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Comments: Comments on South Plateau Landscape Area Treatment Proposal

Amanda Williams, NEPA Team Leader

Custer Gallatin National Forest

Hebgen Lake Ranger District

West Zone

P.O. Box 5220

West Yellowstone, Montana

Project 57353

Dear Amanda Williams:

November 5, 2022

On October 6, 2022, the U.S. Forest Service provided public notice of the Revised Draft Environmental Assessment (EA) of the South Plateau Landscape Area Timber (SPLAT) Project of the Custer Gallatin National Forest (CGNF). I would like to provide comment on behalf of myself and my organization, Great Old Broads for Wilderness, Bozeman Broadband. The project area is contained in the Hebgen Lake Ranger District located south and west of the town of West Yellowstone in Gallatin County, Montana. According to the public notice, "the project area extends from US Highway 20 on the north end, to the Montana-Idaho border on the west and south and the Yellowstone National Park boundary on the east."

Great Old Broads for Wilderness is a national grassroots organization with all-volunteer local chapters led by women, that engages and inspires activism to preserve and protect wilderness and wild lands. The local Bozeman Broadband works in concert with partners at Gallatin Wildlife Association, which is dedicated to the preservation and restoration of wildlife, fisheries, habitat and migration corridors in Southwest Montana and the Greater Yellowstone Ecosystem, using science-based decision making. GWA recognizes the intense pressures on our wildlife from habitat loss and climate change, and the group advocates for science-based management of public lands for diverse public values.

I submitted comments opposing this project in 2020. Now that the project has been reintroduced under the 2022 Forest Plan, we see that the

Forest Service reached a conclusion of a "Finding of No Significant Impact".

Now in the Revised Draft EA, there is no range of alternatives considered. This may meet the bare minimum standard of National Environmental Policy Act (NEPA) requirements for an environmental assessment, but it is not adequate for a project as extensive in size and scope as this one. These lands are part of the Greater Yellowstone Ecosystem (GYE), being adjacent to one of this country's most beloved National Parks. The top priority for these areas should be for wildlife habitat. The area should not have been classified as a Recreation Emphasis Area, with motorized trails and roads criss-crossing the landscape.

I have lived in the GYE for 23 years with my family. Originally I am from the Dakotas, and we moved our family here to enjoy the lifestyle we can have in this fully intact ecosystem, the only ecosystem in the temperate regions

of the planet with the entire complement of mammals and biodiversity that existed before white settlers came to the North American continent.

For the past ten years I have devoted myself full-time to learning more about how to protect the GYE, reading scientific literature and attending meetings at the local and state level to advocate for preserving as much of the wild character of the GYE as possible. Along with hundreds of supporters, I helped to promote a 230,000 acre Recommended Wilderness for the Gallatin Range, which was accepted as Alternative D in the recent Forest Plan revision. The fact that the Custer Gallatin National Forest has allowed proliferation of motorized and mechanized use of wilderness-quality lands has been illegal under the 1978 Montana Wilderness Study Act. That the Forest Service is now codifying motorized and mechanized use in lands that were always intended to be recommended Wilderness should be litigated. As a volunteer advocate who has never been paid or reimbursed for any expenses in ten years, I do not have the resources to finance litigation. The best I can do now is to oppose the further degradation of lands in and near the Hyalite Porcupine Buffalo Horn Wilderness Study Area (HPBH WSA) by opposing management proposals that will destroy parts of the Greater Yellowstone Ecosystem, bit by bit.

The reasons for protecting the SPLAT area have to do with wildlife and biodiversity. I agree with statements in the comments by Gallatin Wildlife Association such as "implementation of this project will hinder if not be in violation of the Endangered Species Act by impacting both grizzly bear habitat and their respective corridor routes, their ability to move freely upon the landscape." The endangered Canada Lynx and the seriously threatened if not endangered wolverine are two other species that warrant objections to this proposal. The plan to cut about 56 miles of roads to accomplish the project is inexcusable. Roads are known to fragment wildlife habitat more than any other factor, especially for grizzly bears. The presumption that the Forest Service can simply create small berms to "close" these temporary roads clearly fails muster. Around the state, "closed" routes are routinely poached by motorized users and others, defeating the intentions described in planning. With the extent of motorized use already existing in the SPLAT area, and the fact that the Forest Service is sorely understaffed to ensure compliance with area closures, the assumption that the 56 miles will be closed is invalid. And to keep these temporary roads operating for the 15 year life of the SPLAT plan will effectively displace wildlife for the future. With the advent of the Sixth Mass Extinction of species on earth, that 15 years is critical.

