Citizen Alternative: Natural Recovery with ESA Protection and Connectivity Areas

Purpose and Need

The purpose of this alternative is the reestablishment of a large population of grizzly bears in the Bitterroot Ecosystem of north-central Idaho and western Montana. In order to have long term grizzly bear population viability in the Northern Rockies, the Bitterroot Ecosystem must be reoccupied and linked through protected habitats with the other Grizzly Bear Recovery Areas (Allendorf, et al. 2019). There are millions of acres of contiguous remote productive wildlands in which grizzly bears can explore and thrive.

Legal Status and Management Authority

The legal status of grizzly bears under this alternative is Threatened under the Endangered Species Act. Management authority is vested by law with the U.S. Fish & Wildlife Service, which is responsible for grizzly bear recovery.

The current legal status of all grizzly bears within the lower 48 states is Threatened under the ESA. The Experimental, Non-essential (ENE) population status under Section 10(j) of the ESA does not apply to the Bitterroot Ecosystem. There are several factors upon which a court is likely to find that this alternative is not legally available.

- To qualify for ENE, an area must be wholly geographically separate from other populations of the same species. The Continuously Occupied Habitat Area for the NCDE is within the Bitterroot Mountains and is now directly adjacent to the 2000 Recovery Area (U.S. Fish & Wildlife Service 2023). Moreover, there have been numerous verified observations of grizzly bears within the Bitterroot Ecosystem including photographs, a den site, tracks, and mortalities.
- 2) The USFWS has also mapped May be Present (Species List Map) areas that are contiguous across Montana and Idaho.
- 3) Immigrants to the BE could only have possibly come from the NCDE, CYE and SE (verified) or GYE populations so it is not wholly separate genetically.

Therefore, this alternative is based upon grizzly bears having threatened species status. Trapping for research and management and management removals are authorized through a 4(d) rule under 50 CFR 17.40. The U.S. Fish & Wildlife Service may enter into cooperative agreements with the Idaho Department of Fish and Game and the Montana Department of Fish, Wildlife & Parks which would allow these agencies to carry out management relocations or control actions when necessary.

CONSULTATION WITH TRIBES— The Secretary of the Interior, acting through the U.S. Fish & Wildlife Service, shall initiate consultations required under existing law with tribal nations with Usual and Accustomed areas within the recovery and connectivity areas including the Nez

Perce, Shoshone-Bannock and Salish-Kootenai Tribes including opportunities for comanagement.

Primary Recovery Method

The primary recovery method under this alternative is natural immigration from other populations. <u>This is NOT a No Action Alternative</u>. This alternative calls for several specific actions including habitat connectivity areas, development of habitat management standards, sanitation, I&E, livestock conflict reduction measures, a Scientific Committee, identification of highway passage structure sites, anticipating and preventing conflicts with big game hunters as well as mortalities from poaching which are two dominant causes of human-caused bear mortality on public land jurisdictions with similar configurations of human activity (GYE and CYE) and culture (notably the CYE) and other actions necessary to support grizzly bear recovery in the Bitterroot Ecosystem and its connectivity areas.

The grizzly bear population in the Northern Continental Divide Ecosystem (NCDE) is the largest population in the lower 48 states and it has been described as a "source population" providing immigrants to supplement other existing populations. The NCDE is most likely to be the primary source of immigrants to the Bitterroot ecosystem (Grizzly Bear Conservation Strategy, U.S. Fish & Wildlife Service 2018) although it is possible that grizzly bears will also move from the Greater Yellowstone towards the BE. Trends in distribution and dispersal movements are related to these prospects.

An augmentation program in the Cabinet Mountains has largely been a failure. Several translocated bears returned to the NCDE or were killed. Notably, of the 22 translocated bears, only three contributed genetically to the Cabinet Mountains population, and of these three, just one contributed 87% of documented offspring and there was just a 13% success rate per bear (Dr. David J. Mattson, pers. comm.). A 13% success rate would not result in Bitterroot repopulation.

