

August 9, 2021

Bitterroot National Forest

Matt Anderson, Forest Supervisor, Bitterroot National Forest

Steve Brown, Stevensville District Ranger (Project Manager)

Gold Butterfly Project

1801 N. First St.

Hamilton, MT 59840

**Filed electronically at <https://cara.ecosystem-management.org/Public/CommentInput?Project=59262>**

**Please acknowledge receipt.**

**Re: Comments – Gold Butterfly Project Draft Supplemental Environmental Impact Statement**

Dear Supervisor Matt Anderson and Ranger Steve Brown,

These comments are submitted on behalf of Gail H. Goheen; Stephen S. Goheen [collectively hereafter referenced as “Goheen”]; Friends of the Bitterroot (FOB) [Jim Miller, President]; and Alliance for the Wild Rockies—hereafter “Alliance” [Mike Garrity, Director]. We also hereby incorporate all comments (and related documents) in responses to the Gold Butterfly Project DSEIS submitted by the above named persons and entities, as well as any that have been or may be submitted by WildEarth Guardians and Native Ecosystems Council. In addition we incorporate all prior Comments to the DEIS and the Objection to the FEIS relating to the Gold Butterfly Project which were filed by Gail H. Goheen and Stephen S. Goheen, as well as those separately submitted on behalf of Friends of the Bitterroot and Alliance for the Wild Rockies (and WildEarth Guardians and Native Ecosystems Council) as part of the public record in this matter, including any additional articles or documents submitted in conjunction therewith AND any other filings incorporated therein which are part of the record relating to this Project.

The Gold Butterfly Project is proposed for the Sapphire Mountains and foothills of the Bitterroot National Forest (BNF). The Forest Service on this project proposes a commercial timber harvest of approximately 5,461 acres in an area of 55,157 acres on the Eastside of the Bitterroot National Forest, in addition to other significant operations, treatments, and activities. All of the log hauling planned for this project is to be over one county road—Willow Creek Road (a road adjacent to the Goheen’s residence and that passes through the Goheen property); there are significant public health and safety issues associated with the plans for its use in numerous regards, as referenced later in these comments. Yet, the Forest Service has overwhelmingly ignored these issues in its determination to continue with the Project, and these shortcomings are not addressed in the DSEIS. If anything, they are made worse by the logging that is envisioned by the faulty substantive and procedural analysis contained in the DSEIS. The comments below outline some of the previously referenced problems with this project, and also in the DSEIS (in addition to those submitted by others and referenced above). At the conclusion of each topic discussed below is a series of questions and requests for information that we request be answered and addressed.

**1.) THE CHANGE IN THE DEFINITION OF “OLD-GROWTH” IN THE DSEIS, AND THE JUSTIFICATIONS FOR THE SAME, RESULT IN THE REMOVAL OF MORE OLD/LARGE TREES, WHICH NOT ONLY AFFECT SPECIES SURVIVAL, BUT ARE CONTRARY TO CLIMATE CHANGE CONCERNS, AS WELL AS ENHANCING DANGERS FROM LARGE FIRES.**

The current plan for the Gold Butterfly Project commits to maintaining all stands classified as “old-growth” as old-growth stands. However, given the less restrictive nature of the definition of “old-growth” presented by Green et. al., this would allow for significantly more removal of large, old trees from old-growth stands without having to classify the result as “losing old-growth stands.” In contrast with the Plan for the Bitterroot Forest, this would almost certainly lead to more commercial logging of old-growth stands, threatening important wildlife habitat and forest resilience. Arguments relating to the loss of “old growth” stands as well as those that similarly function by the size of their trees (regardless of their age), as well as the importance of the connectivity of such stands, is separately presented in other separate comments submitted by FOB and the

Alliance in their Comments, and as mentioned above are incorporated in the comment submitted herein (hence, for the most part they will not be repeated here). Suffice it to say that the undersigned strongly object to the cutting of any old growth stands (or those that function as such), especially given the effects of climate change on preserving moisture in the forest, including in the form of snowmelt; the likelihood that historical forest regeneration is unlikely to occur given increasing temperatures and drought; the likely impact of extreme wind occurrence when fires occur; and, of course the damage done to habitat for endangered species.

The DSEIS relies heavily on Green et. al, boldly asserting that it represents the “best available science” regarding old growth. The DSEIS also indicates that Green, et al has been updated four times, with the most recent being in 2011. The fact that Green et al has been accepted by a number of national forest to support its self-serving goals does not in and of itself demonstrate that it qualifies as the “best available science.” Other significant scientific peer reviewed supporting documentation and authority has not been demonstrated. Furthermore, the fact that the original publication was 28 years ago, and even the most recent updates are at least 10 years old on its face, implies that this evidence may not be the “best available” science. This is especially true given the fact that climate change has exponentially accelerated over recent years.

This position is also supported by significant studies which suggest that forest treatments which attempt to use fuel reduction to mitigate forest fires can actually have the opposite effect. One such study<sup>1</sup> analyzed 1,500 forest fires affecting over 23 million acres of pine and mixed-conifer forests in the West from 1984 to 2014. The study covered 11 western states and considered 45 different variables, including climate ecoregion and topography. It found that the more actively managed areas with more logging suffered higher burn density as noted below:

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<sup>1</sup> Dominick DellaSalla, Ph.D., Geos Institute, Chad Hanson, Ph. D., John Muir Project, Earth Island Institute; and Curtis Bradley, Center for Biological Diversity, *Logged Forests Across the West Burn at Higher Severities Compared to Protected Forests (Summary)*

We found no evidence to support the prevailing forest/fire management view that higher levels of forest protection [like parks and wilderness] are associated with more severe fires when fires eventually occur. On the contrary, using over three decades of fire severity data and a broad analysis are, we found support for the opposite – burn severity tended to be higher in pine and mixed-conifer forests with lower levels of protection – more intense management – after accounting for topographic and climatic conditions.

...While we did not test for the specific mechanism responsible for our findings, we suspect based on published literature... that logged areas tended to burn more severely than protected areas due to logging slash and homogenization of dense vegetation found in most forest plantations. Also in forests with higher canopy cover, which are frequently found in protected areas, woody material on the forest floor can stay moister later into the fire season, due to the cooling shade of the forest canopy.

The findings referenced above are strongly buttressed by the information presented by FOB in their Comments (which are incorporated in these Comments) relating to the effect of wind patterns in large openings and their “deleterious effect on fire behavior.” Citing a recent study by *Atchley et al.*,<sup>2</sup> FOB pointed out that the type of openings being proposed in the Gold Butterfly Project as the FS attempts to justify in its DSEIS, are likely to result in “turbulent wind conditions” resulting in “faster fire spread.” The FOB comments even cited a Forest Service publication pointing out dramatic differences in enhanced wind speeds and burn rates in open forest areas over those of dense conifer forests.

Thus, the claimed value of the proposed treatments in the Gold Butterfly Project in general—and certainly the attempt to justify more logging in redefining “old growth” in the DSEIS—is contraindicated by evidence from the studies cited above.

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<sup>2</sup> Atchley, et al 2021, "Effects of fuel spatial distribution on wildland fire behaviour." International Journal of Wildland Fire, <https://doi.org/10.1071/WF20096>.

### **Questions and Requests:**

- Please cite all authority relied on by you which contradict the conclusions of *DellaSalla et al* and of *Atchley et al* in the above references.
- Please indicate whether or not you agree that climate change will impact forest regeneration potential, and if so, how that has been considered in the recommendations utilized in the DSEIS.
- Please explain how and to what extent “old growth” standards under Green et al, have evaluated and adapted to climate change concerns, including the those relating to fire severity (including enhancement of turbulent winds) based on the studies referenced above by *Atchley et al* and *DellaSalla et al*.
- Please set forth an alternative to avoid the openings referenced in *Atchley et al*.

### **2.) THE CHANGE PROPOSED IN THE DSEIS REVEALS ATTEMPTS TO SIDESTEP NECESSARY PROCESSES FOR UPDATING THE BITTERROOT NATIONAL FOREST PLAN AND THE UTILIZATION OF “AMENDMENTS” TO LIMIT LEGALLY REQUIRED PUBLIC INVOLVEMENT.**

The Bitterroot National Forest Plan was developed in 1987 under the 1982 Planning Rule passed by Congress. This Planning Rule has been replaced by new Planning Rules, including most recently in 2012. In 2016, the Forest Service made administrative changes to the Bitterroot National Forest Plan to comply with this latest Planning Rule. The 1987 Forest Plan, however, remains in effect despite these administrative changes.

The National Forest Management Act (NMFA) anticipates forest plans to be updated every 15 years. This practice has been ignored, apparently for budgetary

reasons. The Forest Service stated in its 2016 letter announcing the administrative changes mentioned above that, “The Lolo and Bitterroot National Forests are proposing to revise their forest plans simultaneously, given that the two forests share a common boundary and can use a joint team of specialists to complete both plans at the same time. Revision is expected to begin in the near future, depending on the availability of funding.” Based on discussions with a Forest Service official it is our understanding that the Bitterroot Forest Plan is one of the oldest forest plans in the region. Five years have passed since the 2016 letter referencing intended Plan changes were announced. Priority in budget concerns should not be an excuse for failing to amend the Plan (and involving the public in doing so), or in ignoring requirements in enforcing the Plan “as is,” or illegally attempting through “amendments” to move forward with Projects. This is ironically demonstrated even more so by the Gold Butterfly Project, which anticipates an approximate \$1.65 million deficit in the Project costs as demonstrated by the 2018 Economic Analysis relating to the project. Such a cost to the Forest Service (if indeed the full implementation of the Gold Butterfly Project—including its stated restoration commitments—are met) may be better spent on a Plan amendment process, rather than undertaking projects in violation of the current applicable Plan.