On the subject of providing timber to local mills, seemingly the primary mission of the Forest Service, I have many objections. For one, harvest is required to be "sustainable." Whether current harvest can be continued into perpetuity without converting the forest to unfrosted land is a matter of predicting the future, which is not possible to do. Modeling regeneration of the forest based on data from the past 100 years is no longer reasonable. The mega drought we are experiencing is the most severe in 1200 years. There is scientific research to demonstrate that forests will not grow back into the type of forests that existed historically, when harvested. The Montana Climate Assessment (gyclimate.org) says "Future droughts will occur under warmer average conditions and hence have the potential to be more extreme than those of the past or present." The resulting drying of the terrain after clearcutting and thinning makes the soil unsuitable for regeneration of a diversity of plants and trees. The Montana Climate Assessment (2017) predicts that where we have a diversity of forest types in the GYE now, we will see species change to more grassland, ponderosa and sagebrush. That type of ecosystem will not support the biodiversity that we currently have in parts of the GYE. Bears, wolves, and other predators that depend on a web of life to thrive will be impacted.

Speaking of soils, the SPLAT area is characterized by obsidian sand soil types that hold little if any water. I have toured the project area with Forest Service employees and observed the soil types. Disrupting the current ecosystem by clearcutting and thinning in this particular soil type will result in permanent deforestation of the landscape, during this time of climate change.

Westerling et al say "Our findings suggest a shift to novel fire-climate-vegetation relationships in Greater Yellowstone by midcentury because fire frequency and extent would be inconsistent with persis-

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A paper by Zald and Dunn demonstrates that fire severity can be worse on a 'treated' landscape. The findings 'suggest intensive plantation forestry characterized by young forests and spatially homogenized fuels, rather than pre-fire biomass, were significant drivers of wildfire severity. This has implications for perceptions of wildfire risk, shared fire management responsibilities, and developing fire resilience for multiple objectives in multi-owner landscapes.' The research may not apply directly to the South Plateau forest, which is not a plantation, but as it has been logged many times since 1920, it is equivalent to a tree plantation. The intention to clearcut the lodgepole pine when it reaches 80 years old shows that the land is being managed essentially as a timber farm.

The best thing the Forest Service can do now is to adjust the approach to timber harvest to one of Proforestation, described in a paper by Dr. William Moomaw

I want to document in these comments my personal observations from attending meetings of the Montana Forest Action Advisory Council in 2019, which resulted in the Montana Forest Action Plan (MFAP). With 50-60 individuals in the room, representing extractive industries and agencies, there was but one PhD scientist present. When I spoke with that scientist during a break in the meeting, I asked if it were true that the entire impetus for making the MFAP was driven by events that began when Donald Trump toured a wildfire site in California and stated that we need to "rake" our forests like they do in Finland in order to clean up the forest and prevent wildfire. His executive order from Dec. 2018 resulted. I was told that my assumption was "exactly right" by that scientist. I reported that conversation to CGNF Supervisor Mary Erickson, and she contacted the scientist to verify that conversation. He indeed acknowledged it, saying he believed I had the 'best of intentions' and there may have been some level of misunderstanding. Nevertheless, it is clear to me from reading and watching national politics, especially seeing propaganda from timber interests that use fear as a tactic to influence public opinion toward logging to prevent fire, as well as rhetoric from Congress people beholden to corporate interests, that the Forest Service is following political winds rather than stepping up to the realities of current "management" proposals.

As I wrote recently in local papers, euphemisms like "forest health" are typical excuses for the age-old mission of the Forest Service to subsidize the logging industry, which provides about 1300 jobs to Montanans, but huge profits to corporations. The benefit to the local economy is negligible, as logging workers will likely buy a few hamburgers from the West Yellowstone economy, but proceeds from the timber harvest will flow elsewhere. And who is checking whether deforestation is "sustainable?" Can we adjust or will we crash and burn as water and forests are depleted?

Research shows logging has little beneficial effect on wildfire spread and can actually increase fire severity. High winds carry wildfire across "treated" areas. And logging destroys wildlife habitat. After logging of state lands nearby at Mt. Ellis, what Joe Gutkoski used to call 'the best moose habitat in the state' was dried up. A displaced bull moose was in our backyard this fall for the first time in 23 years, stripping native shrubs. Wildlife habitat is ever shrinking.

