Comment VIA Link: www.fs.usda.gov/project/?project=60856

January 6, 2023

Doug Nishek
Sandpoint Ranger District
1602 Ontario St.
Sandpoint, ID 83864

Dear Doug:

On behalf of the American Forest Resource Council (AFRC) and its members, thank you for the opportunity to provide scoping comments on the Chloride Gold Project.

AFRC is a regional trade association whose purpose is to advocate for sustained yield timber harvests on public timberlands throughout the West to enhance forest health and resistance to fire, insects, and disease. We do this by promoting active management to attain productive public forests, protect adjoining private forests, and assure community stability. We work to improve federal and state laws, regulations, policies, and decisions regarding access to and management of public forest lands and protection of all forest lands. Many of our members have their operations in communities within and adjacent to the Idaho Panhandle National Forest and management on these lands ultimately dictates not only the viability of their businesses, but also the economic health of the communities themselves.

The proposed Chloride Gold Project is located southeast of Lake Pend Oreille. The project area is about 43,000 acres in size. The proposed action includes vegetation management/fuel reduction and activities to manage invasive plants, roads, trails, recreation, wildlife habitat, and improve fish passage under streets. The proposed activities focus on treating approximately 17,150 acres of vegetation using 327 vegetation treatment units, including about 5,358 acres for prescribed burning only.

AFRC supports the Purpose and Need for this Project which includes:

- Decrease hazardous fuels
- Improve overall landscape resiliency to disturbances such as wildfires, insect, and disease outbreaks.

While AFRC supports the Purpose and Need for this Project, we would like you to consider the following comments that we believe will enhance and strengthen the Project.

1. AFRC is pleased that the Forest has identified 9,004 acres for possible commercial treatments and an additional 8,153 acres for non-commercial treatments. This represents about 40% of the Project area. AFRC supports this work considering that stands in the area are dominated by grand fir, Douglas-fir, western hemlock and lodgepole pine. The existing preponderance of these species represents an increase from what had been historically present on the landscape and does not reflect the desired condition of the forest. Currently stands are more susceptible to disease related mortality such as root diseases which now dominate the landscape. Also, with the current makeup of species and lack of disturbances, such as wildfire, there is a lack of desired species composition and structural diversity, which contribute to the vulnerability of the stands to succumb to insects, diseases, and high severity wildfires. Hence, there is a need to re-introduce desired species through larger regeneration harvests and planting operations to improve growing conditions for future and existing western larch, ponderosa pine, and blister rust-resistant western white pine.

   While the Purpose and Need for the Project focuses on forest health and fuels reduction, we suggest that the Forest include another Purpose and Need to provide timber products for the local sawmills in the area that depend on sawlogs from the Idaho Panhandle National Forest for their operations. The National Forests in Idaho are very important for providing the raw materials that local sawmills need to operate. The timber products provided by the Forest Service are crucial to the health of our membership. Without the raw material sold by the Forest Service these mills would be unable to produce the amount of wood products that the citizens of this country demand. Specifically, studies in Idaho have shown that 18 direct and indirect jobs are created for every one million board feet of timber harvested. Without this material, our members would be unable to run their mills at capacities that keep their employees working, which is crucial to the health of the communities that they operate in. These benefits can only be realized if the Forest Service sells their timber products through sales that are economically viable. This viability is tied to both the volume and type of timber products sold and the manner in which these products are permitted to be delivered from the forest to the mills. There are many ways to design a timber sale that allows a purchaser the ability to deliver logs to their mill in an efficient manner while also adhering to the necessary practices that are designed to protect the environmental resources present on Forest Service forestland.

2. AFRC supports the Forest's proposal of creating 43 openings larger than 40 acres; approval to exceed 40 acres will be requested from the Regional Forester in accordance with the law. This will serve as AFRC's endorsement for creating the openings since the Forest must open a 60-day public notice comment period. Openings in the project area would range from 41 acres to 606 acres and would be generated through regeneration harvests. These regeneration harvests would consist of a mix of shelterwood and seed tree harvests that will focus on removing less desirable and disease-susceptible species such as grand fir, Douglas-fir, western hemlock, and lodgepole pine. These harvests would remove most of the overstory within the proposed treatment areas. Regeneration

harvest at this time would capture some of the timber value before additional mortality occurs and would contribute to local economies by providing wood products. If the proposed timber harvest locations have the potential to affect wildlife and/or sensitive plant areas, these areas would be analyzed for effects and may be buffered, mitigated, and/or removed from harvest.