The violations referenced are best reflected in the DSEIS itself which establishes a consistent pattern of supposed “project-specific” amendments that in reality are a blanket revision of standards in the Bitterroot Forest Plan. On the one hand, the DSEIS (at p. 4) points out that “When an amendment applies to one project or activity, the amendment is not considered a significant change to the plan for the purposes of NFMA...” and “[t]herefore, a 90-day comment period is not required.” On p. 18 of the DSEIS confesses the Bitterroot Forest’s gameplan to consistently apply the old growth “project-specific amendments to the other major projects currently underway in the Bitterroot—i.e., the Mud Creek and Bitterroot Front projects, stating:

Other projects including Mud Creek and the Bitterroot Front will also be incorporating a project-specific amendment to the Forest Plan for old growth. These site-specific amendments improve the method for measuring the amount of old growth in project areas and evaluating project

effects. Modifying the current criteria used to identify old growth is based on better scientific information than was used in 1987 when the Bitterroot Plan was developed. Therefore there would be no adverse effects expected to old growth when considering this project project-specific amendment in concert with the reasonably foreseeable old growth project-specific amendments for Mud Creek and Bitterroot Front projects.

It is very apparent that the Bitterroot Forest administration is effectively undertaking Plan amendments and simply, through a “sleight of hand,” hiding that fact by calling them “project-specific” amendments.<sup>3</sup>

By taking the course of action it has over such a wide expanse of the Bitterroot Forest, the Forest Service is violating CFR § 219.13(b)(3), which states, “...Except for an amendment that applies only to one project or activity, a proposed amendment that may create a significant environmental effect and thus requires preparation of an environmental impact statement is considered a significant change in the plan for purposes of the NFMA and therefore requires a 90-day comment period for the proposed plan and draft environmental impact statement (§ 219.16(a)(2)), in addition to meeting the requirements of this section.”

It appears that the Forest Service is illegally attempting to use project-specific amendments to bypass the need for more comprehensive public input which would naturally be part of the development of a new Forest Plan. We are deeply disappointed by the Forest Service’s attempt to do an “end-run” around the public on this issue.

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<sup>3</sup> The magnitude of the supposed project-specific amendments is amplified by the size of the projects referenced. The Gold Butterfly project, as previously indicated, encompasses over 55,000 acres on the east side of the Bitterroot Valley. The Mud Creek project involves approximately 48,000 acres and the Bitterroot Front project about 150,000 acres, both on the west side of the Bitterroot and together encompassing almost the entire length of the Bitterroots in Ravalli County. [The utilization of site-exception amendments have also recently been applied in another project concerning road density in elk habitat (namely the Darby Lumber Lands project), changing the road system across more than 27,000 acres, with logging on about 1300 of those acres on the southeast side of the Bitterroot valley.]

**[Questions and Requests:**

- Please address all question and requests outlined by FOB et al on the issues raised (re site-specific amendments not being appropriate), in its separate Comments filed in this matter (which have been incorporated herein).
- Please itemize any projects currently underway or being planned in the Bitterroot National Forest involving commercial logging that do not have site-specific amendments relating to “old growth” definitions, indicating the name of the project, and the size, and acreage for commercial logging, and date the project was approved.
- Please identify any other instances when the Forest Service has utilized multiple site or project specific amendments on a forest which have been declared illegal.

**3.) THE GOLD BUTTERFLY PROJECT’S ORIGINAL DEIS AND FEIS RELY ON DOCUMENTS WHICH ARE LIKELY TO BE OUT OF DATE OR OTHERWISE FLAWED, AND HENCE SHOULD BE AMENDED AND RE-EVALUATED AS TO EFFECTS ON THE PROJECT.**

The supporting documents for the Gold Butterfly Project generally date back to 2017 and early 2018. While some of these reports are likely to still be valid, others either are significantly outdated and/or contain significant flaws that have never been corrected. Specifically, the Economic Analysis was dated March of 2018. Given the massive changes to the world’s economy resulting from the Covid pandemic, it seems highly unlikely that this analysis is still accurate. Regarding log prices at the mill, a recent report (attached) from the University of Montana, Bureau of Business and Economic Research relying on surveys of Montana timber-processing plants shows “mill-delivered prices” for logs in Montana are close to what they were in 2018. (See attachment hereto.) However, costs of the project appear to be out of date. Many of the projected costs are likely to be associated with labor and other activities and expenses outlined in the Economic Analysis, which are now over three years out of date, and the pandemic makes such expenses in the Economic Analysis likely to be even less reliable.



Even more fundamentally, the Economic Analysis is flawed in that it discounted to “present value” the costs anticipated over the time of the project—but, it failed to consider the increase of inflationary expenses including those relating to labor as an offset over the same period of time. Without a valid current Economic Analysis, the Environmental Impact Statements for the Gold Butterfly Project are fundamentally incomplete.

Additionally, the Air Quality report still cites the National Ambient Air Quality Standard (NAAQS) for small particulate matter (PM2.5) from 1997 of 65 micrograms per cubic meter, not the current standard implemented in 2006 of 35 micrograms per cubic meter. There appears to be no recognition of this obvious and very significant mistake (despite our bringing to the Forest Service’s notice in official objections). The Forest Service has not updated this document since its initial publication, and requests to implement local air monitoring processes relating to this project (truly adequate to assess risk to those living near Willow Creek Road) have been totally ignored by the Forest Service. [More detail relating to some of these issues appears later in these Comments, as well as in the Comments and Objections.] Given this lack of attention, we must question how many of the other supporting documents regarding air quality and other key project requirements are out of date.

### **Questions and Requests:**

- Due to the passage of time since the initial “Economic Analysis” associated with this project and the significant likely increase in its costs, please revise your projections of expenses associated with the project, so that a more accurate determination of project losses can be determined.
- Since the Economic Analysis report itself (p. 3) did not report an expectation of an increased agency budget relating to the Project, please explain in detail how the anticipated \$1.645 million dollar shortfall (p. 10 of the Economic Analysis) regarding costs for activities associated with the Project will be met. [While the economic impact regarding jobs and labor on p. 10 was projected as a positive number (primarily most of which would likely benefit persons outside of Ravalli County), unless you can clearly

demonstrate otherwise, such “benefits” will not be utilized to actually pay for the \$1.645 million shortfall.] As part of this analysis please describe which activities (in order of least priority) will in reality not be done, due to any shortfall in funding.

- Please explain how required Federal and State standards for the concentration of PM 2.5 (not exceeding 35 micrograms per cubic meter over a 24 hour period) will be realistically accurately monitored relating to the Project. In that regard, please focus on the issues relating to road dust and the affected persons a) living near Willow Creek Road along the gravel section, and separately b) those residing along the chip section, of the Road.
- Please explain any added costs relating to the Project for: 1) the monitoring referenced in the immediately preceding bullet point, and 2) the expense of anticipated corrective processes to meet clean air quality governmental requirements for the persons affected along Willow Creek Road. As part of this process, if the Forest Service has no intention of paying for any or all of such expenses, or requiring its contractors involved with the Project to do, please so state, and provide all the reasons relied on relating to your responses.
- Please include in a revised Economic Analysis, the costs associated with necessary Willow Creek Road ongoing maintenance during the Project, as subsequently referenced in these below comments.

**4.) THE GOLD BUTTERFLY PROJECT STILL FAILS TO ADEQUATELY ADDRESS THE IMPACT OF THE PROJECT ON PUBLIC HEALTH AND SAFETY MATTERS, INCLUDING THOSE RELATING TO WILLOW CREEK ROAD.**

In addition to the above direct comments on the matters addressed in the DSEIS, we would like to take this opportunity to restate our comments and concerns about the Gold Butterfly’s potential impact on public health and safety. There are

a significant number of people who live on Willow Creek Road or in all probability regularly access it from their residences. As calculated in based on documents in our initial 2018 comments on the Gold Butterfly Project, there approximately 1,200 to 1,300 people who are likely to be seriously affected by road maintenance and safety issues along Willow Creek Road. In other words, there are a significant number of people, as well as properties that are impacted by the traffic which appears to be planned for Willow Creek Road as a result of this project.

The safety and public health issues we included in both our 2018 comments on the DEIS and our 2019 objections to the FEIS have not been adequately addressed by the Forest Service. In fact, these legitimate concerns have often been dismissed or even completely ignored by Forest Service officials. Our concerns include the following matters listed in the separate sections outlined below.

**A) THE FEIS AND ROD GENERALLY FAIL TO REQUIRE THE FOREST SERVICE TO TAKE NECESSARY RESPONSIBILITIES RELATING TO HEALTH AND SAFETY ISSUES INVOLVING THE GOLD BUTTERFLY PROJECT:**

Before reviewing separate public health and safety issues subsequently referenced, we wish to point out that when it comes to environmental issues involving forest service projects, Federal and State requirements affecting “people” (not just animals and vegetation, etc.) are relevant considerations. The National Environmental Policy Act (NEPA; 42 USC Section 4321 *et seq.*) requires federal agencies to complete detailed analyses of proposed actions that may significantly affect the quality of the human environment.” The severity of the impact should, amongst other factors, include: “the degree to which the proposed action affect public health or safety”; the “degree to which the effects on the quality of the human environment are likely to be highly controversial”; “the degree to which the effects on the human environment are highly uncertain or involve unique or unknown risks”; and whether “the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment” (item 2,4,5, and 10 of 40 CFR 1508.27). Surely these factors are met here. As to state and local law, Montana’s Department of Environmental Quality requires air quality consistent with the Clean Air Act, and Montana’s Constitution

even entitles its citizens to “a clean and healthful environment” (Article IX, Section 1). We respectfully request that the Bitterroot National Forest Service honor and protect these rights and the well-being of all the people living in this county (as well as the environment and wildlife) which may otherwise be negatively impacted by the proposed Gold Butterfly Project.

The composite thrust of our comments submitted on July 30, 2018, was the need to protect the health and safety of those affected by the Gold Butterfly Project, and for the Forest Service to take the necessary steps to take responsibility for doing so. The July 30, 2018 comments (published as Comment 5e.01 in Appendix C of the FEIS) submitted by the Ravalli County Commissioners (and likewise grouped with comments from 7 other people) addressed similar concerns in the context of “Ravalli County Roads.” Regardless of other issues which may be in dispute relating to the Gold Butterfly Project, it was anticipated that the health and safety of the people most impacted (i.e., those residing near the Willow Creek Road or significantly utilizing it) would be treated by the Forest Services as of paramount concern relating to the Project. Indeed, even the DROD recognized that “The National Environmental Policy Act (NEPA; 42 USC §4321 *et seq.*, [as referenced above]) requires federal agencies to complete detailed analyses of proposed actions that may significantly affect the quality of the human environment” (See ROD, section 5.4, p.13.) Despite the lip service given to these considerations, the Forest Service FEIS and final ROD are disturbingly inadequate in protecting public health and safety.