Management of wildlife and fish is vulnerable to frequent changes in political administrations, policies and priorities. A previous plan to recover grizzly bears in the BE was politically defunded and essentially abandoned until the USFWS was sued to comply with federal law and consented to prepare a new EIS. If the plug on assisted translocations were pulled mid-stream, this would be proven to be an ineffective approach that results in mortality for the source population. There are also risks to the bears. A reintroduction plan in BC was cancelled after the first grizzly to be translocated died in the process (Dr. Garth Mowat at IGBC NCDE subcommittee meeting).

Moreover, a public attitude survey (Shaw and Whalen 2021) suggests Idaho residents closest to the potential recovery area have less resistance to grizzly bears coming to the BE on their own as opposed to having grizzly bears actively moved in by the government.

The initial phase of BE reoccupation is already under way. Numerous verified observations including a den site have come from within and directly adjacent to the BE. These are presumed to be males but the possibility that one or more females have reached the BE cannot be ruled out

although that has not yet been verified. Sighting grizzly bears in this remote, heavily forested landscape is difficult, even with game cameras and many people do not report bear sightings.

The U.S. Fish & Wildlife Service estimates that grizzly bear breeding will occur within the Bitterroot Ecosystem in as soon as 15 years under current conditions. Breeding activity may occur sooner with actions to facilitate natural recovery including highway passage structures and designated connectivity areas. Under this alternative, effective monitoring of natural immigration would occur for 15 years. If, after 15 years there is no verified evidence of resident breeding age females and/or reproduction, the U.S. Fish & Wildlife Service may consider human-assisted translocations.

Recovery Area

Under this alternative the Recovery Area 21,612 mi² (55,976 km²;) includes the Selway-Bitterroot, Frank Church-River of No Return and Gospel Hump Wildernesses and surrounding primarily federal lands on the Nez Perce-Clearwater, Salmon-Challis, St. Joe, Boise, Payette, Lolo, Bitterroot and Beaverhead-Deerlodge National Forests. The Recovery Area and Connectivity Areas are shown in the Appendix. Approximately 75% of the Recovery Area is within designated Wilderness and Inventoried Roadless Areas. In fact, this area encompasses one of the largest assemblages of wild roadless country in the lower 48 states.

The Recovery Area boundary is informed by the results of numerous peer-reviewed and published analyses of grizzly bear habitat potential across all four seasons. These include Merrill et al. (1999), Carroll et al. (2001), Hogg et al. (2001), Boyce and Waller (2003), Walker and Craighead (2006), Mowat, et al. (2013), Mattson (2021), Bader and Sieracki (2022) and Sells et al. (2023).

Boundaries

The boundaries for the recovery area are shown in Appendix.

Northern Boundary— The northern boundary of the recovery area shall be the northern boundary of the Mallard-Larkins inventoried roadless area on the Nez Perce-Clearwater and Idaho Panhandle National Forests and the northern boundary of the Sheep Mountain inventoried roadless area on the Lolo National Forest.

Western Boundary— The western boundary shall be the western boundary of the Nez Perce-Clearwater National Forest; the western boundary of the Payette National Forest east of U.S. Highway 95 and Idaho Highway 55; the westernmost boundaries of the Boise National Forest east of Idaho 55 (all isolated outliers of National Forest lands are excluded).

Southern Boundary— The southern boundary shall be the southern boundaries of the Boise, Sawtooth and Salmon-Challis National Forests north of U.S. Highway 20.

Eastern Boundary— The eastern boundary shall be the eastern boundaries of the Salmon-Challis National Forest west of U.S. Highway 93; the Bitterroot National Forest west of Lost Trail Pass

northwest to Trapper Peak; the eastern boundary of the Bitterroot National Forest west of the Bitterroot River; the Lolo National Forest from Lolo Peak to Garden Point; Garden Point to Rivulet Peak; Rivulet Peak to Sunrise Point; Sunrise Point to Blacktail Mountain.

