



April 2, 2021

Gallatin County
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Submitted via email to:

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Garrett.Mcallister@gallatin.mt.gov, and
Commissioners@gallatin.mt.gov

Re: Comments on Draft Gallatin County Growth Policy; Recommendations Regarding Wildlife, Habitat, and Human-Wildlife Conflicts

Dear Gallatin County Commission, Planning Board, Steering Committee, Staff, and Consultant Team:

On behalf of the undersigned Bozeman-area conservation organizations, we appreciate the opportunity to submit the following comments on the Draft Gallatin County Growth Policy (“Draft Growth Policy”).¹ Thank you for all of the time, consideration, and effort that has gone into developing it. The Draft Growth Policy is a thoughtful, forward-looking document that will serve as an important guide to help Gallatin County and its residents navigate the many challenges that we will face in the years ahead.

We offer the following thoughts and recommendations on those aspects of the plan pertaining to wildlife conservation, habitat protection, and human-wildlife conflict reduction—particularly with respect to black and grizzly bears. We appreciate the many important wildlife-related provisions already contained in the document. We recommend, however, that language be added to the Draft Growth Policy to: 1) reflect the importance of Gallatin County to maintaining the integrity and biodiversity of the Greater Yellowstone Ecosystem (“GYE”) and its connectivity with other ecosystems; and 2) incorporate additional specific language and goals aimed at

¹ See Gallatin County Draft Growth Policy, *Envision Gallatin: Tomorrow Together, Working Draft for Public Review* (Feb. 8, 2021) (“Draft Growth Policy”), available at <https://envisiongallatin.com/>.

reducing the negative impacts that transportation, recreation, subdivisions, and conflicts with humans have on bears and other wildlife.

I. Gallatin County Is Integral to the Overall Health of the Greater Yellowstone Ecosystem

Gallatin County plays a key role in protecting the overall ecological and biological health of the GYE, which is among the most intact temperate ecosystems remaining in North America. A primary reason that the GYE is so unique is its wildlife. Nowhere else in the lower 48 states do large herds of elk, bison, mule deer, and other ungulates roam over such a vast landscape, completing some of the longest annual migrations in the contiguous United States. *See* Middleton et al. (2019). In addition, all of the native carnivores present in this region centuries ago still exist on the landscape today, including grizzly bears, gray wolves, and wolverines. As discussed below, Gallatin County’s mountains, rivers, and valleys not only provide important habitat for these species, but are also critical to ensuring that GYE grizzly bears and other wide-ranging species are able to connect to populations to the north and re-establish populations in historical habitat to the west.

For all of these reasons, we believe it is crucial that the Draft Growth Policy clearly acknowledges and honors the important role that Gallatin County plays in maintaining the intact nature of the GYE as a whole. Thoughtful planning and careful consideration of wildlife populations and habitat within Gallatin County is even more important when one considers that, while large areas of designated wilderness adjoin Yellowstone National Park to the northeast, east and south to protect wildlife and wildlife habitat, only small portions of wilderness exist northwest of Yellowstone, in Gallatin County.

While we recognize and appreciate the attention already given to wildlife and wildlife habitat through several specific recommendations and policies in the Draft Growth Policy, we could find no language that recognizes this important overall role of the County within the GYE context. We request that the introductory “Setting”² discussion of the Growth Policy include language describing the role of Gallatin County in protecting the integrity of the GYE. We also recommend that the Growth Policy’s “Vision”³ include the following specific language recognizing the world-renowned wildlife of the County and the GYE:

Gallatin County upholds and advances values that protect the unparalleled beauty of its landscape *and its world-renowned wildlife*, honor its rich history rooted in agriculture, and promote the development of healthy, welcoming communities that offer a variety of extraordinary opportunities.⁴

² Draft Growth Policy, p. 1-1.

³ Draft Growth Policy, p. 2-3.

⁴ Draft Growth Policy, p. 2-3 (italicized language added).

