

INTERAGENCY
GRIZZLY BEAR COMMITTEE



NCDE

Jim Williams
Jeff Mow

FWP
GNP

Chair
Vice Chair

Numerically Recovered

+

Spatially Recovered

= Biologically Recovered

But not LEGALLY Recovered

NCDE Grizzly Bear Conservation Strategy

---- DRAFT ---- DRAFT ---- DRAFT ----

April 2013



Photo by Rick Mace, Montana Fish Wildlife and Parks.



United States Department of Agriculture

Draft Environmental Impact Statement

Volume 3: Forest Plan Amendments to incorporate relevant direction from the Northern Continental Divide Ecosystem Draft Grizzly Bear Conservation Strategy

Helena National Forest
Kootenai National Forest
Lewis and Clark National Forest
Lolo National Forest



Forest Service

May 2016

"...the greatest good for the greatest number in the long run." –Gifford Pinchot, 1st Chief of the Forest Service, 1905

NORTHERN CONTINENTAL DIVIDE ECOSYSTEM

GRIZZLY BEAR POPULATION MONITORING

ANNUAL REPORT – 2015



1. population trend,
2. survival rates,
3. reproductive rates,
4. movements and habitat selection,
5. distribution in western Montana,
6. mortality levels in the NCDE, and
7. levels of unreported mortality.

Monitoring Team Cooperators:

Montana Fish, Wildlife & Parks

U.S. Fish and Wildlife Service

U.S. Forest Service

National Park Service, Glacier National Park

Parks Canada, Waterton Lakes National Park, Alberta

Blackfeet Tribe

Confederated Salish and Kootenai Tribes

British Columbia Ministry of Forests

Prepared By:

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Lori L. Roberts, MTFWP

This annual report summarizes data collection efforts to date. It is not a peer-reviewed document, and data summaries and interpretations are subject to change.

Suggested Citation:

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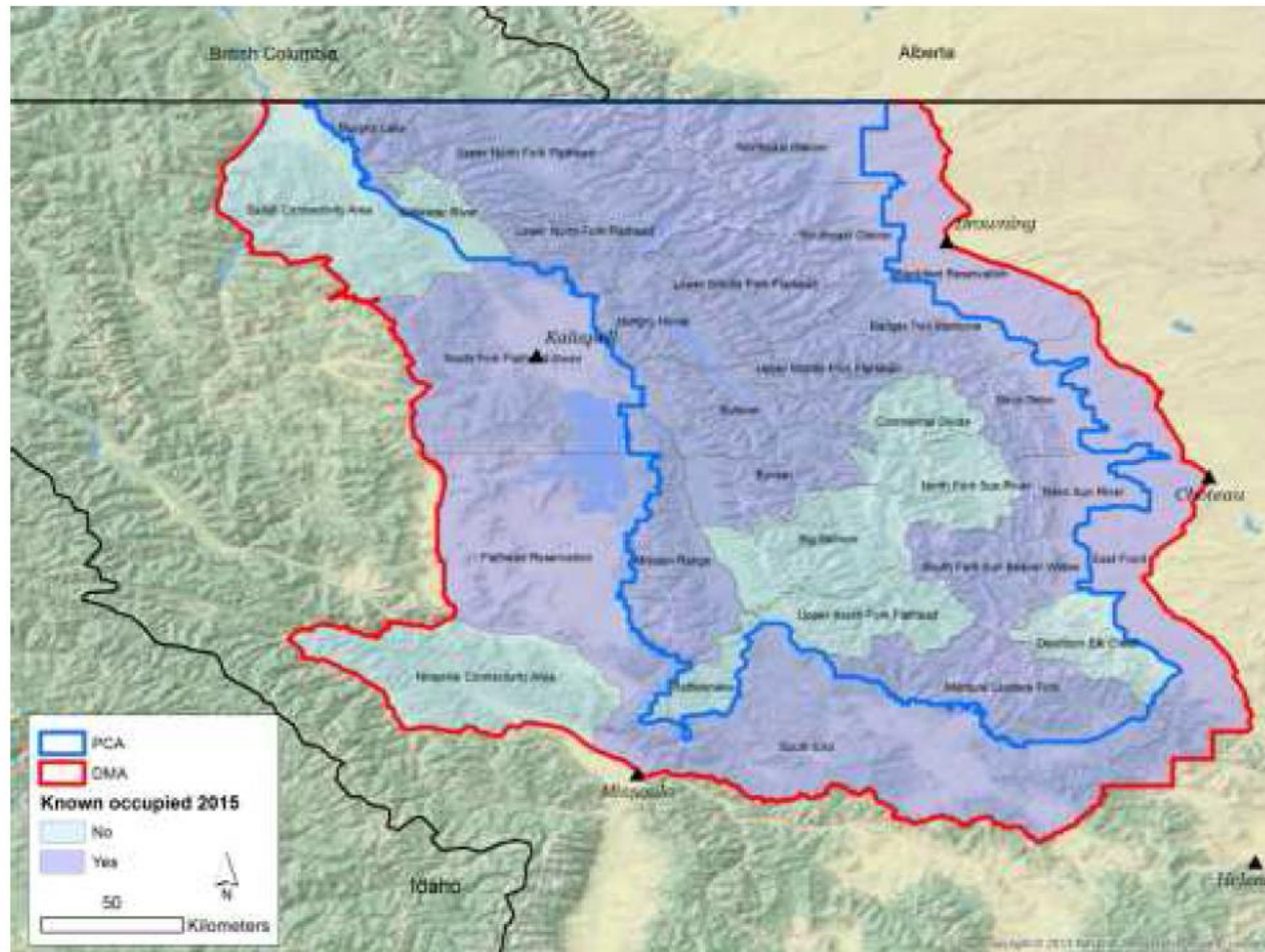


