

Selkirk-Cabinet Yaak Grizzly Bear Conservation Strategy July 2026

Selkirk-Cabinet Yaak Grizzly Bear Conservation Strategy Draft May 2026	1
CHAPTER 1 – STRATEGY OVERVIEW AND CONTEXT	7
Vision and Intent for Grizzly Bears in the SCY Area	7
Purpose of the Strategy	9
Strategy Objectives.....	10
Ecological Context - Behavior and Habitat.....	11
Strategies for Management and Survival Improvements	11
Context of Geographic Scale and Management Objectives.....	13
Geography Used for Demographic and Habitat Assessment	15
Demographic Monitoring Area (DMA).....	15
Habitat Management – Bear Management Units (BMUs) and Secondary Habitat Area (SHA)	16
Distribution Units – (Females with Young).....	18
CHAPTER 2 – DEMOGRAPHIC OBJECTIVES AND CRITERIA.....	19
Overview	19
Demographic Objectives and Criteria	19
Objective 1: Maintain grizzly bear distribution in the SCY Area PCAs.	19
Objective 2: Manage mortality within SCY Area DMA at sustainable levels.	20
Objective 3: Maintain the long-term, population-level genetic health of grizzly bears in the SCY Area.	20
General Demographic Monitoring Protocols	21
CHAPTER 3 – HABITAT MANAGEMENT AND MONITORING.....	22
Overview	22
Interagency Commitment	22
Conservation Success to Date	22
Habitat Management Principles and Measures	23
Principles	23
Measures.....	23
Habitat Management Areas	24
Primary Conservation Areas.....	25

Zone A	25
Land and Habitat Management Commitments.....	29
Federal Lands in the Primary Conservation Area.....	29
Federal Lands in Zone A and the Secondary Habitat Area.....	35
State Land in the SCY Area.....	36
Conflict Management and Information, Education, and Outreach	39
Monitoring.....	39
Habitat Security	39
Securing Attractants.....	39
Other Management Concerns	39
CHAPTER 4 – CONFLICT PREVENTION, RESPONSE, AND MANAGEMENT	40
Importance of Conflict Management to Grizzly Bear Conservation	40
Strategies for Prevention, Management, and Response to Human-Bear Conflicts.....	40
Conflict Management and Response.....	41
Relocations	42
Removals	42
Monitoring and Adaptive Management.....	42
CHAPTER 5 – INFORMATION, EDUCATION, AND OUTREACH.....	43
Positive Public Attitudes and Knowledge: Cornerstones of Successful Grizzly Bear Conservation.....	43
IEO Objectives and Strategies.....	43
IEO Planning Components.....	44
IEO Priorities.....	44
Adaptive Efforts	45
CHAPTER 6 – IMPLEMENTATION AND EVALUATION.....	46
Interagency Coordination.....	46
Implementation Structure.....	46
Monitoring Team	46
Other Interagency Teams/Committees	47
Evaluation and Reporting.....	47
Data Management.....	48
Biology and Monitoring Review.....	48
Potential Management Actions.....	48

Conservation Strategy Review	49
CHAPTER 7 – REGULATORY AND CONSERVATION FRAMEWORK.....	50
Federal Laws	50
Federal Regulations.....	53
State Laws and Regulatory Authorities	54
Federal Plans and Guidelines	54
USDA Forest Service	54
Bureau of Land Management (BLM).....	55
U.S. Fish and Wildlife Service Wildlife Refuge.....	55
State Plans and Guidelines	55
Idaho	55
Montana.....	55
Washington	56
GLOSSARY	57
LITERATURE CITED.....	59
APPENDIX A – Distribution Units for Demographic Objective 1	64
APPENDIX B – Methods for Demographic Objective 2	68
Assessing minimum population size via reconstruction	68
Calculation of Mortality Thresholds	71
APPENDIX C – Tri-State Memorandum of Agreement.....	76

List of Tables

Table 1. Comparison among the Selkirk Cabinet-Yaak Area, Northern Continental Divide Ecosystem, and Greater Yellowstone Ecosystem.	14
Table 2. Estimated acres* and percentage of land management in the SCY Area (rounded to the nearest thousand)	28
Table 3. Allotments on Forest Service lands within the SCY Area.	34
Table 4. Size of Distribution Units (DUs).	64
Table 5. 6-year reconstruction and tally of unduplicated individual grizzly bears detected within the U.S. Cabinet-Yaak and Selkirk DMA, 2018–2023. Sex and age classes include independent females (≥ 2 years old), independent males, and dependent bears of either sex (< 2 years old). The 5-year averages are the values used for mortality limit computations (as explained in text above).	70
Table 6. Deterministic population projection for SCY DMA, for variable independent male survival rates, based on assumptions: (a) starting population size = 130 (based on reconstructed average annual minimums for 2018–2022 for Cabinet-Yaak and Selkirk PCAs, as rounded: 40 independent females, 56 independent males, 34 dependent young); (b) independent female	

survival = 0.91 (static); (c) reproductive and dependent survival rates based on Cabinet-Yaak PCA observed 2006-2025 (static); and (d) numbers of years = 12.....	73
Table 7. Example calculations for obtaining 6-year threshold values for Demographic Objective 2.....	74
Table 8. Observed and estimated unreported mortalities within the SCY DMA, 2018-2025.	74
Table 9. Comparison of calculated thresholds and observed mortalities (documented and unreported) of independent female and males bears in the SCY DMA.....	75

List of Figures

Figure 1. Area covered by this Selkirk-Cabinet-Yaak Conservation Strategy, in relation to the range of grizzly bears in North America (North America portion of map adapted from Proctor 2021), and to the areas covered by Conservation Strategies for the Northern Continental Divide (IGBC 2021) and Greater Yellowstone (IGBC 2024) Ecosystems. The respective Primary Conservation Areas (PCAs) and Demographic Monitoring Areas (DMA) for the three conservation strategies are shown. The SCY DMA describes the extent of this Strategy's coverage.	8
Figure 2. Selkirk-Cabinet-Yaak Demographic Monitoring Area (DMA), Primary Conservation Areas (PCAs) (corresponding to Recovery Zones (FWS 1993)), and Zone A, shown with the adjacent part of the respective Northern Continental Divide Ecosystem DMA and PCA (see footnote regarding potential boundary adjustments indicated by hashed line).....	9
Figure 3. Combined estimated occupied range of grizzly bears relative to the SCY Area.....	16
Figure 4. Bear Management Units (BMUs) in the Selkirk and Cabinet Yaak Primary Conservation Areas (PCAs) used for Habitat Management (see chapter 3).	17
Figure 5. Distribution Units (DUs) in the Selkirk and Cabinet-Yaak PCAs used for assessment of grizzly bear distribution (see chapter 2).	18
Figure 6. SCY Area DMA, Zone A, and SHA including new proposed SHA between ecosystems.	25
Figure 7. Land jurisdiction across the SCY Area. Conservation easements reflect lands on which residential development is limited, including easements held by state agencies under the Forest Legacy Program, which supports continued land uses as working timberlands. Note: the final version of this map will be updated with conservation easements under the Forest Legacy Program in Washington.	27
Figure 8. Forest Service land management areas' with motor vehicle use limitations.	32
Figure 9. Development of DUs from BMUs: (A) BMUs were screened as to whether they were large enough (green) or too small (tan) to fully contain a female activity area (red circle) and combined as shown with arrows or described in the text; and (B) resulting DUs developed from these combinations.	66
Figure 10. Observed percent of units occupied by females with offspring during 6-year periods, based on BMUs (blue) and DUs (orange) within the Selkirk PCA (A) and the CYE PCA (B). ..	67
Figure 11. Reconstructed total number of unduplicated male and female bears age 2 or older detected within the combined U.S. Cabinet-Yaak and Selkirk DMA. Reconstructed data comes from detections of bears from the six-year period 20180–2023, plus year-of-birth and age information for those bears. Mortality limits are derived from averages of the most-historic 5 years of the reconstruction (as explained in text).	70
Figure 12. Image showing an example of the application of 6-year widow for independent male and female mortality thresholds based on reported and unreported additions for the Cabinet-Yaak and Selkirk PCAs.	75

List of Acronyms

BLM: Bureau of Land Management
BMU: Bear management unit
BORZ: Bears outside the recovery zone
CNF: Colville National Forest
DMA: Demographic monitoring area
DNR: (Washington) Department of Natural Resources
DNRC: (Montana) Department of Natural Resource Conservation
DU: Distribution unit
ESA: Endangered Species Act
GYE: Greater Yellowstone Ecosystem
IDL: Idaho Department of Lands
IDFG: Idaho Department of Fish and Game
IEO: Information education and outreach
IGBC: Interagency Grizzly Bear Committee
IPNF: Idaho Panhandle National Forest
IRA: Inventoried Roadless Areas
KNF: Kootenai National Forest
MOA: Memorandum of Agreement
FWP: Montana Fish Wildlife and Park
FWS: Fish and Wildlife Service
NCDE: Northern Continental Divide Ecosystem
PCA: Primary conservation area
SHA: Secondary habitat area
SCY: Selkirk Cabinet Yaak
USDA: United States Department of Agriculture
USDI: United States Department of Interior
WDFW: Washington Department of Fish and Wildlife

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CHAPTER 1 – STRATEGY OVERVIEW AND CONTEXT

This Selkirk-Cabinet Yaak Grizzly Bear Conservation Strategy (Strategy) was developed to describe the signatory Agencies’¹ (Agencies) commitments to management and monitoring of grizzly bears (*Ursus arctos horribilis*) and their habitat in the Selkirk-Cabinet-Yaak Area (SCY Area) (figure 1 and figure 2). Successful grizzly bear conservation will continue to involve coordinated management and cooperation across multiple land ownerships and jurisdictions. Once the Strategy becomes effective, it will remain in place for the foreseeable future, beyond the applicable Endangered Species Act (ESA) post-delisting monitoring period for the grizzly bear.

Vision and Intent for Grizzly Bears in the SCY Area

- Agency management of grizzly bears and their habitat will continue to conserve grizzly bears as an integral part of the SCY Area in Montana, Idaho, and Washington.
- The SCY Area will continue its contribution to the long-term resiliency of grizzly bears in the lower-48 United States (lower-48 states) as part of the larger occupied range of grizzly bears extending northward through western Canada to Alaska.
- Management of grizzly bears and their habitat will continue to be conducted through interagency cooperation in a way that respects the interests and values of those who live in, visit, and use the SCY Area, as well as the needs of local communities and the varied missions of land and wildlife management agencies.

¹ References to the “Agencies” in this Strategy refer to the signatories on the cover page.

Selkirk-Cabinet Yaak Grizzly Bear Conservation Strategy
Draft July 2026

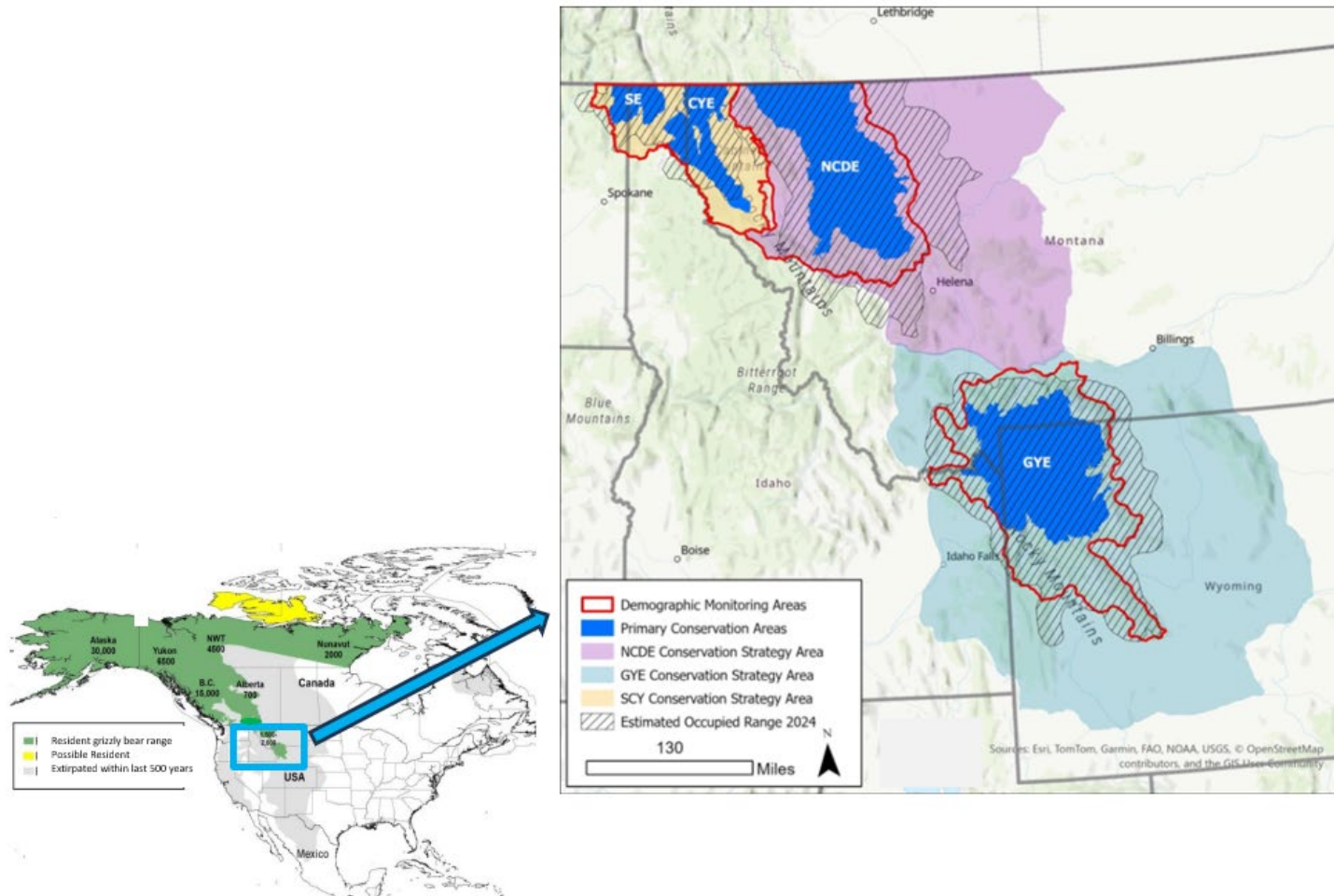


Figure 1. Area covered by this Selkirk-Cabinet-Yaak Conservation Strategy, in relation to the range of grizzly bears in North America (North America portion of map adapted from Proctor 2021), and to the areas covered by Conservation Strategies for the Northern Continental Divide (IGBC 2021) and Greater Yellowstone (IGBC 2024) Ecosystems. The respective Primary Conservation Areas (PCAs) and Demographic Monitoring Areas (DMA) for the three conservation strategies are shown. The SCY DMA describes the extent of this Strategy's coverage.

Purpose of the Strategy

- Describe the Agencies' commitments and activities for conservation of grizzly bears and their habitat in the SCY Area including: management and monitoring; conflict prevention and response; and information, education, and outreach.
- Identify demographic and habitat objectives and criteria for the SCY Area.
- Document applicable regulatory mechanisms, legal authorities, plans and policies to support grizzly bear population stability or growth.
- Describe other measures benefitting grizzly bear conservation in the SCY Area and the process for interagency coordination, review, and adaptive management.

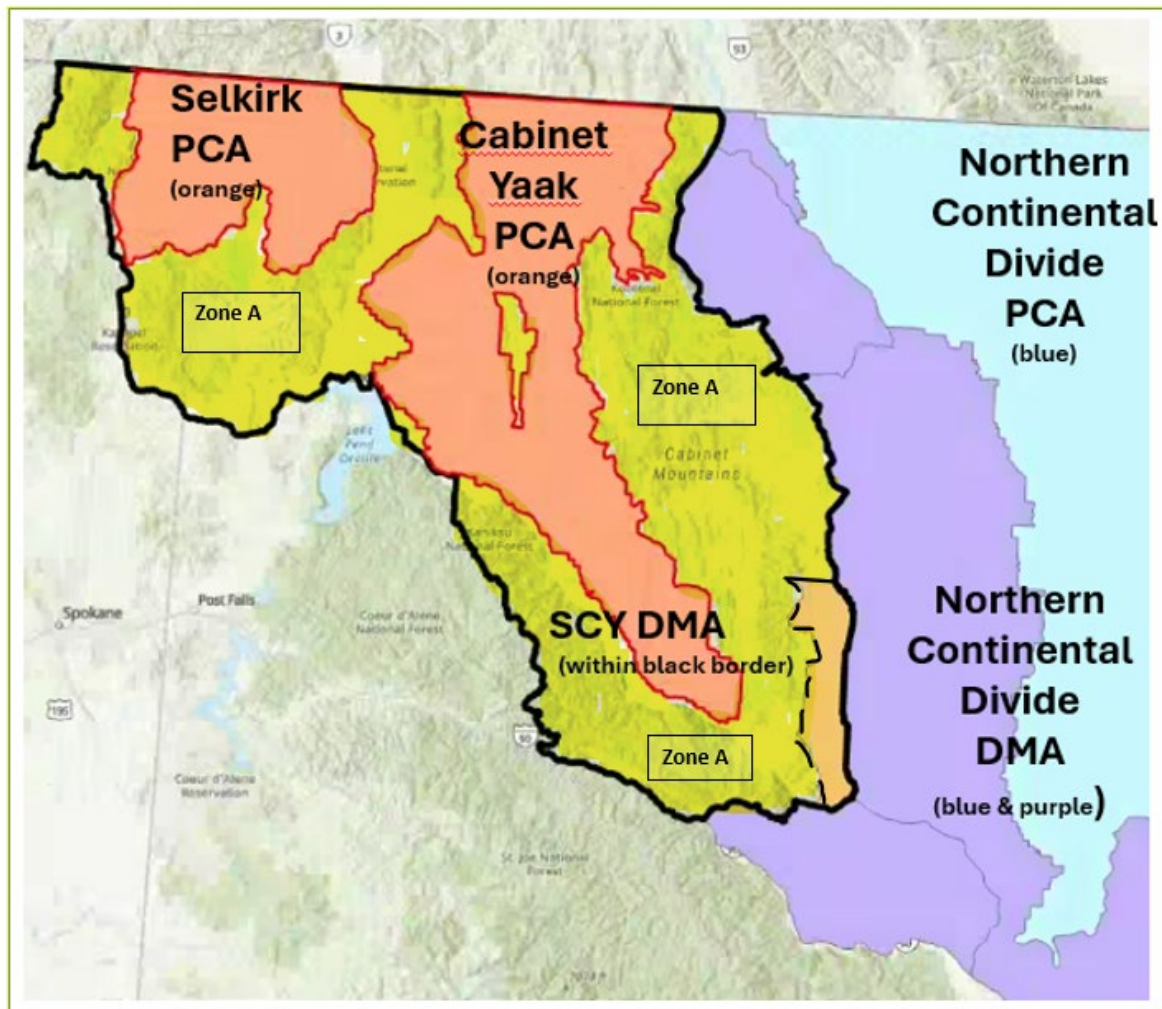


Figure 2. Selkirk-Cabinet-Yaak Demographic Monitoring Area (DMA), Primary Conservation Areas (PCAs) (corresponding to Recovery Zones (FWS 1993)), and Zone A, shown with the adjacent part of the respective Northern Continental Divide Ecosystem DMA and PCA (see footnote 2 on page 15 regarding potential boundary adjustments indicated by hashed line).

Strategy Objectives

This Strategy identifies objectives for the SCY Demographic Monitoring Area (DMA) (figure 2, above), which includes all the area covered by this Strategy. The SCY DMA consists of two primary conservation areas (PCAs), and Zone A (area around and between the PCAs) (figure 2, above). The combined Selkirk and Cabinet-Yaak PCAs consist of approximately 3,669 square miles (mi²) (9,502 square kilometers (km²)), with most lands in the PCAs (88%) under federal jurisdiction managed by the USDA Forest Service (Forest Service) and 5% in state ownership. Zone A consists of a mix of lands in private, federal, state, local government, and tribal ownership, with a variety of land uses and human development.

Objectives for this Strategy include:

- Manage grizzly bears, consistent with demographic criteria described in chapter 2, to sustain the SCY Area's contribution to grizzly bears in the lower-48 states and the larger U.S.– Canada population. Demographic criteria include criteria for distribution of females with young in the PCAs, mortality levels in the DMA, and population-level genetic health.
- Manage habitat in the PCAs, consistent with criteria described in chapter 3, to protect secure core (see glossary) habitat and to limit access-related disturbances and reduce human-caused mortality.
- In Zone A:
 - Maintain existing resource management and recreational uses and allow the Agencies to respond to human-bear conflict with appropriate management actions.
 - Allow grizzly bears to expand into biologically suitable and socially acceptable areas.
 - Manage public motorized access in the secondary habitat area (SHA) (see figure 6 in chapter 3) identified on National Forest lands to reduce motorized access-related displacement and mortality.
- Implement food storage requirements on most federal and state lands.
 - Continue Agency activities to foster connectivity and permeability, while recognizing limitations related to levels of human use and habitat suitability.
- Manage grizzly bears as protected wildlife (classified as big game animals in Montana and Idaho, and state-endangered big game animals in Washington), with no expectation of annual hunting seasons. Game animal designation allows these States to regulate or prohibit take under their respective state laws.
- Provide responsive management to address grizzly bears involved in conflict (chapter 4).
- Provide public information, education, and outreach to reduce human-bear conflict potential in the PCAs and Zone A, and to support permeability in Zone A (chapter 5).
- Establish an evaluation process to adapt management and monitoring techniques based on changes in circumstances and scientific developments (chapter 6).

Ecological Context - Behavior and Habitat

The behavior and life history of grizzly bears in the SCY Area is consistent with that described in the Northern Continental Divide Ecosystem (NCDE) Conservation Strategy (IGBC 2021). Like the western NCDE, the SCY PCAs consist of wet and mesic conifer forests, subalpine, and alpine habitats (Kasworm 2025a; Kasworm 2025b). These habitats, along with avalanche chutes, burned, and riparian habitats, provide a variety of grizzly bear food resources (ibid). Human uses in the SCY Area are also comparable to those in parts of the western NCDE, including timber harvest, ungulate hunting, and other forms of recreation.