3. AFRC did not see a proposed Road Management Plan in the scoping document regarding reconstruction, new construction, and possible road decommissioning. We would like to remind the Forest that an intact road system is critical to the management of Forest Service land, particularly for the provision of timber products in the general timber designated lands. Without an adequate road system, the Forest Service will be unable to offer and sell timber products to the local industry in an economical manner. The land base covered in the Chloride Gold Project area is to be managed for a variety of forest management objectives. Removal of adequate access to these lands compromises the agency's ability to achieve these objectives and is very concerning to us. Roads proposed for decommissioning should be assessed to determine if objectives could be met instead by road closure using barriers or blockage of the road entrances. AFRC does not support obliteration or recontouring roads that are to be decommissioned because of the high cost involved. The project is already very uneconomical.

   Furthermore, there are alternative methods to mitigating potential resource damage caused by poorly designed or poorly maintained roads aside from full decommissioning. Removing or replacing ineffective culverts, installing waterbars, and blocking access are all activities that can mitigate resource damage while maintaining useful roads on the landscape for future use. Please consider these methods as an alternative to full decommissioning.

   AFRC believes that a significant factor contributing to increased fire activity in the region is the decreasing road access to our federal lands. This factor is often overshadowed by both climate change and fuels accumulation when the topic of wildfire is discussed in public forums. However, we believe that a deteriorating road infrastructure has also significantly contributed to recent spikes in wildfires. This deterioration has been a result of both reduced funding for road maintenance and the federal agency's subsequent direction to reduce their overall road networks to align with this reduced funding. The outcome is a forested landscape that is increasingly inaccessible to fire suppression agencies due to road decommissioning and/or road abandonment. This inaccessibility complicates and delays the ability of firefighters to attack fires quickly and directly. On the other hand, an intact and well-maintained road system would facilitate a scenario where firefighters can rapidly access fires and initiate direct attack in a more safe and effective manner.

   If the Forest Service proposes to decommission, abandon, or obliterate road segments from the Chloride Gold Project area we would like to see the analysis consider potential adverse impacts to fire suppression efforts due to the reduced access caused by the reduction in the road network. We believe that this road network reduction would

decrease access to wildland areas and hamper opportunities for firefighters to quickly respond and suppress fires. On the other hand, additional and improved roads will enable fire fighters quicker and safer access to suppress any fires that are ignited.

We would like the District to carefully consider the following three factors when deciding to decommission any road in the project area:

- Determination of any potential resource risk related to a road segment.
- Determination of the access value provided by a road segment.
- Determination of whether the resource risk outweighs the access value (for timber management and other resource needs).

We believe that only those road segments where resource risk outweighs access value should be considered for decommissioning.

4. AFRC believes that the use of Designation by Prescription might be a good option for designating the trees to be harvested and those to be retained especially in commercial thinning, seed tree, and shelterwood harvests. The goal of the Project is to remove shade tolerant species such as grand fir, western red cedar, and western hemlock and shift towards more western larch, western white pine, and ponderosa pine. Prescriptions can be written to accomplish this.

5. AFRC would like the Forest to consider implementing shaded fuel breaks along some of the major ingress and egress roads. These shaded fuel breaks should extend to at least 200 feet on each side of the road for not only fuel breaks, but also to improve forest health.

6. AFRC is concerned about the plan to prescribe burn 5,359 acres of natural fuels. In recent years we have seen the window of opportunity for prescribed fire diminish either because of poor burning conditions or because of air shed restrictions. We also believe that a programmatic option for salvage of excessive burnt timber should be included in your analysis should any of the prescribed fires escape.

7. AFRC and our members have voiced our concerns in the past about required removal of non-saw materials when there are no markets present. We would like the Forest to provide for optional removal of this material.

8. Looking at the geography and map of the Project area, it appears that there are several drainages and smaller streams within the Project area. It has been well documented that thinning in riparian areas accelerates the stand's trajectory to produce large conifer trees and has minimal effect on stream temperature with adequate buffers. Removal of suppressed trees has an insignificant short-term effect on down wood, and ultimately a positive effect on long-term creation of large down woody debris and large in stream wood, which is what provides the real benefit to wildlife and stream health. We encourage the Forest Service to focus their riparian reserve treatments on a variety of native habitats. Utilization of gap cuts to promote early seral habitat in the reserves,

treatments to diversify all areas of the reserve, and prescriptions that account for the full range of objectives.

The tradeoffs that the Forest Service will likely be considering through the ensuing environmental analysis will be between achieving these forest health benefits and potentially having adverse impacts to streams. These impacts to streams typically include stream temperature, wood recruitment, and sedimentation associated with active management. We would like the Forest Service to review the literature cited below and incorporate its findings into your environmental analysis that will shape the level of management permitted to occur in riparian reserves.