The final ROD (in section 5.5, pp. 13-14) in discussing the National Forest Management Act, declared that the project environmental impact statement followed its requirements and procedures, claiming the interdisciplinary team had “fully evaluated and disclosed the environmental effects of the proposed project based upon field study, resource inventory and survey, the best available science, and their professional expertise” referencing the project record. Yet, as is explained further in these Comments (and the documents incorporated or referenced herein), the project “Economic Analyses” and the “Air Quality” report are not only insufficient in what they addressed, but they are riddled with errors, in particular as to how they assess and make recommendations affecting public health and safety.

Another law cited in the final ROD, was “The Clean Air Act of 1970, as amended (42 USC §7401, *et seq.*). The decision found that: “Federal and state ambient air quality standards are not expected to be exceeded as a result of implementing the selected alternative (Air Quality Specialist Report...), declaring that “This action is consistent with the Clean Air Act.” [See provision 5.1, p. 12.] Yet, as revealed in these Comments (and the Objection incorporated herein) the most relevant required standard applicable in evaluating particulate requirements of the Clean Air Act which was cited by the “air quality specialist” was misstated by almost 50%; and that report as well as the FEIS utterly failed to acknowledge any adequate design feature to monitor and enforce Clean Air Act violations.

With a few very minor exceptions<sup>4</sup>, the Forest Service made no changes from their draft EIS. Although Public Health and Safety consequences were supposedly addressed, none of the 7 issues cited in the related table at pp 52-53 of the FEIS, however, was “carried forward for analysis.” The reasons cited for failure to do so were deficient, evasive, and misleading, and in violation of law, including the acts referenced above, as explained below in more detail.

### **Questions and Requests:**

- Please set forth all you have done to complete a detailed analysis of how all actions undertaken have been met relating to the project may significantly affect the quality of the human environment, including all of those raised in the Comments regarding the DSEIS and Objection concerning the FEIS and DROD, as well as the Comments raised herein. A description of your analysis should include:

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<sup>4</sup> The only significant difference between the DROD and final ROD, was a statement that the Bitterroot National Forest would oversee maintenance responsibilities for the entire gravel section of Willow Creek Road, and that they were “committed to working with” the Ravalli County Commissioners “to seek” solutions for maintenance repair of the paved portion of Willow Creek Road (FROD, p. 4). (The FS has been saying similar things for the past 3-4 years, but without any written or financial commitment. Furthermore, relating to the gravel portion of the road, it still appears that the standards of maintenance—especially for dust control—are VERY unclear, especially inasmuch as there don’t appear to be any plans for monitoring equipment.)

- the degree to which the proposed action affect public health or safety;
- the “degree to which the effects on the quality of the human environment are likely to be highly controversial;
- the degree to which the effects on the human environment are highly uncertain or involve unique or unknown risks; and
- whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

- Concerning the questions raised in the immediately preceding bullet point and the legal requirements of 42 USC Section 4321 *et seq.* , please set forth in detail your rationale and authority for not carrying forward the issues raised in the table on pp 52-53 of the FEIS.

**B) THE FEIS, DROD AND FINAL ROD (AND OTHER PROJECT RELATED DOCUMENTS): DO NOT ADEQUATELY ANALYZE THE DESIGN FEATURES AND ASSOCIATED COSTS NECESSARY TO MEET FOREST SERVICE REQUIREMENTS TO PROTECT THE PUBLIC HEALTH AND SAFETY; ATTEMPT TO SHIFT RESPONSIBILITY FOR THE MAJORITY OF SUCH COSTS TO RAVALLI COUNTY INSTEAD OF RECOGNIZING THE FOREST SERVICE’S ULTIMATE RESPONSIBILITY FOR THE SAME; AND SUBSEQUENTLY FAIL TO INCLUDE THE TRUE PROJECT COSTS IN THEIR ECONOMIC ANALYSIS**

**1) Outline of major costs relating to protecting the public health and safety.**

The obligations of the Forest Service to protect public health and safety are inherent in NEPA, The National Forest+ Management Act, and The Clean Air Act. The majority of Project issues relating to public health and safety arise from the

use of Willow Creek Road (and from the anticipated slash burning). Other Comments delineated below (and in our earlier incorporated Comments and Objection filed relating to this Project), deal with more details of the Forest Service's failure to adequately assess, monitor, and protect the public from such health and safety issues. The bottom line, however, is that the costs relating to appropriately protecting public health/safety issues engendered by this project could easily run into hundreds of thousands of dollars and possibly approaching well more than a million dollars (presuming that there are no liability claims that arise from damages done to affected persons). Those costs reasonably would include:

- Costs for chemical dust treatment, timely applied, on the gravel portion of Willow Creek County Road, as well as any other costs appropriate to reasonably maintain that portion of the road for safe travel during the timeline of the Project;
- Costs for appropriate maintenance of Willow Creek Road from Corvallis to the section of the road where the gravel portion now begins, resulting from the damage done from the Project (primarily log hauling)—to include repaving/chip-sealing when necessary;
- Charges necessary to make the bridge across the Bitter Root Irrigation District (BRID) ditch along Willow Creek Road safe for the load requirements of the loaded logging trucks over the time of the Project, and to adequately protect travel of residents/other users while such repairs/replacement is accomplished.
- Expenses for appropriate monitoring of the particulate levels to ensure The Clean Air Act requirements are upheld (whether resulting from gravel dust (or pavement dust) alone or in conjunction with other sources, such as slash burning;
- Cost of monitoring and enforcing the Clear Air Act particulate requirements (even if it means reduced logging operations when required) and for the expenses incurred by the public for legal efforts

to ensure such enforcement in the event the Forest Service fails to properly administer such obligations;

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- Any expenses resulting from enforcing hours of travel along county portions of Willow Creek Road relating to logging operations—including not only during times before and after school (as currently planned), but also to protect safe school bus travel times to and from Corvallis schools.

These are true expenses necessary to protect public health and safety that are reasonably generated by the subject Project. They should not be shifted to the taxpayers of Ravalli County, or worse—ignored—with the potential for serious health (or even life-threatening) consequences for those affected.

**2) The attempt to shift the financial burden of the Project to Ravalli County (or even worse not to do the appropriate remedy), is in violation of current law and agreements—contrary to the assertions made in the FEIS, DROD AND final ROD (and related underlying documents).**

*General Status re County Maintenance:*

When it comes to road and related public health and safety issues, Comment 5e.01 (FEIS) from the Ravalli County Commissioners overlapped with ours (the Goheen DEIS comments)—at least as to overarching issues, including who should ultimately bear financial responsibility for the Project relating to health and public safety issues. The road at issue is the approximate 8.29 mile stretch of Willow Creek Road under Ravalli County jurisdiction “between the town of Corvallis and mile post 8.29, at the line between sections 9 and 10 of township 6 north, range 19 west” where the Forest Service jurisdiction of the road begins. [DEIS, section 2.2.2.3, p.19, referring to “Haul Routes” for the Project; *see also* p. 105 of FEIS.]

The Ravalli County Commissioners (listed in the FEIS Appendix C, Comment 5e.01) began by stating that, “Ravalli County is concerned about the impacts to county owned/maintained roads from heavy equipment and logging trucks, mostly, but



not limited to, the impacts to Willow Creek Road. **Due to resource and financial limitations, Ravalli County would not be able to accommodate the necessary maintenance during the project, nor the rehabilitation of the road after the project is complete.** [Emphasis supplied.]

The only significant difference between the DROD and final ROD, was a statement that the Bitterroot National Forest would oversee maintenance responsibilities for the entire gravel section of Willow Creek Road, and that they were “committed to working with” the Ravalli County Commissioners “to seek” solutions for maintenance repair of the paved portion of Willow Creek Road (FROD, p. 4). (The FS has been saying similar things for over the past three years, but without any written or financial commitment, except for efforts towards dust abatement on the gravel portion of the County road.<sup>5</sup> But even relating to this, it still appears that the standards of maintenance—especially for dust control—are VERY unclear, especially inasmuch as there is no clarification as to the frequency or length of time for using chemical treatments for dust, and doesn’t appear to be any plans for monitoring equipment that would realistically be able to measure the harmful dust particles emanating from this Project.) The FROD (p. 9) sums up the basis for the vagueness of the decision, stating: “No amount of project design features can eliminate traffic safety risks entirely. However, I feel the design features presented in the FEIS are a reasonable approach to minimizing risks to the extent practical while allowing the project implementation to move forward.”

*The Forest Service’s position relating to Ravalli County’s responsibility to pay for County Road maintenance.*

The response by the Forest Service (FEIS, Appendix C) to the comment from the County regarding its inability to pay for the road maintenance burden generated by the project, states that, “Potential impacts of log hauling on Willow Creek Road are disclosed in Chapter 3, Section 3.5 Public Health and Safety. See design features in Chapter 2, Table 2.2-8 developed to minimize risks related to log hauling. The Bitterroot National Forest will continue discussions with Ravalli

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<sup>5</sup> Apparently the Forest Service has made arrangements with Ravalli County to apply magnesium chloride to the gravel portion of Willow Creek Road relating to this Project. However, at least based on information obtained to date, this obligation currently anticipates only annual treatment, which as mentioned later in these Comments would be trivial in comparison to the need to MUCH more frequently apply such treatments given the planned Project use of this Road.