II. Gallatin County Is Critical to Achieving Wildlife Connectivity between the Greater Yellowstone and Northern Continental Divide Ecosystem

Gallatin County serves an important role in facilitating connectivity between rare and sensitive populations of species such as grizzly bears, wolverines, and lynx. While they remain listed as “threatened” under the Endangered Species Act,⁵ grizzly bears in the GYE have made great strides toward expanding their range. Bears are roaming further south and west of the GYE than they have in decades, with confirmed presence in southern Wyoming,⁶ far-western Montana,⁷ and central Idaho.⁸ Healthy grizzly bear populations require connectivity, and southwestern Montana is, and will continue to be, critical for bears moving between the GYE and the Northern Continental Divide Ecosystem (“NCDE”).⁹ Gallatin County, which includes both productive bear habitat and pockets of developing communities, is an important piece of the connectivity puzzle for a dispersing bear. We urge the Commission to consider this as it further develops and finalizes the Draft Growth Policy.

Gallatin County functions as a buffer zone and a corridor for wildlife traveling out of Yellowstone Park, which is a source of grizzly bears and other large carnivores. Grizzlies are dispersing west and north out of Yellowstone’s northwest corner and into Gallatin County.¹⁰ Grizzlies are known to disperse around West Yellowstone and north on both sides of the Gallatin Canyon corridor, with a grizzly having been confirmed only a few miles from downtown Bozeman in 2020 by Montana Fish, Wildlife and Parks (“FWP”).¹¹

The Gallatin Range, the Big Sky area, the West Yellowstone area, Bozeman Pass, and other locations within the county are important grizzly bear habitats and travel corridors. The Draft Growth Policy acknowledges this and defines some of these areas as “core wildlife habitat,” the highest value habitat identified in the plan. For example, core wildlife habitat includes “wildlife habitat surrounding Big Sky; wildlife habitat near Hebgen Lake; areas important for wildlife movement and migration in Bozeman Pass and the Hebgen Lake area; and areas that may have some native habitat and where there is higher wildlife use.”¹² More specifically, and in regard to

⁵ See 50 C.F.R. § 17.11(h).

⁶ See *Game and Fish verifies grizzly bear sighting in southern Wyoming Range*, WYO4NEWS, May 29, 2020, available at <https://wyo4news.com/news/game-and-fish-verifies-grizzly-bear-sighting-in-southern-wyoming-range/>.

⁷ See Justin Housman, *Lone Grizzly Makes a Home in Bitterroot Ecosystem—First Time in 80 Years*, ADVENTURE JOURNAL, July 22, 2019, available at <https://www.adventure-journal.com/2019/07/lone-grizzly-makes-a-home-in-bitterroot-ecosystem-first-time-in-80-years/>.

⁸ See Eric Barker, *Trail camera captures second grizzly in Idaho area where few have been seen for decades*, IDAHO STATESMAN, Jan. 29, 2020, available at <https://www.idahostatesman.com/outdoors/article239664003.html>.

⁹ See, e.g., Dixon, B., Canfield, J., Barnett, J., and Stasey, C. Assessment Forest Plan Revisions: Final Terrestrial Wildlife Report for the Custer Gallatin National Forest (Feb. 16, 2017) (“Wildlife Report”), p. 39, available at https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd533114.pdf.

¹⁰ See, e.g., Wyoming Game & Fish Department, *Approximate Distribution of Grizzly Bear in Wyoming*, <https://wgfd.wyo.gov/wildlife-in-wyoming/more-wildlife/large-carnivore/grizzly-bear-management>.

¹¹ See Michael Wright, *Grizzly ambles through Bear Canyon near Bozeman*, BOZEMAN DAILY CHRONICLE, Oct. 23, 2020, available at https://www.bozemandailychronicle.com/news/grizzly-ambles-through-bear-canyon-near-bozeman/article_2e289dca-d8e5-5512-a8a7-0033042521ce.html.

¹² Draft Growth Policy, p. 5-33.

grizzlies, the plan states that Bozeman Pass is important for wildlife movement and migration, citing Peck et al. (2017) and its model predicting grizzly bear movement.¹³ Peck et al. also identify several other areas—both within and just outside Gallatin County—that could serve as possible routes and significant opportunities for grizzly bears to connect between the GYE and NCDE, including the Madison, Gravelly, Bridger, and Tobacco Root Mountain Ranges. *See* Peck et al. (2017).

