimate).

The Parties' management objective and related mortality management consider: the U.S. Fish and Wildlife Service (USFWS) recovery criteria for minimum GYE population size (500), occupancy, and survival/mortality rates; levels for population resiliency and genetic fitness; recalibration, using the IPM, for the Chao2 population size estimates for 2002-2014 (consistent with the federal court remand of the 2017 delisting rule); evidence of GYE population density in the DMA reaching levels limiting population growth rates since the early 2000s; and higher conflict levels associated with a population that is more abundant, and has higher densities in a larger extent of occupied range.

[1] Implementation of the IPM is described in the IGBST 2022 Annual Report (published in 2023 by U.S. Geological Survey, Northern Rocky Mountain Science Center, available at igbconline.org).

The Parties make commitments, to resolve deficiencies that the Ninth Circuit Court (July 2020) identified in the USFWS 2017 final rule designating and delisting the GYE DPS of grizzly bears. The Parties commit: (1) to ensure long-term genetic diversity of the GYE population through translocation if effective immigration does not occur naturally; and (2) to recalibrate GYE population metrics and mortality limits should a new population estimation method be incorporated to estimate size and evaluate survival/mortality of the GYE population.

## II. Background

Since 2006, the GYE Interagency Conservation Strategy Team, with participation of the Parties and various federal agencies, has developed and revised the Strategy to identify and implement regulatory mechanisms, interagency cooperation, population and habitat management and monitoring, and other actions to ensure continued recovery and sustainable management of the GYE population post-delisting. The Strategy's key mechanisms for maintaining a recovered GYE population are its population and habitat criteria, which are based on continued achievement of USFWS recovery criteria for the GYE population. The Strategy incorporates the Parties' individual state management plans, which have different, but compatible, management objectives.

For purposes of this MOA, the Parties adopt the Demographic Monitoring Area (DMA), identified in the 2016 Strategy revision and the USFWS 2017 Supplement to the Grizzly Bear Recovery Plan (Supplement), as the geographic area used to monitor continued achievement of population objectives for the GYE population. The IGBST and the Yellowstone Ecosystem Subcommittee (YES) of the Interagency Grizzly Bear Committee (IGBC) recommended the use of the DMA for monitoring GYE population demographics.

The demographics and vital rates of the GYE population have changed over time, and the IGBST has periodically reviewed and adjusted mortality limits to ensure a total GYE population of at least 500 bears and to meet the occupancy criterion for breeding female bears. The GYE population has far surpassed the minimum requirement for genetic diversity represented by 500 bears for more than two decades. By 2006, although the GYE population was still increasing, the GYE population growth rates slowed when compared to the higher levels of growth in the 1980s and 1990s, and the GYE population began exhibiting signs of density dependence (e.g., population growth fluctuations, decreased home-range size, reduced dependent young survival, increased competition, and increased intraspecific mortality as more bears occupied the same suitable habitat).

In 2021, the IGBST adopted the IPM framework, based on Bayesian statistics, as the estimator of population vital rates for the GYE. The IPM continues to use documentation of females with cubs-of-the-year and the Chao2 estimate, which has been used (with refinements) for GYE population estimation since 2007. The IPM also uses other modeled and field-collected data inputs, such as survival, mortality, and reproduction data. The IPM allows the Parties to estimate population vital rates annually by sex- and age-specific cohorts, and to set mortality limits incorporating those rates.[2]

[2]Before the IPM, the IGBST reassessed vital rates on timeframes of 5 years or longer, and the Parties' prior MOA framework identified tiers of mortality limits based on these rates. With the implementation of the IPM, the Parties are able to apply a more responsive approach for limiting mortality on an annual basis.

## III. Definitions

1. "Discretionary mortality" is the amount of human-caused grizzly bear mortality over which agencies have discretionary authority, such as management removals, translocations out of the DMA and regulated harvest.

2. "Non-Discretionary mortality" is mortality 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. Non-discretionary mortality includes a statistical estimate derived by the IPM of unknown mortalities from non-discretionary sources.

3. "Total mortality" is the combination of discretionary and non-discretionary mortality, as estimated by the IPM.

4. "Greater Yellowstone Ecosystem" (GYE) is defined as that portion of Idaho east of Interstate Highway 15 and north of U.S. Highway 30; that portion of Montana 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 is the same GYE definition USFWS used in its 2007 and 2017 rules to designate and delist a DPS of grizzly bears under the ESA, both of which rules USFWS vacated in response to court decisions based on grounds other than the DPS designation. The Parties assume USFWS will re-designate a grizzly bear DPS for the GYE using this same defined geographic area.