Fig. 4. Documented occupancy by female grizzly bears with offspring of the 23 BMUs within the PCA and the 7 supplementary BMUs within Zone 1 during 2015. All BMUs have been occupied during the last 6 years.





A People of Vision



**Montana Fish,
Wildlife & Parks**



Northern Continental Divide Ecosystem (NCDE) PROGRESS REPORT ON 5-YEAR PLAN TASKS 2013-2017

Jim Williams
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FWP
GNP

Chair
Vice Chair

Green = completed and ongoing or working well

Red = continued staff emphasis or new work area

- Enhance cooperative efforts with local communities by working closely in partnership with local residents and county governments to build local support and understanding about grizzly recovery and ecosystem health. **ONGOING**
- Invite local County Commissioners as members of the Subcommittee. **COMPLETED.**

Complete the NCDE Conservation Strategy, including:

- Establish the area within which morality standards and mortality limits will be applied. - **COMPLETED**
- Establish the area within which habitat standards and habitat criteria monitoring will be applied. - **COMPLETED.**
- Decide whether to apply a tiered management intensity system involving higher levels of habitat and population management in a core area and lesser levels of management intensity in surrounding areas. - **COMPLETED.**

Develop demographic recovery criteria for the NCDE, including:

- Population monitoring methods – **IN GOOD SHAPE WITH 2016 FWP REPORT.**
- Sustainable mortality limits – **NCDE SCIENCE TEAM TO APPLY BIOLOGICALLY APPLICABLE DEMOGRAPHIC CRITERIA USED IN THE GYE TO THE NCDE, AS APPROPRIATE.**
- Unknown/unreported mortality calculation - **IN GOOD SHAPE WITH 2016 FWP REPORT.**
- Decide on and apply trend monitoring methods. - **IN GOOD SHAPE WITH 2016 FWP REPORT.**

A POSSIBLE LINK BETWEEN YELLOWSTONE AND GLACIER GRIZZLY BEAR POPULATIONS

HAROLD D. PICTON, Department of Biology, Montana State University, Bozeman, MT 59717

Abstract: Grizzly bears (*Ursus arctos horribilis*) have been observed in 5 of the 7 mountain areas that link the Northern Continental Divide (Glacier Park) and Yellowstone ecosystem grizzly bear populations in Montana. Thus these 2 populations, recognized by the Grizzly Bear Recovery Plan (U.S. Dep. Int. 1981) are possibly linked by a filter bridge. Portions of this bridge are not included in the Grizzly Bear Recovery Plan. Current data is analyzed to make specific estimates of the population potential of the bridge units. Each unit is evaluated with respect to extinction time, migration, and potential as a viable bridge link using methods based upon biogeographic theory. This analysis suggests that these scattered observations should not be routinely classed as accidental and ignored as is currently the case.

Int. Conf. Bear Res. and Manage. 6:7-10

Studies of the last 20 years of related Montana grizzly bear populations have justifiably centered upon 2 areas: the Northern Continental Divide population, including Glacier National Park, extending south through the Great Bear, Bob Marshall, and Scapegoat wilderness areas, and the southern population including Yellowstone National Park and a limited contiguous area (Fig. 1). This southern population has been regarded as isolated from the northern population; this theoretical view is expressed in the Grizzly Bear Recovery Plan (U.S. Dep. Int. 1981). The 2 areas, however, are linked by mountainous country in primitive or semiprimitive condition. The Recovery Plan does not encompass management of this intervening habitat and thus its possible role in future grizzly bear management has not been provided for. As interest in grizzly bears has grown, increasing numbers of reports of bears outside the 2 recognized population blocks have come to me. Although many could not be verified, some are undeniable. These undeniable reports have sometimes been referred to as "accidental" observations in environmental impact statement documents (e.g., BPA 1981) and thus have not been incorporated into forest management plans or into the Grizzly Bear Recovery Plan. The number and pattern of the observations suggests several exploratory questions: does a biogeographic filter bridge (allowing intermittent travel) exist between the 2 populations? If potentially present, what are its properties? Can sufficient movement occur across the several hundred kilometers to be of genetic significance?

This study was supported by the Mont. Agric. Exp. Sta.

DISCUSSION

Observational data (Table 1) verify tracks, photographs, hair samples, and dead bears. Direct ob-

servations made by trained individuals who have worked extensively with bears and who are well acquainted with species recognition are also included. The observation reporting rate has been about 0.04 verified observations/100 km²/year compared to a rate of 0.07 verified observations/100 km²/year in the area immediately adjacent to that used by radio-equipped Yellowstone grizzly bears in the Madison and Gallatin ranges as estimated from Basile (1981). A more organized effort has been made to collect information concerning the area adjacent to Yellowstone Park than in the areas being discussed here.