Wolverines and Canada lynx also rely on the rugged landscapes of Gallatin County to move between ecosystems. For example, the Final Terrestrial Wildlife Report (“Wildlife Report”) completed for the recent revision of the Custer Gallatin National Forest management plan noted the importance of the Bridger, Bangtail, and Tobacco Root (among other) mountain ranges—located in or near Gallatin County—to wolverine and lynx attempting to migrate from Yellowstone National Park to the NCDE.¹⁴ Regarding wolverine, the Wildlife Report specifically noted:

[A]nother area important for wolverines has been coined the “Central Linkage Region” by Inman and associates (2014). The Central Linkage Region consists of relatively small patches of suitable wolverine habitat found in a number of isolated mountain ranges located between the larger contiguous blocks of wolverine habitat. The Central Linkage Region includes the Bridger, Bangtail and Crazy Mountain Ranges of the Custer Gallatin National Forest, as well as other small mountain ranges to the north and west (e.g., the Belts, Anaconda/Pintler, and Gravelly Ranges).¹⁵

These small ranges will likely become even more important for wolverines in the future due to a warming climate and changes to their historical habitat. As noted in the Wildlife Report, “by about year 2070, important dispersal corridors connecting the Greater Yellowstone Area wolverine population to other core areas such as Glacier National Park and the Bob Marshall Wilderness complex in northwest Montana, would shift to the east, assessing greater import to the Bridger/Bangtail/Crazy Mountain landscape in the plan area for wolverine connectivity.”¹⁶

These areas will also prove increasingly important for Canada lynx. Like grizzly bears, lynx are listed as threatened under the Endangered Species Act.¹⁷ They are imperiled by a multitude of threats associated with climate change, including loss of boreal spruce-fir forest habitat, contraction of snow conditions that favor lynx over other snowshoe hare predators, and reduced gene flow between Canadian and U.S. lynx populations.¹⁸ As with wolverines, the Wildlife Report noted that mountain ranges such as the Bridgers, Bangtails, and Crazies that are located

¹³ Draft Growth Policy, p. 5-36.

¹⁴ *See* Wildlife Report, pp. 39, 55, 67, 76.

¹⁵ *See* Wildlife Report, p. 67.

¹⁶ *See* Wildlife Report, p. 76.

¹⁷ *See* 50 C.F.R. § 17.11(h).

¹⁸ *See* U.S. Fish and Wildlife Service, Species Status Assessment for the Canada Lynx (*Lynx canadensis*): Contiguous United States Distinct Population Segment (Oct. 2017), p. 8.

in or near Gallatin County “may provide important connecting habitat to facilitate north-south movement of lynx, which could play a role in connecting [lynx in] the . . . Greater Yellowstone Area to source populations in northwestern Montana and/or Canada.”¹⁹

We appreciate that the Draft Growth Policy recognizes many of the areas delineated above as “core wildlife habitat” and “higher value for wildlife.”²⁰ However, we encourage the County to adopt the following policy under the Heritage Theme, Topic 3: Fish, Wildlife and Plant Habitat²¹ committing to the long-term conservation of these areas for the specific purpose of maintaining their important role in facilitating wildlife connectivity:

HAB-1-10. Preserve habitat that facilitates connectivity between populations of rare and sensitive species such as grizzly bears, wolverines, and Canada lynx in the Greater Yellowstone Ecosystem and populations of those species in other ecosystems to the north and west.

III. Transportation

The Draft Growth Policy should consider the potential impacts of new roads and changes to the existing transportation system on wildlife prior to construction or modification.

Wildlife struggle to meet their survival needs when roadways impede or discourage them from traveling in order to reach food, find mates, or meet habitat requirements. *See* Trombulak & Frissell (2000). Mitigation and conflict-prevention measures can drastically reduce collisions and human, wildlife, and economic losses while still allowing efficient travel for people and wildlife. Over forty measures aimed at mitigating wildlife-vehicle collisions have been developed, with variable rates of effectiveness. *See* Huijser et al. (2009). Wildlife fencing and animal detection systems, such as conspicuous warning signs with flashing lights that are triggered when a sensor detects wildlife crossing the road, used both individually and in combination, are particularly cost-effective. *See* Huijser et al. (2009), Table 1 and Fig. 5. Many of these mitigation measures have been shown to pay for themselves over time through collision cost prevention when installed at collision hotspots, saving taxpayer dollars in the long run. *See* Huijser et al. (2009); Clevenger & Huijser (2011).