Grizzly bears are habitat generalists and omnivores with diets characterized by high variability among individuals, seasons, and years. The SCY Area is relatively low in protein availability compared to other areas, such as that available with bison in the Greater Yellowstone Ecosystem (GYE) or salmon runs (British Columbia) (FWS 2024). Like areas in the western NCDE, grizzly bear diets in the SCY Area are largely herbivorous (FWS 2024; Teisberg 2026). Where animal protein is less available, berries, grasses, roots, bulbs, tubers, seeds, and fungi are important in meeting protein and caloric requirements. Higher annual indices of berry production in the SCY Area are associated with lower human-caused mortality (ibid).

Strategies for Management and Survival Improvements

In 1975, the estimated grizzly population in the entire lower-48 states was 700 to 800, and largely confined to mountainous regions, National Parks, and wilderness areas (FWS 2024). The 1975 ESA listing did not specifically refer to grizzly bears in the SCY Area, and the area is thought to have hosted only a few bears at the time of listing (FWS 2024).

The Cabinet range was functionally extirpated before the U.S. Fish and Wildlife Service (FWS) made translocations during 1990–1994 (with additional augmentation during 2005–2023) (Kasworm 2025a). Given small population sizes, there has been documented inbreeding based on parentage analysis (Turnock 2024). An evaluation of genetic status in 2012 found low genetic diversity in the Selkirk PCA (and adjacent British Columbia) than elsewhere in the lower-48 states and Canada, likely the result of a bottleneck effect, although no deleterious effects were observed (FWS 2024; Turnock et al. 2024).

Since the 1975 ESA listing, government agencies (federal, tribal, state, county, and city) improved management coordination, and they adopted and implemented regulatory and other conservation measures for the SCY Area. The agencies worked with communities, individuals, and organizations to improve habitat conditions, reduce grizzly bear-human conflicts and human-caused grizzly bear mortality, and increase public awareness and appreciation for grizzly bears in the SCY Area.

Supported by these collaborative public and agency efforts, 50 years after listing under the ESA, the SCY Area now has:

- An estimated minimum of 120 grizzly bears (FWS 2024).
- Increased distribution of females with young in the PCAs (Kasworm 2025a; Kasworm 2025b).

- Expansion of occupied range to 96% of the combined PCAs, extending to areas outside the PCAs (Costello et al. 2025).
- Increased habitat security in the PCAs (see description below).
- Additional movements of grizzly bears among the PCAs, the NCDE, and adjacent areas in British Columbia allowing for gene flow among populations and increased genetic diversity (Turnock et al. 2024).

Human-caused mortality, disturbance, and habitat displacement and loss were key causes of decline of grizzly bears in the lower-48 states before 1975. Improving habitat security by increasing secure core habitat and managing public motorized access in the SCY PCAs has corresponded with increased abundance, distribution, and occupied range.

The SCY PCAs are overwhelmingly in government ownership (88% federal and 5% state). In 1975, and continuing into the 1980s, roads constructed on national forests and state land primarily for timber resource management were commonly open to public motorized access, leading to motorized road densities limiting habitat security in the PCAs. In the 1990s, the Interagency Grizzly Bear Committee (IGBC) prioritized habitat security improvements in the PCAs, supporting agency research to develop management recommendation (IGBC 1994; Wakkinen et al. 1997).

Beginning in the 1980s, the Colville, Idaho Panhandle, and Kootenai National Forests started working to create secure habitat for grizzly bears. In January 1999, the Forest Service began specifically working toward achieving the management recommendations from the Wakkinen et al. 1997 research within the Selkirk and Cabinet-Yaak PCAs to improve habitat conditions for grizzly bears with a 2004 land management plan access amendment for the Idaho Panhandle and Kootenai National Forest land management plans. This increased secure core by about 390,000 acres (157,827 hectares (ha)) (Selkirks = 74,150 acres (30,007 ha); Cabinet-Yaak = 315,850 acres (127,820 ha)) from the days of maximum road construction and use to conditions in 2009 (USDA 2011). By 2011, the Forest Service had successfully adopted and began implementation of the current suite of forest plan components for secure core and motorized access that apply to most of the PCAs. These measures have dramatically improved habitat security in the PCAs in the intervening years (see chapter 3).

Existing habitat management outside of the PCAs has been compatible with an increasing number of grizzly bears and expansion of range in the SCY Area as well. To provide additional support for connectivity and permeability between PCAs, the Forest Service has also identified a secondary habitat area in Zone A for management of public motorized access to support permeability and connectivity between ecosystems (see chapter 3).

Increased information, education, and outreach, combined with community-based efforts, have reduced conflict potential, and supported increased permeability around the PCAs (see chapter 5). Adoption of food storage requirements on federal and state land in the PCAs and the larger DMA has also reduced human-bear conflict potential. Ultimately, however, human-bear conflicts and associated management removals for public safety cannot entirely be eliminated in human-dominated landscapes, and Agency responsiveness to address conflict is important to maintaining social tolerance for grizzly bears in the SCY Area (see chapter 4).

Other conservation measures related to land use and transportation planning have also supported improved demographics and habitat. These include the use of conservation easements through federal-state Forest Legacy program partnerships. Forest Legacy easements in Idaho, Montana, and Washington restrict residential development on working timberlands in checkerboard ownership with federal and state land in the PCAs and Zone A (see figure 7, below, in chapter 3).

This Strategy describes the framework the Agencies will use in the absence of the ESA to sustain the improvements to grizzly bears and their habitat in the SCY Area, which have been achieved with decades of coordinated federal, state, tribal, and local community efforts.

Context of Geographic Scale and Management Objectives

This Strategy is one of three conservation strategies developed for grizzly bears in the lower-48 states (figure 1, above). Like the conservation strategies developed for grizzly bears in the NCDE (IGBC 2021) and the GYE (IGBC 2024), the intent of this Strategy is to sustain the improvements in demographics and habitat achieved in the SCY Area for continued successful conservation of grizzly bears in the lower-48 states for the foreseeable future.

Like the other two conservation strategies, this Strategy for the SCY Area identifies regulatory mechanisms, conservation measures, and objectives to:

- Manage for sustainable mortality levels.
 - Manage for distribution within PCAs.
 - Monitor for population-level genetic health.
 - Support habitat security in PCAs – protect secure core and manage public motorized access.
 - Reduce human-bear conflict potential and promptly address conflicts.
 - Support information, education, and outreach.
- Support connectivity and permeability outside of PCAs, with human-mediated connectivity if necessary for population-level genetic health.

This strategy differs from the other two strategies in geographic scale, potential bear abundance, and aspects of management and monitoring. In comparison to the SCY Area, the NCDE and the GYE are not only larger but also contain higher quality habitat. The NCDE and GYE contain more extensive areas of core habitat, based around large, federally designated wilderness areas and National Parks (table 1) (IGBC 2021; IGBC 2024). As such, the NCDE and GYE are able to support more grizzly bears and can be managed on a scale for independent viability and long-term genetic fitness, supporting greater management flexibility (FWS 2024). The NCDE and GYE strategies each identify management objectives above 800 bears in their respective demographic monitoring areas (IGBC 2021; IGBC 2024). Recent estimates for the GYE and NCDE are each above 1,000 individuals (table 1). The differences in geographic context and scale of the GYE, NCDE, and SCY conservation strategies result in different contributions to resiliency, redundancy, and representation to grizzly bears in the lower-48 states.

The PCAs in the SCY Area are bounded on the north by the U.S.–Canada border and consist of the relatively narrow southern extensions of mountain ranges that straddle the international

border. The Selkirk PCA is approximately 1,000 mi² (2,590 km²) and the Cabinet-Yaak PCA is approximately 2,600 mi² (6,734 km²) (FWS 2024). The PCAs in the SCY Area are bounded by developed river valleys and roadways, including U.S. Highways 2 and 95, Idaho/Montana State Highway 200, and Washington Highways 20 and 31.

Table 1. Comparison among the Selkirk Cabinet-Yaak Area, Northern Continental Divide Ecosystem, and Greater Yellowstone Ecosystem.

	Selkirk-Cabinet-Yaak Area	Northern Continental Divide Ecosystem	Greater Yellowstone Ecosystem
Population estimate (FWS 2024)	~120 bears (minimum)	~ >1,000 bears	` >1,000 bears
Estimated occupied range (mi ²) (Costello 2025)	7,069	24,049	26,104
Range Overlap with another DMA (mi ² and %)	83 or 1.2% (NCDE)	325 or 1.4% (SCY)	0
PCA (mi ²)	3,669	8,933	9,210
% PCA occupied	96%	100%	100%
DMA (mi ²)	8,813	16,454	19,278
% DMA occupied	72%	93%	97%

The differences in geographic context and scale manifest as differences in the SCY Area Conservation Strategy relative to the GYE and NCDE conservation strategies. Specific aspects of this Strategy include:

- Use of one DMA encompassing two narrowly separated PCAs (approximately 3,669 mi² (9,502 km²) total for the combined PCAs) for collective sustainable mortality management, with distribution units (DUs) to separately assess each PCA (see *Geography Used for Demographic and Habitat Assessment* below).
- Extension of the SCY DMA to align with the NCDE DMA, including NCDE range expansion, and unoccupied range, to avoid gaps in assessment.
- No expectation of annual hunting seasons due to small number of grizzly bears in smaller geography and current states' protections as big game animals (including additional protections in Washington as a state-listed endangered big game animal).
- Focus on habitat criteria for federal lands on secure core and public motorized access management. Mortality or disturbance has been absent or insignificant on federal lands in the SCY Area related to developed sites, grazing, and other land uses. Existing general food storage requirements and project-specific permitting requirements are in place and monitoring of conflict and mortality would detect if negative effects were to become significant.

- Identification of a secondary habitat area on National Forest System lands adjacent to the PCAs in which public motorized access will be managed to facilitate connectivity and permeability between the PCAs and with the adjacent NCDE and British Columbia.

Geography Used for Demographic and Habitat Assessment

Demographic Monitoring Area (DMA)²

The geographic area covered by this Strategy is defined as the DMA (figure 3, below). The SCY DMA is where demographic monitoring protocols document the distribution, mortality, and population-level genetic health (see chapter 2 and appendices A and B for methodologies). Demographic monitoring protocols are focused within the Selkirk and Cabinet-Yaak PCAs. In Zone A (the area within the DMA outside the PCAs), monitoring will emphasize documenting all mortalities and opportunistic detections of individuals. Additional monitoring actions may be implemented outside of the PCAs as evolving management or information needs arise.

The DMA identified for this Strategy differs in some respects from the area that the FWS has historically been using for assessment and reporting of demographic parameters (e.g., FWS 1993, Kasworm et al. 2025a, and Kasworm et al. 2025b). The DMA applies a biological framework based on two primary conservation areas. In the 1993 Recovery Plan, the FWS concluded that the Selkirk and Cabinet-Yaak areas are a subset of a larger population along the U.S. - Canada border and these areas were not adequate to sustain independent populations by themselves (FWS 1993; FWS 2024). Because the Selkirk Range in the United States was unlikely to support a minimum recovery objective of 90 grizzly bears, the FWS added an additional 1,000 mi² in British Columbia when identifying the Selkirk recovery zone in the 1993 Recovery Plan. The FWS previously assessed and reported demographics independently for the Selkirk and Cabinet-Yaak recovery zones and a 10-mile buffer area, which included area in British Columbia (e.g., Kasworm 2025a and Kasworm 2025b). The FWS' prior reporting of mortalities and trend has thus been based on a larger transboundary footprint, including mortalities in British Columbia (FWS 2024).

The DMA for this Strategy does not include any area in Canada. Although individual grizzly bear home ranges may span the international U.S.–Canada boundary, grizzly bears in Canada have never been ESA-listed, and grizzly bears and their habitat are not subject to comparable levels of monitoring or management direction by Canada's or British Columbia's government in Canada (FWS 2024). Thus, this Strategy uses a DMA specific to the United States, and the Agencies' monitoring and management framework can adapt to sustain demographic or habitat objectives independently of contribution from Canada if such actions were needed.

The Agencies have chosen to use a single DMA to encompass both PCAs and Zone A. The SCY Area as a whole is capable of supporting a small number of grizzly bears (FWS 2024). The distance between the Selkirk and Cabinet-Yaak PCAs is narrow (between 8 and 20 miles (12 and

² The DMA boundary presented in this draft may be adjusted in finalizing a conservation strategy for the SCY Area, including those boundaries relative to the Flathead Indian Reservation and Kalispel Indian Reservation, based on preferences of the tribes, and boundary alignments that may simplify administration as between the NCDE and SCY Conservation Strategies (e.g., Flathead National Forest).

32 kilometers). Recent monitoring information indicates overlap of range occupancy between the two PCAs, with individual male bear home ranges documented to include areas in both PCAs (Kasworm 2025a; Kasworm 2025b). Coordinated bear management and monitoring, and related habitat management and monitoring, for a single DMA better supports the Agencies' objectives for sustaining grizzly bears in the SCY Area than managing the two PCAs independently. DMA boundaries were adjusted to align with the NCDE to avoid gaps in assessment coverage. The DMA boundaries were also adjusted to use political boundaries, roadways and rivers for ease of communication.

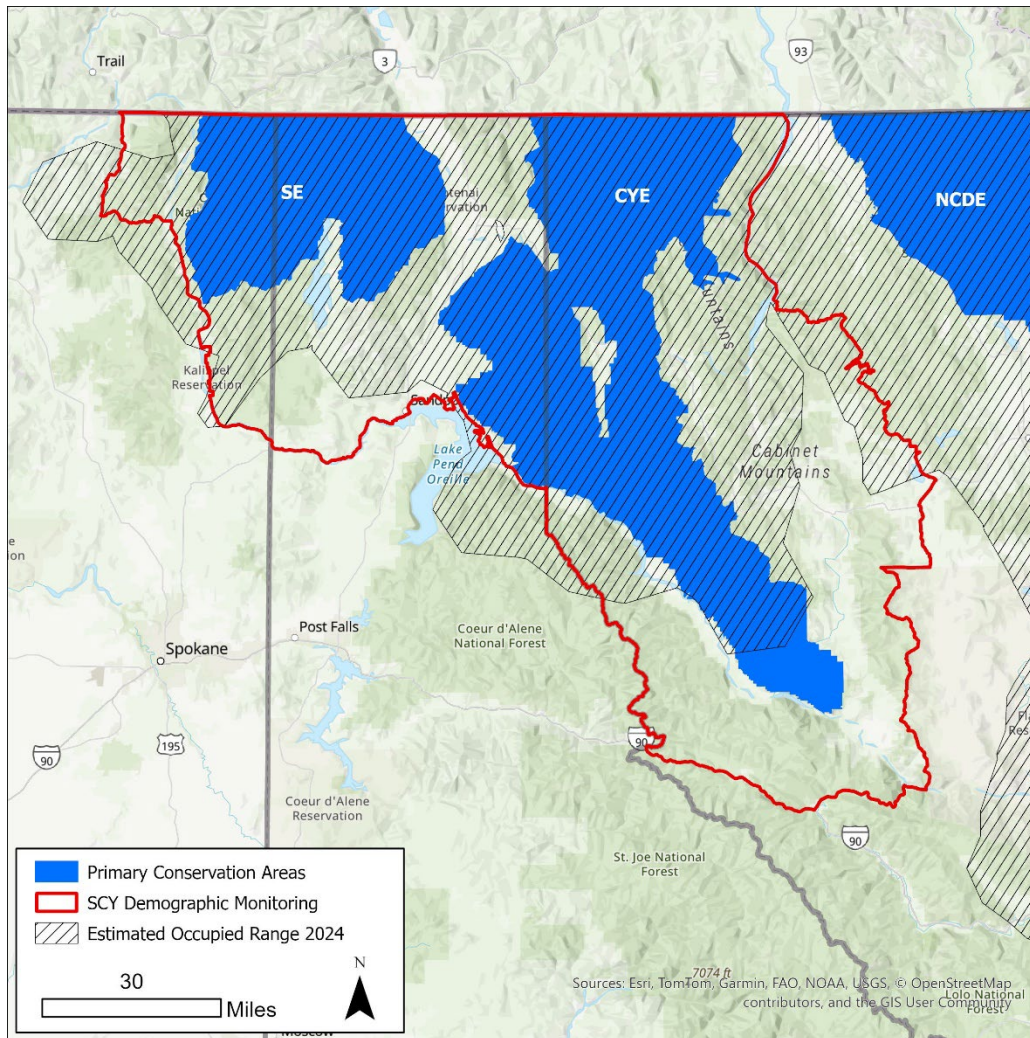


Figure 3. Combined estimated occupied range of grizzly bears relative to the SCY Area.

Habitat Management – Bear Management Units (BMUs) and Secondary Habitat Area (SHA)

This Strategy continues the use of 32 previously identified Bear Management Units (BMUs) to subdivide the PCAs for identification and assessment of metrics for secure core habitat and public motorized access management on National Forest System lands. One BMU in the Selkirk PCA is comprised primarily of state of Idaho endowment land, where public motorized access is managed in conjunction with timber resource management (figure 4, figure 7, and see chapter 3 for more detailed discussion). The SCY Area BMUs are analogous to bear management subunits

Selkirk-Cabinet Yaak Grizzly Bear Conservation Strategy Draft July 2026

in the NCDE Conservation Strategy that are mapped for similar habitat assessment for secure core and public motorized access management, typically based on incorporation of female home range size (IGBC 2021). The size of BMUs in the SCY DMA range from 28 mi² to 255 mi² (73 km² to 660 km²).

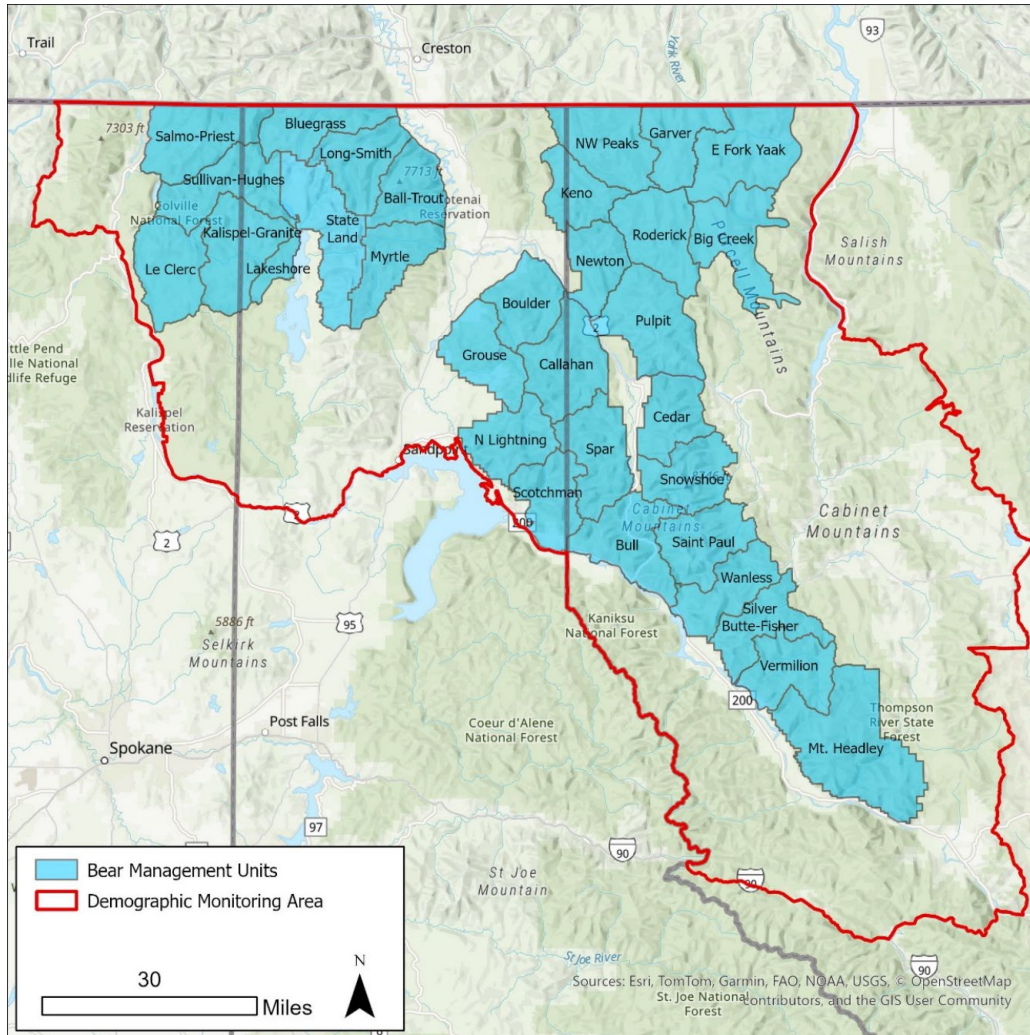


Figure 4. Bear Management Units (BMUs) in the Selkirk and Cabinet Yaak Primary Conservation Areas (PCAs) used for Habitat Management (see chapter 3).

In Zone A, the Strategy identifies a secondary habitat area (SHA) on National Forest System lands (see figure 4, above, and chapter 3). The SHA corresponds to areas identified as Bears Outside of Recovery Zones (BORZ) in the Idaho Panhandle and Kootenai National Forest Land Management Plans. These areas currently have recurring use by grizzly bears adjacent to the PCAs. The Forest Service has managed public motorized access in the SHA to benefit grizzly bears and will continue to do so. To provide additional support for connectivity and permeability between the NCDE and SCY Area, an additional 124 mi² (321 km²) between the NCDE Salish Demographic Connectivity Area and the Cabinet Mountains in the Kootenai National Forest is proposed as an addition to the SHA, subject to the Forest Service land management plan amendment or revision process.

Distribution Units – (Females with Young)

To assess performance of the demographic objective for distribution of grizzly bears in the PCAs, the Agencies have identified distribution units (DUs) to assess the presence of females with young. These DUs correspond to individual BMUs or a combination of BMUs, with assignment of the two halves of the State Land BMU (figure 4, above) to the S3 and S6 DUs based on watershed boundaries and logistical considerations (figure 5; see appendix A). The Selkirk PCA is divided into 6 DUs, and the Cabinet-Yaak PCA is divided into 15 DUs. The DUs range in size from 90 mi² to 270 mi² (233 km² to 699 km²).