According to MacArthur and Wilson (1967) the number of species inhabiting mountain habitats (e.g., grizzly bears) is controlled by the area of their habitat unit. In a previous study (Picton 1979), I found that the occurrence of grizzly bears and other large mam-

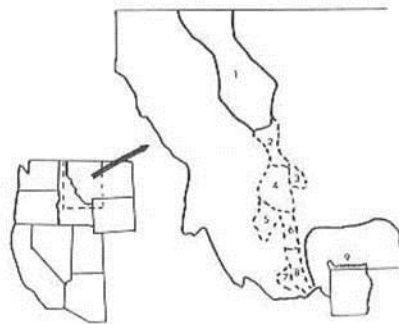


Fig. 1. Area proposed as a possible bridge linking the 2 officially recognized habitat areas. The areas shown are 1, Northern Continental occupied grizzly bear ecosystem; 2, McDonald-Rogers Pass; 3, Elkhorn Mountains; 4, Champlain-Thunderbolt; 5, Highland Mountains; 6, Tobacco Root Mountains; 7, Snowcrest Mountains; 8, Gravelly Mountains; 9, Yellowstone occupied grizzly bear ecosystem.



GRIZZLY BEARS NEED YOUR HELP

#DontDelistGrizzlies

Connectivity, Linkage Zones, and Suitable

The grizzly bears of the Greater Yellowstone Ecosystem are an isolated population and west has always been viewed as a biological necessity for the bear.

So, federal grizzly bear managers simply decided to ignore connectivity of the GYE population once every decade or so.

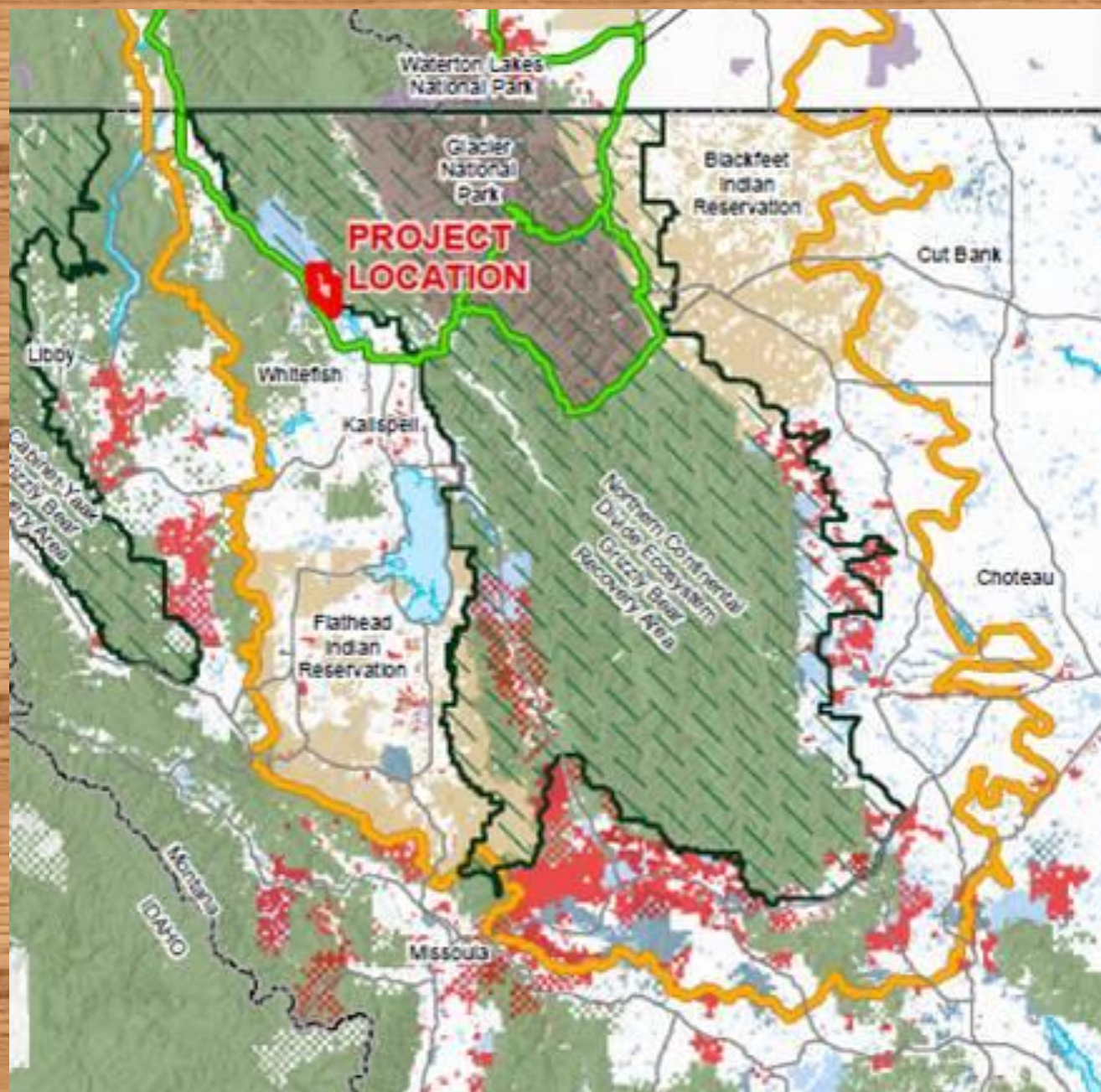
We believe that connectivity of the GYE population to at least one other population is essential for the long-term survival of the species.