The Greater Yellowstone and NCDE Recovery Areas, along with their larger Demographic Monitoring Areas, span vast landscapes to accommodate the very large home and life range sizes of grizzly bears. The Recovery Area and Connectivity Areas under this alternative are capable of supporting many hundreds of grizzly bears, greatly enhancing prospects for the long-term survival of the Lower 48 listed grizzly bear population.

Connectivity Areas

Connectivity areas between the Bitterroot Ecosystem and other Recovery Areas have been identified and mapped by several sources including Alternative 4 in the 2000 Bitterroot EIS, Servheen, et al. (2001), Walker and Craighead (1997), Bader and Sieracki (2022), Sells, et al. (2023).

This alternative designates connectivity areas (see map in Appendix). Management direction for Connectivity Areas will be developed based upon recommendations from the U.S. Fish & Wildlife Service which shall subsequently be reviewed by the Scientific Committee established under this alternative.

Cabinet-Yaak-Bitterroot Connectivity Area

This connectivity area (3,447 km²) was identified as a possible connectivity habitat by the U.S. Fish and Wildlife Service (1993) warranting further analysis. It is 93.3% federal, 0.2% state and 6.5% private lands and 33.2% is within Inventoried Roadless Areas. Bader and Sieracki (2022) found this connectivity area has suitable denning habitats and secure core habitats capable of supporting resident female grizzly bears. Sells et al. (2023) predicted this connectivity area has high connectivity potential for female and male grizzly bears. Grizzly bears have been documented using this connectivity area including Bear 927, the Kelly Creek bear that was killed, Ethyl and others who have moved south of Highway 200 and I-90. The U.S. Forest Service (2020) stated this area has grizzly bear habitat productivity equal in quality to that in the Grizzly Bear Recovery Areas.

Ninemile Demographic Connectivity Area-Bitterroot Ecosystem

The Ninemile Demographic Connectivity Area for female grizzly bears was established in the Lolo National Forest Plan Amendment and is part of the NCDE Grizzly Bear Conservation Strategy (2018). In recent years the Ninemile DCA has had verified observations of females with cubs in 2018, 2019, 2020 and 2023.

Sells, et al. (2023) found this area to have the highest potential for female grizzly bear connectivity and movement including in the area between the DCA and the BE. Bader and Sieracki (2022) identified significant amounts of moderate-high probability denning habitat. The area also has valley bottom riparian habitat and extensive berry fields.

Under this alternative the Ninemile DCA is extended in two areas to connect all the way to the Bitterroot Ecosystem which results in a total area of 2,204 km². The existing Demographic Connectivity Area is 44.5% federal, 31.0% Flathead Indian Reservation, 5.5% state and 19.0% private lands and 10.1% is within Inventoried Roadless Areas and there is contiguous roadless area on the Flathead Indian Reservation. The DCA additions are 59.7% federal, 16.7% state and 23.5% private lands and 18.4% is within Inventoried Roadless Areas.

Sapphire-Pintler Connectivity Area

The Sapphire-Pintler Connectivity Area (7,113 km²) has the highest potential for occupancy by resident breeding age female grizzly bears and has potential to support a small sub-population of grizzly bears due to nearly three-quarters of a million acres of roadless wildlands and proximity to the NCDE and BE (Bader and Sieracki 2022). It is 87.5% federal, 2.4% state and 10.1% private lands and 40.5% is within Inventoried Roadless Areas and Wilderness/WSA.

The western edge of the Sapphires is within the highest connectivity category (Sells et al. 2023) and directly adjacent to abundant denning habitat. The Sapphire Mountains were also found to have extensive ground cover by berry-producing species favored by grizzly bears (Hogg et al. 2001) and also has the highest amount of secure core habitat of any connectivity area between the NCDE, Bitterroot and Cabinet-Yaak Recovery Areas (Bader and Sieracki 2022).

There have been numerous verified observations in this area including a female and 3 cubs near Gillespie Creek, a male denned in the northern Sapphires in 2023-24, a male and female pair of siblings, a male near Stevensville, an adult female in 2015, a male around Miller Peak and several others including two males in the East Fork of the Bitterroot.