Mother Nature knows best how to balance forest ecosystems with changing climate. Disease and fire are normal processes. Protecting homes is a separate issue. This brings up a problem with what the Forest Service relies on for defining the Wildland Urban Interface (WUI). I have perused the Gallatin County Rural Fire Prevention Operating Plan (2015) and I see that the entire county is designated as WUI, except for actual urban areas.

"All land in Gallatin County in a wildland fire protection district, state land, or assessed affidavit land is protected on the DNRC's behalf by the USDA Forest Service. This is conducted by an agreement known as a protection offset in which the Forest Service protects the land in Gallatin County on DNRC's behalf and DNRC protects

Forest Service land on their behalf in another area of the state. As part of this agreement, the Forest Service is responsible for wildfire suppression activities and expenses on this land. The DNRC still retains administrative control of this land. Large amounts of this offset protection exists in the Bridgers, Bangtails, Northern Gallatin Range, Big Sky, and West Yellowstone. Most land north of West Yellowstone is in a wildland fire protection district."

My objection is that to be effective in protecting homes and communities, treatment should be done only within about 200 feet from structures. When I attended the Oct. 6 field trip of SPLAT, I raised this point, and FS employees responded that protection is effective within one-half mile from structures.

The Forest Service defines the WUI as "an area within or adjacent to an "at-risk community" ...that is identified in recommendations to the Secretary of Agriculture in a Community Wildfire Protection Plan, or

A WUI is any area for which a Community Wildfire Protection Plan is not in effect, but is within 1/2 mile of the boundary of an "at risk community".

But in fact, the CGNF is proposing and implementing logging treatments as far as six miles from community structures. This demonstrates that there is no accountability by the agency for the rationale for logging to protect communities.

Speaking of local communities, West Yellowstone obtains the majority of its revenue from tourists who come to see wildlife in Yellowstone National Park. By far the most significant interest of these tourists is to observe wildlife like grizzlies and wolves. They are not coming to see remnants of clearcut and thinned forests. In this case, the mandate of the Forest Service to meet timber targets is being prioritized over real economic prosperity for the community. It is more appropriate to grow timber in areas like the Southeastern U.S. where the conditions are more conducive to rapid tree growth. Between the arid conditions in Montana and the remarkable features of the Greater Yellowstone Ecosystem for wildlife habitat, there has clearly been no fair evaluation by the agency.

Insect and Disease Rationale

One of the three purposes for the SPLAT project according to FS representatives is to address the potential for tree mortality from insects and disease. Spruce budworm was cited as a potential problem, but most of the project area is a monoculture of lodgepole pine, with little if any occurrence of spruce. Mistletoe is cited as a problem that can stunt tree growth, but native dwarf mistletoe is a resource for wildlife foraging, and because it is native, it is 'normal'. Pine bark beetle is also a natural disease cycle, and is exacerbated by climate warming. The same factors that have allowed its spread will in the future make it unlikely that these forests will regenerate after treatment.

An excerpt from the comments of my colleagues at GWA states: "Much emphasis of the draft EA of 2020 pertained to dwarf mistletoe and mountain pine beetle. That does not seem to be the case in the revised draft of 2022. Basically, this EA proposes we cut and manage the forest of the South Plateau before the forest becomes infested, not after. This may be proactive, but the degree that we use proactiveness can become extreme. For example, it is also proactive to say we will cut all the trees down to eliminate disease or to prevent fire upon the landscape. It may be proactive, but it is also not feasible, sensible, or acceptable. Thinning forest to prevent natural occurrences upon the landscape is not proper forest management. It just becomes an excuse for more logging."

In conclusion, it appears that the Forest Service is driven to make this bad project proposal by political factors driven by the money from the timber industry to our elected representatives, and not by any consideration of the science behind ecosystem health, wildlife and habitat needs, or even sustainability of timber harvest. I ask that for the sake of present and future generations of living things, the Forest Service should disqualify this bad proposal and let the land heal itself as best it can under deteriorating climate conditions.

Sincerely,

Nancy Ostlie
Volunteer Leader, Great Old Broads for Wilderness, Bozeman Broadband
263 Painted Hills Rd.
Bozeman MT 59715
Ph. 406-556-8118

Citations:

Banerjee, Tirtha. 2020. "Impacts of Forest Thinning on Wildland Fire Behavior" *Forests* 11, no. 9: 918.
<https://doi.org/10.3390/f11090918>

Hostetler S, Whitlock C, Shuman B, Liefert D, Drimal C, Bischke S. 2021. Greater Yellowstone climate assessment: past, present, and future climate change in greater Yellowstone watersheds. Bozeman MT: Montana State University, Institute on Ecosystems. 260 p. <https://doi.org/10.15788/GYCA2021>.