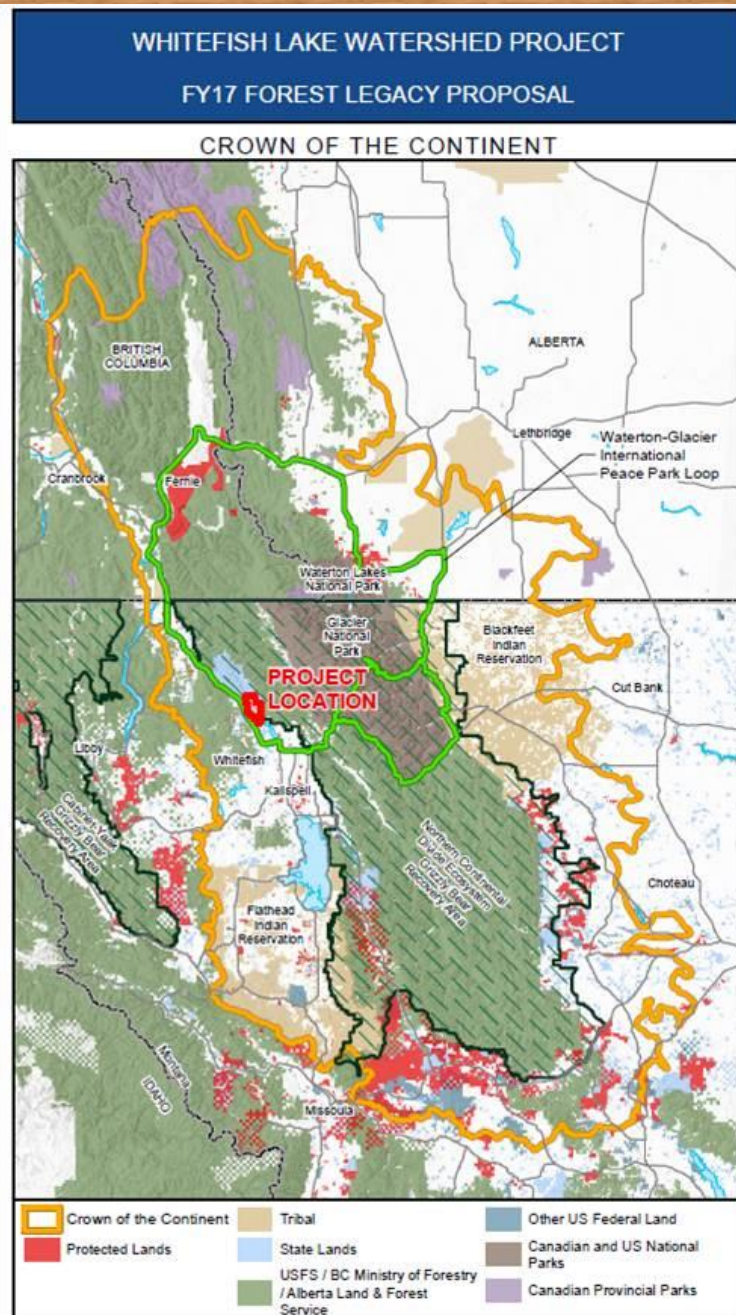
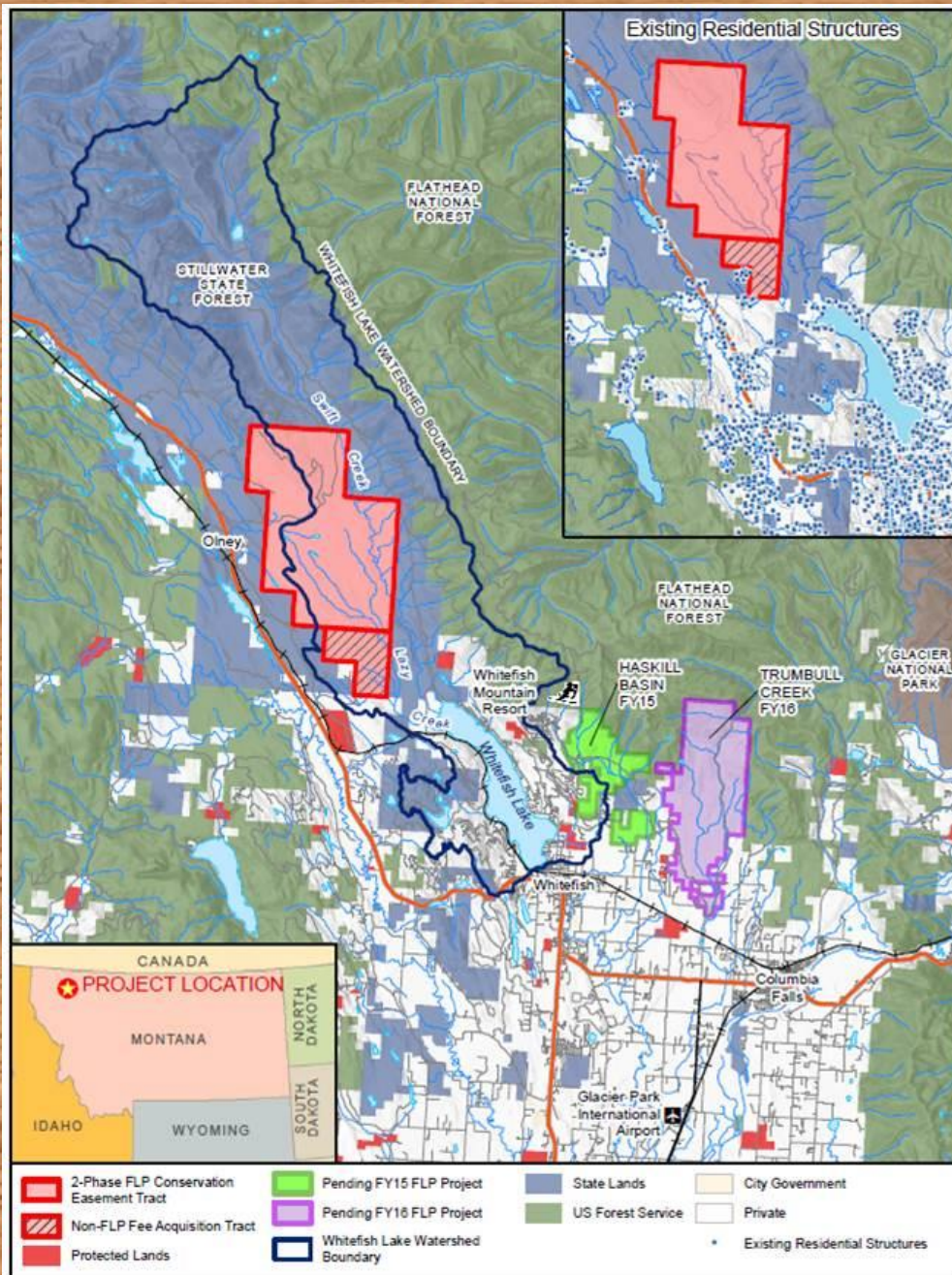
Connectivity and linkage zones remain an issue as the resumption of habitat connectivity between the various populations leaving the GYE population isolated is essential for the long-term survival of the species.