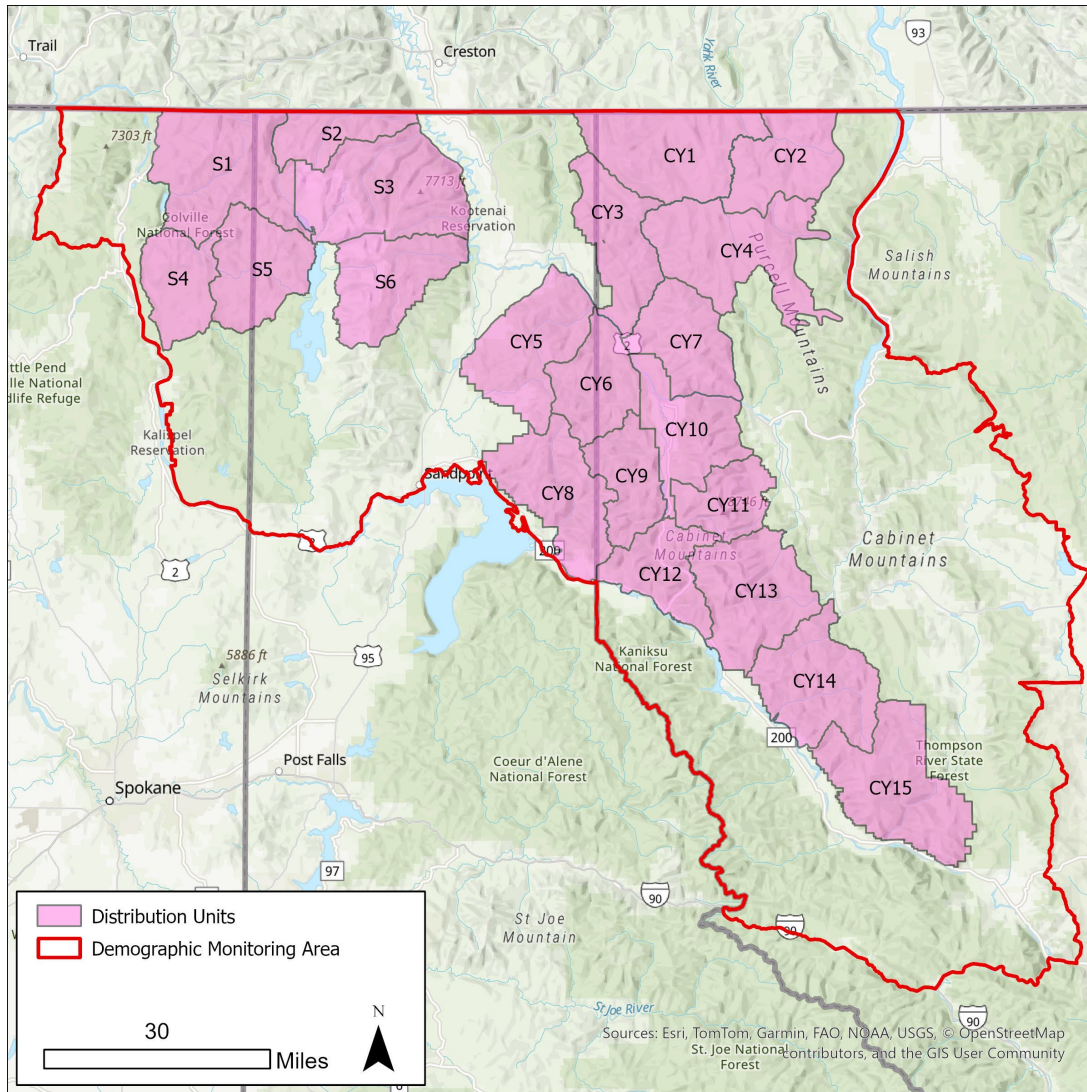


Figure 5. Distribution Units (DUs) in the Selkirk and Cabinet-Yaak PCAs used for assessment of grizzly bear distribution (see chapter 2).

CHAPTER 2 – DEMOGRAPHIC OBJECTIVES AND CRITERIA

Overview

This chapter describes demographic objectives and associated criteria for distribution, mortality management, and population-level genetic health of grizzly bears in the DMA for the SCY Area (see figure 5, above). Because of the low density and cryptic habits of grizzly bears, this Strategy uses multiple criteria to provide sufficient information on which to base management decisions.

Descriptions of the DMA, PCAs, and DUs used for assessment of objectives are provided in chapter 1. See figure 2 for the DMA and PCA boundaries and figure 5 for the DUs.

Descriptions of methodologies for application of the criteria below are provided in appendices A and B. The Agencies will continue to investigate ways to improve the demographic assessment. As new methods emerge and are scientifically vetted and accepted, the Agencies will adapt their methodologies and the demographic criteria as appropriate using the best available scientific information (see chapter 6 and appendix B).

Interagency coordination regarding monitoring, reporting, and evaluation of performance relative to demographic criteria is described in chapter 6. If a demographic criterion is not met, the Agencies will conduct a biology and monitoring review to determine potential cause(s) and make appropriate science-based recommendations for achieving the criterion (see chapter 6).

The states of Idaho, Montana, and Washington have a Tri-State Memorandum of Agreement describing the individual agency commitments for implementation of demographic objectives and criteria, conflict management, and monitoring (see appendix C).

Demographic Objectives and Criteria

Objective 1: Maintain grizzly bear distribution in the SCY Area PCAs.

Criterion: Using a 6-year rolling window, detect females with young in at least 5 of the 6 DUs in the Selkirk PCA and 11 of the 15 DUs in the Cabinet-Yaak PCA (see figure 5, above, for a map of the DUs).

Rationale: Detection of females with young demonstrates the presence of all sex and age cohorts in an area. Because grizzly bear young, especially female young, tend to occupy habitat within or near the maternal home range after weaning, distribution of females with young is an indication of future occupancy of the same area.

Presence of females with dependent young (cubs, yearlings or 2-year-olds) will be documented through: visual observations of radio-marked females; locations of radio-marked females known to have young; verified remote camera photos; other verified visual observations; and known or probable mortalities of family units (death of the mother, dependent young, or both). Detections of females with young within the DMA and within 10 miles (16 kilometers) of a PCA will be assigned to the nearest DU.

Using a 6-year rolling window for assessment encompasses two potential reproductive cycles for grizzly bears, accommodates natural fluctuations in reproduction, and allows detection of any changes over time. Assuming that successful reproduction is an indicator of habitat sufficiency, distribution of reproducing females also provides evidence of adequate habitat in the PCAs (Fisher et al. 2014).

The use of DUs continues to support tracking changes in population trend and occupancy over time, such as that observed since 2001 during a period of population growth (e.g., Kasworm et al. 2025a; Kasworm et al. 2025b). See appendix A for additional information about the selection of DUs.

Objective 2: Manage mortality within SCY Area DMA at sustainable levels.

Criterion: Manage mortality of independent-aged female and independent-aged male bears from all causes within the DMA over the 6-year period ending in the current year to not exceed calculated sustainable mortality level(s) at which population stability or growth would be expected to occur.

Rationale: Sustainable mortality levels will be estimated using population modeling and observed vital rates. These sustainable mortality levels will be applied to a minimum estimated population size obtained from population reconstruction. The use of reconstructed minimum counts for calculation of sustainable mortality levels has been couched as erring on the conservative side. Using a 6-year rolling window for application of mortality levels accommodates annual variability, encompasses two reproductive cycles, and allows detection of changes over time.

The Agencies will collect information related to each mortality event, including incident-specific details such as locale, demographics, cause, and timing.

The Agencies will consider spatial patterns of mortality and will make management adjustments if mortalities become concentrated in only one PCA or otherwise of localized significance. The Agencies will consider whether mortalities are influenced by factors external to the DMA (e.g., dispersal from the NCDE and Canada). See appendix B for details of how sustainable mortality levels are calculated based on a reconstructed minimum count.

Objective 3: Maintain the long-term, population-level genetic health of grizzly bears in the SCY Area.

Criterion:

- Document movements and gene flow between population cores via observations of marked bears, telemetry data, DNA detections, and parentage.
- Estimate metrics of genetic health (e.g. heterozygosity, allelic richness, average pairwise relatedness) approximately once per generation (10–14 years) (e.g., Kamath 2015, Turnock 2024).

Rationale: The Agencies expect continued habitat protections in the PCAs and SHA to promote permeability of Zone A, and education and outreach efforts to facilitate natural genetic exchange.

Genetic monitoring is conducted to detect levels of inbreeding or other indicators of genetic health, helping to identify potential needs for management action.

If monitoring indicates a significant decline in genetic health (e.g., increased inbreeding or a lack of effective immigration) on a generational timeframe (10–14 years), the Agencies will conduct a biological and monitoring review, and the Idaho and Montana state agencies commit to translocation of bears from the NCDE or GYE into the Idaho and/or Montana sections of the SCY Area for genetic health as determined appropriate by the review (see appendix C).

General Demographic Monitoring Protocols

Demographic monitoring in the SCY DMA relies on multiple data sources, including capture and radio-telemetry monitoring, non-invasive genetic and photo detections, mortalities, and other verified sightings and photos.

Hair, blood, or tissue samples will be collected from captured bears, mortalities, or non-invasive hair-corral/rub-tree sampling for DNA extraction and genotyping. When feasible, successful genotypes will be used to estimate parentage using pedigree or population genetic clustering analyses.

Movements of individual bears between PCAs will be documented by observations of marked bears, telemetry data, DNA detections, or parentage (i.e., presence in a population other than their natal population). Age, timing of observations, and other information will be used to evaluate the degree to which these movements may have influenced genetic health or population size:

- If detection of an individual within a non-natal area is not supported by additional information of residency, these movements will be characterized as temporary forays with no assumption of demographic or genetic improvement;
- If home range establishment within a non-natal PCA is evident for an individual (from telemetry or multi-year detections), its movements will be characterized as natal dispersal, representing evidence of potential effective immigration; or
- If reproduction within a non-natal PCA is evident (from observations) for an individual (female) or parentage analysis (either sex), its movements will be characterized as gene flow, representing strong evidence of effective immigration.

The Agencies will continue to maintain a sample of radio-marked grizzly bears to evaluate cause-specific mortality, reproduction, and survival. This known fate information can be used in conjunction with multiple population evaluation/modeling platforms as well as providing congruent data analyses with NCDE grizzly bears and connected grizzly bears in Canada.

The Agencies will continue to investigate improved and new methods for demographic assessment and adapt their methodologies and criteria as appropriate.

The Agencies may adapt current genetic hair sample modeling to develop a grid system based on DUs (see objective 2) that will assess the criteria using cameras/DNA and opportunistic sightings. These data may then be used to set annual monitoring objectives (e.g., distribution, and evaluation of reproduction via parentage analysis).

CHAPTER 3 – HABITAT MANAGEMENT AND MONITORING

Overview

Interagency Commitment

This Strategy aims to sustain the SCY Area’s current contribution to grizzly bears in the lower-48 states through continued commitment to habitat-based conservation outcomes reflective of the current condition. The Agencies commit to the following habitat-based conservation outcomes:

- Maintaining sufficient secure core habitat in the PCAs such that population stability or growth would be expected to occur;
- Managing motorized access in the PCAs and SHA to reduce motorized access-related displacement and mortality;
- Reducing opportunities for conflict-related mortalities associated with unsecured attractants;
- Supporting connectivity and permeability between the PCAs and other population areas in the lower-48 states and Canada; and
- Monitoring and adaptive management to respond to habitat, conflict, and population changes as they arise.

The specific methodologies, measures, and metrics that are, and will be, employed to achieve these outcomes vary across space and time and are subject to revision as conditions, needs, technology, and best available scientific information continue to evolve. Therefore, those specific details are not included in this Strategy. However, a general overview of measures is provided in the *Habitat Management Principles and Measures* section below, and a summary of, and links to, the current mechanisms are provided in the *Land and Habitat Management Commitments* section.

An effective management plan requires flexibility to adapt objectives, monitoring techniques, and habitat protections, if appropriate, based on the best available science. Thus, this Strategy may be subject to revision in the future based on monitoring and/or updates in best available scientific information (see chapter 6 for further details). Any revisions will maintain the conservation commitments of this Strategy and this chapter.

Conservation Success to Date

Changes to habitat management since the 1975 listing of grizzly bears in the lower-48 states have supported an increase in the number of grizzly bears in the SCY DMA, from a few bears in the 1970s to an estimated minimum of 120 grizzly bears using the two PCAs (3,669 mi²) as of 2024 (FWS 2024). As of 2024, grizzly bear occupied range is estimated to encompass 100% of the Selkirk PCA and 93% of the Cabinet-Yaak PCA (figure 3, above) (Costello 2025). The area outside the PCAs (Zone A) occupied by grizzly bears has also increased (ibid).

Over 92% of the two PCAs are in federal and state ownership, with 88% of the lands managed by the Forest Service. The PCAs are divided into bear management units (BMUs) for purposes of habitat management, with 22 BMUs in the Cabinet-Yaak PCA and 10 BMUs in the Selkirk

PCA (figure 4)³. Since 2004, 30 of the 32 BMUs have been subject to national forest land management planning direction for habitat security and motorized access management for the Kootenai, Idaho Panhandle, and Lolo National Forests (USDA 2015a; USDA 2015b; USDA 2011). One BMU, the State Land BMU, consists primarily of state of Idaho endowment lands managed primarily for timber resources. The final BMU, the LeClerc BMU in the Selkirk PCA, consists of lands managed by the Colville and Idaho Panhandle National Forests and includes land in checkerboard ownership with private lands in timber resource management. Access management standards for the LeClerc BMU were incorporated into the 2019 Land Management Plan for the Colville National Forest (USDA 2019).

As of 2024, achievement of the desired levels of motorized access in the BMUs subject to national forest land management plan direction has increased to 30 of 31 BMUs ([USDA 2025a and b](#)). In addition, the Forest Service has expanded grizzly bear management direction (via plan amendment in USDA 2023) in areas of recurring grizzly bear use outside of the PCAs (currently delineated as BORZ) to 946,500 acres⁴ (383,035 hectares).

Habitat Management Principles and Measures

Principles

Primary habitat factors associated with risk of mortality and displacement for grizzly bears in the SCY Area are the availability of habitat security and the incidence of conflicts arising from access to unsecured attractants. Two key habitat management conservation principles address these factors and facilitate population persistence:

- Managing motorized access (allowed use of motor vehicles in areas officially designated for motorized travel) to maintain large blocks of secure core (areas where there is no motorized access leading to displacement) in the PCAs is important to the survival and reproductive success of grizzly bears, especially adult female grizzly bears (Mattson et al. 1987; IGBC 1994; Wakkinen et al. 1997; Schwartz et al. 2010; Boulanger et al. 2014; Proctor et al. 2020).
- Securing attractants reduces the chance of human-bear conflicts (Harding et al. 1980; McLellan et al. 1988; Mattson et al. 1992; Mace et al. 1996; McLellan et al. 1999; Johnson et al. 2004).

Measures

The above habitat management principles guide conservation measures in the SCY Area. The habitat measures to address these principles, which are described more fully in the *Land and Habitat Management Commitments* section below, can be summarized as follows:

³ Note that BMUs in this conservation strategy are analogous to BMU subunits in the conservation strategy for the NCDE (IGBC 2021).

⁴ This is the full acreage of BORZ areas of the Kootenai and Idaho Panhandle National Forests at the time of writing this Strategy inside and outside the DMA. The acres of secondary habitat area identified in this Strategy will exclude current BORZ outside the DMA. This includes BORZ that overlap the Salish Demographic Connectivity Area in the NCDE and the portion of the Clark Fork BORZ outside the DMA boundary.

- Motorized access management includes constraints established by federal land management plan components, habitat conservation plans, state land management agreements and regulatory provisions, conservation easements, wilderness designations, and administrative orders.
- Regulatory measures to reduce attractant conflicts at recreation sites, livestock allotments, and other activities on federal and state land include food storage and sanitation requirements via administrative orders, regulations, permits, and operating plans.
- Federal land management plan components and requirements for state land (e.g., administrative regulations and habitat conservation plan requirements) for vegetation management and mineral development activities support sufficient habitat security.
- Adjacent to the PCAs, the Agencies have adopted various measures to encourage working timberlands, and other land uses that support grizzly bear habitat connectivity and permeability within human-dominated landscapes.

With the measures described below, the Agencies expect to maintain or improve habitat security throughout the two PCAs, and support connectivity and permeability between the PCAs and other population areas in the lower-48 states and Canada.

Habitat Management Areas

Application of the conservation measures described vary by the identified habitat management area (PCAs, Zone A, SHA). Motorized access management is focused in the PCAs to support individual bear survival and reproduction, and the population benefits they confer. Recognizing that other areas may contribute important population benefits such as connectivity, additional areas outside the PCAs have also been delineated as a secondary habitat area (SHA). This includes an area within the broader DMA boundary, which will be managed by the Forest Service to support bear connectivity and permeability where biologically suitable and socially acceptable, while supporting other resource management and recreation on public lands (figure 6).

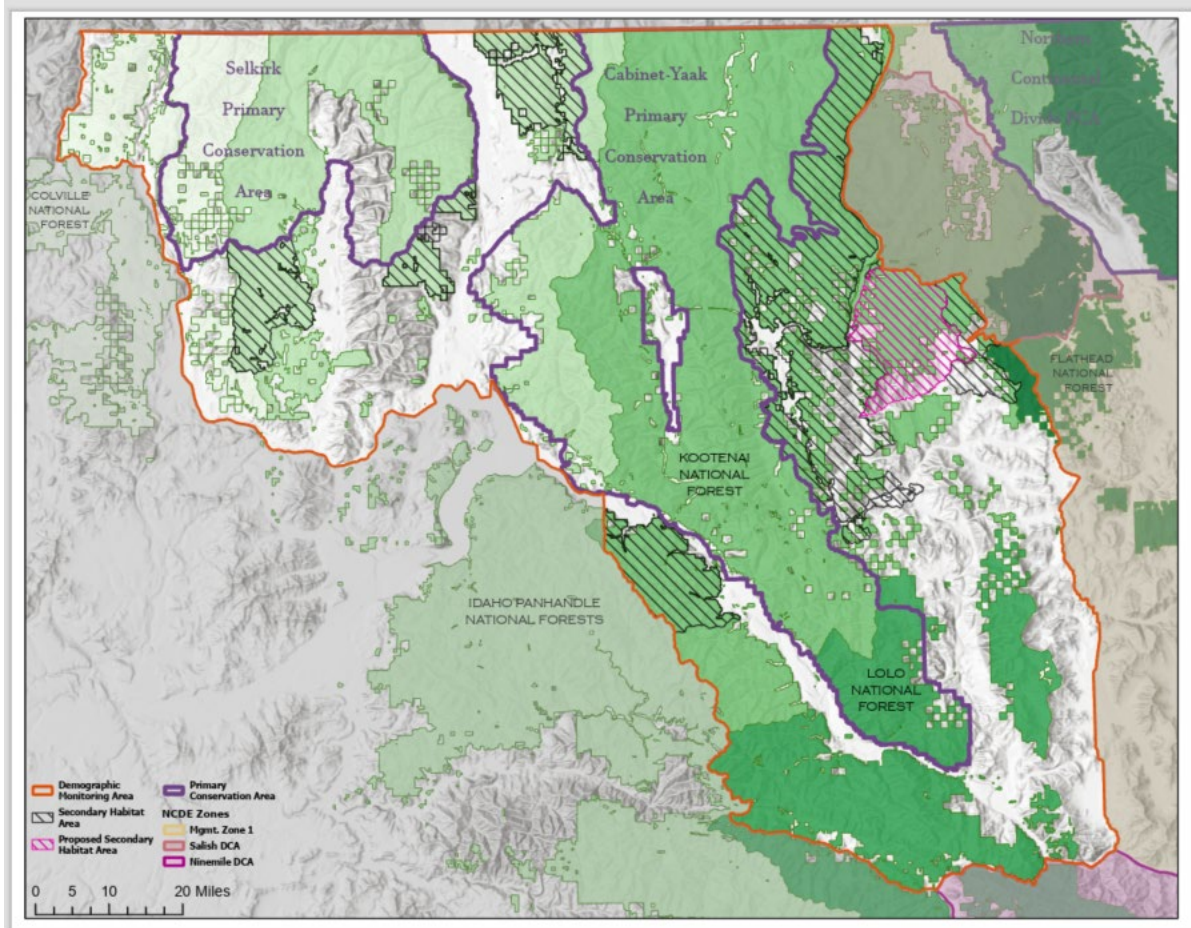


Figure 6. SCY Area DMA, Zone A, and SHA including new proposed SHA between ecosystems.

Primary Conservation Areas

The Selkirk and Cabinet-Yaak PCAs (3,669 mi²) account for approximately 57% of the SCY Area's grizzly bear occupied range. Approximately 88% of the two PCAs are managed by the Forest Service. Approximately 5% of the PCAs are managed by the states of Idaho, Montana, and Washington. The PCAs are divided into 32 bear management units (BMUs) for habitat evaluation, based on an area large enough to represent the approximate size of a female grizzly bear's annual home range. The Selkirk PCA includes 10 BMUs and the Cabinet-Yaak PCA includes 22 BMUs (figure 4). This Strategy will continue to use BMUs as a tool for managing and monitoring certain habitat conditions and management activities within the PCAs.

In addition, the states of Idaho, Montana, and Washington have acquired conservation easements, or in some cases fee title, for private lands in the PCAs that have been managed for timber resources (see figure 7). The conservation easements restrict subdivision or residential development in perpetuity or a term of years, depending on the easement.

Zone A

Habitat conditions and land management practices have supported expansion of grizzly bears in biologically suitable areas outside the PCAs. This Strategy delineates the area outside of the PCAs but within the DMA boundary as Zone A. In Zone A, habitat protections focus on securing

attractants, with a secondary habitat area (SHA) identified to provide additional habitat security between ecosystems to support connectivity. Approximately 47% of Zone A occurs on federally managed land and 8% is managed by state agencies (see table 2, above). On federal lands beyond Zone A, Forest Service land management plan direction supporting species diversity will support continued population expansion and grizzly bear movement and connectivity beyond the DMA (e.g., USDA 2015a, USDA 2015b).

Secondary Habitat Area (SHA) on National Forest Lands in Zone A

Most of the secondary habitat area consists of areas formerly referred to as BORZ polygons, which are areas with recurring use by grizzly bears adjacent to the PCAs within Zone A. The Forest Service has been and will continue to manage public motorized access for grizzly bears in these areas. This Strategy also proposes including an additional 79,333 acres (32,105 hectares) not currently delineated as BORZ to the SHA. The additional area is between the NCDE's Salish Demographic Connectivity Area and the southern portion of the Cabinet Mountains to provide additional support for connectivity between the NCDE and SCY Area. Public motorized access constraints would be applied in these areas through amendment or revision of the Kootenai National Forest Land Management Plan (see USDA 2015b).

Land ownership for the SCY Area is shown in figure 7 and described in table 2. As described here in chapter 3 and in chapter 6, management of federal and state land is guided by their respective statutes, land management or conservation plans, or other administrative mechanisms.