5. The "Primary Conservation Area" (PCA) is the area whose boundaries are approximately depicted on the map attached hereto as Attachment A; the PCA is divided into 18 Bear Management Units.

6. The "Demographic Monitoring Area" (DMA) is the area that includes the PCA and an additional area surrounding the PCA. The DMA is approximately 19,279 square miles in area, whose boundaries are depicted on the map attached hereto as Attachment A. The IGBST delineated the DMA based on suitable habitat and narrow valley areas bordering suitable habitat that could act as potential mortality sinks. The DMA is the area within which the GYE population is annually surveyed and estimated and within which the total mortality limits will apply.

7. The "Integrated Population Model" (IPM) is the population estimation framework used for the GYE population as best available science. The IPM is based on in-depth analyses and annual field data collections since 1983. The IPM is a synergistic model that incorporates data from a variety of field-collected and modeled sources. The IPM allows the Parties to estimate population size and vital rates annually by sex- and age-specific cohorts and to derive mortality limits incorporating those rates. The IPM population size estimate is reported as a median value.

## IV. Responsibilities

1. **Science-based Adaptive Management.** The Parties will continue to use best available science and adaptive management approaches to manage the GYE population collectively and cooperatively.

2. **Tri-State Population Management Objectives.**

a. The Parties agree to monitor and manage the GYE population to ensure achievement of the three USFWS demographic recovery criteria (minimum population size, breeding female occupancy, and mortality limits).

b. As an additional level of protection, the Parties will manage the GYE population in the DMA to maintain a population within or above a range of 800 – 950 grizzly bears (applying the IPM population size estimate).

This range is reflective of the population size when the GYE population began exhibiting traits indicative of density dependence since 2006 (e.g., reduced population growth rates, population growth fluctuations, decreased home range size, reduced dependent young survival, and increased competition).

c. In conjunction with the IGBST, the Parties have reassessed and recalibrated population metrics with the adoption of the IPM to estimate and monitor population size. Following this review, the Parties agree to apply annual mortality rates to maintain the population in the DMA within or above a range of 800-950 grizzly bears, based on the following framework in Table 1 (see Attachment C, Tables C1 and C2, for example of process for establishing limits and allocation by management jurisdiction):

**Table 1. Management Framework based on DMA Population Size (IPM Population Size Estimate)**

| 800* – 950 | > 950 |
|---|---|
| ➢ Manage to maintain population within or above this range.<br>➢ Use IPM to determine mortality limits for population stability, slight increase, or slight decrease, remaining within or above the population range:<br>$0.98 \leq \lambda \leq 1.02$<br>➢ Manage conflict and authorize hunting at individual state discretion, based on allocated mortality limits. | ➢ Manage to maintain/reduce population.<br>➢ Use IPM to determine mortality limits for population stability or decrease.<br>$0.95 \leq \lambda \leq 1.00$<br>*If mortality limits are determined for a population decrease, the decrease will not exceed* 5% ($\lambda \geq 0.95$).<br>➢ Manage conflict and authorize hunting at individual state discretion, based on allocated mortality limits. |

*See Paragraph 4e below for management strategies if the population falls below 800.
*Note:* Lambda ($\lambda$) 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.

d. Should the Parties adopt a new population estimation method to estimate size and evaluate survival/mortality of the GYE population, the Parties renew their commitment to recalibrate population metrics and mortality limits.

3. **Relationship of Tri-State Management Objectives to USFWS Demographic Recovery Criteria.**

a. **USFWS Demographic Recovery Criterion 1 (Minimum Population Size)** is to maintain a minimum population size of at least 500 bears within the DMA (for genetic fitness).

The Parties' agreement in Paragraph IV.2 to manage the GYE population in the DMA within or above a range of 800 to 950 grizzly bears, and to take additional measures described in Paragraph IV.4, provide an additional level of protection above USFWS Demographic Recovery Criterion 1 and will ensure this criterion is met.

b. **USFWS Demographic Recovery Criterion 2 (Breeding Female Occupancy)** is to ensure that 16 of the 18 Bear Management Units within the PCA are occupied by at least one female with offspring over a six-year period, with no two adjacent Bear Management Units unoccupied over a six-year period.