County on road maintenance and repair during and after project implementation to address public concerns to the extent feasible.” There were no clear plans for effectively dealing with these issues in the DEIS, as Table 2.2.-8 of the FEIS in its Design Feature relating to reducing the “risk of traffic-related in areas outside of FS jurisdiction” merely states: “The Forest Service will continue to coordinate with Ravalli County on such issues as road maintenance and log truck traffic on county jurisdictions.” This response is facile at best, and it is telling that the in the FEIS (pp. 52-53), most of the “Public Health & Safety Issues” were not even deemed significant enough by the FS to carry them forward for analysis, and they fell within Category 5 “No Further Response Required” as set out in Appendix C, Comment 5e.01 *et seq.*

Another significant mention of the responsibility for road maintenance listed in the Gold Butterfly public documents occurs in the FEIS (Ch. 3, p. 54), this issue framed as “Log haul may negatively affect the physical conditions of the county section of Willow Creek road causing burden to the taxpayers of Ravalli County,” but, it was not carried over for analysis. was discussed briefly in the “issues” section of the Economic Analysis (which was published with the Draft Environmental Impact Statement in 2018). The Economic Analysis Report (p. 3) merely references the current Road Maintenance Agreement between Ravalli County and the Forest Service, reaffirms that, “the Forest Service continues to coordinate with Ravalli County about road maintenance concerns,” and then references the Payment in Lieu of Taxes (PILT) federal program. It notes that Ravalli County received 2.3 million dollars from the program in 2017 to help carry out vital services such as road maintenance. The Economic Analysis Report fails, however, to list the other vital services such as firefighting, police protection, public schooling, and search and rescue operations that PILT is intended to help fund (and which is already designated as such in county budgets). It also fails to note that Ravalli County is responsible for maintaining about 550 miles of public roads, and that expecting them to divert a large percentage of their PILT revenue to support about 1% of their county roads is unreasonable.

This evidence, taken in conjunction with the above cited statement from the FEIS (Ch. 3.5, p. 109) that, **“Road maintenance activities by Ravalli County are expected to occur as needed to maintain the road at the desired standard”** (emphasis supplied), makes it abundantly clear that the Forest Service expects

Ravalli County taxpayers to foot the majority of the costs of maintaining Willow Creek Road while the logging trucks (and other vehicles) associated with the Gold Butterfly Project repeatedly destroy a road not designed to carry this type of traffic.

The FEIS and the DROD documents are riddled with innuendo (as suggested above), that the Forest Service will work with the County regarding the physical and financial responsibilities in maintaining Willow Creek Road—carrying them out through ongoing public collaboration. Yet from the statement noted in the last paragraph, it would certainly seem that such allegations are duplicitous. One would think that if the Forest Service was serious about working together with Ravalli County to address this issue, they would have worked out the supposed agreement with the county over the past 3 years, since the County’s comments were initially made on this project on July 30, 2018. The reason for all of these concerns, and the Forest Service’s underlying motives to avoid addressing them, become even more apparent for the reasons explained in the section of this objection referenced as *“Economic analysis and its failure to recognize road, health and safety issues”* set forth later below.

*Forest Service’s assertions of rights of logging truck operators along Ravalli County roads.*

Despite serious impacts to road infrastructure, public safety and human health (as noted more specifically in objections below and on pp. 108-109 of the FEIS), the Forest Service maintains that not only is Ravalli County expected to maintain the road to the desired standard as indicated above, but logging truck operators are “still subject to the same traffic safety laws and posted speed limits on Willow Creek Road as all other road users.” (FEIS at p. 109). The clear innuendo is that Ravalli County is stuck with the Project and any rules relating to it that the Forest Service has determined. In part their theory appears to be based on a road maintenance agreement between the Forest Service and Ravalli County.

*Effect of “road maintenance” agreement.*

At several points in the Project documents, there is reference to an Agreement between Ravalli County and the Forest Service. For example, in the FEIS, at p. 19 (section 2.2.2.3), in referring to the haul route, the following statement is made:

...Although under county jurisdiction, the Forest Service does have an agreement with Ravalli County (dated May 22, 2017 to perform maintenance on 1.2 miles of Willow Creek Road within section 9; it is expected that this agreement will remain in place for the duration of the project. [Emphasis added.]

No doubt the Forest Service contends that it is this road agreement that gives it authority to insist that Ravalli County be solely responsible for the all maintenance of the public road, at least to the where the gravel section of the road begins. (See map of asphalt and gravel surfaced portions of Willow Creek Road shown on p. 106 of the FEIS.) [Note that the Forest Service in the FEIS, as a modification to the DEIS, says that it will enter into a Schedule A agreement to modify maintenance of the 1.2 mile portion of the road by undertaking maintenance responsibilities for the entire 2.46 miles of the gravel portion of Willow Creek Road (under county jurisdiction) for dust maintenance purposes (see Table 2.2-8 on p. 33, FEIS).]

Attached to the Goheen Objection (to the FEIS and DROD) as Document A is a copy of the existing 2017 “Schedule A” agreement between Ravalli County and the Forest Service regarding maintenance of various County and Forest Service roads, as well as Document B, the original 1965 “Forest Development Road Cooperative Agreement” [hereafter “1965 agreement”] to which the “Schedule A” attachment is modified from time to time. Contrary to any suggestions that these documents somehow obligate the Ravalli County to 1) pay the tab for maintaining the county Willow Creek Road “at the desired standard” or 2) permit the use of the road by commercial log truck traffic (without setting any special limitations on such traffic), throughout the duration of the project (regardless of its impact), these documents demonstrate the Forest Service’s rights and responsibilities in this matter, for the reasons outlined below. [Please note that references to documents set out in the following bullet points are attachments to the Goheen Objection.]

- P. 4 of the 1965 agreement [Attachment B to the Goheen Objection] indicates that “maintenance” is “subject to availability of funds.” P. 6 of that agreement contains a provision stating that nothing in the agreement “shall be construed to obligate” the Forest Service or the

County “beyond the extent of available funds allocated or programmed for this work...” As referenced from their earlier comments, Ravalli County has indicated it doesn’t have adequate funds to do maintenance on Willow Creek Road related to this Project.

- The 1965 agreement (p. 5) anticipates that in the event conditions require extraordinary repairs outside the scope of ordinary road maintenance, the same should be addressed through a separate project agreement.
- The 1965 agreement (p. 5) requires compliance with State and Federal laws and federal regulations (Department of Agriculture) AND those of Ravalli County relating to its jurisdiction as well as “all necessary rules of road use, such rules to include those measures necessary to regulate speeds, vehicular weights and widths, and such other restrictions for specified classes of users as deemed necessary for public interest and safety.” Thus, the Forest Service’s contention that logging truck operators have the same right to use the road as other vehicles (with no special restrictions on speed, weight limits, etc.), is contrary to the 1965 agreement. The Forest Service’s position also fails to recognize the Ravalli County’s rights to set up special rules, under Section 7-14-2127 MCA(1) (attached as Document C to the Goheen Objection) which allows county commissioners in their “discretion” to “limit or forbid, temporarily, any traffic or class of traffic on the county roads or any part of a county road when necessary in order to preserve or repair the roads.” It seems that would be especially appropriate during the (temporary) period when a major logging project is underway...in particular when this type of restriction is anticipated by virtue of an agreement with the Forest Service.
- The 2017 “Schedule A” [Document A to the Goheen Objection] to the aforescribed agreement, at p. 1 limits Forest Service operation of roadways “to that level necessary to provide for administrative

access to the National Forest” (emphasis added). A review of the Forest Service Manual 5400 *et seq* (Document D, p. 17) demonstrates that it is intended to be applied to the type of agreements like the 1965 agreement and Schedule A to it. On p. 20 of that same document, “definitions” are noted, and they also reference by inclusion definitions from a Forest Service Handbook (FSH 5409.17, chapter 60, section 60.5) [Document E]. That provision specifically indicates that in defining “Administrative Traffic” (including the reference on p. 1 of the Schedule A agreement), it “does not include commercial traffic associated with logging, such as log trucks, fallers, machine operators...”

- The Schedule A Document (p. 2) above referenced also clearly states that the Forest Service is responsible for not only the 1.2 miles of road maintenance at the upper end of the county Willow Creek Road, but they are also liable for evaluating the existing BRID bridge concerning a satisfactory load rating [presumably for the Gold Butterfly project, which in and of itself is likely to be expensive to bring up to required standards, given the current load rating of the Bridge as explained later in these objections].
- The Forest Service Handbook (FSH 1509.11, subpart 31.21 and 31.22)) [Document F] clearly anticipates that cooperative Forest Service Road Agreements can call for the Forest Service to provide funds “in whole or in part” to projects of this nature, and also anticipates that the same can become part of a Schedule Agreement. Additionally, Document G attached [FSM 7703.4] encourages the local authorities to bear only a proportionate share of reconstruction when they can’t afford to accept full responsibility (implying the Forest Service can bear their share or all of said costs).
- It is also anticipated under FSM 7703.5 (Document G to the Goheen Objection) that such costs for which the Forest Service bears responsibility may be recovered from “commercial haulers commensurate with their use.” (See *e.g.*, the Air Quality report

(pp.3-4) which anticipates passing dust abatement costs on to the contractor.) The problem with the application of this practice in the planning for the Gold Butterfly Project is that it does not appear that the realistic road and related expenses have been included in the economic analysis AND that such obligations and expenses should be made available by the Forest Service up front to any contractors bidding on the project to avoid the legal morass that might otherwise ensue.

- Regardless of the above points, as the current Schedule A Road Maintenance Agreement only lists the upper 1.2 miles of Willow Creek Road and the Willow Creek Road bridge across the BRID canal, and does not list the remaining portion of Willow Creek Road, this unlisted portion is not in any way under Forest Service Jurisdiction. Thus, even if the Forest Service argues that no restrictions should be placed on log truck traffic along portions of Willow Creek Road listed under Schedule A, they cannot compel Ravalli County to avoid restricting log truck traffic on the unlisted portions of said Road.

*Economic Analysis and the need to include road related health and safety expenses.*

The Economic Analysis document prepared in conjunction with the Project fails to meet the required specifications. Section 32.24 (2.) of the Forest Service Handbook, requires consideration of non-forest service costs. These include “cooperative road maintenance.”