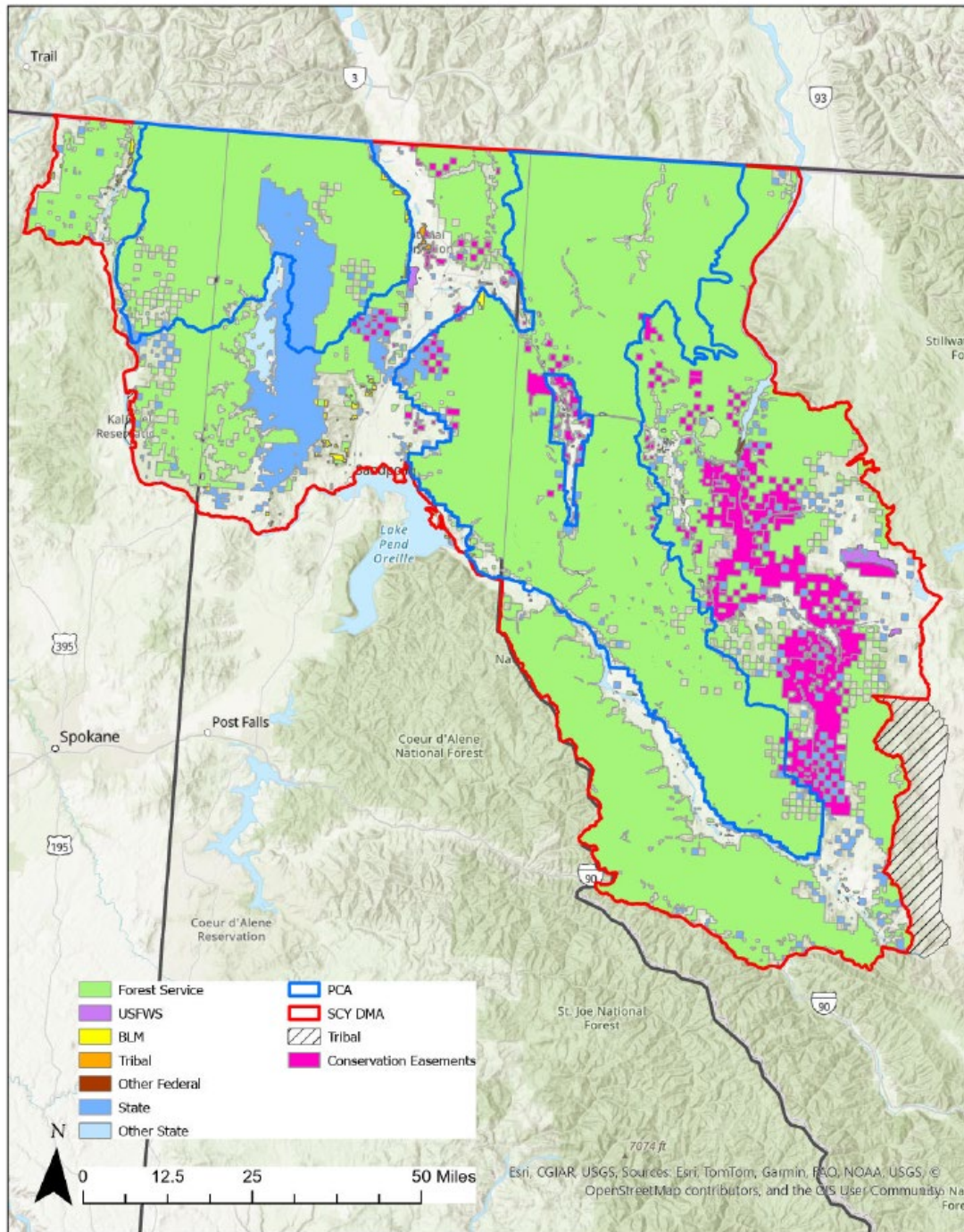


Figure 7. Land jurisdiction across the SCY Area. Conservation easements reflect lands on which residential development is limited, including easements held by state agencies under the Forest Legacy Program, which supports continued land uses as working timberlands. Note: the final version of this map will be updated with conservation easements under the Forest Legacy Program in Washington.

Selkirk-Cabinet Yaak Grizzly Bear Conservation Strategy
Draft July 2026

Table 2. Estimated acres and percentage of land management in the SCY Area (rounded to the nearest thousand)*

Land Management Jurisdiction	Demographic Monitoring Area	PCA	Zone A (Outside PCA)	Secondary Habitat Area (Forest Service only – subset of Zone A)
National Forests	3,688,000 (63%)	2,052,000 (88%)	1,636,000 (47%)	746,000 (21%)
Bureau of Land Management	14,000 (<1%)	4,000 (<1%)	10,000 (<1%)	0
FWS	12,000 (<1%)	126 (<1%)	12,000 (<1%)	0
Tribal Lands	164,000 (3%)	0	164,000 (5%)	0
Washington State Land	19,000 (<1%)	3,000 (<1%)	17,000 (<1%)	0
Idaho State Land	250,000 (4%)	107,000 (5%)	143,000 (4%)	0
Montana State Land	107,000 (2%)	3,000 (<1%)	103,000 (3%)	0
County/City/Local Government	3,000 (<1%)	171 (<1%)	2,000 (<1%)	0
Private	1,548,000 (27%)	166,000 (7%)	1,380,000 (39%)	0
Water/Riparian	35,000 (1%)	4,000 (<1%)	33,000	0
Total Acres	5,840,000	2,340,000	3,500,000	746,000

** Acres have been estimated from multiple jurisdictional datasets with some gaps in the broader DMA boundary data. Unidentified areas likely consist of private land subtypes and are captured in the “Private” category. This likely represents family, corporate, and Timber Investment Management Organizations (TIMOs) and Real Estate Investment Trusts (REITs) according to Public and Private Forest Ownership Conterminous United States 2020 imagery.*

Land and Habitat Management Commitments

Federal Lands in the Primary Conservation Area

The two PCAs encompass 3,669 mi² (9,503 km²), which correspond to the U.S. portion of the formerly identified Selkirk and Cabinet-Yaak Recovery Zones (FWS 1993). The most rigorous habitat protections apply to the PCAs to achieve the goal of continual occupancy and survival compatible with long-term persistence. Habitat management on federal lands specifically directed at supporting grizzly bear persistence in the PCAs will continue to be focused on maintaining or improving secure core, managing public motorized access, and adopting requirements for food storage and other aspects of generally or individually permitted activities (e.g., recreation, camping, timber harvest, grazing).

Approximately 4,256 acres (< 0.5%) of the PCAs are managed by the Bureau of Land Management. The Coeur d'Alene Resource Management Plan (FWS 2011) includes management direction for secure habitat and motorized access, coordinated with the Forest Service. A small portion of the Selkirk PCA overlaps the Kootenai National Wildlife Refuge (less than 0.1%) (see table 1). Grizzly bears have been documented on the refuge through sightings and telemetry during spring and fall (Kasworm 2025b). The refuge's habitat management direction supports continued transient use.

The majority of the PCAs (approximately 88%) is managed by the Forest Service within the Colville, Idaho Panhandle, Kootenai, and Lolo National Forests. National forest and grassland land management plans are guided by the National Forest Management Act (NFMA) and the 2012 Planning Rule (36 CFR 219) which provide an integrated set of management direction, including goals, desired conditions, standards, guidelines, suitability of uses, and management area allocations, to guide resource management programs on each administrative unit of the National Forest System. NFMA requires that land management plans provide for the diversity of plant and animal communities, and NFMA implementing regulations require plan components to provide the ecological conditions necessary to maintain viable populations and ecological integrity within the capability of the lands. Land management plans are revised periodically, may be amended at any time, and are prepared in compliance with the National Environmental Policy Act (NEPA), which requires significant public involvement. The commitments described in this Strategy will continue to be met if and when the land management plans are amended or revised.

Land management plans for each of the national forests within the SCY Area are available online at:

- Colville National Forest — <https://www.fs.usda.gov/r06/colville/planning>
- Idaho Panhandle National Forest — <https://www.fs.usda.gov/r01/idahopanhandle/planning>
- Kootenai National Forest — <https://www.fs.usda.gov/main/kootenai/landmanagement/planning>
- Lolo National Forest — <https://www.fs.usda.gov/main/lolo/landmanagement/planning>

Habitat Security

National forest lands within the PCAs are subject to land management plan components that ensure the Forest Service manages authorized motorized access to maintain sufficient secure core and publicly accessible open motorized route densities (e.g., OMRD) such that grizzly bear population stability or growth would be expected to occur.

This is accomplished through five primary mechanisms:

1. Wilderness designations
2. Inventoried roadless area (IRA) designations
3. Land management plan allocations
4. Plan components, and monitoring, which ensure no permanent net decrease in the amount of secure core within any BMU
5. Monitoring densities of publicly accessible open motorized routes with adaptive management plan content to ensure that habitat conditions are maintained such that population stability or growth would be expected to occur

Approximately 47 percent of all lands inside the PCAs are considered “protected” or “partially protected” because of their status as Congressionally designated wilderness areas (6%), Roadless Area Conservation Rule Inventoried Roadless Areas (24%), Idaho Inventoried Roadless Areas (12%), and other land management plan allocations that restrict motorized use during the non-denning season (5%) (figure 8).

Congressionally designated wilderness areas are part of the National Wilderness Preservation System that was established by the Wilderness Act of 1964 (16 U.S.C. 1131–1136). The Wilderness Act provides limits on road construction, permanent human habitation, increases in developed recreation sites, new livestock allotments, and new mineral development. Motorized use is generally prohibited in wilderness areas, and these areas provide large remote areas with little human disturbance. In addition to designated wilderness areas, thousands of acres have been recommended as wilderness. Although lacking statutory wilderness protection, recommended areas are managed by federal agencies to maintain their wilderness character and limit motorized use.

The 2001 Roadless Area Conservation Rule generally prohibits road construction, road reconstruction, and some types of timber harvest in IRAs on National Forest System lands (66 FR 3244–3273, January 12, 2001) in Montana and Washington. The Idaho Roadless Area Rule provides state-specific direction with prohibitions and limited permissions for road construction, road reconstruction, timber harvest, and discretionary mineral activities across five management themes ([36 CFR 294 Subpart C](#)). Roadless themes in the PCAs include wild land recreation, backcountry restoration, special area, and general forest. Even as inventoried roadless policies evolve, 100% of IRAs within the PCAs have additional land management plan constraints restricting public motorized access. This includes desired conditions to provide habitat security for large-ranging carnivores and standard and guidelines that restrict how and where motor vehicle use can be authorized.

On federal lands in the PCAs, actions are and will continue to be evaluated for potential effects on secure core. Federal activities will not result in a permanent net decrease in the amount of secure core within any BMU. Any permanent secure core decreases due to a federal activity may not be greater than any permanent increases due to previous activities within a BMU, ensuring no net permanent decrease.

Secure core is defined as an area of habitat within a BMU that contains no motorized travel routes during the non-denning season and is more than 0.31 miles (500 meters) from a drivable road. Core areas do not include any gated roads but may contain roads that are impassible due to vegetation or constructed barriers. Core areas strive to contain the full range of seasonal habitats that are available in the BMU. For the Selkirk/Cabinet-Yaak Grizzly Bear Recovery Zones, no scientifically based minimum effective size polygon for core area has been determined (Wakkinen et al. 1997). Therefore, discounting small or narrow blocks of core area is not prudent at this time.

Federal lands in the PCAs are also, and will continue to be, managed for publicly accessible open motorized route densities (e.g., OMRD), such that population growth or stability would be expected to occur. Monitoring to inform this management is described in the monitoring section below.

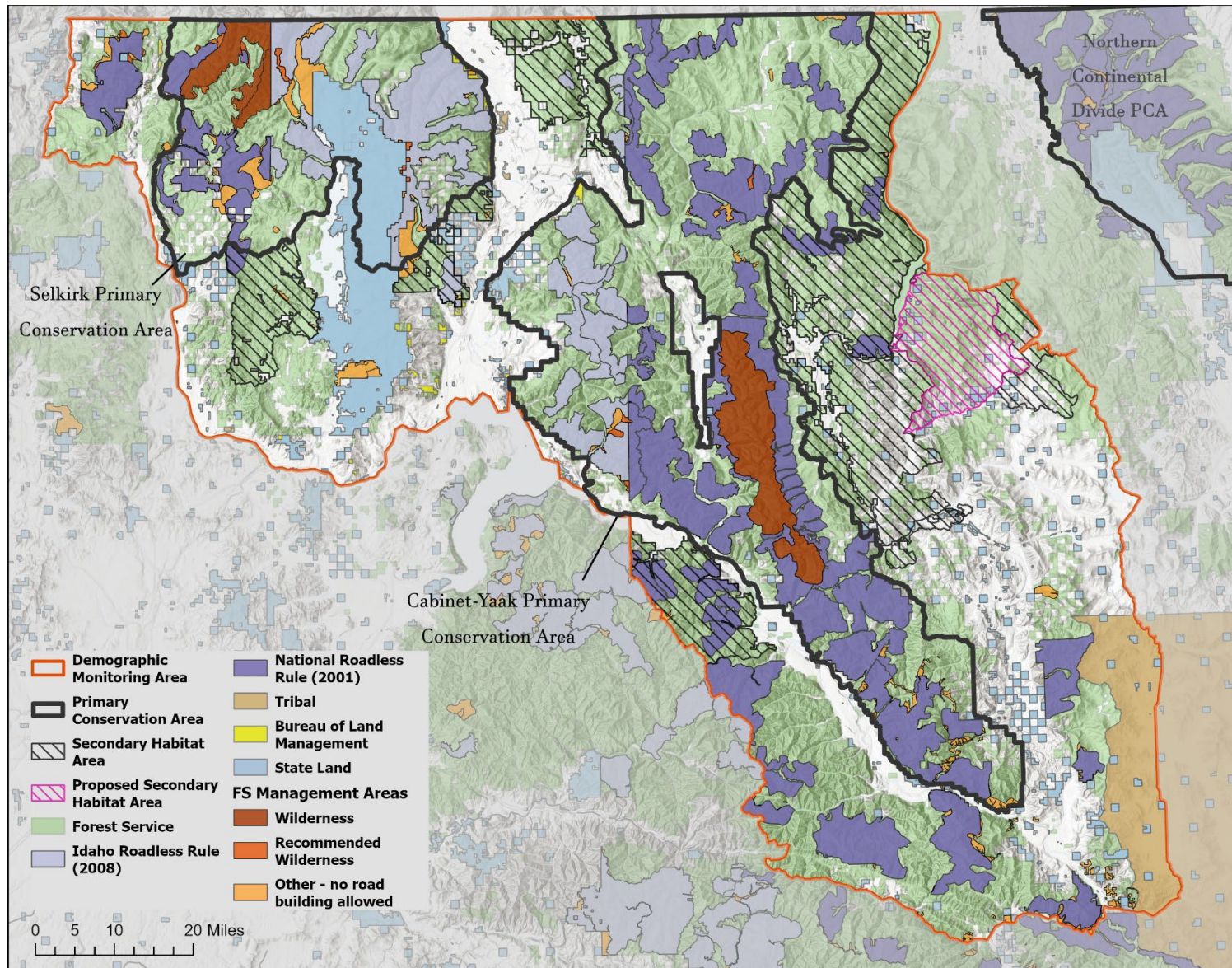


Figure 8. Forest Service land management areas' with motor vehicle use limitations.

Securing Attractants

Requiring proper storage of food and attractants has been demonstrated to be an effective tool to promote public safety and to reduce human-grizzly bear conflict potential. In the PCAs, food and attractant storage rules will be maintained on all Forest Service lands (see <http://igbconline.org/food-storage-regulations-2/> for current regulations) and bear-resistant food lockers and garbage containers have been installed in campgrounds, picnic areas, and other public use areas. In addition, operating plans (e.g., special use, grazing, and mining) specify sanitation measures to ensure wildlife attractants (e.g., garbage, food, livestock carcasses) are inaccessible through proper storage or disposal. The Forest Service will continue to partner with state wildlife agencies to address conflicts related to unsecured attractants when they occur.

Other Management Concerns

The primary concern related to developed recreation sites is direct mortality from human-bear conflicts, such as those caused by unsecured attractants (e.g., human foods and garbage), and resulting management removals (FWS 2024). With just one documented case of human-grizzly conflict induced mortality (illegal kill) in the past 40 years at a SCY Area recreation site (Kasworm et al. 2025a; Kasworm 2025b), recreation site-specific habitat objectives beyond those described for providing habitat security and securing attractants are not proposed in this Strategy. If human-grizzly bear conflicts were to increase at recreation sites, concerns would be addressed site-specifically, and any appropriate adjustments identified through the monitoring and evaluation process described in chapter 6.

Human-caused mortality resulting from management removals is the main impact to grizzly bears associated with livestock (FWS 2024). There are only 7 allotments with active permits within, or partially within the PCA, totaling less than 43,000 acres of the PCA (table 3). Grazing permits include land management plan-required sanitation measures to ensure attractants are inaccessible through proper storage or disposal. Given the relatively small number of grazing allotments, all of which are leased to large livestock only (cattle), and no evidence of conflicts between grizzly bears and allotments due to attractants, depredation, or forage competition, this Strategy does not identify grazing specific habitat objectives beyond those described for securing attractants. If grazing conflicts were to become significant, any appropriate adjustments would be identified through the monitoring and evaluation process described in chapter 6.

Table 3. Allotments on Forest Service lands within the SCY Area.

National Forest	Number of Active Allotments in the DMA (within PCA)	Livestock Type	Acres in DMA	Acres in PCA	Acres in Zone A	Acres in Secondary Habitat Areas
Kootenai	5 (3)	Cattle/Horse	52,982	9,474	43,508	41,556
Lolo	1 (1)	Cattle	329	329	0	0
Colville	6 (1)	Cattle	72,209	18,869	53,340	0
Idaho Panhandle	3 (2)	Cattle/Horse	16,243	14,327	1,916	6
Flathead	2 (0)	Cattle	10,504	0	10,504	5

The primary concerns related to mineral and energy development are human-caused mortalities and displacement due to habitat loss (FWS 2024). Approximately 6% of the PCA is unavailable to new mineral claims due to their status as Congressionally designated wilderness areas. No leasable minerals (oil and gas) are presently being produced on the Idaho Panhandle, Kootenai, or Colville National Forests. Oil and gas occurrence potential is low across the SCY Area, and geothermal resources are not known to occur (USDA 2013 a; USDA 2013b). Locatable mineral exploration (copper, silver, gold) is occurring in several locations across the SCY Area and are subject to permitting consistent with land management plan and regulatory direction as described below.

Claimants under the 1872 General Mining Law have a right to explore for and develop valuable mineral deposits on their claims. However, the Forest Service develops appropriate conservation measures for these claims through site-specific analysis, land management plan direction, the NEPA process (42 U.S.C. 4321–4370m), and in compliance with regulations at [36 CFR 228](#) to minimize adverse environmental impacts. Appropriate mitigation measures or stipulations have been, and will continue to be, implemented in plans of operation, notices, and permits to protect grizzly bears and minimize detrimental impacts to them during and after operations. Mortality risk to grizzly bears from mineral development on federal lands will be largely mitigated through the habitat security objectives and food/attractant storage requirements described above, but additional mitigation measures that are project specific may also be implemented.

States also have regulatory authority for exploration, development, production, mitigation measures, reclamation, and closure activities for locatable minerals on federal, state, and private lands. The federal and state agencies work cooperatively in the administration and management of mineral operations. The potential effects to grizzly bears and bear habitat and necessary mitigation measures will be determined at the site-specific level by the authorizing or permitting agency.

Vegetation management programs can disturb bears during the vegetation management activity and/or increase human-grizzly bear conflicts or mortalities as a result of unsecured attractants. However, as habitat generalists, removal or alteration of vegetation through timber harvest or other fuel reduction activities does not pose a mortality risk to grizzly bears and may even create foraging opportunities. Vegetation management can be used to promote a habitat mosaic of openings and forest, which is the type of habitat that grizzly bears prefer (Blanchard 1983; Hamer and Herrero 1987). Vegetation management can also increase bear foods by creating openings and stimulating the growth of grasses, forbs, and berry-producing shrubs (Mealey 1980, Zager et al. 1983; Hamer and Herrero 1987; Kerns et al. 2004; Gunther et al. 2014). Grizzly bears actively select timber management areas (Nielsen et al. 2004; Ciarniello et al. 2015), although use varies by season and area (Kearney et al. 2019; Colton 2021), often depending on the amount of bear food in vegetation management areas (Colton 2021).

This Strategy relies on the land management plan framework of the four national forests to provide a range of desired ecological conditions supporting ecological integrity and the overall persistence of native species, while applying species-specific plan components when necessary to support recovery of at-risk species. This includes plan components that constrain public motorized access and changes to secure core when conducting vegetation management activities to address the primary mortality and displacement risk for grizzly bears. Although additional habitat objectives beyond providing habitat security and managing attractants are not identified for the other management concerns listed here, the Forest Service recognizes the importance of adaptive management. Adjustments will be made over time if needed, based on new information, monitoring, and site-specific analyses.

Federal Lands in Zone A and the Secondary Habitat Area

This Strategy recognizes the need to support connectivity within and between the multiple core population areas in the lower-48 states. Outside the PCAs, the key to successful grizzly bear management lies in considering the needs of grizzly bears while also recognizing and accommodating the legitimate role of other uses on the same landscape. As such, an important management objective for areas outside the PCAs is to maintain existing resource management and allow agencies to respond to demonstrated problems with appropriate actions. The emphasis in Zone A will be on sustaining existing resource management and recreational uses and supporting agency actions to prevent and respond to human-grizzly bear conflicts, while continuing to support population expansion where suitable. Although a flexible management strategy in the area outside of the PCAs in Zone A is crucial for promoting social acceptance and tolerance, the Forest Service's obligation to support species diversity, persistence, ecological integrity, and connectivity will continue to support grizzly bear expansion on federal lands. In addition, the signatory Agencies are committed to continuing attractant storage rules on federal and state land in Zone A, as described and compiled via the IGBC website.

On National Forest Service lands, the NFMA implementing regulations emphasize the importance of connectivity as a component of ecological integrity. The regulatory definition of connectivity recognizes that it exists at multiple scales across large landscapes within home ranges and between populations. Land management plan direction supports connectivity across both Zone A and additional National Forest System lands beyond the DMA in multiple ways. This includes land allocations that provide large remote areas with little human disturbance, plan components that constrain motorized access to provide habitat security, requirements for wildlife

crossings and linkage areas, requirements to manage attractants, and plan content to maintain or restore ecological integrity.