Well defined and biologically suitable linkage zones designed to connect the various populations need to be utilized, especially along the interstate highway system. Neglect this core need of the isolated GYA population is irresponsible. The GYE ecosystem. Human encroachment and habitat fragmentation associated with the recovery. Reduction in vehicle vs wildlife incidents would provide financial resources for the recovery of the GYE ecosystem.

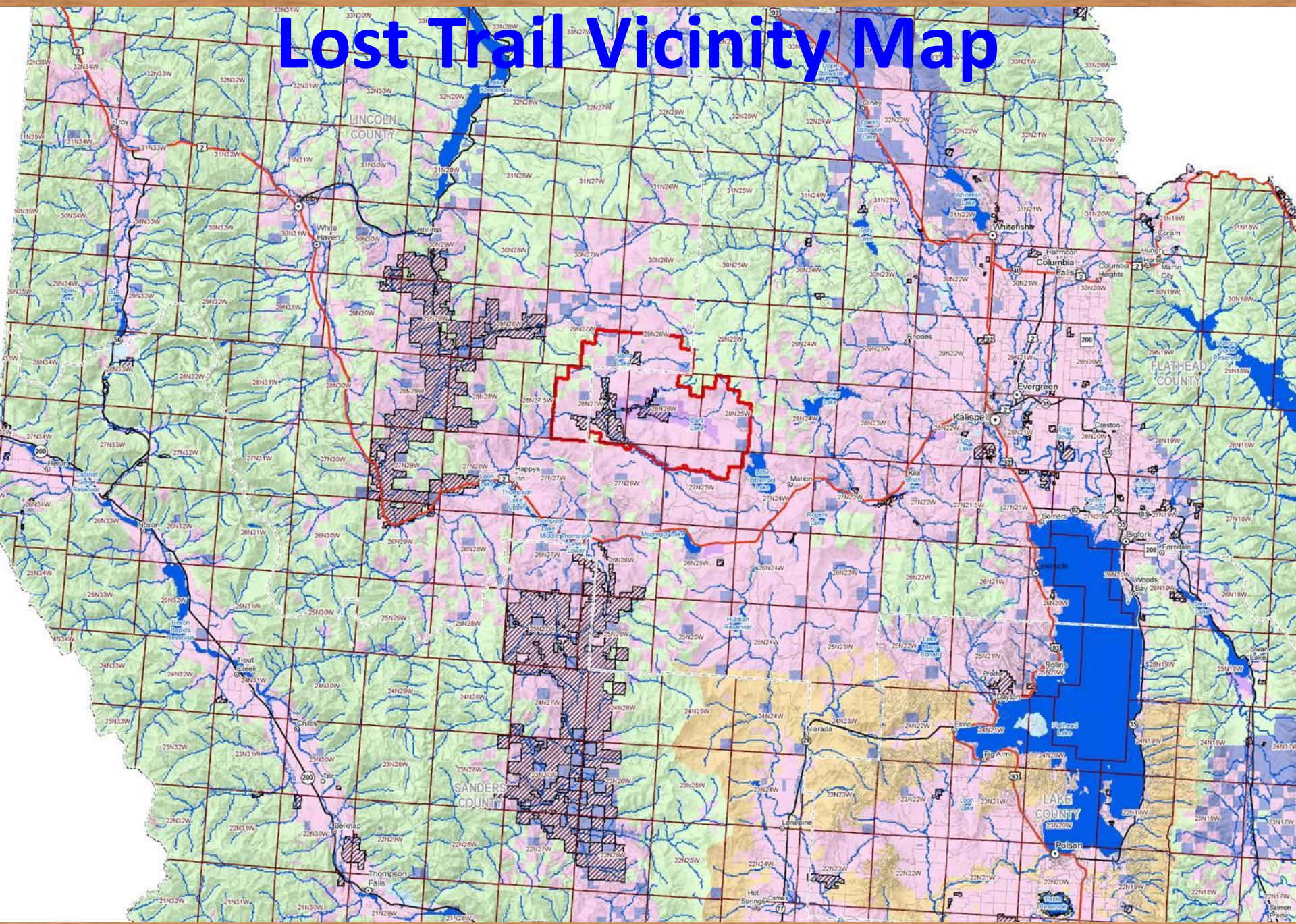
The USFWS has designated vast areas as Suitable Grizzly Habitat.