Bitterroot to Greater Yellowstone Connectivity Area

This connectivity area along the Continental Divide (11,075 km²) is a natural movement area for wildlife and has been documented to have high value for connectivity for male and female grizzly bears (Craighead and Walker 1997). Numerous grizzly bears have been documented in the Southern Bitterroot Mountains and the west side of the Big Hole Valley (Sells et al. 2023). These mountains continue all the way to I-15 where grizzly bears moving west from the GYE have been verified. This connectivity area is 69.7% federal, 5.9% state and 24.4% private lands and 28.3% is within Inventoried Roadless Areas.

Bitterroot Ecosystem Demographic Monitoring Area

Applying methodology from the NCDE and GYE, the Recovery Area is buffered to 10 miles (16 km) and this area, Zone 1 (19,052 km2) together with the Recovery Area and the Connectivity Areas comprise the Demographic Monitoring Area from which population statistics shall be consistently monitored and management standards developed and applied.

Population Recovery Goal

This alternative establishes no a priori population recovery target. Rather, it is assumed that habitat within the Recovery Area and connective habitats will be available to grizzly bears and they will be allowed to occupy the habitat at whatever densities it will support.

Management Standards and Conflict Minimization

The U.S. Fish & Wildlife Service shall make recommendations to the U.S. Forest Service, the Bureau of Land Management and the states of Idaho and Montana for management standards supporting grizzly bear recovery within the Demographic Monitoring Area. A Conservation Strategy shall be produced for the Bitterroot Ecosystem Demographic Monitoring Area as was done for the Northern Continental Divide and Greater Yellowstone populations. The Conservation Strategy standards shall be amended into National Forest Plans within the Bitterroot DMA.

As in the NCDE and GYE, standards shall be developed for road management, timber harvest, livestock grazing, mining, developed recreation sites on public lands and landscape connectivity. In connectivity areas, road management and secure core recommendations shall be consistent with the best available scientific information for management in connectivity areas as per Proctor, et al. (2019).

Roadless Areas

Under this alternative all roadless areas within the Recovery Area and Connectivity Areas shall remain intact pursuant to the Idaho Roadless Rule and the National Roadless Rule. No roadbuilding, temporary or otherwise would occur within these inventoried areas.

Sanitation

Under this alternative, all public sites within the DMA including campgrounds, picnic areas, fishing access sites, etc. must have sanitation including bear resistant garbage cans and dumpsters and signage. The initial focus area of this effort is the eastern and northern portions of the Demographic Monitoring Area and shall be implemented throughout the entire DMA within 3 years.

Information and Education

Under this alternative the U.S. Fish & Wildlife Service will contribute funds towards information and education, coexistence, Bear Smart, range rider and other safety and conflict minimization efforts.

Passage structures

The U.S. Fish & Wildlife Service shall assist in identifying potential sites for highway passage infrastructure that assists with natural immigration. Information from other sources shall be included in this assessment.

Bear Management Units

This alternative has Bear Management Units identified for the Nez Perce-Clearwater, Lolo and Bitterroot National Forests and a portion of the Beaverhead-Deerlodge National Forest (Mattson 2021, FLBCTF/Sieracki and Bader (2022). (Appendix). These shall be reviewed and if necessary, amended by the U.S. Fish & Wildlife Service.

Hair Trap DNA survey

This alternative includes a hair trap DNA study to be established within different portions of the BE starting with the north and east portions of the Recovery Area. This will be in addition to existing U.S. Fish & Wildlife Service efforts in the Sapphire Mountains and East Fork of the Bitterroot and other areas in western Montana.

Scientific Committee

Under this alternative a Scientific Committee is appointed. This interdisciplinary team shall be comprised of state, federal, tribal and independent scientists.