The Parties' agreement in Paragraphs IV.2, IV.4, and IV. 6. to monitor and manage for breeding female occupancy will ensure it is met.

c. **USFWS Demographic Recovery Criterion 3 (Mortality Limits)** is to maintain the population within the DMA around the 2002 2014 model averaged Chao2 estimate ($\overline{X}$= 674; 95% CI = 600–747; 90% CI = 612–735) by maintaining annual mortality limits for independent females, independent males, and dependent young (based on maximum mortality rates ranging from 7.6 to 22% depending on the demographic class and total population size estimate).

With the adoption of the IPM as a population estimator for the GYE population in 2021/2022, this USFWS criterion is outdated. Using the IPM, the "recalibrated" numbers for this criterion approximately correspond to an IPM population size estimate for 2002-2014 of 823 (mean of 821), with 95% credible intervals of 681-960).

The Parties' agreement to determine and apply mortality limits based on our objective of managing the population in the DMA within or above a range of 800-950 bears, using the framework presented in Table 1, is consistent with the foundation for the USFWS Criterion for applying mortality/survival rates on an annual basis.

4. **Additional Mortality Management.** In addition, the Parties' management in the DMA will include, but not be limited to, the following:

a. With the adoption of the IPM, the Parties are able to review vital rates and demographics for the GYE population annually and will make appropriate adjustments to mortality rates (as presented in Paragraph IV.2. above).

b. The Parties will prohibit hunting of females accompanied by young, and young accompanied by females, and discretionary mortality of such animals will only occur for management removals.

c. If total available mortality for a demographic class (independent male or female) is exceeded, the calculation of the next year's available discretionary mortality will reflect the appropriate offset for that class.

d. If a state meets any of its allocated regulated harvest limits at any time of the year (see IV.7 below), the respective state will close that state's portion of the DMA to hunting for the remainder of the year.

e. If the IPM population size estimate for the population within the DMA is less than 800, which the Parties do not expect to occur based on their commitments under this MOA and other interagency commitments, such as those described in the Strategy, the Parties will:
    i. Manage the population for increase above 800 (use IPM to determine mortality limits based on $\lambda > 1.0$), including closure of the DMA to hunting.
    ii. Request IGBST biology and monitoring review, and consider the results of the IGBST review in determining appropriate changes to the management framework.

5. **Genetic Fitness.** The Parties agree to translocate grizzly bears between the GYE and other grizzly bear populations, when necessary for genetic fitness of a distinct grizzly bear population occurring within the three states, and subject to applicable requirements of federal, state, or tribal law and consistent with applicable demographic recovery criteria for a population listed or previously listed under the ESA.

a. As a cooperative effort of the IGBST, the Parties will continue to conduct genetic sampling of GYE grizzly bears (i.e., biological samples will be acquired from grizzly bear captures, mortality investigations, or other methods), and will analyze these samples to evaluate genetic diversity and connectivity with other grizzly bear populations.

b. To further ensure genetic viability of the GYE population, the Parties adopt the following mechanisms to provide for genetic augmentation through translocation:

    By the end of 2025, the Parties will translocate at least two grizzly bears from outside the GYE into the GYE, unless migration from outside the GYE is detected in the interim. Genetic monitoring of the GYE population will continue, and genetic diversity and effective population size ($N_e$) will be re-assessed at least every 14 years (*i.e.*, one generation). If effective migration is not detected, the Parties will continue to make additional translocations from outside the GYE.

6. **Monitoring.** The Parties will support the IGBST in the annual monitoring of the GYE population to ensure demographic criteria are met.

7. **Coordination and Allocation of Discretionary Mortality.**

a. The Parties will meet to review population data annually (preferably as soon as practical after the annual population data are available).

b. The Parties will use monitoring data supplied by IGBST and collectively derive discretionary mortality limits based on varying management objectives (i.e., maintain, increase, reduce) to calculate regulated harvest available for each jurisdiction (MT, ID, WY) in the DMA, based upon the following allocation protocol (see Tables C1 and C2 for example of process for deriving available harvest mortality and allocation by jurisdiction.):

i. Begin with the estimates for total population size and mortality, and estimates specific to demographic classes[3] (independent males, independent females and dependent young) in the DMA for the previous calendar year, as derived using the IPM (reported by the IGBST).

ii. If an annual mortality limit was exceeded in the prior year for any demographic class (i.e., total mortality was greater than the available mortality for the prior year), the calculation of the mortality available for that demographic class for the current year will reflect the appropriate offset for that class.

iii. Using IPM estimates, determine the total available mortality for the demographic class of independent females and independent males respectively, based on the framework for managing mortality identified in Table 1.

iv. Determine the available harvest mortality by subtracting the prior year non-harvest mortality, as derived using the IPM, from the total available mortality.

v. Allocate discretionary mortality available for regulated harvest of independent males and independent females to each management jurisdiction as provided in Table 2.