Lost Trail Vicinity Map





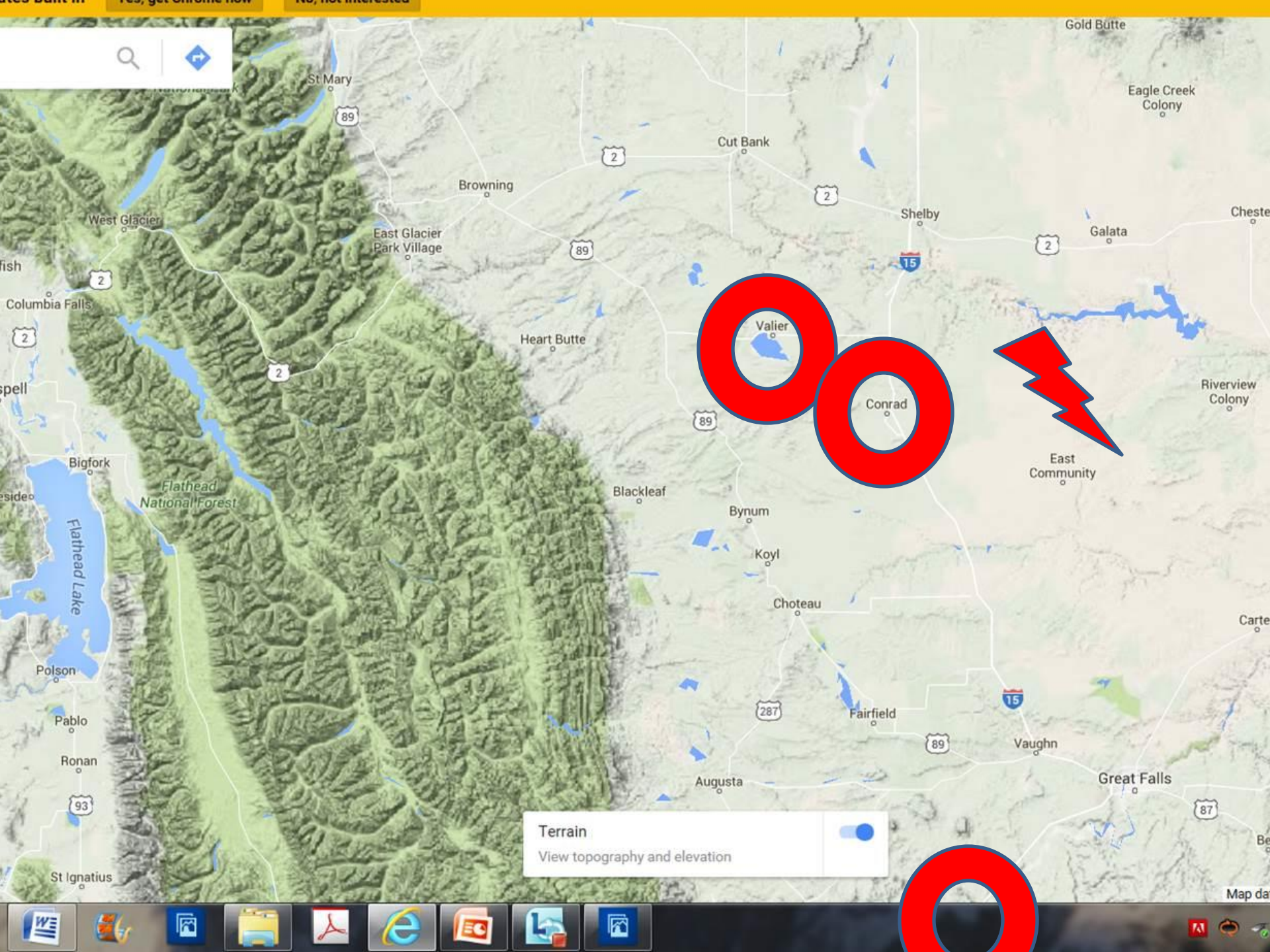
**We have about 1,000
grizzly bears
in the NCDE right now...**