Moomaw William R., Masino Susan A., Faison Edward K.. Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good. *Frontiers in Forests and Global Change* Vol. 2. (2019) .<https://www.frontiersin.org/articles/10.3389/ffgc.2019.00027> DOI=10.3389/ffgc.2019.00027 . ISSN=2624-893X

Anthony L. Westerling, Monica G. Turner, Erica A. H. Smithwick William H. Rommed and Michael G. Ryane. Continued warming could transform Greater Yellowstone fire regimes by mid-21st century. Sierra Nevada Research Institute, University of California, Merced, CA 95343; Department of Zoology, University of Wisconsin, Madison, WI 53706; Department of Geography and Intercollege Graduate Degree Program in Ecology, Pennsylvania State University, University Park, PA 16802; Warner College of Natural Resources, Colorado State University, Fort Collins, CO 80523; and US Department of Agriculture Forest Service, Rocky Mountain Research Station, Fort Collins, CO 80526

Grizzly bears and roads:

Effects of roads and motorized human access on grizzly bear populations in British Columbia and Alberta, Canada

Michael F. Proctor, Bruce N. McLellan, Gordon B. Stenhouse, Garth Mowat, Clayton T. Lamb, Mark S. Boyce
Author Affiliations +
Ursus, 2019(30e2):16-39 (2020). <https://doi.org/10.2192/URSUS-D-18-00016.2>

1. E. González-Bernardo, M. d. M. Delgado, D. G. G. Matos et al., "The influence of road networks on brown bear spatial distribution and habitat suitability in a human-modified landscape", *Journal of Zoology* , pg. , (2022); doi:10.1111/jzo.13023

CrossRef

2. Sean P. Kearney, Terrence A. Larsen, Tristan R. H. Goodbody et al., "Characterizing Off-Highway Road Use with Remote-Sensing, Social Media and Crowd-Sourced Data: An Application to Grizzly Bear (*Ursus Arctos*) Habitat", *Remote Sensing* 13(13), pg. 2547, (2021); doi:10.3390/rs13132547

CrossRef

3. Laura Finnegan, Rebecca Viejou, Doug MacNearney et al., "Unravelling the impacts of disturbance type and regeneration on movement of threatened species", *Landscape Ecology* 36(9), pg. 2619, (2021); doi:10.1007/s10980-021-01259-x

CrossRef

4. B.M. Parsons, N.C. Coops, S.P. Kearney et al., "Road visibility influences habitat selection by grizzly bears (*Ursus arctos horribilis*)", *Canadian Journal of Zoology* 99(3), pg. 161, (2021); doi:10.1139/cjz-2020-0125
CrossRef
5. Christopher P. Colton, Nicholas C. Coops, A. Cole Burton, "Grizzly bear (*Ursus arctos*) responses to forest harvesting: A review of underlying mechanisms and management recommendations", *Forest Ecology and Management* 497, pg. 119471, (2021); doi:10.1016/j.foreco.2021.119471
CrossRef
6. Anja Sorensen, Catherine Denny, Tracy McKay et al., "Response of grizzly bears (*Ursus arctos*) to pipelines in Alberta", *Environmental Management* 67(6), pg. 1158, (2021); doi:10.1007/s00267-021-01457-y
CrossRef
7. Cameron J.R. McClelland, Catherine K. Denny, Terrence A. Larsen et al., "Landscape estimates of carrying capacity for grizzly bears using nutritional energy supply for management and conservation planning", *Journal for Nature Conservation* 62, pg. 126018, (2021); doi:10.1016/j.jnc.2021.126018
CrossRef
8. Tristan R.H. Goodbody, Nicholas C. Coops, Vivek Srivastava et al., "Mapping recreation and tourism use across grizzly bear recovery areas using social network data and maximum entropy modelling", *Ecological Modelling* 440, pg. 109377, (2021); doi:10.1016/j.ecolmodel.2020.109377
CrossRef
9. Shekoufeh Nematollahi, Sima Fakheran, Felix Kienast et al., "Application of InVEST habitat quality module in spatially vulnerability assessment of natural habitats (case study: Chaharmahal and Bakhtiari province, Iran)", *Environmental Monitoring and Assessment* 192(8), pg. , (2020); doi:10.1007/s10661-020-08460-6
CrossRef
10. Olga Povoroznyuk, Warwick F. Vincent, Peter Schweitzer et al., "Arctic roads and railways: social and environmental consequences of transport infrastructure in the circumpolar North", *Arctic Science* , pg. , (2022); doi:10.1139/as-2021-0033
CrossRef
11. Bethany M. Parsons, Nicholas C. Coops, Gordon B. Stenhouse et al., "Building a perceptual zone of influence for wildlife: delineating the effects of roads on grizzly bear movement", *European Journal of Wildlife Research* 66(4), pg. , (2020); doi:10.1007/s10344-020-01390-1
CrossRef
12. Lauren H. Henson, Christina Service, Astrid Vik Stronen et al., "Genetic evidence to inform management of rare genetic variants and gene flow: Balancing the conservation of the rare "Spirit bear" allele and population genetic diversity across a complex landscape", *Conservation Science and Practice* , pg. , (2022); doi:10.1111/csp2.12769
CrossRef