**Table 2. Allocation of harvest by management jurisdiction within the DMA.**

| Management Jurisdiction* | % of DMA outside NPS Lands |
|---|---|
| WY inside DMA | 58%* |
| MT inside DMA | 34% |
| ID inside DMA | 8% |

*Four percent (4%) of the DMA outside of National Park Service lands in Wyoming is under the jurisdiction of the Tribes governing the Wind River Reservation.

c. The Parties may agree to adjust their respective individual allocation of discretionary mortality based on management objectives and spatial and temporal circumstances. Each party has discretion as to how it applies its allocation of discretionary mortality pursuant to its respective regulatory processes and management plan.

[3] Independent males and independent females are 2 years of age or older. Dependent young are younger than 2 years of age.

d. A state may opt to use its allocation for regulated harvest for translocation of grizzly bears out of the DMA for conservation purposes. If, for any reason, a state opts not to implement some or all of its allocation, that allocation is not available to another state for additional harvest unless agreed to by the state with the unused allocation.

e. The Parties will confer with the National Park Service (NPS) and United States Forest Service (USFS) annually. The Parties will invite representatives of both GYE National Parks, the NPS regional office, GYE USFS Forest Supervisors, and the Wind River Reservation to attend the states' annual meeting.

f. The Parties will monitor mortality throughout the year, and will communicate and coordinate with each other, and tribal and federal land management agencies as appropriate, to minimize the likelihood of exceeding mortality limits.

g. Each Party will designate one representative as a respective Point of Contact for purposes of achieving the objectives of this MOA.

## V. Authorities and Regulatory Mechanisms

The Parties enter into this MOA pursuant to their respective state authorities as set forth in Title 87, Montana Code Annotated; Title 23, Wyoming Statutes Annotated; and Title 36, Idaho Code.

The Parties have the authority, capability, and biological data to implement appropriate hunting restrictions, management relocations and removals, and population management. The Parties will use their respective individual authorities to regulate discretionary mortality as allocated to their jurisdictions under this MOA. The Parties' respective regulatory mechanisms to manage, monitor, restrict, and adjust mortality include, but are not limited to, those identified in Attachment B.

This MOA in no way restricts the Parties from participating in similar activities with other states, agencies, tribes, local governments, or private entities.

Each Party has discretion to manage grizzly bears within its jurisdiction of the GYE that are outside the DMA pursuant to its respective regulatory processes and state management plan.

## VI. No Obligation of Funds

This MOA is neither a fiscal nor a funds obligation document. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds among the Parties will be handled in accordance with applicable laws, regulations, and procedures and such endeavors will be outlined in separate agreements or contracts made in writing by representatives of the Parties. This MOA does not provide such authority.

## VII. Term, Termination and Effective Date

This MOA will become effective upon the date of signature of all Parties. It will remain in effect until it is terminated by the Parties. Any Party may terminate its participation in the MOA by providing one hundred-eighty (180) days' written notice to the other Parties, which notice shall be transmitted by hand or other means of delivery confirmation.

## VIII. Amendment

Party representatives will meet annually to review implementation of the MOA and recommend any appropriate modifications to the MOA based on changes to the Strategy, state management plans, or other pertinent regulatory documents. Any modification to the MOA will only become effective upon the written consent of all Parties.

## IX. No Third-Party Beneficiary

Nothing contained herein shall be construed as granting, vesting, creating, or conferring any right of action or any other right or benefit upon any third party.

## X. Severability

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

## XI. Sovereign Immunity

The states of Wyoming, Montana, and Idaho do not waive their sovereign immunity by entering into this MOA, 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 MOA.

In Witness Thereof, the Parties hereto have executed this MOA as of the last written date below.

President, Wyoming Game and Fish Commission — Date: Jan 17-024

Director, Wyoming Game and Fish Department — Date: January 17, 2024

In Witness Thereof, the Parties hereto have executed this MOA as of the last written date below.