**And growing at 2-3%
and occupying
new and historical habitats...**





Livestock Feed




Terrain

View topography and elevation





**G637 Ad Female Gbear "Swan" w/3yearlings
bedded in riparian shrubfield on Sheep Cr.
4-21-2012**

An aerial photograph of a grassy prairie. The terrain is a mix of light brown and green patches, indicating different vegetation or soil types. A red arrow points from the bottom center towards the middle of the image, highlighting a specific area of interest. The arrow is thick and bright red.

Ad Female Gbear "McDee"
arlings feeding in open
ass prairie, Dupuyer Cr

Near Valier, Montana



Cascade, Montana







20XX

GRIZZLY BEAR

Montana Hunting Regulations

Montana Fish, Wildlife & Parks



Subunit

BMU (Bear Mgmt Unit)

Primary Conservation Area

City, Town

Highways

MT State Boundary

Lakes, Reservoirs

Land Ownership

BLM

NPS

USFWS

USFS

USFS WILDERNESS

OTHER FEDERAL LANDS

TRIBAL LANDS

TRIBAL WILDERNESS

DNRC

MFWP

OTHER STATE LANDS

CITY/COUNTY GOVERNMENT

PVT - The Nature Conservancy

PRIVATE

MISSOULA

HELENA

MONTANA

1:22,500,000

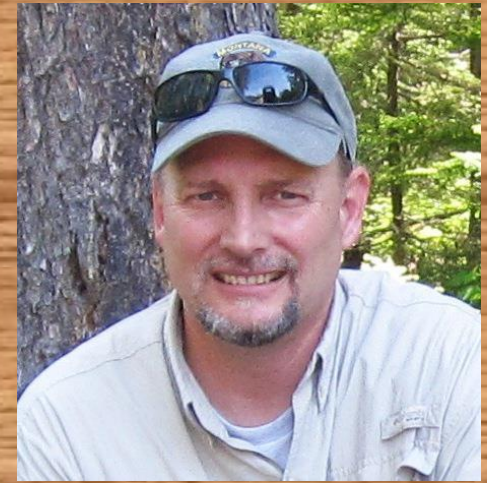
VICINITY MAP

Grizzly bear *Ursus arctos horribilis*. Photo by Donald M. Jones

Apply for General Licenses, Special Licenses, and SuperTags Online: fwp.mt.gov

The map displays the NCDE Primary Conservation Area, which is outlined in black. Within this area, various Bear Management Units (BMUs) are shown, each with a unique color and a light gray outline for its subunits. The BMUs include: Upper North Fork Flathead, Northeast Glacier, Lower North Fork Flathead, Lower Middle Fork Flathead, Hungry Horse, Sullivan, Bunker, Mission Range, Rattle-snake, Upper South Fork Flathead, North Fork Sun River, Teton Sun River, South Fork Sun Beaver Willow, Dearborn Elk Creek, Monture Landers Fork, Birch Teton, Continental Divide, Badger Two Medicine, and Upper Middle Fork Flathead. The map also shows land ownership, including BLM, NPS, USFWS, USFS, USFS Wilderness, Other Federal Lands, Tribal Lands, Tribal Wilderness, DNRC, MFWP, Other State Lands, City/County Government, PVT - The Nature Conservancy, and Private. A legend in the bottom left corner provides a key for these symbols. A vicinity map of Montana in the bottom right corner shows the location of the conservation area. The map includes a scale bar (1:1,225,000) and a north arrow.

Figure 2. Bear Management Units (BMUs) in the NCDE Primary Conservation Area. BMU subunits are outlined in light gray.



And if this group fails?

We get this....