ESTABLISHMENT— Not later than 60 days after signing a final decision notice and Record of Decision on the EIS, the Secretary of the Interior, in cooperation from the National Academy of Arts and Sciences shall establish a Bitterroot Ecosystem Science Committee. The Committee shall consist of at least 10 and not more than 12 persons appointed by the Secretary of the Interior after consideration of comments received and full and good faith consultation with the National Academy of Arts and Sciences and the Society for Conservation Biology and other professionals in wildlife and ecosystem sciences.

MEMBER QUALIFICATIONS—The Scientific Committee shall consist of at least ten (10) and no more than twelve (12) individuals, each of whom is an acknowledged expert in one or more of the following disciplines-

- A) the design and implementation of grizzly bear recovery plans (private sector appointment);
- B) landscape ecology;
- C) grizzly bear habitat requirements and habitat use patterns;
- D) range and plant ecology;
- E) genetics and population viability analysis (private sector appointment);
- F) fire ecology;
- G) transportation systems and motorized route density analysis;
- H) climate; (private sector appointment)

I) DNA analysis using hair traps

OTHER REQUIREMENTS- No more than 5 members of the Scientific Committee may be employees of any Federal or State Agency. No less than 5 members shall consist of tribal representatives and persons affiliated with non-governmental organizations and the independent scientific community.

PUBLICATION AND COMMENT PERIOD-The Secretary of the Interior shall publish for public comment the proposed appointees to the Scientific Committee in the Federal Register.

AUTHORITY- The Secretary of the Interior, acting through the U.S. Fish and Wildlife Service, shall have sole authority and responsibility for implementing recovery efforts pursuant to the Endangered Species Act. The Secretary, acting through the U.S. Fish and Wildlife Service, shall act in good faith upon the recommendations of the Scientific Committee and in accordance with its legal responsibilities under the Endangered Species Act requiring the Service to use the best available scientific information in formulating, implementing and monitoring recovery efforts.

DURATION- The duration of the Scientific Committee shall be three (3) years.

COMPENSATION- The Committee shall be instructed to use online platforms to the extent possible for their meetings and communications to reduce the need for travel and lodging expenses. The members of the Scientific Committee shall be compensated for any expenses associated with travel, meals and lodging required to attend meetings of the committee. Committee members may also be provided a daily per diem for work done pursuant to their duties as commission members.

REPLACEMENT-In the event that a member of the Scientific Committee should become unable to serve, the Secretary of the Interior, using the process described above, and keeping in mind the requirements, qualifications and composition shall appoint a new member to the Committee.

DUTIES— The Scientific Committee shall:

-review the U.S. Fish & Wildlife Service recommendations for management standards in the Bitterroot Ecosystem Demographic Monitoring Area;

-monitor the results of natural immigration;

-evaluate existing habitat studies and make recommendations for any additional habitat research needs;

-review the study design of the DNA hair trap survey;

-assist the U.S. Fish & Wildlife Service in mapping Bear Management Units for the Recovery Area;

-assist in identification and assessment of potential sites for highway passage infrastructure;

-evaluate the potential impacts from climate change;

-evaluate potential impacts from state wildlife management regulations and practices which may pose risks to grizzly bears;

-make recommendations for conflict minimization;

-identify potential restoration areas;

The Committee may, at its discretion, address other issues and concerns that may arise including newly available information or unforeseen circumstances.

REPORT— Prior to termination of the Committee, the Committee shall submit a written report to the Secretary of the Interior. This report shall summarize the findings and recommendations of the Committee.

Measurements of Progress-

Short-Term

In assessing the short-term progress of recovery effort within the Recovery Area and Connectivity Areas the following factors shall be considered measures of progress during the first ten years:

- (1) no or limited mortality to immigrating bears;
- (2) immigrants stay within the Recovery Area and Connectivity Areas;
- (3) there is evidence of breeding activity;
- (4) sanitation measures are in place on public lands;
- (5) there is a positive trend towards acceptance and bear smart practices;
- (6) there is a low level of conflicts between humans and bears.

Long-Term Progress-

The following factors shall be considered as measures of progress

- (1) there is sustained population growth;
- (2) immigration continues;
- (3) grizzly bears are distributed throughout the recovery areas and connectivity areas;
- (4) there is documented genetic exchange between the CYE, GYE and Bitterroot Ecosystems;
- (5) there is a positive trend in habitat conditions;
- (6) public support and acceptance of recovery efforts is increased.