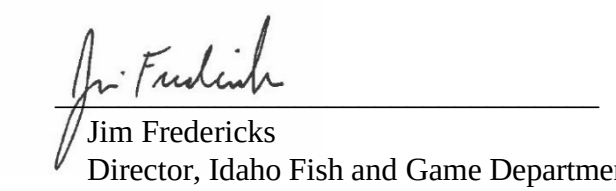
Chairman, Montana Fish and Wildlife Commission — Date: 6/24/24

Director, Montana Fish, Wildlife and Parks — Date: 7/9/24

In Witness Thereof, the Parties hereto have executed this MOA as of the last written date below.

Don Ebert
Chair, Idaho Fish and Game Commission

January 25, 2024
Date

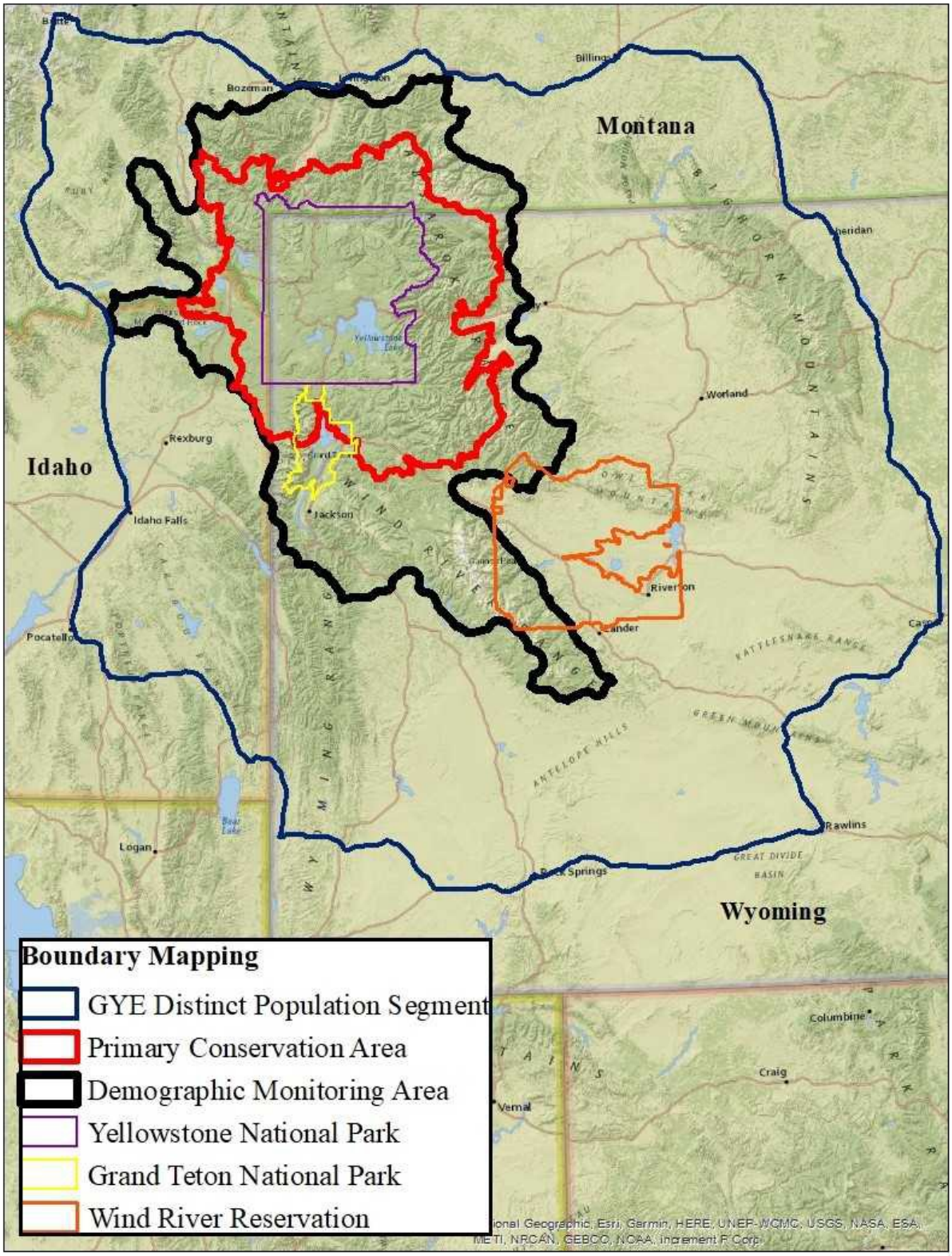


Jim Fredericks
Director, Idaho Fish and Game Department

January 25, 2024
Date

**ATTACHMENT A**

**Greater Yellowstone Ecosystem**



## ATTACHMENT B

### State Regulatory Mechanism

| | **Wyoming**<br>WS=Wyoming Statute<br>WGBMP=Wyoming Grizzly Bear Management Plan | **Montana**<br>MCA= Montana Code Annotated<br>ARM=Admin. Rules of Montana<br>MTFWC – Montana Fish and Wildlife Commission Regulation | **Idaho**<br>IC=Idaho Code IDAPA=Idaho Admin. Code<br>ISP=Idaho Season Proclamation |
|---|---|---|---|
| **Protected Classification** | W.S. 23-1-101 (a)(xii)(A) (classified as trophy game animal) | MCA 87-2-101 (4) (classified as a game animal) | IC 36-201<br>IDAPA 13.01.06.100.05<br>(classified as big game animal) |
| **No Take without Statutory/Commission/Director Authorization** | W.S.23-3-102(a) | MCA 87-1-301; MCA 87-1-304; MCA 87-5-301 (including quotas for take for livestock protection); MCA 87-5-302 | IC 36-1101(a) |
| **Commission restriction of season, location boundaries, limits, gender, age** | W.S. 23-1-302(a)(ii), WGBMP | MCA 87-1-304 (1); MCA 87-5-302 | IC 36-104(b)(2) seasons, locations, sex, limits, methods of take; ISP |
| **Commission limit of harvest to automatically close season, including gender-based limits** | W.S. 23-1-302(a), WGBMP | MCA 87-1-304; MCA 87-5-302 | IC 36-104(b)(2); ISP |
| **Commission authority to restrict hunter effort (e.g., controlled hunts, tag limits)** | W.S. 23-1-302(a)(i), WGBMP | MCA 87-1-201(8); MCA 87-1-304 (1); MCA 87-2-702; MCA 87-5-302; | IC 36-104(b)(2)<br>IC 36-104(b)(5) authority to designate controlled hunt IC 36-408(1),(2); ISP |
| **Prohibition against take of females with young present** | W.S. 23-1-302(a) | MCA 87-1-304; MCA 87-5-302; MCA 87-5-302 | IC 36-104(b)(2) (Commission authority to prohibit in conjunction with season setting via proclamation or rulemaking); IDAPA 13.01.08.300.01.d |