FOR THOSE WHO LOVE *The* LAND

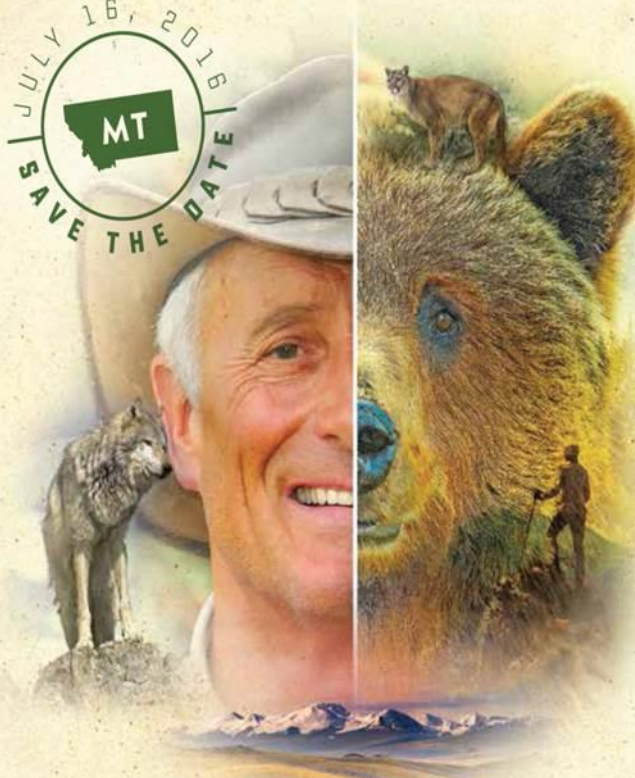
Rendezvous with

JACK HANNA

AND MONTANA'S OUTDOOR LEGACY
FOUNDATION FOR A "WILD" TIME.

7.16.16 FROM 5-9PM

BAR W RANCH, WHITEFISH



**MONTANA'S
OUTDOOR**
LEGACY FOUNDATION

www.mtoutdoorlegacy.org/event/hanna-rendezvous-on-the-wild-side

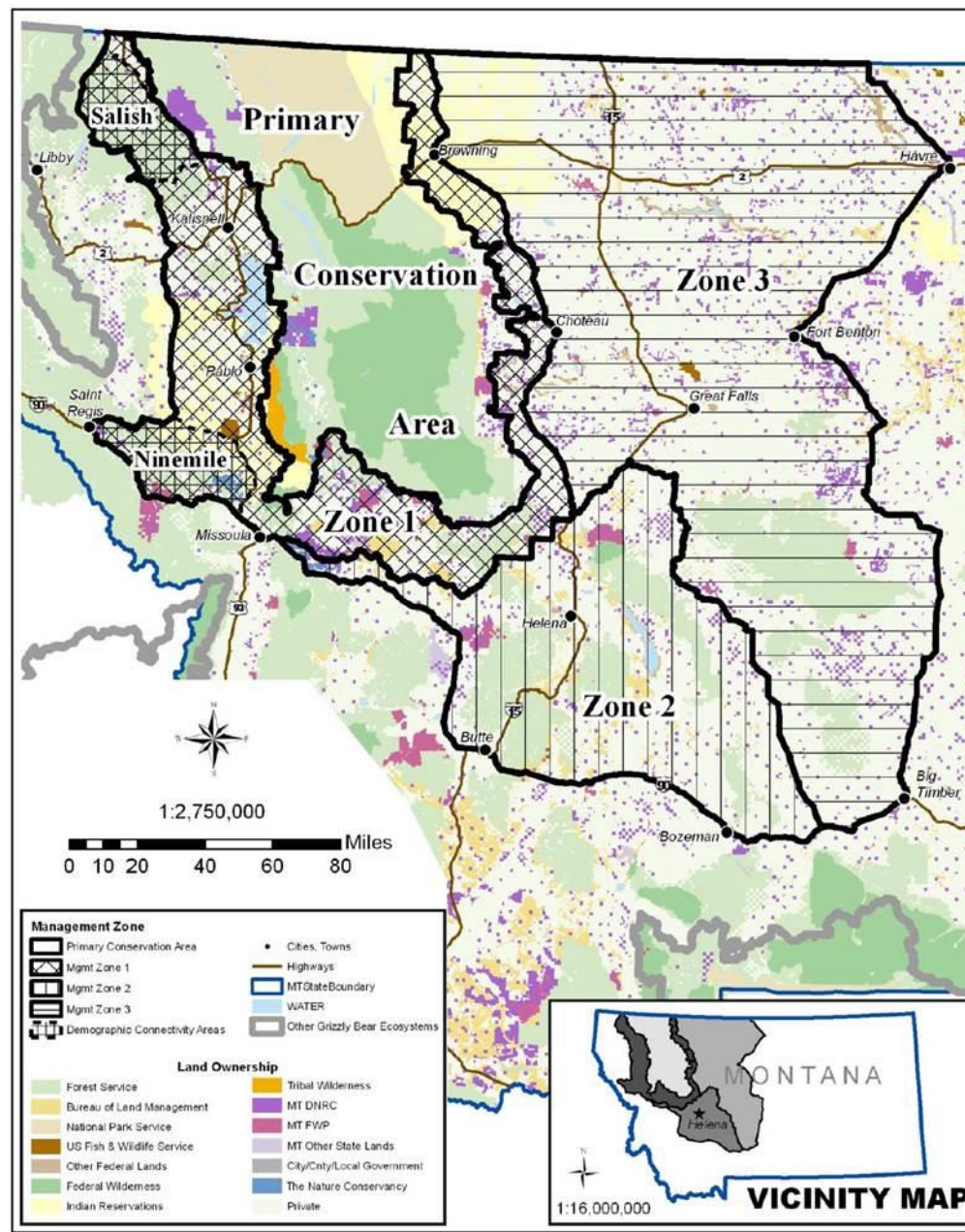


Figure 1. Grizzly bear management zones specified in this Conservation Strategy. The Salish and Ninemile Demographic Connectivity Areas within Zone 1 are delineated by cross-hatching.



THANKS