At p. 3 of the Economic Analysis, the report indicates that the “FS continues to coordinate with Ravalli County about maintenance concerns,” when in reality there are no indications of any meaningful cooperative agreement reached over the past couple of years. Regardless, the report seems to acknowledge financial responsibility for only the upper 1.2 miles of Willow Creek road under county jurisdiction, and goes on to state: “It is expected that this agreement will remain in place for the duration of the project.” [Dust maintenance on the gravel portion of the road has been added since, based on the FEIS and FROD,

although analysis of any added costs regarding the same are not part of the Economic Analysis.]

The only line item which might “possibly” relate to “Road Maintenance” is that which appears on Table 4 on p. 8 of the report under “Other Logging Costs...” related to the Project. That amount is \$261,234, BUT there is no explanation of how it was derived and whether it is just related to road maintenance within the forest jurisdiction (which would appear to be the case, given the statements in the report immediately preceding said Table).

Based on the above analysis regarding the Forest Service’s lack of enforceable obligation relating to the logging Project against the County for its portion of the Willow Creek Road, and the commissioner’s stated inability for the County to pay for the same, it would appear that the Economic Analysis is seriously in error.

These errors are compounded because no one at the Forest Service appears to have done a study of the true cost of maintain the county road for a project of this size. The road maintenance costs given the number of logging trucks and related equipment, etc. traveling on one narrow road (most of which is either gravel or already potholed/cracked chip-sealed and is traditionally hard to maintain) is likely to be astronomical for the reasons stated later in these objections. The project is scheduled to last 8 years, so maintenance will need to be ongoing. This factor does not include the costs of proper dust abatement and related monitoring, etc.

The economic analysis also does not consider that monitoring and enforcement of the Clean Air Act standards, and other public safety measures may further curtail the use of the road (including through implementing speed requirements, limiting operation during school bus times on the road, etc.). These are real costs to any party bidding on the project (if they are to be added to their responsibilities), and they need to be disclosed to potential contractors. YET, as it currently sits, the FS is obviously anxiously anticipating beginning this Project as is evidenced by the DSEIS. Regardless, such related costs for the Project are likely to end up being the burden of the Forest Service or its contractors for the reasons above explained.

We have always contended that the Forest Service should take appropriate responsibility for the effects of the Gold Butterfly Project on Willow Creek Road and the BRID canal (see Goheen Comments 3 & 4 for the DEIS). The failure of the



FROD and FEIS to address the economic impact of undertaking these responsibilities violates the Bitterroot National Forest Land and Resource Management Plan, which calls for Project net public benefit and/or probable marketability to be analyzed before advertising the project (Gold Butterfly Project Economic Analysis, p. 1). However, no economic analysis related to this project has been published since March of 2018, and certainly no economic analysis has been made which takes into account the Forest Service's true financial responsibilities as outlined above.

**Questions and Requests:**

- Please set out in detail, if, and all reasons why you maintain that each point raised in the above Effect of "road maintenance" agreement section above is in error and any authority you rely on for the same.
- Is the Forest Service willing to amend the current Schedule A Road Maintenance Agreement with Ravalli County to place responsibility for maintaining (to the current level of quality and maintenance), the full 8.29 miles of Willow Creek Road with the Forest Service during the anticipated time period for this Project (currently 8 years)?
- Is the Forest Service willing to negotiate a Supplemental Project Agreement with Ravalli County which provides for the Forest Service to repave, improve, and if necessary, reconstruct the chip seal portion of Willow Creek Road? If so, please outline the details of the commitment that the Forest Service is willing to undertake regarding such a possible Agreement.
- Has the Forest Service conducted a load assessment on the BRID bridge which it arranged to do with the county under the 2017 Schedule A Amendment referenced above? If so, please provide all the results of the same. If such an assessment has not occurred, please detail all reasons why not.

- Is the Forest Service willing to cover expenses (proper maintenance; monitoring--through monitoring devices placed along Willow Creek Road; and enforcement) of adhering to Clean Air Act requirements and meeting other related public safety requirements? If so, please describe precisely any plans that you have regarding the same.
- Please detail all sources of money you can timely draw on to pay for each cost element referenced in this Section B), and whether any of these funds have been applied for and/or approved (and if so, under what program or authority), and the status of the same.

**C) THE GOLD BUTTERFLY FEIS DOES NOT ADEQUATELY ADDRESS AIR QUALITY ISSUES, INCLUDING DUST ABATEMENT PROCEDURES AND RESPONSIBILITIES FOR THE GRAVEL SECTION OF WILLOW CREEK ROAD AND THOSE PORTIONS OF THE ROAD THAT ARE LIKELY TO ESSENTIALLY BE PULVERIZED TO GRAVEL THROUGH PROJECT USAGE.**

In the original Goheen comments filed on this Project, item number 5 stated that, “Particulates and dust are likely to create a serious health issue on the upper stretches of Willow Creek Road from where the gravel section begins to the Forest Service boundary.” Our supporting arguments for this comment:

- 1) Provided that the Forest Service should take responsibility for dust abatement on the gravel section of Willow Creek Road which lies below the upper 1.2 miles of the road (which was already the responsibility of the Forest Service under their Schedule A Road Maintenance Agreement with Ravalli County);
- 2) Asked the Forest Service not to consider water as an appropriate treatment method (but rather use magnesium chloride applied as appropriately needed), given the short duration of water’s efficacy as a treatment method, and the difficulty of legally procuring sufficient quantities of water;
- 3) Requested that air quality be adequately monitored and particulate requirements not be violated., given that the DEIS Specialist Report – Air

Quality only mentioned monitoring devices in Hamilton, Missoula, and other more distant Montana locations which would not effectively measure the dust generated on Willow Creek Road by the Gold Butterfly Project.

In a table listing design features common to both Alternative 2 and Alternative 3, the FEIS for the Gold Butterfly Project states (Ch. 2.2.3, p. 33) that, “When conditions warrant, dust abatement for log hauling will be completed on sections of road for which the FS is responsible to maintain. The Forest Service will enter into a Schedule A road maintenance agreement with Ravalli County to undertake maintenance responsibilities for the entire 2.46 miles of gravel surface of Willow Creek Road. Conditions would not be warranted during winter or if the road surface is moist enough to limit dust. Abatement could include either water or chemical application.” [Emphasis supplied]

This design feature is flawed in major ways, as outlined below. Despite the alternatives for treatment described above in the FEIS, it has come to our attention that apparently in the summer of 2020, the Forest Service entered into an agreement with Ravalli County to participate in a program for magnesium chloride treatment of Willow Creek Road, with such work being done by the County. However, apparently the agreement is only in effect for a period of 5 years (and the Project hasn’t even started yet and is anticipated to last for 8 years). An even bigger problem is that it is our understanding that the County program involving magnesium chloride treatment is done only once annually. The gravel portion of the road received a treatment of magnesium chloride last summer and had deteriorated to the point it was hard to tell the work had even been done, just a few months later (many cracks were in the surface and much dust was already being recreated). This was true even though the Project has not yet started, and thus the loaded logging trucks had not traveled down the road. With each loaded logging truck being the equivalent of 4,000 to 7,000 cars traveling the road (and with a total of about 7,000 loads anticipated), the magnesium chloride would need to be VERY frequently applied on a regular basis to keep the dust at a Clean Air Act limit.

As it now stands, despite the possibility of “some” minimal magnesium chloride treatment being required and the above referenced DEIS requirements, the

Design Feature dealing with the dust issue is flawed in many ways, as noted below.

**1) The FEIS clearly envisions the option of using water as a primary dust abatement measure.**

In addressing the “Impacts to Health and Human Safety from Haul-Generated Dust,” the FEIS states (Ch. 3.5, p. 108) that, “Residents immediately adjacent to this section of Willow Creek Road may still temporarily experience elevated dust conditions over a short duration (i.e. hours) between dust abatement treatments.” As chemical dust abatement treatments do not require repeated treatments within hours, we can only assume that water dust abatement treatments could possibly be considered as a primary method of dust abatement.

Unfortunately, water treatments are impractical, both in their effectiveness and in their feasibility. At high temperatures, water treatments are only effective for about a half an hour (“Dust Palliative Selection and Application Guide,” published by the Forest Service and attached to our original comments as Document 14). However, the time a treatment vehicle would be required to travel just the length of the existing county portion of Willow Creek Road which is gravel is likely longer than a half an hour – and that does not include the time the truck would have to be refilled with water, nor the time it would take to water the Forest Service Roads running near Riparian Habitat Conservation Areas (RHCAs), as called for in the Gold Creek DEIS Specialist Report on Hydrology (p. 3). Gaining 30 minutes of dust abatement followed by “hours” of trucks propelling large amounts of particulate matter (PM) into the air is not an effective design feature.

Additionally, the feasibility of providing enough water for treatment vehicles is also impractical. The only large source of local water for such treatments is Willow Creek, but taking large amounts of water from Willow Creek would violate the decreed water rights of downstream users who rely upon their allotment of Willow Creek water for livestock, irrigation and similar use. Any attempt to use Willow Creek as a source for water-based dust abatement would therefore be illegal, and the Forest Service would likely be faced with resulting litigation. [See Article 9, Section 3 of the Montana State Constitution, which addresses water rights in Montana and Title 85, chapter 2, MCA, which sets forth the rights and

obligations relating to Montana surface and groundwater, and establishes the system for the ownership of rights and enforcing of decreed water rights. Enforcement is administered through the Department of Natural Resources and Conservation. This would include the water rights that have been determined or adjudicated through said authority, including those on Sub basin 76HA (dealing with the water rights of which the Willow Creek drainage is part), and the further restrictions as set forth in section 85-2-344 MCA relating to sub basin temporary closure.]

Magnesium chloride treatment to control gravel dust under these circumstances is consistent with federal recommendations. In the Federal Highway Administration (FHWA) 2013 report, "Unpaved Road Dust Management: A Successful Practitioner's Handbook," (see attached Document H to the Goheen Objection, hereafter "Handbook") a committee of more than 20 experts traveled to unpaved roads in 10 different sites across 4 western states, meeting with the respective host practitioners to gain a broad perspective to help road managers find successful means of dust abatement. A variety of chemical applications were observed, including magnesium chloride, calcium chloride, lignosulfonate, petroleum resin, synthetic polymer, synthetic fluid, electrochemical additives, sulfonated oil, and enzymes. The Handbook does not attempt to identify a "best product," but attempts to identify a process to best manage an unpaved road system using chemical treatments. It reminds practitioners that chemical dust abatement cannot make a bad road good, but that it can help keep a good road good.