Zald HSJ, Dunn CJ. Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape. *Ecol Appl.* 2018 Jun;28(4):1068-1080. doi: 10.1002/eap.1710. Epub 2018 Apr 26. PMID: 29698575.

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Insect and Disease Rationale

One of the three purposes for the SPLAT project according to FS representatives is to address the potential for tree mortality from insects and disease. Spruce budworm was cited as a potential problem, but most of the project area is a monoculture of lodgepole pine, with little if any occurrence of spruce. Mistletoe is cited as a problem that can stunt tree growth, but native dwarf mistletoe is a resource for wildlife foraging, and because it is native, it is 'normal'. Pine bark beetle is also a natural disease cycle, and is exacerbated by climate warming. The same factors that have allowed its spread will in the future make it unlikely that these forests will regenerate after treatment.

An excerpt from the comments of my colleagues at GWA states: "Much emphasis of the draft EA of 2020 pertained to dwarf mistletoe and mountain pine beetle. That does not seem to be the case in the revised draft of 2022. Basically, this EA proposes we cut and manage the forest of the South Plateau before the forest becomes infested, not after. This may be proactive, but the degree that we use proactiveness can become extreme. For example, it is also proactive to say we will cut all the trees down to eliminate disease or to prevent fire upon the landscape. It may be proactive, but it is also not feasible, sensible, or acceptable. Thinning forest to prevent natural occurrences upon the landscape is not proper forest management. It just becomes an excuse for more logging."

In conclusion, it appears that the Forest Service is driven to make this bad project proposal by political factors driven by the money from the timber industry to our elected representatives, and not by any consideration of the science behind ecosystem health, wildlife and habitat needs, or even

sustainability of timber harvest. I ask that for the sake of present and future generations of living things, the Forest Service should disqualify this bad proposal and let the land heal itself as best it can under deteriorating climate conditions.

Sincerely,

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Citations:

Banerjee, Tirtha. 2020. "Impacts of Forest Thinning on Wildland Fire Behavior" *Forests* 11, no. 9: 918. <https://doi.org/10.3390/f11090918>
Hostetler S, Whitlock C, Shuman B, Liefert D, Drimal C, Bischke S. 2021. Greater Yellowstone climate assessment: past, present, and future climate change in greater Yellowstone watersheds. Bozeman MT: Montana State University, Institute on Ecosystems. 260 p. <https://doi.org/10.15788/GYCA2021>.

Moomaw William R., Masino Susan A., Faison Edward K.. *Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good. Frontiers in Forests and Global Change* Vol. 2. (2019) .<https://www.frontiersin.org/articles/10.3389/ffgc.2019.00027>
DOI=10.3389/ffgc.2019.00027 . ISSN=2624-893X

Anthony L. Westerling, Monica G. Turner, Erica A. H. Smithwick William H. Rommed and Michael G. Ryane. Continued warming could transform Greater Yellowstone ?re regimes by mid-21st century.
Sierra Nevada Research Institute, University of California, Merced, CA 95343; Department of Zoology, University of Wisconsin, Madison, WI 53706; Department of Geography and Intercollege Graduate Degree Program in Ecology, Pennsylvania State University, University Park, PA 16802; Warner College of Natural Resources, Colorado State University, Fort Collins, CO 80523; and US Department of Agriculture Forest Service, Rocky Mountain Research Station, Fort Collins, CO 80526

Grizzly bears and roads:

Effects of roads and motorized human access on grizzly bear populations in British Columbia and Alberta, Canada
Michael F. Proctor, Bruce N. McLellan, Gordon B. Stenhouse, Garth Mowat, Clayton T. Lamb, Mark S. Boyce
Author Affiliations +
Ursus, 2019(30e2):16-39 (2020). <https://doi.org/10.2192/URSUS-D-18-00016.2>

1. E. González-Bernardo, M. d. M. Delgado, D. G. G. Matos et al., "The influence of road networks on brown bear spatial distribution and habitat suitability in a human-modified landscape", *Journal of Zoology* , pg. ,

(2022); doi:10.1111/jzo.13023

CrossRef

2. Sean P. Kearney, Terrence A. Larsen, Tristan R. H. Goodbody et al., "Characterizing Off-Highway Road Use with Remote-Sensing, Social Media and Crowd-Sourced Data: An Application to Grizzly Bear (*Ursus Arctos*) Habitat", *Remote Sensing* 13(13), pg. 2547, (2021); doi:10.3390/rs13132547

CrossRef

3. Laura Finnegan, Rebecca Viejou, Doug MacNearney et al., "Unravelling the impacts of disturbance type and regeneration on movement of threatened species", *Landscape Ecology* 36(9), pg. 2619, (2021); doi:10.1007/s10980-021-01259-x

CrossRef

4. B.M. Parsons, N.C. Coops, S.P. Kearney et al., "Road visibility influences habitat selection by grizzly bears (*Ursus arctos horribilis*)", *Canadian Journal of Zoology* 99(3), pg. 161, (2021); doi:10.1139/cjz-2020-0125

CrossRef

5. Christopher P. Colton, Nicholas C. Coops, A. Cole Burton, "Grizzly bear (*Ursus arctos*) responses to forest harvesting: A review of underlying mechanisms and management recommendations", *Forest Ecology and Management* 497, pg. 119471, (2021); doi:10.1016/j.foreco.2021.119471

CrossRef

6. Anja Sorensen, Catherine Denny, Tracy McKay et al., "Response of grizzly bears (*Ursus arctos*) to pipelines in Alberta", *Environmental Management* 67(6), pg. 1158, (2021); doi:10.1007/s00267-021-01457-y

CrossRef

7. Cameron J.R. McClelland, Catherine K. Denny, Terrence A. Larsen et al., "Landscape estimates of carrying capacity for grizzly bears using nutritional energy supply for management and conservation planning", *Journal for Nature Conservation* 62, pg. 126018, (2021); doi:10.1016/j.jnc.2021.126018

CrossRef

8. Tristan R.H. Goodbody, Nicholas C. Coops, Vivek Srivastava et al., "Mapping recreation and tourism use across grizzly bear recovery areas using social network data and maximum entropy modelling", *Ecological Modelling* 440, pg. 109377, (2021); doi:10.1016/j.ecolmodel.2020.109377

CrossRef

9. Shekoufeh Nematollahi, Sima Fakheran, Felix Kienast et al., "Application of InVEST habitat quality module in spatially vulnerability assessment of natural habitats (case study: Chaharmahal and Bakhtiari province, Iran)", *Environmental Monitoring and Assessment* 192(8), pg. , (2020); doi:10.1007/s10661-020-08460-6

CrossRef

10. Olga Povoroznyuk, Warwick F. Vincent, Peter Schweitzer et al., "Arctic roads and railways: social and environmental consequences of transport infrastructure in the circumpolar North", *Arctic Science* , pg. , (2022); doi:10.1139/as-2021-0033

CrossRef

11. Bethany M. Parsons, Nicholas C. Coops, Gordon B. Stenhouse et al.,

"Building a perceptual zone of influence for wildlife: delineating the effects of roads on grizzly bear movement", *European Journal of Wildlife Research* 66(4), pg. , (2020); doi:10.1007/s10344-020-01390-1

CrossRef

12. Lauren H. Henson, Christina Service, Astrid Vik Stronen et al., "Genetic evidence to inform management of rare genetic variants and gene flow: Balancing the conservation of the rare "Spirit bear" allele and population genetic diversity across a complex landscape", *Conservation Science and Practice* , pg. , (2022); doi:10.1111/csp2.12769

CrossRef

Zald HSJ, Dunn CJ. Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape. *Ecol Appl*. 2018 Jun;28(4):1068-1080. doi: 10.1002/eap.1710. Epub 2018 Apr 26. PMID: 29698575.