The Lost Trail National Wildlife Refuge (NWR) (8,834 acres (3,575 hectares)) is located within Zone A near the confluence of the boundaries of the Flathead, Kootenai, and Lolo National Forests. The NWR consists of prairies and wetlands managed to provide habitat for migratory birds as well as a wide variety of other wildlife and plant species. Public use activities that are currently allowed include hunting, wildlife observation, wildlife photography, and environmental education. The FWS established the Lost Trail Conservation Area (LTRCA) to protect up to 100,000 acres within the 120,000-acre project boundary surrounding the Lost Trail NWR in northwest Montana through acquisition of conservation easements from willing sellers (FWS 2020).

Secondary Habitat Area on National Forest Lands in Zone A

The Forest Service is committed to maintaining habitat security levels in the polygons the Kootenai and Idaho Panhandle National Forests' land management plans identify as "BORZ." Management direction in these areas is intended to reduce the potential for mortality and displacement of grizzly bears, while also supporting connectivity and dispersal of grizzly bears. This, together with the broad land management plan direction supporting species diversity and ecological integrity, will support continued population expansion and facilitate grizzly bear movement and connectivity between the SCY PCAs, as well as other areas in the lower-48 states and adjacent British Columbia.

Habitat Security

On federal lands in the SHA, habitat security is and will continue to be maintained to support bear occupancy and connectivity where biologically suitable and socially acceptable. This Strategy proposes to manage the SHA for no net permanent decrease in secure core across the area. Subject to land management plan amendments, actions will be evaluated for potential effects on secure core, and federal activities will not result in a permanent net decrease within the SHA.

This Strategy also proposes to include an additional 79,306 acres of the Kootenai National Forest within the SHA for further support of connectivity between the NCDE's Salish Demographic Connectivity Area and the southern portion of the Cabinet-Yaak PCA.

Securing Attractants

On federal lands in SHA, food and attractant storage rules are in place (see <http://igbconline.org/food-storage-regulations-2/> for current regulations). If human-bear conflicts occur at recreation sites in the broader areas of Zone A outside of the SHA, food storage orders would be developed and implemented on a site-specific basis.

State Land in the SCY Area

Endowment and Trust Lands

Idaho, Montana, and Washington are among the states that accepted endowment or trust lands at statehood under the condition that they be managed in perpetuity, to secure the maximum long-term financial return for the beneficiaries, public schools and other public institutions. Other uses

of endowment lands are incidental to this mission. These commonly comprise checkerboard or small parcels of lands because of origins of “two school sections” for each township, some of which were later consolidated via exchange or acquisition (see figure 7).

On Idaho endowment lands, management actions are carried out by the Idaho Department of Lands under the direction of the State Board of Land Commissioners, which consists of elected officials. Due to land exchange with the federal government, one BMU (152 mi² total) in the Selkirk PCA on the east side of Priest Lake consists almost entirely of State of Idaho endowment lands. There are also State of Idaho endowment lands in checkerboard ownership in the Myrtle BMU. Idaho state endowment lands in the PCA are managed primarily for timber production, but Idaho Department of Lands (IDL) has adopted restrictions for public motorized access in the PCA, with enforcement for gate closures supported through an agreement with Idaho Department of Fish and Game (IDFG) (IDL 2012). This interagency agreement also describes general restrictions and interagency review by IDFG. IDL has also adopted restrictions for food storage in the SCY Area (IDL 2026). In the SCY Area, including land in the PCA, IDL also holds conservation easements on working private timberlands that restrict residential development (see Conservation Easement section below).

On Montana endowment lands, management actions are carried out by the Department of Natural Resources and Conservation (DNRC) under the direction of the State Board of Land Commissioners, which consists of elected officials. DNRC lands within the PCA occur in either large blocks managed as state forests or small, isolated parcels surrounded by other land ownerships.

In 2011, DNRC entered into a [Habitat Conservation Plan \(HCP\)](#) with the FWS for state endowment lands in western Montana to clarify obligations under the ESA and to provide long-term certainty for their timber management program. The HCP requirements remain in effect until 2061 (DNRC 2011). The HCP specifies limitations and requirements regarding motorized access. DNRC will continue to manage motorized access on their forested lands within the Cabinet-Yaak PCA and additional area outside of the PCA according to the HCP and state administrative rules.

There is limited Washington endowment or trust land in the SCY Area. Management actions are carried out by the Washington Department of Natural Resources (DNR). Washington Administrative Code 222-16-080 prohibits harvesting, road construction, aerial application of pesticides, or site preparation within one mile of known active grizzly bear den sites on DNR trust land between October 1st and May 30th or within 0.25 mile at other times of the year.

Other State Land

State wildlife and state park management agencies manage a small amount of acreage in the SCY Area, with land management objectives involving some combination of habitat management and recreational access.

Montana Fish Wildlife and Parks manages the Bull River Wildlife Management Area (1,600 acres) in the Cabinet-Yaak PCA and other small WMAs in Zone A (Kootenai, Mount Silcox, and Thompson Chain of Lakes WMAs). Montana Fish Wildlife and Parks also manages small fishing access sites in Zone A.

The Idaho Department of Fish and Game (IDFG) has three wildlife management areas in Zone A, two of which have some seasonal usage by grizzly bears. McArthur Lake WMA is located adjacent to U.S. Highway 95 and management of the WMA and associated transportation improvements implemented for Highway 95 (including a crossing structure) benefit connectivity between the Selkirk and Cabinet-Yaak PCAs.

The Idaho Department of Parks and Recreation manages Priest Lake State Park, which consists of developed recreation sites adjacent to Priest Lake in the Selkirk PCA. Emphasis in the State Park is on sanitation infrastructure.

Washington Department of Fish and Wildlife lands in Zone A are small in acreage with minimal impact on grizzly bear conservation.

Securing Attractants

Food and attractant storage rules are in place for most state land in the PCA and in parts of Zone A, with variation based on the state and other land use objectives and considerations. See the IGBC website (<http://igbconline.org/food-storage-regulations-2/>) for current regulations.

Other Regulatory Mechanisms

Forest Legacy Program and other Conservation Easements

The Forest Legacy Program is a conservation program administered by the U.S. Department of Agriculture in partnership with state agencies to encourage protection of privately owned forest lands as “working forests” (i.e., managed for timber resources), with restrictions on residential and other commercial development, through conservation easements or land purchases. The Forest Legacy Program has funded purchases of private lands and conservation easements in the PCA and Zone A (figure 7).

Montana, Idaho, and Washington state agencies have acquired land and permanent conservation easements on privately-owned forestlands in the SCY Area, including through the Forest Legacy Program (figure 7). Specific easement terms vary, but these easements prohibit residential subdivision and non-forestry related commercial development (in which lands acquired by state agencies have been added to other parcels in state ownership). Additionally, some easements in Montana restrict road construction to roads required for timber management purposes. The right to manage public and administrative motorized access is retained by the landowner. Keeping these lands in timber resource management supports habitat connectivity and permeability.

Other Conservation Measures

Transportation Planning

The states of Idaho and Montana have taken measures to improve the permeability of highway corridors in the SCY Area. Cooperative interagency efforts, including federal and state transportation and wildlife management agencies, have resulted in existing and planned highway crossings along Highway 95 in Idaho. Three wildlife crossing structures of Highway 95 near Copeland, Idaho and one near Elmira, Idaho (adjacent to the IDFG McArthur Lake Wildlife Management Area) support connectivity between the Selkirk and Cabinet-Yaak PCAs.

Conflict Management and Information, Education, and Outreach

The contributions of conflict management and Information Education and Outreach (IEO) and are described in more detail in chapters 4 and 5 respectively.

Monitoring

Reporting of habitat monitoring described below will be integrated with reporting of demographic monitoring and will be made available as needed for the purposes of any Biological and Monitoring Review, as described in chapter 6.

Habitat Security

Secure core and open motorized route density (OMRD) are monitored inside the PCAs to evaluate impacts of Forest Service and Bureau of Land Management (BLM) activities (e.g., USDA Forest Service 2024a, USDA Forest Service 2024b). To monitor the effects to secure core and open motorized route density, the respective land management agencies will be responsible for maintaining their motorized routes GIS databases. The data for project effects on secure core will be compiled and reported in the Forest Service biennial monitoring report with a status by BMU of 1) No change; 2) increase in secure core of XX acres; or 3) decrease in secure core of XX acres.

The data on OMRD will be compiled and reported in the Forest Service biennial monitoring report with a status by BMU of:

- No change;
- Increase in the percent of a BMU with OMRD greater than 1 mile per mi²; or
- Decrease in the percent of a BMU with OMRD greater than 1 mile per mi².

To evaluate any changes needed to open road densities, the agencies will use the mortality monitoring described in chapter 2 to evaluate: (1) if mortality rates become inconsistent with a stable or increasing grizzly bear population; and, if so, (2) if and where there is a correlation between permanent increases in OMRD and the observed increase in bear mortality. Based on this information, the responsible agency would implement OMRD mitigations or reductions where necessary to address the identified issues.

Securing Attractants

The area of the PCAs and SHA covered by food storage orders will be monitored by each individual land management agency, and any status changes will be reported every 5 years.

Other Management Concerns

Where it is determined there is potential for significant impacts (“significance” as determined through environmental review and permitting) to the grizzly bear population or its habitat from a specific project (e.g., mineral resource development on land managed by the Forest Service), a monitoring plan will be developed by the operator with approval by the applicable state or federal regulatory permitting agency. The monitoring plan will outline how changes in habitat and/or disturbance to bears will be monitored and mitigations (e.g., monitoring of reclamation measures) will be identified and funded.

CHAPTER 4 – CONFLICT PREVENTION, RESPONSE, AND MANAGEMENT

Importance of Conflict Management to Grizzly Bear Conservation

The objective of conflict management is to protect human safety and property while sustaining grizzly bears in the SCY Area. Underlying attitudes toward grizzly bears and grizzly bear management are highly variable and may be influenced by the nature of and response to human-grizzly bear conflict. Local support for grizzly bears on the landscape may decrease if conflicts are not responded to in an effective, timely manner to address public safety concerns and economic impacts on homesteads, businesses, and agricultural producers. Conversely, local support towards grizzly bears may continue or improve when people are provided with information and tools for conflict prevention, reinforced by proactive efforts and prompt agency response when conflicts occur (e.g., Johansson et al. 2019). Local attitudes may also be affected based on perceptions about agency reasoning for management actions or inaction, and it is important for conflict management to include an effective communication component.

Since grizzly bears in the lower-48 states were listed under the ESA in 1975, ESA regulations have acknowledged the need to protect public safety and address conflicts between people and grizzly bears, even when grizzly bears were more limited in their range and fewer in number. Under this Strategy, conflict management will continue to prioritize the safety of people and their property while sustaining grizzly bears in the SCY Area. The conflict management framework outlined here is analogous to the approach used in other areas in Idaho, Montana, and Wyoming that support grizzly bear populations. This approach prioritizes biologically and socially suitable habitat. Suitable habitat is concentrated in the areas identified as the PCAs, which have been delineated to achieve grizzly bear population and habitat objectives. In between PCAs, management will promote permeability and movement of grizzly bears, while recognizing limitations related to levels of human use and habitat suitability.

Strategies for Prevention, Management, and Response to Human-Bear Conflicts

Strategies to prevent, manage, and respond to human-grizzly bear conflicts usually fall into one or more of the following categories:

- Proactively removing or securing attractants.
- Providing ongoing information, education, and outreach to modify human behavior or practices.
- Discouraging grizzly bears from visiting known or potential conflict areas using non-lethal methods (e.g., electric fencing, aversive conditioning or hazing techniques).
- Reactively or preemptively capturing and relocating the grizzly bear(s) to a new area.
- Removing the grizzly bear(s) through lethal removal.
- Removing the grizzly bear(s) through placement in an accredited zoo/research facility.

Strategies for information, education and outreach are addressed in more detail in chapter 5. Food storage regulations on federal and state land are also described in chapters 3 and 7.

Conflict Management and Response

Effective, timely conflict management is essential to successful grizzly bear conservation. Conflict management supports public safety, prevents property damage, and discourages habituation or food-conditioning of bears. Agencies will retain personnel specifically trained to rapidly respond to grizzly bear conflicts, perform public education, provide assistance with proactive actions to minimize availability of attractants, and assist with grizzly bear relocations and removals. Conflict management and response actions will be coordinated and completed in compliance with state, federal or tribal laws and regulations and wildlife agency management plans and/or policies. State or tribal wildlife management agencies will coordinate with potentially affected landowners and federal, state, and tribal land management agencies.

State wildlife agencies have protocols for wildlife attacks on humans that would apply to incidents involving injuries to humans and for imminent public safety risks, and for addressing nuisance wildlife situations creating public safety concerns (see appendix C, Tri-state Memorandum of Agreement).

Decisions regarding the fate of bears involved in human-grizzly bear conflicts will generally be based on the following guidelines:

- Considerations for determining appropriate conflict response will include location, cause of incident, severity of incident, conflict history of the individual bear, health/age/sex of bear, and current population metrics and demographic objectives (see chapter 2).
- Action in all human-grizzly bear conflicts will emphasize non-lethal actions when practicable, including removal or securing of attractants when applicable, hazing, or preemptive capture and relocation of bear(s) when deemed necessary to avoid additional conflict and education to prevent future conflicts.
- Grizzly bears may be preemptively moved when they are in areas where they are likely to come into conflict with people (e.g. human settlements) if aversive conditioning and/or minimizing or removing attractant sources is not feasible or has failed.
- To facilitate informed decisions about grizzly bears involved in conflict on adjacent jurisdictions, federal, state, and tribal management authorities will communicate with each other to understand the origin and conflict history of any marked grizzly bear that is captured in a conflict situation within their respective jurisdictions, as appropriate. Statewide conflict databases will be maintained annually to promote efficient identification of marked grizzly bears and previous history.

Conflict management is focused on appropriate responses and strategies to address human-grizzly bear conflicts inside and outside of PCAs. It is recognized that active management aimed at individual bears involved in conflicts will be required in both areas, subject to mortality thresholds for the DMA (see chapter 2).

- In the PCAs, conflict management will prioritize addressing human-related causes of conflict and enhancing grizzly bear habitat security, with greater emphasis on the needs of grizzly bears.

- Outside of the PCAs, Agencies will continue to focus on resolving human causes of conflict and promote permeability for bears between PCAs, but Agencies will give more consideration to existing human uses in the area.

Respective wildlife agencies will decide on removal or relocation on a case-specific basis after considering the cause, location, and severity of the incident(s). Bears displaying food conditioning or habituation, or that damage property may be relocated or removed based on specific details of the incident. Bears may be relocated when and as many times as judged prudent by the management authorities.

Relocations

Agencies will coordinate to predetermine appropriate release sites before the need for relocation occurs. The respective wildlife management agency will coordinate with the appropriate landowner or land management agency when capturing or releasing bears involved in conflict.

Removals

Captured grizzly bears identified for removal may be sent to an authorized zoological park or other authorized facility for appropriate non-release educational or scientific purposes as per state policies and requirements. Any management removals (see glossary) will count against the mortality levels as described in chapter 2. Grizzly bears not suitable for release, research, or educational purposes will be removed as described in appropriate state management plans or policies.

Monitoring and Adaptive Management

Conflicts between grizzly bears and humans will be investigated by the respective management authorities. Identifying situation-specific details such as, but not limited to, the frequency, locale, cause, land ownership, and type of conflict will inform priorities for proactive management actions to reduce human-grizzly bear conflict potential and address existing and potential human activities that may cause future conflicts. The Agencies will report summarized conflict information annually and will confer as appropriate to identify best practices and support adaptive management.

CHAPTER 5 – INFORMATION, EDUCATION, AND OUTREACH

Positive Public Attitudes and Knowledge: Cornerstones of Successful Grizzly Bear Conservation

Historically, excessive human-caused mortality and loss of habitat were major factors in grizzly bear population declines. The SCY Area consists of two small, disjunct PCAs anchored by multiple-use national forest lands in the Cabinet, Yaak, and Selkirk Mountains, with adjacent areas of working timberlands in state and private ownership. The PCAs are bordered by towns and rural development in river valleys, lakefronts, and highway corridors.

Coordination of agency information, education, and outreach (IEO) with community-based efforts and incorporation of local core values promote local ownership, interest in, and implementation of conservation measures and make more effective use of agency resources. Conservation will also depend on the actions of visitors to the area, many of whom have less awareness of grizzly bears. The SCY Area's small spatial scale and unique mixture of land-use practices make IEO activities especially important.

In the SCY Area, IEO activities focus on preventing and managing interactions between grizzly bears and people, with public safety a paramount concern. Messaging centers on what people can do to live and recreate safely to reduce the potential for conflict while supporting grizzly bear conservation, protecting human safety and property, and maintaining human livelihoods. IEO activities also emphasize habitat stewardship and ways to obtain agency assistance if needed.

The Agencies will continue to build on the success of IEO activities in the SCY Area to date through their combined efforts with local communities, tribes, government agencies, private enterprises, individuals, and organizations.

IEO Objectives and Strategies

The goal of an effective IEO is to enhance human safety and livelihoods while supporting the demographic and habitat objectives outlined in chapters 2 and 3 by:

- **Preventing and reducing human–bear conflict potential:** Provide guidance and resources to help people safely live, work, and recreate in bear country.
- **Supporting effective conflict response:** Promote prompt, effective response to public safety or property damage concerns by increasing public awareness of how and when to contact appropriate agencies and what response actions are available and appropriate for conflicts (e.g., hazing methods).
- **Enhancing permeability between PCAs:** Improve the ability of grizzly bears to move through or around developed valleys, highway corridors, and high-use recreation areas while reducing human-bear conflict potential.
- **Maintaining and improving habitat conditions:** Deliver information on tools and practices that sustain or enhance habitat within PCAs and maintain landscape permeability between PCAs.

- **Encouraging stewardship:** Support voluntary conservation actions and compliance with regulations that reduce human–bear conflict risk and improve safety outcomes for communities while supporting long-term conservation goals.

IEO Planning Components

Interagency IEO planning and implementation should include:

- Clear, measurable goals
- Target audiences
- Key actionable, understandable, consistent messages and themes
- Communication channels and tactics
- Strategic partnerships
- Feedback & evaluation to measure effectiveness, areas of misinformation, and priority needs
- Protocols for immediate, urgent notifications
- Budget and resources

IEO Priorities

Collective Agency priorities will continue to include:

- Education and training of permanent and seasonal Agency personnel
- Dedicated, trained bear conflict specialists on a state and regional basis
- Message accuracy and consistency (e.g., IGBC approved messages)
- Basics of being “Bear Aware” and supporting bear conservation through various communication channels
 - Location signage
 - Various media, workshops, and community presentations
 - Targeted public service announcements, brochures, and paid advertising for initial and reminder info
- Public safety and deterrence
 - Safe, effective use of bear spray, including training and education
 - Options for deterrence, including proper usage of available tools (see bear-resistant infrastructure below)
 - Appropriate actions for preventing surprise encounters and recognizing and reacting to bear observation or encounters (tailor for hunters, anglers, cyclists, berry pickers, and other recreations with higher encounter potential)
 - Public safety contact information
- Bear-resistant infrastructure (securing attractants) – tailored to specific situations
- Information and resources for use of bear-resistant containers, initial and reminder information for conflict-prone areas, campgrounds and other developed sites,

backcountry use areas, residential subdivisions (homeowners, tenants, and vacation rentals), timber jobsites, etc.

- Information and workshops on use of electric fencing, other exclusionary measures, and deterrents to keep bears out of orchards, garbage, agricultural products and food storage, beehives, rural homesteads (chickens, pigs, etc.)
 - Sanitation resources for subdivisions, local agencies and waste handlers responsible for waste collection, hauling and management
 - Recommendations on limitations for feeding birds and other wildlife
 - Recommendations for sanitation in front-country and back-country recreation
 - Staffing (volunteer/paid) for developed campgrounds and high-use recreation areas prone to conflicts
- Identification of black bears and grizzly bears by black bear hunters
 - Initial hunter education and reinforcement messages
 - State education and bear identification test requirements for black bear hunters
- Reminders of bears' seasonal activities in relation to people's seasonal activities
- Initial information and reminder information to private property owners and agricultural producers about Agency resources for conflict management and response
- Information for land use planning and conservation tools for priority habitats
- Information about human-bear conflicts, agency removals, and effectiveness of conflict prevention and reduction
- Collection of information to gauge effectiveness and provide feedback loop for IEO efforts, voluntary measure recommendations, and regulatory/permitting considerations

Adaptive Efforts

Effective IEO efforts adapt as new needs, audiences, channels, and partnerships are identified. Adaptive prioritization ensures effective use of limited resources. An adaptive IEO program is especially important in areas where human development and use are increasing and where grizzly bears are returning to areas they have not inhabited in recent decades.

Recent examples of adaptation include the organization of local community apple picking and cider pressing events to reduce an identified source of fall conflicts — fruit trees in neighborhoods and local parks. In another example, agencies recognized a cost-effective method for timely message reinforcement and created bear-awareness content for captive audience ads at gas pumps tailored to high-recreation seasons for hunters and backcountry users.

The Agencies will share information on their individual Agency IEO activities, and coordinate planning and implementation for the above categories as practical on an annual basis. Agency IEO staff representatives will meet at least annually through the IGBC Committee Information and Education (I&E) Subcommittee or comparable forums for Agency information and education professionals to support an adaptive IEO program by identifying best practices, leveraging resources, addressing any changes in conflicts and tools, and facilitating partnerships.

CHAPTER 6 – IMPLEMENTATION AND EVALUATION

Interagency Coordination

The Agencies will coordinate and evaluate implementation of this Strategy through the IGBC or other interagency committee structure. Individual agencies maintain their authority and responsibilities for implementing actions described in this Strategy.

Interagency coordination activities include:

- Ensuring commitments described in the Strategy are being met through regular monitoring and reporting.
- Exchanging monitoring data and information about management actions among the Agencies.
- Appointing, as needed, science teams, task forces, or other committees to analyze or make recommendations regarding specific grizzly bear management issues.
- Identifying management, research, data management, and financial needs and seeking opportunities to address these needs to successfully implement the Strategy.
- Making recommendations concerning revisions to the Strategy or related requirements and conservation measures.

Implementation Structure

Monitoring Team

To understand the status of grizzly bears throughout the SCY Area, there is a need for shared responsibility to collect, manage, analyze, and distribute science-based information on grizzly bear trend, distribution, survival, mortality, conflicts, and habitat conditions. To meet this need, the three state wildlife agencies, FWS, and Forest Service will each identify a representative to a monitoring team for coordination of demographic data collection, analysis, and reporting for the SCY DMA. Additional representatives may be added as needed. A chair of the team will rotate biennially among the three states and Forest Service.