In a 2016 study of wildlife-vehicle collision hotspots in Montana, the ten-mile stretch of US Highway 191 just south of Four Corners had the second-highest number of wildlife carcasses along the side of the road of any section of highway in the state. *See* Creech, McClure, & Calahan (2016). The area around Highway 191 serves as a refuge for animals like elk, moose and bighorn sheep, while also providing habitat connectivity for wide-ranging and rarer species, including grizzly bear, wolverine, lynx (*see* Peccia & Associates (2020)), mountain lions and wolves. Grizzly bears have a sustained presence in the Gallatin and Madison Ranges, which also

¹⁹ *See* Wildlife Report, p. 55.

²⁰ Draft Growth Policy, pp. 5-34 – 5-35.

²¹ Draft Growth Policy, p. 6-6.

form part of an important corridor linking GYE bears to bears in the NCDE, as discussed above. *See Gehman (2010).*

In 2020, the Montana Department of Transportation (“MDT”) conducted a corridor study related to Highway 191 improvements from Four Corners to Beaver Creek Road south of Big Sky.²² Bozeman and Big Sky are two of the fastest growing communities in Montana, bringing increasing traffic volume to this corridor and all of Gallatin County. MDT’s corridor analysis studied highway expansion effects and listed both reducing animal-vehicle conflicts and accommodating wildlife movement as key objectives of the study.

Another study of wildlife movement in the Bozeman Pass area, conducted by the Craighead Institute in 2011, contains important recommendations to improve the ability of wildlife to cross the highway safely and to improve public safety.²³

We urge the State and the County to work with MDT to ensure that effective mitigation and renovation measures are implemented in road corridors of concern in key wildlife habitat areas, including Highway 191 from Four Corners to West Yellowstone, Huffine Lane from Bozeman to Four Corners, and Interstate 90 from Bozeman to Bozeman Pass. Montana residents and visitors would benefit from a County planning process that affirmatively addresses public concerns at the nexus of human safety and wildlife stewardship.

We encourage the County to take a holistic and proactive approach to reducing collisions and providing safer passage for both people and wildlife, including particularly vulnerable animals such as bears, elk, and moose. Employing proven solutions to mitigate these issues will reduce human, wildlife and economic losses, and would likely result in stream and road crossings that require less maintenance over time. Accordingly, we recommend adding the following policies to the Draft Growth Policy under the “Opportunities” theme for Topic 3: Transportation:²⁴

TRN-1-19. Undertake a comprehensive assessment of wildlife-vehicle conflicts and potential mitigations and conflict-prevention options related to the County’s transportation system.

TRN-1-20. Require appropriate analysis and consideration of potential impacts to wildlife and wildlife movement prior to initiation of transportation projects in the County.

²² *See* Peccia & Associates. 2020, available at https://www.mdt.mt.gov/pubinvolve/us191/docs/US191_CorridorStudy_FINAL.pdf.

²³ *See* Craighead, L., Craighead, A., and Oechsli, L. MDT and U.S. Department of Transportation, Federal Highway Administration, Bozeman Pass Post-Fencing Wildlife Monitoring (Jan. 2011), available at https://www.mdt.mt.gov/other/webdata/external/research/docs/research_proj/boz_wildlife/final_report_jan11.pdf.

²⁴ Draft Growth Policy, p. 6-19.

IV. Recreation

As noted in the Draft Growth Policy, the human population of Gallatin County is growing rapidly, with a 64 percent increase from 2000 to 2018, and it is currently the fastest-growing county in Montana. This growth is projected to continue for the foreseeable future,²⁵ particularly considering the continuing influx of people as a result of the COVID-19 pandemic. Associated use of existing trails and demand for increased recreational access is growing rapidly in Gallatin County. This increased recreational use and demand has the potential to displace wildlife from important and necessary habitat.