Citations

Allendorf, FW, LH Metzgar, BL Horejsi, DJ Mattson, FL Craighead. 2019. The Status of the Grizzly Bear and Biological Diversity in the Northern Rocky Mountains. A Compendium of Expert Statements. Flathead-Lolo-Bitterroot Citizen Task Force. Missoula, MT. 21p.

Bader, M, P Sieracki. 2022. Grizzly Bear Denning Habitat and Demographic Connectivity in Northern Idaho and Western Montana. Northwestern Naturalist 103(3):209-225.

Boyce, M, J Waller. 2003. Grizzly Bears for the Bitterroot: predicting potential distribution and abundance. Wildlife Society Bulletin 31(3):670-683.

Carroll, C, RF Noss, PC Paquet. 2001. Carnivores as focal species for conservation planning in the Rocky Mountain region. Ecological Applications 11(4):961-980.

Hogg, JT, NS Weaver, JJ Craighead, BM Steele, ML Pokorny, MH Mahr, RL Redmond, FB Fisher. 2021. Vegetation patterns in the Salmon-Selway ecosystem: an improved land cover classification using Landsat TM imagery and wilderness botanical surveys. Craighead Wildlife-Wildlands Institute Monograph Number 2. Missoula, MT. 98p.

Mattson, DJ. 2021. The Grizzly Bear Promised Land: Past, Present & Future of Grizzly Bears in the Bitterroot, Salmon & Selway Country. Grizzly Bear Recovery Project Technical Report GBRP-2021-1.

Merrill, T, DJ Mattson, RG Wright, HB Quigley. 1999. Defining landscapes suitable for restoration of Grizzly Bears Ursus arctos in Idaho. Biological Conservation 87(1999):231-248.

Mowat, G, DC Heard, CJ Schwarz. 2013. Predicting grizzly bear density in western North America. PLoS One 8(12).

Proctor, MF, BN McLellan, GB Stenhouse, G Mowat, CT Lamb, MS Boyce. 2019. Effects of roads and motorized human access on Grizzly Bear populations in British Columbia and Alberta, Canada. Ursus (30e2):16-39.

Sells, SN, CM Costello, PM Lukacs, LL Roberts, MA Vinks. 2023. Predicted connectivity pathways between grizzly bear ecosystems in Western Montana. Biological Conservation 284 (2023):110199. 14p.

Servheen C, JS Waller, P Sandstrom. 2001. Identification and management of linkage zones for Grizzly Bears between the large blocks of public land in the Northern Rocky Mountains. ICOET 2001 A Time foir Action Proceedings:161-169.

Shaw, K, K Whalen. 2021. Exploring the Human Dimension Equation in Grizzly Bear Conservation in Idaho. How to Effectively Outreach to Our Publics. University of Idaho. Presented to Bitterroot Subcommittee, Interagency Grizzly Bear Committee. 10/27/21.

Sieracki, P, M Bader. 2023. Proposed Grizzly Bear Management Units on the Lolo, Bitterroot and Select Portions of the Beaverhead-Deerlodge National Forests, Montana, USA. Flathead-Lolo-Bitterroot Citizen Task Force, WildEarth Guardians. Missoula, MT. 9p.

U.S. Fish & Wildlife Service. NCDE Subcommittee. 2018. Conservation strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem. 170p. + appendices.

U.S. Fish & Wildlife Service. 2000. Grizzly Bear Recovery in the Bitterroot Ecosystem. Final EIS. 292p.

U.S. Forest Service. 2020. Redd-Bull Environmental Assessment. Lolo National Forest.

Walker, R, L Craighead. 1997. Analyzing Wildlife Movement Corridors in Montana Using GIS. Environmental Sciences Research Institute. Proceedings of the 1997 International ESRI Users Conference. San Diego, CA. 21p.

Appendix-