During the required post-delisting monitoring period, the Agencies expect that the FWS will continue its role in demographic monitoring, as described in chapter 2, database management and reporting (as described below). When the FWS no longer fulfills this role, the state wildlife agencies will assume responsibilities for performance of required monitoring and data management; housing of the database and preparation of the annual report will be determined by the three state agencies (see appendix C, the Tri-State Memorandum of Agreement).

The monitoring team will assist with (or lead) biology and monitoring reviews (see below) as necessary.

Given the current existence of distinct geographic-based conservation strategies, this Strategy describes a SCY Area-focused monitoring team. However, as grizzly bear populations expand beyond and between the 1993 Recovery Zones (FWS 1993), a holistic approach to understanding the lower-48 states population is beneficial. To promote a consistent understanding across the

occupied range in the lower-48 states, the intent of the signatories is to continue to collaborate to expand data integration, information sharing, and management and conservation consistency where appropriate. The Agencies intend to adapt the implementation structures and functions described in this chapter, and when practical to do so, to achieve a more integrated approach with the implementation activities described in other conservation strategies for the lower-48 states.

Other Interagency Teams/Committees

The Agencies will use other interagency teams, committees, or periodic coordination meetings, such as the IGBC Science Subcommittee and IGBC IEO Subcommittee, for coordination to share best practices and improve efficient use of agency resources in implementation of this Strategy.

Evaluation and Reporting

The evaluation of the effectiveness of grizzly bear conservation measures detailed in this Strategy will be an ongoing process shared by the Agencies. Demographic and habitat monitoring data will be reported as required by section 4(g)(1) of the ESA for a minimum of 5 years after delisting any species, and then as described below thereafter.

Evaluation and reporting will continue after any post-delisting period, including the following:

- During the active bear season (typically March through November), the monitoring team will:
 - Share mortality information including cause, locale, age, and sex.
 - Identify potential appropriate management actions if there were multiple mortalities that may have a relationship based on cause, proximity, or timing.
- On an annual basis, the monitoring team will:
 - Convene a meeting to review population monitoring data, including data on genetics, distribution, and mortality.
 - Review monitoring plans and priorities for the next active bear season.
 - Prepare annual monitoring reports for demographic criteria (per chapter 2) and summary of conflicts (per chapter 4), with staff support from relevant agencies.
 - Publicly report demographic information via presentation to the IGBC or another format.
 - Evaluate the need for updating or changing the methods used to evaluate habitat and demographic parameters and make recommendations to management agencies on such changes, as appropriate.
- On a biennial basis, the Forest Service will report on habitat security metrics for national forests (e.g., secure core and public motorized access management) in conjunction with monitoring evaluation reporting required under the National Forest Management Act for the respective land management plans (see chapter 3). Monitoring evaluation reports help determine if a change in management, plan components, or other plan content may be needed as part of the adaptive management framework of Forest Service planning regulations. If a monitoring evaluation report indicates a change is warranted, the Forest Service will initiate the identified necessary actions.

- The monitoring team will identify if there are any departures from monitoring effort commitments and identify actions to ensure that appropriate monitoring efforts are maintained.
- The monitoring team will coordinate review of demographic inputs (e.g., vital rates) every 5 to 10 years, as appropriate.

Data Management

The FWS will house, manage, and share the grizzly bear population database with participating agencies within the structure defined by the monitoring team.

The Forest Service will maintain the spatial data to support analysis of habitat monitoring on national forests as set forth in chapter 3. These databases and GIS layers will be available to all participating agencies to analyze the impacts of management direction and actions.

Biology and Monitoring Review

Under this Strategy, a biology and monitoring review is a process prompted by deviations from demographic criteria (see chapter 2) or the request of the signatory agencies to address a specific concern. Any signatory Agency may request a biology and monitoring review. That request would be discussed by the signatory agencies, and the review would be initiated based on their decision. A review is carried out by an interagency science team (e.g. SCY Area Monitoring Team or IGBC Science Team).

A biology and monitoring review examines management of habitat, populations, or monitoring efforts. The purposes of a biology and monitoring review are:

- To address the subject of the requested review.
- To identify the reasons why particular demographic objectives have not been achieved.
- To provide science-based recommendations for changes/adaptations in wildlife or habitat management or in monitoring.

Biology and monitoring reviews will apply best available science. The results of a biology and monitoring review will be provided as a written report to the agencies.

The Agencies will provide a response to the review, with an explanation or identified management changes as appropriate. In the case of an identified deviation from monitoring efforts identified by this Strategy, the response will identify the means to be implemented to achieve the appropriate level of population and/or habitat monitoring effort.

A biology and monitoring review is distinct from the development of impact analyses related to projects proposed by any agency; such analyses are the responsibility of the agency making the proposal.

Potential Management Actions

A biology and monitoring review could recommend a variety of potential management actions, including, but not limited to:

- Intensify monitoring effort relative to assessment of the criterion.
- Review other available demographic information to assess criterion performance.
- Conduct adaptive IEO or other specific measures to address multiple or recurring mortality causes or conflicts.
- Give additional consideration for relocation (versus removal) for proactive or reactive agency management response to conflict.
- Translocate for genetic fitness or augmentation.

Conservation Strategy Review

The Strategy is intended to remain in effect for the foreseeable future, continuing beyond any post-delisting monitoring period required by the ESA. Regulatory mechanisms described by this Strategy include those adopted by legislative and administrative processes, which typically have prescribed processes for public review (e.g., National Forest Management Act requirements for adoption of plan components in land management plans for national forests). (See appendix C, attachment A for state administrative requirements).

After the Strategy becomes effective, the Agencies will review the Strategy at least once every 5 years (e.g., regulatory mechanisms, interagency cooperation, population and habitat management and monitoring) and will revise this Strategy if necessary. In addition to the periodic 5-year evaluation process, this Strategy's objectives and methods may be changed based on biological data, changed conditions, best available science, and/or new techniques.

CHAPTER 7 – REGULATORY AND CONSERVATION FRAMEWORK

The management of grizzly bears and the habitats they require for survival benefit from the laws, regulations, agreements, and management plans of the state and federal agencies in the SCY Area. This chapter documents existing regulatory mechanisms and other elements of the conservation framework that will be effective in sustaining grizzly bears in the SCY Area in the absence of ESA protections. These laws, regulations, and agreements provide the legal basis for: coordinating management; controlling mortality; providing secure habitats; managing human-grizzly bear conflicts; regulating motorized access and other sources of disturbance on government-managed lands; and maintaining education and outreach programs to prevent conflicts; and monitoring populations and habitats.

Legally enforceable regulatory mechanisms include federal laws, regulations, and orders; national forest land management plans; and Idaho/Montana/Washington state laws and state administrative code, orders, and proclamations. They also include habitat conservation plans and easements enforceable by federal or state agencies. These mechanisms regulate how grizzly bear population and habitat management will occur, and, in doing so, they serve to ensure against excessive grizzly bear mortality by minimizing human-caused mortality risk.

The signatories of this Strategy have reviewed their existing management plans and have or will incorporate the population and habitat conservation measures described in this Strategy into their respective management plans as applicable and needed.

Federal Laws

Endangered Species Act (ESA), 16 U.S.C. §§1531-1599.

The purposes of the ESA are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

Under the ESA, the FWS may authorize or exempt certain activities that may take ESA-listed species; this may take the form of regulation, permit, or incidental take statement. After delisting, the FWS must ensure monitoring for at least 5 years, which is described in a post-delisting monitoring (PDM) plan. Under the ESA, Habitat Conservation Plans (HCPs) may be developed in conjunction with federal approval to minimize and mitigate, to the maximum extent practicable, any impact to species that are listed as, or may be listed as threatened and endangered species. An HCP may continue to apply even after a species is delisted. This Conservation Strategy refers to HCPs that are applicable post-delisting. Section 6 of the ESA—“Cooperation with States”—directs the FWS to “cooperate to the maximum extent practicable” with states in carrying out the ESA. Section 6 also establishes the Cooperative Endangered Species Conservation Fund provides grants to states to participate in a wide array of voluntary conservation projects for listed, candidate, and at-risk species.

Federal Land Policy and Management Act (FLPMA), as amended, 43 U.S.C. §§1701-1782.

The statute mandates the BLM prepare and maintain land use plans, which guide the multiple use management of the BLM land and resources. The plans must detail the environmental concerns of the land, requiring management to protect the integrity of the natural resources and cultural or historical artifacts found on the land, identify segments of the land that deemed to be in danger or in need of protection, and establish if sections of the land have environmental significance.

Fish and Wildlife Conservation Act, 16 U.S.C. §§2901-2911.

Each state should be encouraged to develop, revise and implement, in consultation with appropriate other agencies, a plan for the conservation of fish and wildlife, particularly those species, which are indigenous to the state. The purpose of this act is to provide financial and technical assistance to the states for the development, revision and implementation of conservation plans and programs for nongame fish and wildlife and to conserve and promote conservation of nongame fish and wildlife and their habitats.

Fish and Wildlife Coordination Act, 16 U.S.C. §§661-666c.

This Act relates to wildlife associated with water resource development. This Act also authorizes that lands and waters may be acquired by federal construction agencies for wildlife conservation to mitigate water projects in order to preserve and assure for the public benefit the wildlife potential of the particular water project area.

Fish and Wildlife Improvement Act 16 U.S.C. §§742-754.

This law authorizes the Secretaries of the Interior and Commerce to establish, conduct, and assist with national training programs for state fish and wildlife law enforcement personnel. It also authorized funding for research and development of new or improved methods to support fish and wildlife law enforcement. The law provides the Secretaries authority to enter into law enforcement cooperative agreements with state or other federal agencies and authorizes the disposal of abandoned or forfeited items under the fish, wildlife, and plant jurisdictions of these Secretaries. It strengthens the law enforcement operational capability of the FWS by authorizing the disbursement and use of funds to facilitate various types of investigative efforts. It expanded the use of fines, penalties and forfeiture funds received under the ESA and the Lacey Act to include the costs of shipping, storing and disposing of items. It specifically prohibits the sale of items whose sale is banned under other laws.

Lacey Act, 18 U.S.C. §§42-43.

This Act makes it illegal to import, export, transport, sell, receive, acquire, or purchase any fish or wildlife or plant taken or possessed in violation of any law, treaty or regulation of the United States or in violation of any Indian Tribal law; and to import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce any fish or wildlife taken, possessed, transported, or sold in violation of any law or regulation of any state or in violation of any foreign law.

Multiple Use Sustained Yield Act, 16 U.S.C. §§528-531.

It is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed and wildlife and fish purposes. As used in this Act, "Multiple Use" means the management of all the various resources of the NFs so that they are utilized in the combination that will best meet the needs of the American people. It requires NFs to make the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions. It allows for some land to be used for less than all of its resources while institutionalizing coordinated management of the various resources, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources. It also allows management for multiple uses that may not necessarily provide the greatest dollar return or the greatest unit output.

National Environmental Policy Act (NEPA), 42 U.S.C. §§4321-4370m.

NEPA establishes requirements for federal agencies to assess the environmental effects of their proposed actions before making decisions.

National Forest Management Act (NFMA), 16 U.S.C. §1600, et seq.

NFMA requires that a national renewable resource program be developed, and that integrated land management plans be developed with public participation for each unit of the NFS. Among other requirements, the plans must provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple use objectives.

National Wildlife Refuge Administration Act 1966 and 1997 Refuge Improvement Act. 16 U.S.C. §668dd, et seq.

The charter for the refuge system establishes a clear statutory goal of conservation, defined in ecological terms. The FWS is directed by statutory mission to sustain, restore and enhance healthy populations of fish, wildlife, and plants on system lands. The FWS may not permit uses to occur where they are incompatible with the conservation purpose of the system and economic uses must contribute to attaining the conservation mission. Statutes require the FWS to maintain "biological integrity, diversity, and environmental health" on the refuges.

Sikes Act, 16 U.S.C. §670g.

The Secretaries of Agriculture and Interior and the state agencies will cooperate to plan, develop, maintain, and coordinate programs for the conservation and rehabilitation of wildlife, fish and game. These programs shall include, but not be limited to, specific habitat improvements projects and related activities and provide adequate protection for species considered threatened or endangered pursuant to Section 4 of the ESA. 16 U.S.C. §670g.

The Wilderness Act, 16 U.S.C. §§1131- 1136.

The Forest Service manages lands designated as wilderness areas under the Wilderness Act of 1964 (16 U.S.C. 1131– 1136). Within these areas, the Wilderness Act states the following: (1) New or temporary roads cannot be built; (2) there can be no use of motor vehicles, motorized equipment, or motorboats; (3) there can be no landing of aircraft; (4) there can be no other form of mechanical transport; and (5) no structure or installation may be built. The Wilderness Act allows livestock allotments existing before the passage of the Wilderness Act or if specified in the legislation creating new wilderness areas, and mining claims staked before January 1, 1984, to persist within Wilderness Areas. No new mining claims can be issued, but new grazing permits can be issued on allotments that were in place before the Wilderness Act was signed. If preexisting mining claims are pursued, the plans of operation are subject to Wilderness Act restrictions on road construction, permanent human habitation, and developed sites.

Federal Regulations

Roadless Areas Conservation Rule, 2001.

The stated purpose of the 2001 Roadless Areas Conservation Rule is to provide lasting protection to IRAs on National Forest System lands. The rule generally prohibits road construction, road reconstruction, and some types of timber harvest in IRAs (66 FR 3244-3273, January 12, 2001).

Idaho Roadless Rule, 36 CFR 294, Subpart C.

The stated purpose of the Idaho Roadless Rule is to conserve the undeveloped/unroaded character for the vast majority of the IRAs in Idaho while allowing limited fuel treatment and limited timber harvest exceptions for the protection and benefit of local communities.

36 CFR 219.

Sets out the planning requirements for developing, amending, and revising land management plans for units of the National Forest System. A land management plan must provide for social, economic, and ecological sustainability within Forest Service authority and consistent with the inherent capability of the plan area. The regulations require each land management plan include an integrated set of management direction, including goals, desired conditions, standards, guidelines, suitability of uses to guide resource management programs including providing the ecological conditions to support the persistence of most native species. In addition, to provide for diversity, the plan must provide the ecological conditions necessary to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area. A species of conservation concern is a species, other than federally recognized threatened, endangered, proposed, or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area.

36 CFR 228.

These regulations set forth rules and procedures governing use of the surface of NFS lands in conjunction with operations authorized by the general mining laws, oil and gas leasing, and mineral material disposal laws. The authority at Subpart A is used to ensure authorized mining operators shall take all practicable measures to maintain and protect fisheries and wildlife habitat which may be affected by the operations. The authority at Subpart E ensures lease holders conduct operations in such a manner as to maintain and protect fisheries, wildlife, and plant habitat.

36 CFR 261.50 (a) and (b).

This regulation gives Forest Service supervisors the authority to issue orders which close or restrict the use of described areas, or of any forest development road or trail within the area over which he has jurisdiction.

36 CFR 261.53 (a) and (e).

States that when provided for in an order authorized under 36 CFR 261.50 (a) and (b) it is prohibited to go into or be upon any area which is closed for the protection of: (a) threatened, endangered, rare, unique, or vanishing species of plants, animals, birds or fish or; (b) for public health or safety.

36 CFR 261.58 (e) and (s) and (cc).

States that when provided for in an order authorized under 36 CFR 261.50 (a) and (b) the following are prohibited. (a) camping; (s) possessing, storing, or transporting any bird, fish, or other animal or parts thereof as specified in the order; (cc) possessing or storing any food or refuse, as specified in the order.

State Laws and Regulatory Authorities

Statutory and regulatory authorities for wildlife management in the states of Idaho, Montana, and Washington are summarized in Appendix C (Tri-state Memorandum of Agreement).

Federal Plans and Guidelines

In addition to federal and state laws and regulations, the following plans and guidelines provide both direction and guidance for grizzly bear population and/or habitat management.

USDA Forest Service

If and when the grizzly bear population is delisted under the ESA, national forests in or adjacent to the SCY Area that have not yet identified species of conservation of concern per the 2012 land management planning regulations would assess whether classification of the grizzly bear as a sensitive species is warranted. If so, on those national forests, grizzly bears and their habitats would be managed as sensitive species on NFS lands in accordance with Forest Service Manual 2670 (specifically 2670.22, 2670.32, and 2676.1 2676.17e). For NFs in the SCY Area that have amended or revised their forest plans under the 2012 planning rule, the Forest Service would

evaluate the grizzly bear as a potential species of conservation concern, as required by Forest Service Handbook 1909.12, chapter 10 section 12.52(d)(2)(b). In addition, all national forests would continue to follow direction established in existing land management plans until amended or revised.

Existing land management plans in the SCY Area are:

- Colville National Forest Land Management Plan (2019)
- Idaho National Forest Land Management Plan (2015)
- Kootenai National Forest Land Management Plan (2015, as amended)
- Lolo National Forest Land Management Plan (1986, as amended) (currently under revision)

Bureau of Land Management (BLM)

Existing resource management plans in the SCY Area include:

- Coeur d'Alene Resource Management Plan (2007)

U.S. Fish and Wildlife Service Wildlife Refuge

Existing refuge conservation plans in the SCY Area include:

- Kootenai National Wildlife Refuge Comprehensive Conservation Plan (2011)
- Lost Trail National Wildlife Refuge Comprehensive Conservation Plan (2005)

State Plans and Guidelines

Idaho

State Wildlife Action Plan (2024) (table 3.1.6)

Idaho Wildlife Public Safety Policy (2019), includes attachments: Wildlife Human Attack Response Team (WHART) Guidelines, and Guidelines for responding to Orphaned, Injured, and Problem Wildlife

Montana

Grizzly Bear Management Plan (MT FWP 2024).

State Forest Land Management Plan (DNRC 1996). The DNRC State Forest Land Management Plan was signed in May 1996 and provides specific resource management standards that apply to all forested state trust lands in Montana. The plan contains specific standards that emphasize management of vegetation to promote biodiversity, and it includes habitat protection measures for endangered, threatened, and sensitive species. The resource management standards were codified in Forest Management Administrative Rules in September 2003.

Habitat Conservation Plan (DNRC 2011).

Washington

Grizzly bears are designated and managed as an endangered species under state law.

State Wildlife Action Plan (2026)

Washington Department of Natural Resources (WDNR) Plan

Wildlife Attack Response Manual (2022)

GLOSSARY

adaptive management: a model for conservation that uses and incorporates information from ongoing monitoring and research to direct appropriate management actions. Specifically, it is the integration of program design, management, and monitoring to systematically test assumptions in order to adapt management measures accordingly.

Agencies: Federal, state, and tribal government agencies acting as signatories on this Conservation Strategy.

attractant: anything that attracts a bear to a site or area

bear management unit: Areas established for use in Forest Service grizzly bear analysis. BMUs generally a) approximate SCY female home range size; and b) include representations of all available habitat components.

demographic monitoring area: Geographic area where demographic monitoring protocols document the distribution, mortality, and population-level genetic health for the Selkirk-Cabinet-Yaak area. Mortality thresholds apply in this area.

denning season: the typical time period during winter months in which most grizzly bears are hibernating in dens

distribution units: polygons delineated to assess performance of the demographic objective for distribution of grizzly bears in the PCAs. These DUs correspond to individual BMUs or a combination of BMUs, with assignment of two halves of the state sand BMU based on watershed boundaries and logistical considerations.

human-grizzly bear conflict: incident in which a bear kills or injures people, livestock, or other domestic animals, obtains human-related attractants, damages property (including crops, gardens, orchards, beehives, camper trailers, tents, vehicles, and buildings), or otherwise becomes food-conditioned or habituated. A bear's mere presence is not an inherent conflict; conflict is viewed in the context of the bear's behavior and location.

food-conditioned: A bear that has received a food reward and continues to seek human-related foods such as crops, garbage, camp food, pet food, or processed livestock feed.

habitat security: An area with low levels of human disturbance or habitat that allows a wildlife species to remain in a defined area despite an increase in stress or disturbance.

habituated: A bear that does not display avoidance behavior around humans or areas of relatively high human use such as camps, towns, agricultural operations, or rural residential areas.

primary conservation area: An area to be managed as a source area for the grizzly bear population, where systematic demographic monitoring is focused. The demographic monitoring area (DMA) for the Selkirk and Cabinet-Yaak Conservation Area (SCY) includes two PCAs: one for the Selkirk and one for the Cabinet-Yaak.

relocation: Capture and movement by management authorities of a bear to a preapproved release site.

management removal: Lethal or non-lethal removal from the population.

management authorities: Designated representatives of any federal, state, or tribal wildlife or land management agency in the SCY Area.

motorized route: a road or trail that the management agency has designated for motorized use.

non-denning season: the time period from early spring to late fall when grizzly bears typically are not hibernating. As used for motorized access analyses, the season is April 1 through November 30 in the Cabinet-Yaak and April 1 through November 15 in the Selkirk.

regulatory mechanism: a requirement that is legally binding or enforceable and that has specific protective stipulations or standards.

secure core: an area of habitat within a BMU that contains no motorized travel routes during the non-denning season and is more than 0.31 miles (500 meters) from a drivable road. Core areas do not include any gated roads but may contain roads that are impassible due to vegetation or constructed barriers. Core areas strive to contain the full range of seasonal habitats that are available in the BMU. For the Selkirk/Cabinet-Yaak Grizzly Bear Recovery Zones, no scientifically based minimum effective size polygon for core area has been determined. Therefore, discounting small or narrow blocks of core area is not prudent at this time.

translocation: the capture and transport of a bear from the site of capture to a different location for release

Zone A: The geographic area around and between the two PCAs in the SCY DMA.