Indeed, it appears that such wildlife displacement has already occurred near Bozeman. For example, in the past elk would routinely move out of the foothills in the Mount Ellis area in the fall to winter in open space between the foothills and I-90. They often moved west of Kagy Boulevard to spend several weeks or more in the area that is now the Highland Glen Nature Preserve, providing a unique opportunity for Bozeman residents to enjoy the sights and sounds of wild elk within the city limits. In 2014 a video of these elk crossing Kagy Boulevard near the confluence of Bozeman Trail went viral on the internet.²⁶ Soon after, the Highland Glen Trail was opened to the public and elk use of the area has apparently ceased since.

We request that the Growth Policy include the following policy under the Open Space theme, Topic 2: Recreation:²⁷

REC-1-9. Require comprehensive analysis of potential impacts to wildlife and recommendations for mitigation conducted by a qualified professional prior to establishment of new recreational trails and/or changes to existing recreational trails, to ensure wildlife are not displaced as a result of increased recreational activities.

V. Subdivisions

As noted in the Draft Growth Policy, 53 percent of the land in Gallatin County is privately owned, with 15 percent under conservation easements.²⁸ With the rapid pace of construction to meet new housing demand, it is imperative that the Draft Growth Policy ensures that the landscape is permeable to wildlife and that enforceable measures are in place to prevent increased conflicts between people and wildlife.

⁴ Draft Growth Policy, p. 4-4.

²⁶ See Associated Press, Bozeman elk herd video, with 1 straggler, goes viral, MISSOULIAN, April 9, 2014, available at https://missoulain.com/news/state-and-regional/bozeman-elk-herd-video-with-1-straggler-goes-viral/article_a44463fc-c00c-11e3-8f14-001a4bcf887a.html.

²⁷ Draft Growth Policy, p. 6-11.

²⁸ Draft Growth Policy, p. 4-15.

In regard to subdivisions, the Draft Growth Policy should include a recommendation to update the county subdivision regulations to align with the FWP Recommendations for Subdivisions.²⁹ We agree with the Draft Growth Policy's stated goal of prioritizing infill to reduce sprawl, but are concerned that in areas slated for higher density such as the Bozeman-Belgrade-Four Corners Triangle there will be unnecessary loss of wildlife habitat that could otherwise enhance the urban environment. We are particularly concerned that movement corridors along streams will be blocked and wildlife will be prevented from using these riparian areas to navigate past urban areas without conflict (as now occurs with Bozeman Creek).

Maintaining sufficient buffers and restoring vegetation to improve habitat, which is often severely degraded along stream channels in the Triangle, is critical for wildlife, would help reduce wildlife conflict in developed areas, and presents a rare opportunity to improve wildlife habitat in some cases as areas are developed. In addition, wetland habitats can support a diversity of wildlife species even within densely developed areas if sufficient naturally vegetated buffers are retained. Adopting FWP recommendations for water bodies into county subdivision regulations as suggested above would greatly improve the value of wetlands remaining in developed areas for wildlife.

VI. Human-Wildlife Conflicts

We appreciate the Draft Growth Policy's several goals, recommendations, and policies that seek to protect wildlife, enhance wildlife habitat, and reduce human-wildlife conflicts. We encourage the following additions to ensure that those provisions are applied across all relevant landscapes, that the Draft Growth Policy identifies particularly important conflict-prevention strategies, and that the County commits to monitoring progress made and emerging needs in its ongoing efforts to reduce conflicts with bears and other wildlife.

A. Wildlife Habitat Goals and Recommendations

First, in its wildlife habitat chart on page 5-37, the Draft Growth Policy should apply the goal of "maintaining grizzly bear and black bear populations" to areas of "higher value for wildlife."³⁰ Currently, the Draft Growth Policy applies this goal to "core wildlife habitat" and areas designated as having "lower value for wildlife," but not to higher-value habitat areas.³¹ Much of the northern portion of the County has relatively high-value wildlife habitat; for example, as discussed above, much of that landscape could provide important habitat for grizzly bears moving between the GYE and NCDE. It is important that the County identify a goal of maintaining bear populations in those areas.

²⁹ See FWP, Fish & Wildlife Recommendations for Subdivision Development: A Working Document (April 2012), available at <https://fwp.mt.gov/conservation/living-with-wildlife/subdivision-recommendations>.

³⁰ Draft Growth Policy, p. 5-37.

³¹ Draft Growth Policy, p. 5-37.