| **Requirement for license and tag** | W.S. 23-3-102(a) | MCA 87-1-201(8); MCA 87-2-701; MCA 87-2-702; MCA 87 2-814; MCA 87-5-302 | IC 36-401<br>IC 36-409(c) |
| **Mandatory Check/Report to Monitor Harvest** | W.S. 23-1-302(a) | MCA 87-1-301; MCA 87-5-302 | IC 36-104(b)(3) (Commission authority for rules for mandatory check and report requirements); IDAPA 13.01.08.420, 422 |

| | **Wyoming**<br>WS=Wyoming Statute<br>WGBMP=Wyoming Grizzly Bear Management Plan | **Montana**<br>MCA= Montana Code Annotated<br>ARM=Admin. Rules of Montana<br>MTFWC – Montana Fish and Wildlife Commission Regulation | **Idaho**<br>IC=Idaho Code<br>IDAPA=Idaho Admin. Code<br>ISP=Idaho Season Proclamation |
|---|---|---|---|
| **Authority for Emergency Season Closure based on Change in Conditions affecting mortality/habitat** | W.S. 16-3-103(b) | MCA 87-1-304 (5); MCA 87-5-302 | IC 36-104(b)(3) Commission emergency closure authority<br>IC 36-106(e)(6) Director authority, closure in emergency effective upon written order |
| **Permit required for response to depredation unless self-defense/defense of others/defense of property under threat to human life or domestic animals** | W.S. 23-1-302(a)(viii) | MCA 87-1-201(8); MCA 87-1-304(1)(e); ARM 12.9.103(1)(d) | IC 36-1107 (carcass remains property of state) |
| **Mandatory Education** | W.S. 23-1-302(a)(xxii) | MCA 87-1-301; MCA 87-1-304<br>MFWC Black Bear Regulations | IC 36-412(a) Hunter education mandatory for those born after 1/1/1975<br>IDAPA 13.01.02.200<br>Recommended additional materials and exam regarding bear identification available on-line. |
| **Penalties** | W.S. 23-3-102(d), W.S. 23-6-202, W.S. 23-6-206, W.S. 23-6-208 | MCA 87-6-413. (Hunting or killing over limit) | IC 36-1402(c) Misdemeanor<br>IC 36-1402(d) Felony<br>IC 36-1402(e) Hunting license revocation for certain violations, including take during closed season, exceeding bag/possession limit<br>IC 36-1402(g) License revocation in Idaho revokes hunting privileges in all 44 states participating in the Interstate Wildlife Violator Compact |