LITERATURE CITED

- Blanchard, B.M. 1983. Grizzly bear: habitat relationships in the Yellowstone area: Bears: Their Biology and Management, v. 5, pp. 118-123. <https://doi.org/10.2307/3872528>.
- Boulanger, J., and G. B. Stenhouse. 2014. The impact of roads on the demography of grizzly bears in Alberta. *PlosOne* 9(12): e115535. doi: 10.1371/journal.pone.0115535. Ciarniello et al. 2015
- Cherry, S., M.A. Haroldson, J. Robison-Cox, and C.C. Schwartz. 2002. Estimating total human-caused mortality from reported mortality using data from radio-instrumented grizzly bears. *Ursus* 13:175-184.
- Colton, C.P., Coops, N.C., Burton, A.C., 2021. Grizzly bear (*Ursus arctos*) responses to forest harvesting: A review of underlying mechanisms and management recommendations. *Forest Ecology and Management* 497, 119471. <https://doi.org/10.1016/j.foreco>.
- Costello, C. M., J. A. Dellinger, J. K. Fortin-Noreus, M. A. Haroldson, B. E. Karabensh, W. F. Kasworm, L. L. Roberts, J. E. Teisberg, F. T. van Manen, and T. J. Vent. 2025. A summary of grizzly bear distribution in the lower 48 US States in 2024. Montana Fish, Wildlife and Parks, Bozeman, Montana, USA.
- Creel and Rosenblatt. 2013. Using pedigree reconstruction to estimate population size: genotypes are more than individually unique marks. *Ecology and Evolution* 2013; 3(5):1294–1304.
- Fisher, J.T., Wheatley, M., & MacKenzie, D. (2014). Spatial patterns of breeding success of grizzly bears derived from hierarchical multistate models. *Conservation Biology*, 28(5), 1249–1259.
- Gunther, A. Shoemaker, R., Frey, K., Haroldson, M. Cain, S. van Manen, F. and Fortin, J. 2014 Dietary breadth of grizzly bears in the Greater Yellowstone Ecosystem. *Ursus* 25(1):60-72.
- GYE Subcommittee. 2021. Conservation strategy for the grizzly bear in the Greater Yellowstone Ecosystem. 88 pages + appendices).
- Hamer, D., and S. Herrero. 1987. Grizzly bear food and habitat in the front ranges of Banff National Park, Alberta. *International Conference on Bear Research and Management* 7:199-213.
- Harding, L., and J. A. Nagy. 1980. Responses of grizzly bears to hydrocarbon exploration on Richards Island, Northwest Territories, Canada. Pages 277-280 in *Bears: their Biology and Management. Proceedings of the 4th International Conference on Bear Research and Management*, Kalispell, Montana, USA.
- Hovey, F. W. and B. N. McLellan. 1996. Estimating growth of grizzly bears from the Flathead River drainage using computer simulations of reproductive and survival rates. *Canadian Journal of Zoology* 74:1409-1416.

Idaho Department of Lands (IDL) and Idaho Department of Fish and Game. 2012. Memorandum of Understanding for Land Management.

Interagency Grizzly Bear Committee (IGBC). 1994. Grizzly Bear/Motorized Access Management Task Force Report. Interagency Grizzly Bear Committee, Missoula, MT. 8 pp.

Interagency Grizzly Bear Committee, NCDE Subcommittee. 2021. Conservation strategy for the grizzly bear in the Northern Continental Divide Ecosystem. 169 pages + appendices). https://igbconline.org/wp-content/uploads/2023/03/NCDE_GrizzlyBearConservationStrategy_8.18.21_WithSignaturesAndEditSummary-2.pdf

Interagency Grizzly Bear Committee, 2024. Conservation strategy for grizzly bears in the Greater Yellowstone Ecosystem.

Johnson, C. J., M. S. Boyce, C. C. Schwartz, and M. A. Haroldson. 2004. Modeling survival: application of the Andersen-Gill model to Yellowstone grizzly bears. *Journal of Wildlife Management* 68:966-978.

Kasworm, W. F., T. G. Radandt, J. E. Teisberg, T. Vent, M. Proctor, H. Cooley, and J. K. Fortin-Noreus. 2025a. Cabinet-Yaak grizzly bear recovery area 2024 research and monitoring progress report. U.S. Fish and Wildlife Service, Missoula, Montana. 120 pp.

Kasworm, W. F., T. G. Radandt, J. E. Teisberg, T. Vent, M. Proctor, H. Cooley, and J. K. Fortin-Noreus. 2025b. Selkirk Mountains grizzly bear recovery area 2024 research and monitoring progress report. U.S. Fish and Wildlife Service, Missoula, Montana. 91 pp

Kasworm, W. F., T. G. Radandt, J. E. Teisberg, T. Vent, M. Proctor, and H. Cooley. 2026a. In prep. Cabinet-Yaak grizzly bear recovery area 2025 research and monitoring progress report. U.S. Fish and Wildlife Service, Missoula, Montana.

Kasworm, W. F., T. G. Radandt, J. E. Teisberg, T. Vent, M. Proctor, and H. Cooley. 2026b. In prep. Selkirk Mountains grizzly bear recovery area 2025 research and monitoring progress report. U.S. Fish and Wildlife Service, Missoula, Montana.

Kearney, S.P., Coops, N.C., Stenhouse, G.B., Nielsen, S.E., Hermosilla, T., White, J.C., Wulder, M.A., 2019. Grizzly bear selection of recently harvested forests is dependent on forest recovery rate and landscape composition. *Forest Ecology and Management* 449, 117459. <https://doi.org/10.1016/j.foreco.2019.117459>

Kerns, B. K., S. J. Alexander, and J. D. Bailey. 2004. Huckleberry abundance, stand conditions, and use in Western Oregon: Evaluating the role of forest management. *Economic Botany* 58:668-678.

Mace, R. D., J. S. Waller, T. L. Manley, L. J. Lyon, and H. Zuring. 1996. Relationships among grizzly bears, roads, and habitat use in the Swan Mountains, Montana. *Journal of Applied Ecology* 33:1395–1404.

- Mace, R. D. and J. S. Waller. 1998. Demography and Population Trend of Grizzly Bears in the Swan Mountains, Montana. *Conservation Biology* 12:1005-1016.
- Mattson, D. J., R. R. Knight, and B. M. Blanchard. 1987. The effects of developments and primary roads on grizzly bear habitat use in Yellowstone National Park, Wyoming. Pages 259-273 in *Bears: their biology and management*. Proceedings of the 7th International Conference on Bear Research and Management, Williamsburg, Virginia, USA.
- Mattson, D.J., B.M. Blanchard, and R.R. Knight. 1992. Yellowstone grizzly bear mortality, human habituation, and whitebark pine seed crops. *Journal of Wildlife Management* 56: 432– 442.
- McLellan, B. N., and D. M Shackleton. 1988. Grizzly bears and resource-extraction industries: effects of roads on behaviour, habitat use, and demography. *Canadian Journal of Zoology* 25:451–460.
- McLellan, B. N., F. W. Hovey, R. D. Mace, J. G. Woods, D. W. Carney, M. L. Gibeau, W. L. Wakkenin, and W. F. Kasworm. 1999. Rates and causes of grizzly bear mortality in the interior mountains of British Columbia, Alberta, Montana, Washington, and Idaho. *Journal of Wildlife Management* 63:911–920.
- Mealey, S. 1980. The Natural Food Habits of Grizzly Bears in Yellowstone National Park, 1973-74. *Bears: Their Biology and Management*. <https://doi.org/10.2307/3872882>.
- Montana Department of Natural Resource Conservation. 2021. Habitat Conservation Plan for Forested State Trust Lands (amended 2018). Montana Department of Natural Resources and Conservation. Forest Management Bureau, Missoula, Montana, USA. September 2010. https://dnrc.mt.gov/_docs/Trust-Land/Planning-and-Reports/2010_HabitatConservationPlan_TLMD_FMB.pdf.
- Nielsen, S. E., S. Herrero, M. S. Boyce, R. D. Mace, B. Benn, M. L. Gibeau, and S. Jevons. 2004. Modelling the spatial distribution of human-caused grizzly bear mortalities in the Central Rockies Ecosystem of Canada. *Biological Conservation* 120:101–113.
- Proctor, M. F., B. N. McLellan, G. B. Stenhouse, G. Mowat, C. T. Lamb, and M. Boyce. 2020. The effects of roads and motorized human access on grizzly bear populations in British Columbia and Alberta, Canada. *Ursus* 30e2:6–19.
- Proctor, M. F., T. Dutta, B N. McLellan, S. Garica-Rangel, D. Paetkau, R. R. Swaisgood, and A. Zedrosser. 2021. Managing for interpopulation connectivity of the World’s Bear Species. In Eds. V. Penteriani and M. Melletti, *Bears of the World, Ecology, Conservation and Management* (pp. 317–337). Cambridge University Press. Cambridge, U.K.
- Schwartz, Charles C., M.A Haroldson, S. Cherry, and K. Keating. 2007 Evaluation of Rules to Distinguish Unique Female Grizzly Bears with Cubs in Yellowstone. *Journal Of Wildlife Management* 72:543-554.

- Schwartz, C. C., M. A. Haroldson, and G. C. White. 2010. Hazards affecting grizzly bear survival in the Greater Yellowstone Ecosystem. *Journal of Wildlife Management* 74:654–667.
- Teisberg, J. E., W. F. Kasworm, M. F. Proctor, T. G. Radandt, J. K. Fortin-Noreus, and H. S. Cooley. 2026. Huckleberry Habitat and Its Influence on Two Small Populations of Grizzly Bears (*Ursus arctos*). *Ecology and Evolution*.
- Turnock, M.F., Teisberg, J.E., Kasworm, W.F. *et al.* 2024. Gene flow prevents genetic diversity loss despite small effective population size in fragmented grizzly bear (*Ursus arctos*) populations. *Conserv. Genet* 26, 279–291 (2025). <https://doi.org/10.1007/s10592-024-01666-y>.
- U.S. Fish and Wildlife Service. 1993. Grizzly bear recovery plan. U.S. Fish and Wildlife Service, Missoula, Montana.
- U.S. Fish and Wildlife Service. 2005. Lost Trail National Wildlife Refuge Comprehensive Conservation Plan. <https://iris.fws.gov/APPS/ServCat/DownloadFile/225619>
- U.S. Fish and Wildlife Service. 2011. Kootenai National Wildlife Refuge Comprehensive Conservation Plan ([USDI 2011 Kootenai National Wildlife Refuge Comprehensive Conservation Plan](#)). Portland, Oregon. 210 pp.
- U.S. Fish and Wildlife Service. 2020. Final Land Protection Plan for the Establishment of the Lost Trail Conservation Area. Great Falls, MT. 107 pp.
- U.S. Fish and Wildlife Service. 2024. Species Status Assessment for the grizzly bear (*Ursus arctos horribilis*) in the Lower-48 States. Version 2.2, October 28, 2024. Missoula, Montana. 398 pp.
- U.S. Fish and Wildlife Service. 2025. Proposed rule to revise the listing of grizzly bear on the List of Endangered and Threatened Wildlife with a Revised Section 4(d) Rule. *Federal Register*, 90 Fed. Reg. 4234.
- USDA Forest Service. 2013a. Idaho Panhandle National Forest Land Management Plan Final Environmental Impact Statement. 743 pp. + appendices.
- USDA Forest Service. 2013b. Kootenai National Forest Land Management Plan Final Environmental Impact Statement. 654 pp. + appendices.
- USDA Forest Service. 2015a. Idaho Panhandle National Forest Land Management Plan. 197 pp.
- USDA Forest Service. 2015b. Kootenai National Forest Land Management Plan. 189 pp.
- USDA Forest Service. 2011. Record of Decision for the Forest Plan Amendments for Motorized Access Management within the Selkirk and Cabinet-Yaak Grizzly Bear Recovery Zones. 74 pp.

USDA Forest Service. 2019. Colville National Forest Land Management Plan.

USDA Forest Service. 2023. Kootenai national Forest Plan Amendment for Bears Outside the Recovery Zone Decision Memo.

<https://www.fs.usda.gov/r01/kootenai/projects/archive/64585>.

USDA Forest Service 2025a [Selkirk/Cabinet-Yaak Grizzly Bear Recovery Zones 2024 Bear Year Annual Monitoring Summary Report](#). Idaho Panhandle National Forest. 24 pp.

USDA Forest Service 2025b. [Cabinet-Yaak Grizzly Bear Recovery Zone and Bears Outside Recovery Zones \(Borz\) Annual Monitoring Report for Bear Year 2024 \(BY24\) Kootenai National Forest](#). 69 pp.

USDI Bureau of Land Management. 2007. Coeur d’Alene Resource Management Plan. 244 pp.

Wakkinen, W.L. and W.F. Kasworm. 1997. Grizzly bears and road density relationships in the Selkirk and Cabinet-Yaak Recovery Zones. Interagency Grizzly Bear Committee. 28 pp.

Wakkinen, W. L. and W. F. Kasworm. 2004. Demographics and population trends of grizzly bears in the Cabinet-Yaak and Selkirk ecosystems of British Columbia, Idaho, Montana, and Washington. *Ursus* 15 65-75.

Zager, P., C. Jonkel, and J. Habeck. 1983. Logging and wildfire influence on grizzly bear habitat in northwestern Montana. Pages 124-132 in *Bears: their biology and management*. Proceedings of the 5th International Conference on Bear Research and Management, Madison, Wisconsin, USA.

APPENDIX A – Distribution Units for Demographic Objective 1

For monitoring the distribution of females with young, six distribution unit (DUs) are delineated in the Selkirk Primary Conservation Area (PCA), and 15 DUs are delineated in the Cabinet-Yaak PCA (figure 9). DUs are based on bear management units (BMUs) referred to in the 1993 Recovery Plan (FWS 1993). To ensure efficient use of monitoring resources while maintaining the ability to track changes in distribution over time, the agencies combined some BMUs.

In developing DUs, the agencies applied a screening tool for potential combination of BMUs that considered sizing based on an estimated female activity area (~12 km diameter). This diameter was estimated using data from GPS-collared grizzly bears in multiple ecosystems, and it describes the mean distance between each mean daily location and the females' home range center. BMUs were evaluated as to whether they were large enough to fully contain a mean female activity area (figure 9). The area of the Cabinet-Yaak "keyhole," which is excluded from the Cabinet-Yaak PCA, was treated as a small BMU in this evaluation. Where a BMU was too small to contain a female activity center, potential combination with a neighboring BMU was identified, with preference for the smallest neighboring BMU or the neighboring BMU with the largest shared boundary (figure 9).

A variant of the combination process was applied for DUs on the east side of the Selkirk PCA. The State Land BMU was divided into northern and southern sections for assignment to DUs with greater alignment with watersheds, and sampling logistics. The northern portion of the State Land BMU was combined with the Ball Trout and Long-Smith BMUs and the southern portion of the State Land was combined with the Myrtle BMU (figure 9). The Bluegrass BMU remains an independent DU.

As a result of the above process, some DUs are larger than original BMUs; DUs range from 90 to 269 mi² with a mean of 177 mi². Sizes and composition of individual DUs are detailed in table 4. The original 32 SCY BMUs ranged in size from 28 mi² to 255 mi². The Lakeshore BMU (28 mi²) is an outlier in size, whose delineation lacked clear rationale in available records. For comparison, the SCY BMUs were smaller than the 23 BMUs used to assess distribution in the adjacent Northern Continental Divide Ecosystem (NCDE) PCA and the 18 BMUs used to assess distribution in the Greater Yellowstone Ecosystem (GYE) PCA. The 18 BMUs in the GYE average 512 mi² and range from 322 to 730 mi². The 23 BMUs in the NCDE average 388 mi² and range from 168 mi² to 684 mi².

Table 4. Size of Distribution Units (DUs).

DU Number	BMUs combined	Area (mi ²)
S1	Salmo-Priest-Sullivan-Hughes	258
S2	Bluegrass	90
S3	Long-Smith-Ball-Trout-State Land N	269
S4	Le Clerc	121
S5	Kalispel-Granite-Lakeshore	162
S6	Myrtle-State Land S	176
CY1	NW Peaks-Garver	222
CY2	E Fork Yaak	152
CY3	Keno-Newton	160

DU Number	BMUs combined	Area (mi ²)
CY4	Roderick-Big Creek	252
CY5	Grouse-Boulder	202
CY6	Callahan	134
CY7	Pulpit	150
CY8	N Lightning-Scotchman	198
CY9	Spar	118
CY10	Cedar-Keyhole	156
CY11	Snowshoe	102
CY12	Bull	128
CY13	St Paul-Wanless	210
CY14	Silver Butte-Fisher-Vermilion	206
CY15	Mt Headley	255

Because of the small sample size and smaller number of unduplicated females with young that may be detected in the SCY PCAs, the agencies chose not to extend DUs to the larger scale of assessment used for female with young distribution in the NCDE and GYE.

Delineation of DUs reduced the redundancy of the original SCY BMUs. Irrespective of the size of units, females observed within one unit, especially near a unit edge, may have a home range (observed or not) that also overlaps an adjacent unit. Telemetry and other location data for the SCY PCAs indicate redundancy potential with the smaller SCY BMUs extending to multiple units for the same reproductive female. For example, telemetry for the two females marked in the Selkirk PCA during the 2019–2024 timeframe indicate their combined use of seven BMUs. In the Cabinet-Yaak, one marked female was detected in six BMUs in the 2019–2024 timeframe. With telemetry, this redundancy has less consequence on monitoring resources, but in the absence of marked females, more monitoring resources may be required to document the same female with young in multiple BMUs.

The agencies' approach adopted an incremental combination of BMUs to reduce redundancy for efficiency of monitoring resources, while ensuring capacity was retained to track changes in population trend and distribution over time in a 6-year moving window (figure 10). The combination approach increased the likelihood that observations of reproductive females collected within two non-adjacent DUs may be more likely to represent different reproductive females.

We note that detections for minimum counts and for distribution of females with young in any given year are influenced by, and dependent on, the level of effort available. Available effort is influenced by funding, number of personnel available, area(s) of emphasis, and other circumstances (e.g., COVID-19 limitations in 2020 and 2021 monitoring years). Variation among these factors may correspond to variations in detections, and it is biologically inappropriate to infer changes in detections made from year to year as changes in actual total population size or distribution. Due to these factors and taking into account the life history of grizzly bears in the SCY DMA, we selected a 6-year window for evaluation of objectives (see chapter 2; see appendix B for description of approximate level of effort for 2018-2023 period).

Selkirk-Cabinet Yaak Grizzly Bear Conservation Strategy July 2026

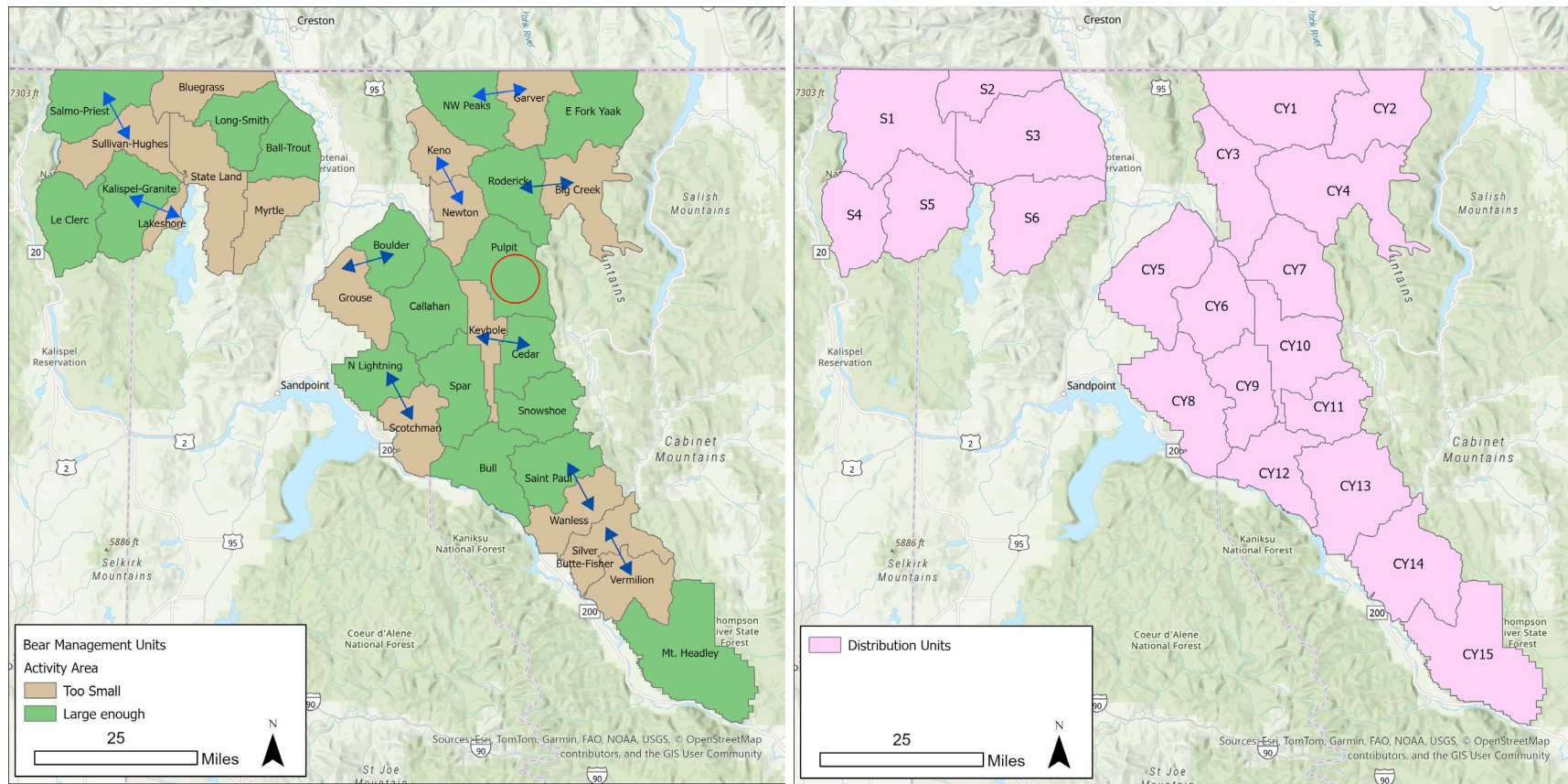


Figure 9. Development of DUs from BMUs: (A) BMUs were screened as to whether they were large enough (green) or too small (tan) to fully contain a female activity area (red circle) and combined as shown with arrows or described in the text; and (B) resulting DUs developed from these combinations.