According to the Handbook (p. 8), appropriate chemical dust control can limit the loss of fine road material, leading to: reduced dust levels; improved safety and driver experience; improved air and water quality; improved quality of life of nearby residents; extended intervals between gravel replacement needs; reduced maintenance costs through extended intervals between grader blading needs; and reduced public complaints. It states (p. 11-12) that, "Treating roads with an appropriate chemical additive will cost more up front compared to leaving them untreated, but the quantifiable benefits usually justify those extra costs... .

However, as referenced in the introductory portion of this section, even a magnesium chloride program must be applied with a frequency that it will keep

dust particles within the requirements of the Clean Air Act. To date, arrangements for the same do not appear to have been done.

**2) The FEIS provides no reasonable process for the monitoring and enforcement of dust abatement procedures, or for the input of the public and local government to report violations of appropriate, legally required standards.**

So, what does the FEIS statement that residents adjacent to the road “may still temporarily experience dust conditions for a short duration of time (i.e., hours)” mean? It is probable (given the Forest Service’s intention not to monitor, as covered below), that the impact of these large and heavy logging trucks and equipment on the road will lead the nearby residents to experience “hours” of exposure to particulates in excess of that allowed by the Clean Air Act. Those hours could be for most of the day; 12 am to 5 pm (when logging traffic is allowed to occur as described in Chapter 3 of the FEIS, p. 108). Monitoring (as referenced below) is critical to meeting Clean Air Act standards in these circumstances. It is worrisome to see this issue treated so carelessly when the Forest Service and its contractors would benefit financially from looking the other way, for days, weeks, or perhaps even months at a time.

Almost laughably, the DEIS Specialist Report – “Air Quality” apparently is still being relied on, even though it indicates (p. 2) that appropriate monitoring stations are available in “Hamilton, Missoula, Helena, Frenchtown, Butte and several other sites in Montana.” **Who would make such a statement and why would the DEIS and DROD ever rely on such assessments? The answer, sadly, is apparent - someone who apparently doesn’t care about the lives and health of those residing close to the road whose health will be affected.** Of the closest monitors mentioned, Hamilton is approximately an 11-mile drive from our home and Missoula is more than a 50-mile drive away (and the equipment referenced apparently isn’t even federal equipment, based on communications with Montana’s DEQ personnel.) It is utterly preposterous to claim that such equipment could reasonably measure local PM violations resulting from the proposed project.

Road dust generated by the Gold Butterfly Project presents a real threat to the health of those people who live near the gravel portion of Willow Creek Road. A literature review<sup>6</sup> by researchers from West Virginia University and North Dakota State University showed that, “Road dust was found to have harmful effects of the human body, especially the respiratory system.” This review found 17 different studies reporting that exposure to road dust had adverse health effects on the respiratory system, including asthma and mesothelioma. It also found 7 articles reporting that road dust exposure adversely affected the cardiovascular system, and one study that linked low birth weights to exposure of the mother to road dust during pregnancy. This extensive research showing a broad spectrum of negative health effects from road dust indicates that thorough care should be taken to minimize the amount of road dust generated by the Gold Butterfly Project.

How much dust may we expect on Willow Creek Road? Document 12 (Goheen initial Project Comments), taken from a Ravalli County 2004 Gravel Roads Management publication indicates that a single vehicle travelling an unpaved road once per day for one year will produce one ton of dust per mile, “which equates to losing 100 tons of fine particles per year for each mile of road with an average of 100 vehicles per day.” No doubt the log truck traffic (given the added weight, friction, road surface, etc.) will pulverize any gravel on Willow Creek Road. Surely such dust particles need to be monitored, and the road surface needs to be appropriately treated as part of the impact resulting from the Gold Butterfly Project. That needs to be done certainly for public health. It also needs to be done for public safety in travelling the roads.

Since the preparation of the Goheen Objection filed relating to this project, other evidence has also come to our attention about the dangers of the PM 2.5 particles which are referenced as being so dangerous. For a summary of the systemic effects of breathing fine particles suspended in air, see:

<https://hms.harvard.edu/magazine/racism-medicine/particulates-matter>. That article points out how such particles (PM 2.5) can cause a host of health conditions including not only cardiovascular or respiratory vulnerabilities, but as

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<sup>6</sup> “Road dust and its effect on human health: a literature review,” Khan, R & Strand, M. *Epidemiol Health*, v. 40. April 10, 2018. See attached Document I.

many as 12 additional diseases, including kidney failure, urinary tract and blood infections, and fluid and electrolyte disorders. This was based on a study of 95 million Medicare hospitalization claims from 2000 to 2012. “The research demonstrates that even small, short -term increases in exposure can be harmful to health, and quantifies the economic impact of the resulting hospitalizations and lives lost” (p.1). The article went on to point out that while older people may be more vulnerable than younger people with healthy immune systems, everyone is affected.

The Air Quality report (at p. 3) states, “Dust would be produced from timber harvest and related activities, including yarding, log hauling, and road maintenance. It would also be produced during administrative use and use by forest visitors. It is impossible to quantify the amount of dust that would be produced by each of the alternatives.” That apparently is the excuse the Forest Service is using to put on a blindfold and pretend that the Air Quality Act requirements for particulates do not need to be met. Surely the Forest Service has access to monitors. Since the upper portion of Willow Creek Road will be closed during log hauling activities for recreational users, there will only be a few residents who will be traveling the gravel portion of the road during those times. The Forest Service knows that the Gold Butterfly Project is huge and by comparison would be overwhelmingly responsible for any road dust. Their decision not to appropriately monitor local air quality indicates a fear of what they might find and what it might mean for the project.

Further aggravating the dangers referenced, the gravel portion of Willow Creek Road passes between two spines of the Sapphire Mountains, which creates a canyon-like characteristic, which is likely to trap dust, diesel fumes, etc. No reference has been made to this special feature and its likely aggravation of the accumulation of PM. This makes it even more important that local monitoring of air quality is made a priority.

Those involved with this Project should realize that we have acquired reliable air quality monitors, have used them to establish a baseline air quality under normal traffic along Willow Creek Road, and can use them to establish Clean Air Act violations. In that event appropriate relief could be sought through the Department of Environmental Quality for the state of Montana which is also



charged with enforcing the same particulate standards as those established by the EPA, and/or litigation could ensue. No one needs this sort of expense and disruption. It would be far better from the outset to do what is right for the health of public citizens and mandated by law.

Another factor that will affect the air quality along Willow Creek Road is smoke from slash burning. The primary focus of the air quality report was adverse air quality resulting from smoke arising from slash burns. While the “expert” asserted that smoke would primarily be directed away from the Bitterroot Valley, it was acknowledged that there may be “short periods of smoke during the night and early morning hours (Air Quality report, p. 3). It was also noted that residual smoke production from larger piles “would be expected for several days.” There has been no attempt to consider the impact of smoke particulate when combined with road dust and the need to restrict log hauling activity when conditions warrant (including when smoke may come from a wildfire). Such combination of factors needs to be addressed and enforced in plans for logging operations when dangerous levels of particulates are reached. Along these lines, it should be noted that evidence shows that prescribed fires in and of themselves can be especially dangerous to human health. In that regard we first point to a technical paper examining the nature of prescribed burns and their production of such particles, written by Haikerwal, *et. al.*<sup>7</sup> That article warned of special potential concerns regarding prescribed fires:

Unlike wildfires that are of high intensity, prescribed fires are cool low-intensity burns and produce relatively short plumes...While low-intensity prescribed burns (low heat, light emissions) cause minimal risk to life and property, they can however emit large amounts of smoke particulates... . Furthermore, prescribed burns are conducted on a regular basis (annually) and impact communities each year. Wildfires, on the other hand, are unpredictable episodic events. There may also be differences in the pattern of smoke exposure (such as duration and frequency) from prescribed fires compared to wildfires. Exposures to smoke plumes from prescribed fires are generally shorter in duration but occur more frequently than wildfire events, although studies are required to quantify the impacts

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<sup>7</sup> Haikerwal, Reisen, Sim, Abramson, Meyer, Johnston and Dennekamp, *Impact of smoke from prescribed burning: Is it a public health concern*, Journal of the Air & Waste Management Association, 65 (5):592-598, 2015.

from this. Prescribed burns are conducted under favorable meteorological conditions, for example, light winds and wind gusts, low temperature, and moderate humidity. These conditions limit the ventilation rate and smoke dispersion and thus promote the buildup of air pollution. As a result, smoke from prescribed burning can have a substantial impact on rural/regional areas, along with potential to impact airsheds due to long-range transport of smoke particles.

One of the important pollutants present in high concentrations in smoke from prescribed burns and wildfires is fine particulate matter (PM 2.5 with aerodynamic diameter  $<2.5\mu\text{m}$ ), and research studies have shown that PM 2.5 concentrations consistently exceed the air quality guidelines... Smaller particles are of greater public health concern than larger size fractions for two reasons: First they remain in the atmosphere for longer periods of time and second, they can penetrate further in the respiratory system where they promote local and systemic inflammation. ...

Another study from the Medical Journal of Australia has been reviewed in various articles, as noted in <https://www.scimex.org/newsfeed/health-impacts-of-prescribed-burns-significant> and <https://medicalxpress.com/news/2020-04-negative-health-impacts-significant.html>. Those articles reiterate that a significant number of premature deaths, and hospitalizations (and related costs) attributable to elevated PM 2.5 concentration. “The study found that, although the impacts of smoke from individual prescribed fires was much lower than that of severe bushfires, their cumulative impacts were similar because of much greater frequency of prescribed burns” [quotation from Schmex].