Similarly, in the same chart, the Draft Growth Policy should apply the goal of minimizing human-bear encounters to all land types. That goal currently only applies to core wildlife habitat and areas with lower habitat value.³² Further, that goal should apply to lands near all urban areas, not just Big Sky.³³ For example, in Bear Canyon, just outside Bozeman, residents regularly experience conflicts with black bears as a result of unsecured attractants, and a grizzly bear moved through the area last fall.³⁴ It is important to prevent human-bear conflicts wherever they occur, both to conserve bear populations and to keep humans, bears, and property safe.

B. Wildlife Policies

We are encouraged that, under its Heritage Theme, Topic 3: Fish, Wildlife and Plant Habitat, the Draft Growth Policy identifies a number of important policies in support of its goal to “[e]mbrace living with wildlife principles to reduce human-wildlife conflicts.”³⁵ We recommend making two amendments to these policies and adding a policy focused on reducing livestock-predator conflicts to the Heritage Theme, Topic 1: Agriculture.

First, the County should specifically seek to partner with municipalities to reduce conflicts. The Draft Growth Policy recognizes that “growth policies should complement one another across jurisdictional lines.”³⁶ The City of Bozeman, for example, recently adopted an updated Growth Policy that contains the following goal: “Develop a plan to mitigate conflicts between humans and wildlife through the use of proactive, nonlethal measures.”³⁷ The Draft Growth Policy should seek to complement that goal, and the County should work with the City of Bozeman to attain that shared objective. We recommend specifically adding “municipalities” to the Draft Growth Policy’s HAB-2-1 policy as follows:

HAB-2-1. Work with FWP, property owners, *municipalities*, and other partners to develop and communicate principles for Living with Wildlife.³⁸

Second, the County should specifically identify electrified fencing as an effective way to secure attractants. If used correctly, electric fencing is a highly effective bear deterrent. It has been used to deter grizzly bears in North America for decades. In the 1970s, electric fences were successfully used to exclude grizzlies from garbage dumps in U.S. and Canadian national parks, including Yellowstone, Denali, Banff, and Jasper.³⁹ Since then, electric fencing has been used successfully to keep bears from accessing beehives, livestock, fruit trees, and other

³² Draft Growth Policy, p. 5-36 – 5-37.

³³ Draft Growth Policy, p. 5-37.

³⁴ See Wilkinson, Todd, *Did you Hear About the Griz that Wandered Down Bear Canyon?*, MOUNTAIN JOURNAL, Oct. 23, 2020, available at <https://mountainjournal.org/a-grizzly-sighting-on-edge-of-bozeman-sparks-lots-of-questions>.

³⁵ Draft Growth Policy, p. 6-7.

³⁶ Draft Growth Policy, p. 1-4.

³⁷ See Bozeman Community Plan (Nov. 17, 2020), Goal EPO-4.6, p. 38, available at <https://www.bozeman.net/Home/ShowDocument?id=1074>.

³⁸ Draft Growth Policy, p. 6-7 (italicized language added).

³⁹ See Interagency Grizzly Bear Committee, *Grizzly Bear Compendium* (1987), p. 92.

attractants. Shocks delivered by electric fences not only deter bears, but also aversively condition them to stay away and avoid high human-traffic areas.

Electric fencing can achieve a near-100 percent success rate, when implemented and maintained properly. For example, a recent study of the effectiveness of electric fencing to protect livestock in Montana’s Mission Valley found that “[n]o depredations occurred when livestock were inside a properly functioning electric fence and 7 livestock depredations occurred at sites without electrified fencing.” Eneas et al. (2020), p. 37. The researchers found that the probability of depredation without an electrified fence was 50 percent, while the probability with an electric fence was zero. *See* Eneas et al. 2020, p. 45.

Both portable and permanent electric fencing have proven highly effective. In 2018, Smith et. al investigated the efficacy of portable electric fencing systems for bear deterrence and confirmed that they were effective in protecting humans, their food, and property from bears in a variety of environments. *See* Smith et al. (2018), p. 311. The study implemented field trials of portable electric fencing systems around campsites in Alaska, Montana, and Wyoming. The trials used electric mesh nets to protect food caches in these bear-dense areas for “5,638 user nights with no loss of food, save 1 instance,” which “strongly underscores the effectiveness of this tool for protecting people, their gear, and bears from trouble.” Smith et al. 2018, p. 320.