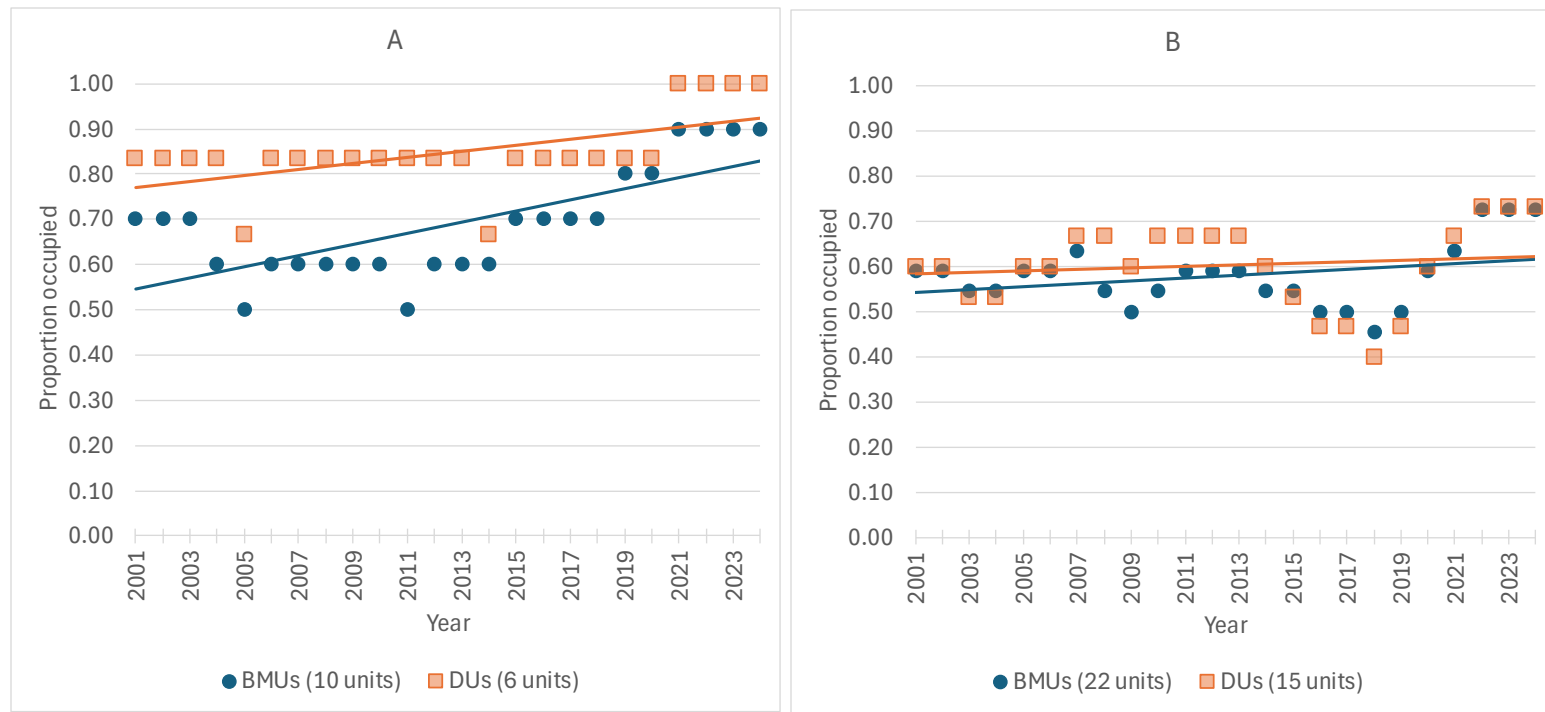


Figure 10. Observed percent of units occupied by females with offspring during 6-year periods, based on BMUs (blue) and DUs (orange) within the Selkirk PCA (A) and the CYE PCA (B).

APPENDIX B – Methods for Demographic Objective 2

Assessing minimum population size via reconstruction

Minimum population size will be estimated using a back-casted reconstruction using last known detection and known age of grizzly bears (e.g., simplification of Creel and Rosenblatt 2013). The monitoring program in the SCY DMA has collected genetic and associated photo information of bears in the Cabinet-Yaak and Selkirk PCAs (and an associated 10-mile buffer area) in an intensive fashion for over a decade. Year-of-birth is identified from two primary methods: field-acquired photos and genotypes of dependent young and cementum annuli analysis of teeth collected at capture and mortality. Collectively, the Cabinet-Yaak and Selkirk monitoring programs have assembled an extensive understanding, such that approximately 97% of grizzly bears detected in the Cabinet-Yaak and Selkirk PCAs have known year-of-birth or age-class.

Genetic and photo monitoring has occurred at live-capture sites, hair snag corrals, and rub objects. Genotype information allows for identification of mother and offspring relationships with high certainty. Photos of dependent young paired with genotypes allow for identification of year-of-birth of known offspring. Average age at first detection of grizzly bears identified via photos, parentage, and genetics was 1.2 years old. This method identifies at least half of the known ages of grizzly bears in the current dataset.

Additionally, the monitoring program has collected age information via cementum aging of first-premolar teeth extracted from bears at live-capture and mortality events. Average age at first detection of bears identified via tooth aging techniques was 5.2 years old. This method identifies at most half of the known ages of grizzly bears in the current dataset.

Since the mid-2010s, annual minimum numbers of grizzly bears detected have been tallied separately for the U.S. portion of the Cabinet-Yaak and Selkirk PCAs. These tallies are of unique (unduplicated) individuals and represent a true minimum of bears detected within the year. In other words, a grizzly bear must be unduplicated from all other grizzly bears in the annual sample to be counted.

To accomplish this conservative minimum, many “consolidation” calls are made, comparing sightings and assessing whether there is any possibility that two detections could be the same bear. In rare cases, distinguishing features on the bear (unique tags, collars, markings) are used to identify unique individuals; however, the marks must be certain enough to establish total uniqueness of the bear within the sample. For example, a photo of an unmarked bear without an accompanying genotype would not be counted as unique if there is any chance it is duplicated in the sample. Most detections of unique individuals come from the genetic sampling of unique genotypes. Annual minimums and reconstructions would only be attempted for years where full genotyping results have been obtained from the collected samples, and future updates could incorporate newly discovered detections and age information.

Starting with the pool of genotyped grizzly bears, we then assess uniqueness of other grizzly bear detections from the following techniques:

- Genetic monitoring paired with photos at trap sites, hair corrals, and rub objects (other bears photographed but not genotyped are often young accompanying mother, identified

with maternal female's genotype or her young's genotype, in some circumstances confirmed with parentage).

- Captured and collared individuals (all genotyped and known age) as well as known number and age of young.
- Mortalities (all genotyped, known age).
- Sightings (certainly not counted with above methods).

To establish a back-casted reconstruction of the population, we then combine the annual minimum tallies of individuals, starting with the most recent complete year with genetic results and proceeding backward in time. Similar to within-year assessments, consolidation calls are made for individuals detected among years. We would target back-casting over a 6-year timespan. Only unduplicated grizzly bears are retained, as established above using all information, including genetic information and known parentage. Many consolidations of detections involve observations of females and their dependent young not genetically identified. Some unduplicated grizzly bears are certainly unique within the year of detection, but their uniqueness does not translate to presence in other years. An example would be a sighting of a unique female with young, with no genotypes from the family group. We cannot assure that this female had not been counted in other years; hence we would only count the bear within the year of detection, as we determined she is only unique within the year.

Once a unique set of individuals is established for the 6-year period, we then apply the age of the bear within each year known alive, using its last year of detection and known (or a minimum) age. With unique grizzly bears that have unknown year of birth, we apply a conservative minimum age. For instance, presumed migrant males with unknown origin would have a subadult age (2 or 3 years) applied to the individual.

Once lifespans (based on known or estimated ages) are applied, we would tally the number of grizzly bears of each sex- and age-class within each year, as follows: dependent (cubs [age ≤ 1] and yearlings (1 year old)); independent (≥ 2 years old) females; and independent males (table 5). Not all bears are detected in a single year; the proportion of bears detected annually ranges between 70 and 90% of the grizzly bears detected during the 6-year reconstruction period. Therefore, it may take 2 or more years to reconstruct a realistic representation of the standing population (figure 11). The most recent year (year 6) of sampling inherently carries a lower number of bears detected than the preceding years so identification of thresholds will be based on averages of the sex- and age-class numbers over the 5-year time span preceding the most recent year of the reconstruction (i.e. years 1–5) (table 5, figure 11). The 5-year averages of 2+ year-old females and males will then be used for mortality threshold calculations, which will be compared to the observed mortality over the 6-year period (i.e., years 16). The reconstruction will be rebuilt with every year where genetics data is obtained.

Table 5. 6-year reconstruction and tally of unduplicated individual grizzly bears detected within the U.S. Cabinet-Yaak and Selkirk DMA, 2018–2023. Sex and age classes include independent females (≥ 2 years old), independent males, and dependent bears of either sex (< 2 years old). The 5-year averages are the values used for mortality limit computations (as explained in text above).

Age class	2018	2019	2020	2021	2022	2023	5-year average (2018–2022)
Independent females	39	41	40	37	44	40	40.2
Independent males	54	60	57	53	57	47	56.2
Dependent	39	27	36	31	17	28	30.0
Total Bears	132	128	133	121	118	115	126.4

Some bears have been detected in both the Cabinet-Yaak and Selkirk PCAs and across multiple states in the SCY DMA. Future reconstructions will be performed on the entire SCY DMA (e.g. figure 11) and will involve coordination and care to not duplicate counts of bears detected during the 6-year period.

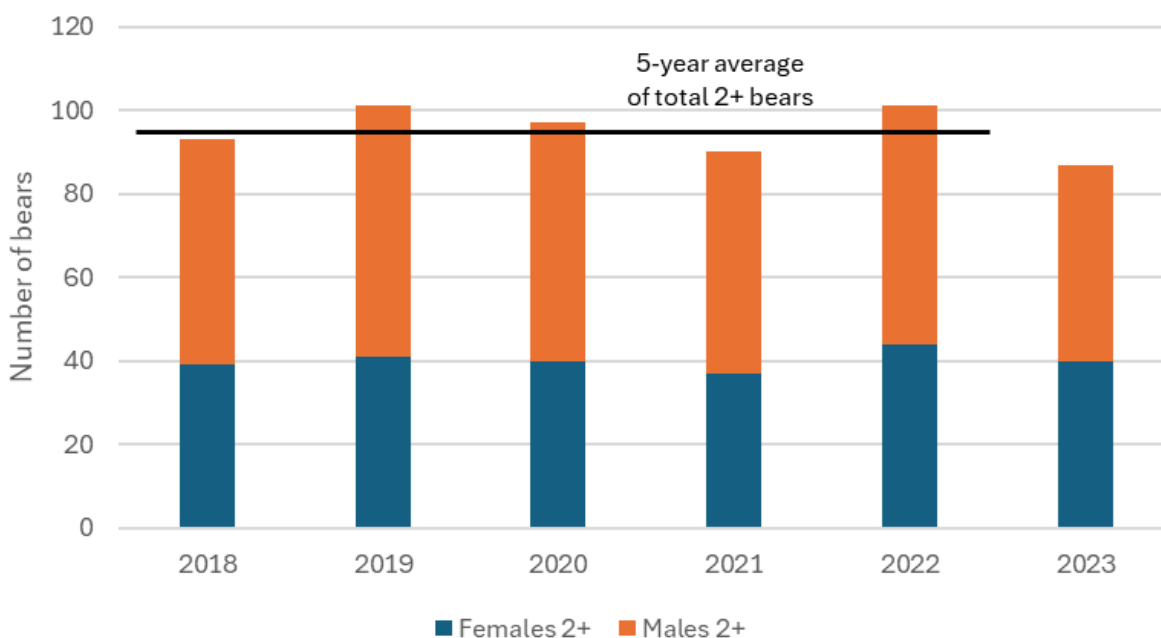


Figure 11. Reconstructed total number of unduplicated male and female bears age 2 or older detected within the combined U.S. Cabinet-Yaak and Selkirk DMA. Reconstructed data comes from detections of bears from the six-year period 20180–2023, plus year-of-birth and age information for those bears. Mortality limits are derived from averages of the most-historic 5 years of the reconstruction (as explained in text).

We note that detections for minimum counts and for distribution of females with young in any given year are influenced by, and dependent on, the level of monitoring effort available. Available effort is influenced by funding, number of personnel available, area(s) of emphasis,

and other circumstances (e.g., COVID-19 limitations in 2020 and 2021 monitoring years). Variation among these factors may correspond to variations in detections, and it is biologically inappropriate to infer changes in detections made from year to year as changes in actual total population size or distribution.

Due to the factors discussed above, and taking into account the life history of grizzly bears in the SCY DMA, the Agencies selected a 6-year window for evaluation of objectives. (See chapter 2; see appendix B for description of approximate level of effort for 2018–2023 period).

For illustration of level of effort, the following is an approximate per year average of interagency monitoring efforts for the 2018–2023 period:

- *Capture effort:* Approximately 400–500 trap-nights are expended per year in each PCA (i.e., 800-1000 total for both PCAs), which roughly translates to 2 capture teams per PCA (i.e., 4 capture teams total), with capture teams staffed by 6-month personnel appointments.
- *DNA collection at hair snag corrals and rubs for genetic monitoring:* Approximately 100–200 corral-months are expended for sampling effort per year per each PCA (with some sampling in adjacent Secondary Habitat Area. A corral-month is one site out for an approximately 3- to 4-week session on a rotational basis. Crews check for rub sites include approximately 500 rub sites (Selkirk PCA) and 700 rub sites (Cabinet-Yaak) per year. Corral and rub efforts translate into the equivalent of 3 DNA crews per PCA (staffed by 6-month personnel appointments).
- *Data entry and similar tasks:* Data entry and similar tasks are included in the 6-month appointments described above (5-months fieldwork and 1 month end-of-year data entry, processing).
- *Full-time equivalent staff:* The FWS has assigned at least 3 full-time equivalent staff dedicated to SCY Area monitoring, which does not include administrative and other interagency staff sharing other functions.

Calculation of Mortality Thresholds

Mortality thresholds are developed as a metric of sustainable mortality to maintain the current SCY grizzly bear population and allow for population stability and growth. It should be stressed that these thresholds are not objectives, but rather another tool in this Strategy to evaluate the population, in this case through an assessment of total mortality. Use of these thresholds, along with monitoring of specific causes and locations of mortalities, supports appropriate proactive and responsive management actions, including management removals in response to conflict, and adaptive emphasis of information, education, and outreach activities.

These thresholds will be compared to the 6-year sum of independent female and male mortalities from all causes, incorporating unreported mortality (Cherry et al. 2002; Kasworm et al. 2026a and b). The unreported mortality rate conservatively assumes one unreported individual for each reported mortality not associated with radio collared bears, management removals, natural mortality, or mortality without any supporting information relating to cause (no known relation to human causes). This approach is analogous, but not identical to that used in the NCDE.

Known fate monitoring with radio-collars has been used to estimate population trend in the Cabinet-Yaak and Selkirk PCAs. The vital rates used in the calculation of population trend include adult female, subadult female, yearling, and cub survival rates, and reproductive data in the form of litter size, litter interval, and first age of parturition. To obtain realistic rates given small sample sizes, these rates were calculated from the last 20 years (2006–2025) of monitoring data from bears captured in the U.S. Trend estimates indicate a slightly increasing growth rate in both the Cabinet-Yaak and Selkirk PCAs of approximately 1–2% (Kasworm et al. in prep 2025a and b). Trend estimates are calculated using a revised Lotka equation and a bootstrapping approach assuming a stable age distribution and using vital rates to obtain confidence intervals (Hovey et al. 1996; Mace et al. 1998; Wakkinen et al. 2004). Use of the mortality rates of females (inverse of survival) that are resulting in a slightly increasing population trend provide a basis for mortality thresholds that maintain growth.

The minimum population size obtained from reconstruction over a 5-year interval (see above) would be the basis for application of mortality thresholds. Use of the minimum would be a conservative approach to additional calculations. The reconstruction allows partitioning of the number of independent females and males (≥ 2 years old).

Known fate monitoring with radio collars indicates that a 9% mortality rate for independent females and independent males is currently supporting a slightly increasing population in both areas (Kasworm et al. in prep 2025a and b). Because of the functional importance of females to the population, the agencies identify an initial threshold based on 9% rates for independent females using the latest minimum population size for conservatism.

Male immigration and movement between the PCAs play a role in the genetic health of the SCY Area. However, as with the GYE and NCDE, the male contribution is less significant to grizzly bear population growth when compared to the reproductive female segment of the population (IGBC 2018; IGBC 2024). In addition, the DMA used in the SCY is approximately 1,000 square miles larger than the 1993 recovery areas on which abundance and mortality is currently assessed with a 10-mile buffer. The SCY DMA includes portions of NCDE estimated occupied range, as well as areas in the Pend Oreille Basin in Idaho and Washington, which have greater potential for both nondiscretionary mortality and conflict management.

Population projections for the SCY DMA were made for a 12-year period based on reconstructed minimums (2018–2022) and observed (2006–2025) reproductive and dependent survival rates. These projections applied an independent female mortality of 9% and independent male mortality rates ranging from 9% to 15% (table 6). These projections indicate a 15% male mortality level is sustainable ($\lambda > 1$) while maintaining the functional importance of females.

Table 6. Deterministic population projection for SCY DMA, for variable independent male survival rates, based on assumptions: (a) starting population size = 130 (based on reconstructed average annual minimums for 2018–2022 for Cabinet-Yaak and Selkirk PCAs, as rounded: 40 independent females, 56 independent males, 34 dependent young); (b) independent female survival = 0.91 (static); (c) reproductive and dependent survival rates based on Cabinet-Yaak PCA observed 2006-2025 (static); and (d) numbers of years = 12.

Male Survival Rate	Lambda	Total population size estimate in year 12	Total increase from year 1 to 12	Number of Independent females in Year 12	Number of Independent males in Year 12	Ratio independent F:M
0.91	1.023	147	13%	53	57	0.92
0.90	1.021	144	11%	53	53	1.00
0.89	1.019	141	8%	53	51	1.04
0.88	1.017	138	6%	53	47	1.13
0.87	1.016	135	4%	53	45	1.17
0.86	1.014	133	2%	53	42	1.26
0.85	1.013	130	0%	53	40	1.33

Initial use of a moderate mortality threshold (12%) for independent aged males would continue to allow for population growth and male dispersal with the potential for enhancing genetic health, while allowing for additional male mortality than currently observed to provide flexibility in a variety of conflict management scenarios (see Schwartz 2007). The agencies will continue to promote connectivity through information, education, and outreach to reduce conflict potential (chapters 4 and 5), and through the exercise of discretion in conflict-related management relocations and removals (chapter 4).

As described above, the agencies will initially apply mortality thresholds based on a 9% mortality rate for independent females, and a 12% mortality rate for independent males. Sustainable mortality rates will be reevaluated every 5 to 10 years and applied to the most recent population reconstruction values (chapter 6).

Example calculations for female and male mortality thresholds are shown in table 7. For example, the reconstructed population of 40.2 independent female bears during 2018–2022 multiplied by a 9% mortality would produce a threshold of 3.6 bears per year or 21.7 bears across a 6-year interval. The reconstructed population of 56.2 independent males during 2018–2022 multiplied by a 12% mortality would produce a threshold of 6.74 per year or 40.46 bears across a 6-year interval. Decimal places are provided, with recognition that bear mortality in the 6-year rolling window will occur as whole numbers. The documented and estimated unreported mortalities for the SCY DMA for 2018–2024 are shown in table 8. Using this example and the thresholds calculated above, a total of 15 female and 16 male mortalities were observed during 2018–2024, compared to calculated thresholds of 21 and 40, respectively. Additional counts of observed mortalities over 6-year periods are included in table 9, and an illustration of the 6-year rolling window is provided in figure 12.

Table 7. Example calculations for obtaining 6-year threshold values for Demographic Objective 2.

Sex	Average Estimated minimum (2018–2022)	Sustainable mortality rate	Annual calculation	6-year calculation	6-year threshold
Independent Female	40.2	9%	3.62	21.71	21
Independent Male	56.2	12%	6.74	40.46	40

*These calculations applied estimated vital rates for the Cabinet-Yaak PCA for 2006–2025.

Table 8. Observed and estimated unreported mortalities within the SCY DMA, 2018-2025.

Sex	Year	Location*	(Collared)	Cause	Unreported additions
Female	2018	CY PCA	Collared	Human unresolved	None
Female	2019	CY PCA		Defense of life	One female
Female	2019	S PCA		Misidentified	One female
Female	2020	CY PCA	Collared	Unlawful shooting	None
Female	2020	DMA		Vehicle collision	One female
Female	2021	None			
Female	2022	DMA	Collared	Management	None
Female	2022	DMA		Vehicle collision	One female
Female	2022	PCA	Collared	Natural	None
Female	2023	CY PCA	Collared	Human unresolved	None
Female	2024	CY PCA	Collared	Defense of life	None
Female	2024	CY PCA	Collared	Probable human	None
Female	2024	S PCA	Collared	Natural	None
Female	2025	CY PCA		Human unresolved	None
Female	2025	S PCA		Misidentified	One female
Male	2018	CY PCA	Probable	Unknown	None
Male	2018	DMA	Collared	Human unresolved	None
Male	2019	DMA	Collared	Management	None
Male	2019	DMA	Collared	Management	None
Male	2020	CY PCA		Misidentified	One male
Male	2020	S PCA		Unlawful neck snare	One male
Male	2021	None			
Male	2022	DMA		Property defense	One male
Male	2022	DMA		Defense of life	One male
Male	2022	DMA		Management	None
Male	2022	DMA		Management	None
Male	2023	CY PCA	Collared	Human unresolved	None
Male	2023	CY PCA		Unknown	None
Male	2023	S PCA		Human unresolved	None
Male	2024	DMA	Collared	Management	None
Male	2025	None			

* Location: S PCA = Selkirk Primary Conservation Area; CY PCA = Cabinet-Yaak Primary

Selkirk-Cabinet Yaak Grizzly Bear Conservation Strategy
July 2026

Conservation Area; DMA = in Demographic Monitoring Area outside of PCAs

Table 9. Comparison of calculated thresholds and observed mortalities (documented and unreported) of independent female and males bears in the SCY DMA.

Sex	Calculated 6-year threshold	Observed mortalities 2018–2023	Observed mortalities 2019–2024	Observed mortalities 2020–2025
Female	21	13	15	14
Male	40	17	16	14

Independent Female Mortality	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Report + est. Unreported		1	4	3	0	4	1	3	3	
		2018-2022 window total					13			
		2019-2024 window total						15		
		2020-2025 window total							14	
Independent Male Mortality	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Report + est. Unreported		2	2	4	0	6	3	1	0	
		2018-2022 window total					17			
		2019-2024 window total						16		
		2020-2025 window total							14	

Figure 12. Image showing an example of the application of 6-year widow for independent male and female mortality thresholds based on reported and unreported additions for the Cabinet-Yaak and Selkirk PCAs.

APPENDIX C – Tri-State Memorandum of Agreement

The Tri-State Memorandum of Agreement (MOA) for the Selkirk-Cabinet Yaak Conservation Strategy (Strategy) is in development and will be added here when available. This MOA between the states of Idaho, Montana, and Washington will describe the individual agency commitments for implementing this Strategy.