**3) As outlined hereafter, unless significant changes are made to the Gold Butterfly Project as it is currently laid out in the Draft Decision and FEIS, it is highly likely that the “paved” portion of Willow Creek Road will quickly deteriorate to the point where dust abatement becomes necessary for the remaining 5.83 miles of Willow Creek Road.**

If the Forest Service continues to take the position that it is not legally obligated to maintain the paved portion of the road, and Ravalli County does not have the

funds to repeatedly repave it, then the PM driven into the air from the passage of log trucks and other project-related vehicles driving over an amalgam of dirt and crushed pavement will likewise be an environmental violation for which the Forest Service will also be responsible. [For reference documents recited below, please see the arguments as they have also been made in the prior Goheen Comments and in particular the Goheen "Objection" to this Project, and the related attachments.]

Road dust on paved roads can also be resuspended by vehicular traffic and other disturbances (Nicholson, 1988). Moosmüller et al. (1998) showed that large vehicles such as trucks or buses resulted in high peaks in wind velocities and increased dust entrainment even from outside the driving lane. Heavy duty vehicles contributed eight times more resuspended road dust than light duty vehicles (Abu-Allaban et al., 2003). Resuspension is high from surfaces that have much loose material of suitable size to be entrained into the air (Kupianen, 2007). Düring et al. (2003) did not find a clear relationship between pavement condition and road dust emission levels, but noted that the highest emission levels tended to be on streets with the poorest conditions, and that their study did not include streets in very bad condition. If the paved road is ground to smithereens (as would be expected from the load referenced in the next Objection section, if not properly maintained), then monitoring of these sections of the road should also be required, with appropriate curtailment of log hauling activity when appropriate under the Clean Air Act.

**4) Failing to address the issues referenced in this Section C), would be a violation of law.**

Failing to properly address these issues would violate Section 17.8.308 (2) ARM (see attached Document K attached to the Goheen Objection), which states, "No person shall cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter." It would also violate Article IX of the Montana State Constitution (attached as Document L to the previously filed Goheen Objection) which states that, "The state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations."

It is quite likely that it would also violate the Clean Air Act by releasing more PM than is allowed by the EPA's National Ambient Air Quality Standards (NAAQS), which list PM as one of the six principal "criteria" air pollutants. We also note here—shockingly—that the DEIS Specialist Report (Air Quality) incorrectly lists the 24-hour standard for PM<sub>2.5</sub> at the 1997 level of 65 micrograms/cubic meter rather than the more current 2006 level of 35 micrograms/cubic meter—a mistake which almost doubles the actual maximum amount allowed. A copy of the current EPA Clean Air Act standards and the EPA's own summary of when the particulate levels referenced above were changed and made permanent, is contained in Document M [Goheen Objection].

### **Questions and Requests:**

- Is the Forest Service willing to commit to arrange for chemical dust abatement (presumably magnesium chloride, but possibly another proven chemical dust abatement measure) to be applied to the entire 2.46-mile gravel section of Willow Creek Road, on an as needed basis (in compliance with Federal and State clean air standards), to control excessive PM violating any air quality standards?
- Is the Forest Service throughout the Project willing to monitor the air quality with appropriate equipment placed along Willow Creek Road to determine when PM standards are being violated and additional dust abatement is required?
- Is the Forest Service willing to designate (at all times throughout the Project) a contact person to whom Ravalli County Officials or local residents can communicate their observations and concerns relating to local air quality along Willow Creek Road? Would this person (and the Forest Service) be responsible for undertaking corrective follow-up measures if violations are found. Would such corrective actions include the Forest Service mandating fewer loads, trucks, or equipment passing – or if

necessary, from time to time halt the project until the conditions appropriately change— in the event violations of the Clean Air Act are detected due to project-related traffic or activities (including when combined with prescribed burning)?

- If problems persist which suggest that the project inherently cannot reasonably meet air quality standards for a location along Willow Creek Road, is the Forest Service willing to require a decrease in the scope of the Project, even if that means less timber removal or log hauling occurs (or prescribed burning should be limited or stopped) until other solutions can be achieved (such as the use of roads at other locations than Willow Creek Road)?
- Is the Forest Service willing to extend the above monitoring and responsible decision-making to include the entire length of Willow Creek Road if road deterioration from Gold Butterfly Project traffic leads to significant air quality issues?

**D) THE GOLD BUTTERFLY FEIS DOES NOT ADEQUATELY ADDRESS THE IMPACT OF THE PROJECT ON THE PAVED PORTION OF WILLOW CREEK ROAD, NOR DOES IT ACKNOWLEDGE ITS RESPONSIBILITY TO REPAIR THIS IMPACT.**

In our original comments filed in 2018, Comment number 3 addressed the “Weight of Logging Trucks and [their] Impact on Paved Road[s].” In the supporting arguments for this comment, we calculated that the loaded log trucks necessary for the implementation of the Gold Butterfly Project would do 16 to 104 times more damage to the paved portion of Willow Creek Road than normal traffic would. Consequently, we asked that the Forest Service take responsibility for maintenance of the paved portion of Willow Creek Road, rather than let that burden fall to Ravalli County taxpayers.

The Gold Butterfly FEIS (Ch. 3.5, p. 109) states that, “The number of estimated log trucks for both alternatives will have a direct detrimental impact on both the paved and gravel surfaces of Willow Creek Road. The extent and duration of surface damage is likely to be higher with Alternative 2 than Alternative 3 based on estimated log truck volume and implementation time. Impacts may include rutting, broken or deteriorating surfaces, potholes, and/or washboards. Maintenance, such as surface blading or resurfacing, will be needed during the life of the project to maintain Willow Creek Road at its use standard. Timber sale contract stipulations preclude log hauling during wet periods when resource damage, such as erosion, will occur. Thus, hauling typically does not take place on U.S. Forest Service roads during periods of freeze/thaw or ice and snowmelt. Limiting log hauling during these times should help reduce damage to Willow Creek Road as well.” It goes on to state lower in the page that, **“Road maintenance activities by Ravalli County are expected to occur as needed to maintain the road at the desired standard.”** [Emphasis added.]

While this analysis acknowledges that the project will have an impact on the paved portion of Willow Creek Road, it does not attempt to quantify this impact. Now that the scope of the Gold Butterfly Project has been more accurately defined in the Draft Record of Decision, we have been able to more precisely calculate the effect of the project on the paved portion of Willow Creek Road. These calculations (see Document N attached to the Goheen Objection), which are based on logging trucks weighing between 80,000 and 92,000 pounds when fully loaded, cars weighing approximately 4,000 pounds, recent traffic density reports from the Ravalli County Road Department, and the GAO’s report linking road damage to the fourth power of weight per axle (see supporting documents 5, 6, 7, and 17 attached to our the original Goheen Comments), show that the loaded logging trucks from the Gold Butterfly Project can be expected to cause 22-39 times more road damage than normal traffic would. These calculations do not even include the damage that would be done by unloaded logging trucks, heavy vehicles brought in to perform road construction and maintenance, Forest Service vehicles, or other vehicles traveling on Willow Creek Road in connection with the Gold Butterfly Project. Thus, the multiplier (when compared to normal vehicle travel on the road) is likely to be much higher than the conservative estimate of 22-39—and this is over an eight-year span. Repairing the cumulative

road damage associated with this project would undoubtedly require hundreds of thousands of dollars, and likely much more to adequately maintain Willow Creek Road at a safe standard.

As referenced in the Goheen Objection, John Horat (Ravalli County Road Administrator) has confirmed that the County maintains the paved/chip sealed area section of the road from Corvallis to where the gravel section begins (a distance of 5.83 miles according to the FEIS, p. 105). Mr. Horat was able to provide per-mile estimates for the cost of the county could be expected to pay for repaving Willow Creek Road. He cited a recent agreement with a private contractor in which the county paid about \$170,000 per mile for repaving a similar road. He also stated that if the county was to do the work itself, the cost for materials (exclusive of labor, insurance, etc.) would be about \$90,000 per mile (the differential with the contracted outprice would also include some profit for the contractor). [From reviewing other materials, the cost of chip sealing the road would undoubtedly be less, but the longevity would likewise be less than repaving, especially given the extreme stress the road would be experiencing from heavy vehicles.]

If a third party (or Ravalli County, factoring in its employee, insurance, overhead, etc.) was doing the work to repave the 5.83 miles referenced above due to project damages, and a logging contractor (or the Forest Service) was paying to have that work done, the approximate cost would be almost one million dollars. ( $\$170,000 \times 5.83 = \$991,000$ .) Since the load and damage to the pavement/chip seal will occur over an eight-year period, interim treatment no doubt will be necessary if Willow Creek Road is to remain passable and reasonably safe for not only Project traffic but for the residents and others using the road. There are approximately 500 households accessing Willow Creek Road along its entire county length, and given likely average occupants, probably 1200-1300 residents utilizing Willow Creek Road. (See Document 16 referenced in the Goheen original Comments, which lists property owners compiled in 2018 from Onxmaps software.) These residents should not be expected to safely use a road that has been torn to “smithereens” (as one of the County road personnel described the result of projected Project traffic on the chip-seal portion of Willow Creek Road without proper maintenance); such a surface would not be satisfactory to log truck operators either.

As reflected in Objection 3 of this document, Ravalli County cannot afford to pay for the maintenance costs referenced above. Realistic road maintenance costs should be paid by the Forest Service (or the contracting party, with a guaranty that the necessary work will be completed and, if necessary, paid by the Forest Service).

**Questions and Requests:**

- Is the Forest Service willing to enter into a road maintenance agreement with Ravalli County in which they will undertake the responsibility to properly maintain the entire Willow Creek Road (including both the gravel portion and the chip/seal portion of the Road) throughout the entire duration of the Gold Butterfly Project (and not just when the Project is completed)?
- Is the Forest Service willing to require that the Project be halted if the maintenance referenced in the immediately preceding bullet point is not complied with?

**E) THE GOLD BUTTERFLY FEIS DOES NOT ADEQUATELY ADDRESS THE ISSUE OF MAINTENANCE OR REINFORCEMENT OF THE COUNTY BRIDGE ACROSS THE BRID CANAL AND RELATED PROBLEMS.**

In our original comments, Comment number 4 addressed the “County Bridge across BRID Canal and Related Problems.” In our supporting arguments relating to this comment, we noted that the Forest Service had agreed to take responsibility for any upgrading or maintenance necessary for the bridge under their current Schedule A Road Maintenance Agreement (Document A) with Ravalli



County. It also asked that a reasonable plan be developed for any necessary upgrades for the bridge, and for this plan to allow for ongoing traffic.