In recognition of the particular importance and effectiveness of electric fencing as a bear conflict-prevention measure, we recommend that the Draft Growth Policy be revised as follows:

HAB-2-3. Utilize covenants and other tools to address the following: . . .
Reduction *and securing* of attractants (prohibiting outdoor food storage, elevated bird feeders, *surrounding potential attractants with electric fencing*, etc.) . . .⁴⁰

Finally, we recommend adding the following policy under the Heritage Theme, Topic 1: Agriculture:⁴¹

AGR-1-13. Work with agricultural producers, wildlife management agencies, and wildlife conservation organizations to develop nonlethal strategies to reduce conflicts between livestock and large carnivores.

Measures such as riders on horseback, scare devices like air horns and Critter Gitters®⁴², livestock guarding dogs, and temporary and permanent electric fencing, as discussed above, have all proven effective at deterring large carnivores and keeping livestock safe. People and Carnivores, among other organizations, has developed several manuals and guides that explain how these tools can be used and the scientific research that has been conducted to test their efficacy.⁴³ The undersigned organizations would welcome the opportunity to work with the County and its partners to develop and implement strategies

⁴⁰ Draft Growth Policy, p. 6-7 (italicized language added).

⁴¹ Draft Growth Policy, p. 6-3.

⁴² *See* Critter Gitter®: Keep Unwanted Guests away from Protected Areas, <https://crittergittersensor.com/>.

⁴³ *See* People and Carnivores, Manuals & Guides, available at <https://peopleandcarnivores.org/manuals-and-guides>.

to reduce agricultural conflicts involving wolves, bears, mountain lions, and other predators occurring on lands subject to the Draft Growth Policy.

C. Human-Wildlife Conflict Monitoring

Finally, the Draft Growth Policy recognizes the importance of monitoring specific indicators pertaining to its themes and goals, both as a way to measure “progress towards the community’s vision and also [to] provide[] a baseline from which the County can track trends.”⁴⁴ In a table in Section 8, the Draft Growth Policy identifies several indicators that the County intends to monitor.⁴⁵ For example, it commits to monitoring total acreage of preserved land as a way of gauging the County’s progress towards its goal of maintaining open space.⁴⁶

The table should include an additional indicator regarding human-wildlife conflicts—particularly conflicts with bears. This will be important to help the County determine both the baseline number of conflicts currently occurring and whether the number and types of conflicts increase, decrease, or remain the same as the Growth Policy takes effect. We recommend adding the following section to the table:

Indicator	Source	Frequency	Notes	Status	Target
<i>Human-Wildlife Conflicts</i>					
<i>Conflicts with Bears and Other Wildlife</i>	Reports from County residents and visitors; nonprofit organizations; Gallatin County Sheriff’s Office; FWP; U.S. Fish and Wildlife Service	Annually	Numbers of conflicts and conflict types (such as bears accessing garbage bins and wildlife-vehicle collisions), location of conflicts, and actions taken		Decrease

As it monitors human-wildlife conflicts on lands subject to the Growth Policy, the County should maintain a database and map accessible to the public indicating the numbers and types of conflicts occurring, where they are occurring, and nonlethal steps being taken to prevent their future occurrence. Such a resource would help alert residents and visitors to the potential presence of bears and other wildlife in their area, inform them about steps they should take to avoid conflicts, and help the County track improvements in reducing negative human-wildlife interactions as the Growth Policy takes effect and new polices are implemented.

⁴⁴ Draft Growth Policy, p. 8-10.

⁴⁵ Draft Growth Policy, p. 8-10.

⁴⁶ Draft Growth Policy, p. 8-10.

VII. Conclusion

We appreciate the many provisions already included in the Draft Growth Policy aimed at protecting the County's rare and sensitive wildlife and the unique landscapes on which they rely. We ask the County to consider also incorporating the above recommendations to ensure that this remarkable area continues to serve its crucial roles of providing habitat and facilitating wildlife connectivity with other ecosystems, while enabling the County's residents and visitors to live, work, travel and recreate in ways that are safe for humans and wildlife alike.

Sincerely,



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