| | **Wyoming**<br>WS=Wyoming Statute<br>WGBMP=Wyoming Grizzly Bear Management Plan | **Montana**<br>MCA= Montana Code Annotated<br>ARM=Admin. Rules of Montana<br>MTFWC – Montana Fish and Wildlife Commission Regulation | **Idaho**<br>IC=Idaho Code<br>IDAPA=Idaho Admin. Code<br>ISP=Idaho Season Proclamation |
|---|---|---|---|
| **Civil Penalty** | W.S 23-6-204(e) | | IC 36-1404(a) |
| **Procedural Aspects of State Regulatory Mechanisms** | W.S. 16-3-101, Wyoming Administrative Procedures Act | MCA 2-4-101, et seq., Montana Administrative Procedures Act | IC 74, Chapter 2, Open Meeting Requirements, including notice for all meetings of Idaho Fish and Game Commission<br>IC Title 67, Chapter 52 (Idaho Administrative Procedure Act), requirements for public notice and comment, legislative review<br>IC 36-105(3) Public Notice & Publication requirements for season setting |

## Attachment C

Example of Process for Establishing Limits and Allocation by Management Jurisdiction

**Table C1.** Example of IPM-estimated available harvest mortality ranges based on management scenario. Available harvest mortality is rounded to nearest whole number with values < 0.5 rounded down and values ≥ 0.5 rounded up without exceeding total limit.

| | **2022 Population Size Estimate**<br><br>**Total Population = 965** | **Available Total Mortality for 2023**<br>Based on Management Scenario<br>(population increase/maintenance/reduction) | | | **Prior Year Non-harvest Mortality** (using 10-year average from 2013-2022) | **Available Harvest Mortality for 2023**<br>= Available Total Mortality – Non-Harvest Mortality | | |
|---|---|---|---|---|---|---|---|---|
| | | Using λ > 1.0 (population increase objective) | Using λ = 1.0 (population maintenance objective) | Using λ = 0.95 for 5% (population reduction objective) | | Using λ > 1.0 | Using λ = 1.0 | Using λ = 0.95 |
| **Independent-aged Females** | 328 | <31 | 31 | 45 | 17 | 31 – 17 = < 14 | 31 – 17 = 14 | 45 – 17 = 28 |
| **Independent-aged Males** | 332 | <41 | 41 | 59 | 20 | 41 – 20 = < 21 | 41 – 20 = 21 | 59 – 20 = 39 |
| **Dependent Young*** | 305 | N/A | N/A | N/A | * | N/A | N/A | N/A |

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

* All 3 states prohibit harvest of dependent young and accompanying adults, so no harvest mortality is available for dependent young.

For purposes of this example, the prior 10-year average of non-harvest mortality is used to illustrate an “average” harvest mortality scenario. An actual calculation would use the prior calendar year’s mortality.

**Table C2.** Example allocation of available harvest mortality in DMA (derived per example presented in Table C1) by state management jurisdiction, using $\lambda = 1.0$ (maintain population) and rounding allocation results to nearest whole number without exceeding total limit (with values $< 0.5$ rounded down and values $\geq 0.5$ rounded up.

| | **Available Harvest** Mortality for Allocation (derived per Table A1) | WY Harvest Allocation | MT Harvest Allocation | ID Harvest Allocation |
|---|---|---|---|---|
| **Independent-aged Females*** | 14 | 8 | 5 | 1 |
| **Independent-aged Males** | 21 | 12 | 7 | 2 |
| **Dependent Young** | N/A | N/A | N/A | N/A |

*Note:* All 3 states prohibit harvest of dependent young and accompanying adults, so no harvest mortality is available for dependent young.