It is extremely unlikely that the bridge as currently constructed could safely hold the weight of even one loaded logging truck, much less the high volume of heavy vehicles necessary for the Gold Butterfly Project. As noted above in Objection 5, a loaded logging truck weighs between 80,000 to 92,000 pounds. The bridge's signage calls for a load limit of 19 tons (38,000 pounds, far less than a standard loaded logging truck). The Gold Butterfly FEIS makes only one mention of this issue, in Appendix C, Comment 5e.09, (again in the "No Further Response Necessary" section), which states that, "Any upgrades or maintenance planned for the Willow Creek Road/ Bitterroot Irrigation District Bridge must include considerations for ingress and egress to allow residents and road users access during bridge repairs (117-6)." The Forest Service's response to this comment claims that, "Any maintenance and repair work conducted on portions of Willow Creek Road or the Bitterroot Irrigation District Bridge would be conducted in consultation with and coordinated by Ravalli County and the Montana Department of Transportation."

While we hope that this coordination would occur, the response implies that the responsibility for this work would fall upon Ravalli County or the state of Montana. This appears to be untrue, as the Schedule A Road Maintenance Agreement between Ravalli County and the Forest Service lists the bridge among the road sections for which the Forest Service takes responsibility, at least as to "load rating," which implicitly should mean that the Forest Service should do the necessary work to make sure the bridge can handle the loads anticipated to be carried by the logging trucks on this project. If that is not part of the Forest Service's responsibility, then it should certainly become so through a revision of the Schedule A agreement and the negotiation of an appropriate project agreement. Since currently the load limit is 19 tons, it would be illegal for weights above that (especially those related to this project). Ravalli County does not have to be responsible for rebuilding the bridge to the level adequate to handle the logging trucks. Rather, by law (7-14-2127 MCA; Document C), no vehicle above the weight limits should be allowed to pass over the bridge.

As the bridge in question is narrow, any significant maintenance or reinforcement could require that a secondary bridge or a widened bridge be constructed to allow traffic to pass while said maintenance or reinforcement was being done. This could require obtaining an easement from one of the owners of the property bordering the bridge. While none of this is impractical, the failure of the FEIS to provide a design feature outlining the Forest Service's plan of action on this issue is a significant oversight.

We have been told that the inclusion of the BRID in the Schedule A Agreement was specifically intended to allow the Forest Service to perform a load assessment on the bridge to determine its ability to handle the traffic that would result from the Gold Butterfly Project. However, it appears that no assessment was ever made (most probably because the Forest Service did not want the answers). Under the circumstances, we will be asking the Ravalli County Commissioners to request that this bridge be assessed and posted by the Montana Department of Transportation's Bridge Load Posting program which was initiated last year and is currently underway. As by statute, the county governing authority (given knowledge of risks) could become personally liable for any resulting problems if they do not make this request, we anticipate that the request will be made, and that the bridge will be scheduled for a load assessment by the MDoT, since the Forest Service has not followed through on its initial intent to do so. Furthermore, for the reasons referenced above in these Comments to the DSEIS [Section B.) 2.)], Ravalli County has the ability in several ways to effectively curtail or shut down the Project if there the load limitations (by weight and over time) impact the safety of the Bridge.

### **Questions and Requests:**

- Is the Forest Service willing to perform a proper engineering study on the Bridge (by competent professionals) to determine capacity of the Bridge relating to load assessment--not only as to sustaining an individual likely weight of a loaded logging truck (80,000 to 92,000 pounds), but also the capacity of the Bridge to allow the passage of approximately 7,000 of such

trucks during the course of the project? Is the Forest Service willing to make such a study promptly available to Ravalli County and to all parties commenting or objecting to this Project?

- Is the Forest Service willing to delay the Gold Butterfly Project until the MDoT load assessment can be done and make sure that the Project complies with its findings?
- If this assessment finds that improvements are needed to safely handle project traffic, will the Forest Service withdraw the project until funds can be found to make said improvements?
- What does the Forest Service plan to do if damage from project traffic renders the bridge unusable, both in regards to damages suffered by Ravalli County, and separately to any persons who are affected by an inability to utilize the Bridge (especially those to the East of the Bridge on Willow Creek Road whose only vehicular access “out” is over this Bridge).

**F) THE GOLD BUTTERFLY FEIS AND FROD DO NOT ADEQUATELY ADDRESS THE ISSUE OF PUBLIC SAFETY DUE TO INCREASED TRAFFIC FROM LOGGING TRUCKS ON WILLOW CREEK ROAD.**

In the original Goheen Comments to this Project, Comment number 6 addressed “Other Safety Issues” involving the increased traffic along Willow Creek Road associated with the Gold Butterfly Project. These issues included:

- 1) Safety issues involving log trucks traveling on areas of Willow Creek Road that are quite narrow and/or have very limited sight distances;
- 2) Safety issues involving Gold Butterfly traffic increasing the danger at “blind” intersections;
- 3) Safety issues involving log trucks traveling Gold Butterfly during times when school buses are traveling along Willow Creek Road.

We asked speed limits to be implemented and monitored by the Forest Service to preserve public safety.

The FEIS (Ch. 3.5, p. 105) admits that “Some sections of Willow Creek Road as well as secondary road intersections with Willow Creek Road have limited sight distances due to topography and curves in the road layout.” It notes (*Id.*) that there are 94 intersections with Willow Creek Road along its 8.29 county length (including driveways and others which are secondary roads leading to multiple residences). It acknowledges that there will be decreased sight distance where dust is present (although it focuses on the gravel portion of the road rather than dust that may emanate from the paved portion of the road if it becomes pulverized) (Ch. 3.5, p. 108). It also states (Ch. 3.5, p. 109) that, “Risk to public safety for motorized, non-motorized, and pedestrian traffic along Willow Creek Road will be elevated over background conditions due to the volume of log trucks estimated under Alternative 2 and Alternative 3.” However, it claims (*Id.*) that, “Log truck operators are still subject to the same traffic safety laws and posted speed limits on Willow Creek Road as all other road users.” The FEIS and the final ROD incorporating it acknowledge that design features and safety precautions can’t eliminate risk altogether [p. 109, Ch 3.5 of FEIS and provision 2.3.2 of DROD, p. 9]. That could be interpreted as “Too bad for those who may be injured or die as a result of this Project, as we certainly wouldn’t want to do anything to slow these logging trucks down.”

Unfortunately, the logging trucks and other heavy vehicles required for the Gold Butterfly Project are not capable of stopping or maneuvering as quickly as normal vehicles. This is the reason that on many roads, the speed limit for heavy trucks is lower than the speed limit for normal vehicles. There have also been complaints from residents near other Forest Service projects in Ravalli County that logging trucks (often being under significant economic pressure to quickly deliver their cargo) have regularly traveled at unsafe speeds along narrow, windy gravel roads like Willow Creek Road. The Forest Service to date has been unwilling to require its contractors to travel at safer speeds.

The FEIS also states (Ch. 3.5, p. 109) that, “Other safety precautions will include signage along Willow Creek Road alerting the public to the presence of log trucks.” Although the FEIS (Ch. 2.2.3, p. 33) includes a design feature to close

Willow Creek Road's upper 1.2 miles on weekdays from 12 AM to 5 PM and to provide signage (and other methods) to communicate this, no other design feature mentions signage, despite the claim made on page 109.

The FEIS does not adequately address the issue of limiting logging traffic during times when school busses are picking up or dropping off children along Willow Creek Road. The issue is raised only in Appendix C, Comment 5e.02 (once again, in the "No Further Response Required" section), which refers to a design feature listed in Chapter 2, Table 2.2-8 of the FEIS restricting log hauling past Corvallis Elementary School during student drop off and pick up times. These times are listed in said table as being from 8:00-8:45 AM and from 3:00-3:45 PM. However, school busses regularly travel along Willow Creek road during times outside of these official drop off and pick up times for the school. This design feature was present during the DEIS and was acknowledged in our comments last summer. The response listed in the FEIS completely ignores the question of protecting those students who ride the bus rather than being dropped off or picked up directly at the school.

The FEIS, DROD, and final ROD, indicate that the Forest Service has endeavored to find other haul routes for this massive project (instead of just utilizing one narrow road (14 feet at times on curves as it passes through our property) as the only available solution. They have chosen to avoid other alternatives (such as temporary condemnation of easements for log hauling purposes, even though that remedy is authorized under Montana law. See 70-30-102 (42) and 70-30-109 MCA [Document O of the Goheen Objection].

**Questions and Requests:**

- Is the Forest Service willing to include provisions in its contracts with logging companies to limit the speed of log trucks to 15 miles per hour on the gravel section of Willow Creek Road and to 25 miles an hour on the paved section of the road?

- Is the Forest Service willing to provide for either equipment or personnel to monitor the speed of log trucks to assure that the restriction in the immediately preceding bullet point is being followed?
- Is the Forest Service willing to provide signage along Willow Creek Road alerting the public to the presence of log trucks?
- Is the Forest Service willing to restrict the travel of log trucks along the paved portion of Willow Creek Road during school bus pick up and drop off times, from 7:30-8:00 AM and from 3:45-4:10 PM?
- Is the Forest Service willing to employ efforts for temporary condemnation of alternative easements to effectuate alternative routes for a reasonable portion of the log hauling relating to this massive Project which is allowed by law (as indicated above)?

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### CONCLUSION

Thank you for your time and consideration. If you need any further information or documentation (including any of the articles referenced herein), please advise and we will endeavor to provide the same.

For the reasons stated herein, as well as those in the earlier Goheen Comments and Objection and in all Comments and Objections filed on behalf of Alliance for the Wild Rockies and Friends of the Bitterroot , we respectfully request that the Forest Service withdraw the Gold Butterfly Project until and unless said issues can be resolved.

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