Stream temperature

Janisch, Jack E, Wondzell, Steven M., Ehinger, William J. 2012. Headwater stream temperature: Interpreting response after logging, with and without riparian buffers, Washington, USA. *Forest Ecology and Management*, 270, 302-313.

Key points of the Janisch paper include:

- The amount of canopy cover retained in the riparian buffer was not a strong explanatory variable to stream temperature.
- Very small headwater streams may be fundamentally different than many larger streams because factors other than shade from the overstory tree canopy can have sufficient influence on stream temperature.

Anderson P.D., Larson D.J., Chan, S.S. 2007 Riparian Buffer and Density Management Influences on Microclimate of Young Headwater Forests of Western Oregon. *Forest Science*, 53(2):254-269.

Key points of the Anderson paper include:

- With no-harvest buffers of 15 meters (49 feet), maximum air temperature above stream centers was less than one-degree Celsius greater than for unthinned stands.

Riparian reserve gaps

Warren, Dana R., Keeton, William S., Bechtold, Heather A., Rosi-Marshall, Emma J. 2013. Comparing streambed light availability and canopy cover in streams with old-growth versus early-mature riparian forests in western Oregon. *Aquatic Sciences* 75:547-558.

Key points of the Warren paper include:

- Canopy gaps were particularly important in creating variable light within and between reaches.
- Reaches with complex old growth riparian forests had frequent canopy gaps which led to greater stream light availability compared to adjacent reaches with simpler second-growth riparian forests.

Wood Recruitment

Burton, Julia I., Olson, Deanna H., and Puettmann, Klaus J. 2016. Effects of riparian buffer width on wood loading in headwater streams after repeated forest thinning. *Forest Ecology and Management*. 372 (2016) 247-257.

Key points of the Burton paper include:

- Wood volume in early stages of decay was higher in stream reaches with a narrow 6-meter buffer than in stream reaches with larger 15- and 70-meter buffers and in unthinned reference units.
- 82% of sourced wood in early stages of decay originated from within 15 meters of streams.

Sedimentation

Rashin, E., C. Clishe, A. Loch and J. Bell. 2006. Effectiveness of timber harvest practices for controlling sediment related water quality impacts. *Journal of the American Water Resources Association*. Paper No. 01162

Key points of the Rashin paper include:

- Vegetated buffers that are greater than 33 feet in width have been shown to be effective at trapping and storing sediment.

Dry Forests

Messier, Michael S., Shatford, Jeff P.A., and Hibbs, David E. 2011. Fire Exclusion effects on riparian forest dynamics in southwestern Oregon. *Forest Ecology and Management*. 264 (2012) 60-71.

Key points of the Messier paper include:

- Fire exclusion has altered the structure, composition, and successional trajectory of riparian forests in fire-prone landscapes.
- Fire exclusion has been associated with increase in tree density and recruitment of shade-tolerate species that may replace large diameter, more decay-resistant Douglas-fir trees.
- A hands-off management regime for these riparian forests will have ecologically undesirable consequences.

Collectively, we believe that this literature suggests that there exists a declining rate of returns for "protective" measures such as no-cut buffers beyond 30-40 feet. Resource values such as thermal regulation and coarse wood recruitment begin to diminish in scale as no-cut buffers become much larger. We believe that the benefits in forest health achieved through density management will greatly outweigh the potential minor tradeoffs in stream temperature and wood recruitment, based on this scientific literature. We urge the Forest Service to establish no-cut buffers along streams no larger than 40 feet and maximize forest health outcomes beyond this buffer.

9. AFRC couldn't find any documentation regarding how the Project might impact the issues of carbon sequestration and climate change. We assume you will be relying on how carbon sequestration was programmatically analyzed in the Forest Plan FEIS.

   The issue of carbon sequestration and greenhouse gasses should be discussed in every Project. We would like the Forest to supplement their Carbon discussion in the EA by

considering the points below from a technical report by the Climate Change Vulnerability Assessment and Adaptation Project (SWOAP) in Southwest Oregon.

- Wood harvested from the forest, especially timber used for durable structures, can be reservoirs of long-term carbon storage (Bergman et al. 2014).
- Forests and their products embody a closed-loop system in which emissions associated with harvests and product use are eventually recovered as forests regrow.
- Although products may be retired in solid waste disposal sites, they decompose quite slowly, causing carbon to continue to be stored for many decades.
- Products derived from the harvest of timber from national forests reduce carbon emissions by substituting for more energy-intensive materials including concrete, steel, and plastics.

Please see the graph below from the IPCC (2007) that captures the ability of forests to "stack" carbon sequestration and storage through continual harvests. **Please consider adopting this graph into the Chloride Gold project analysis.**

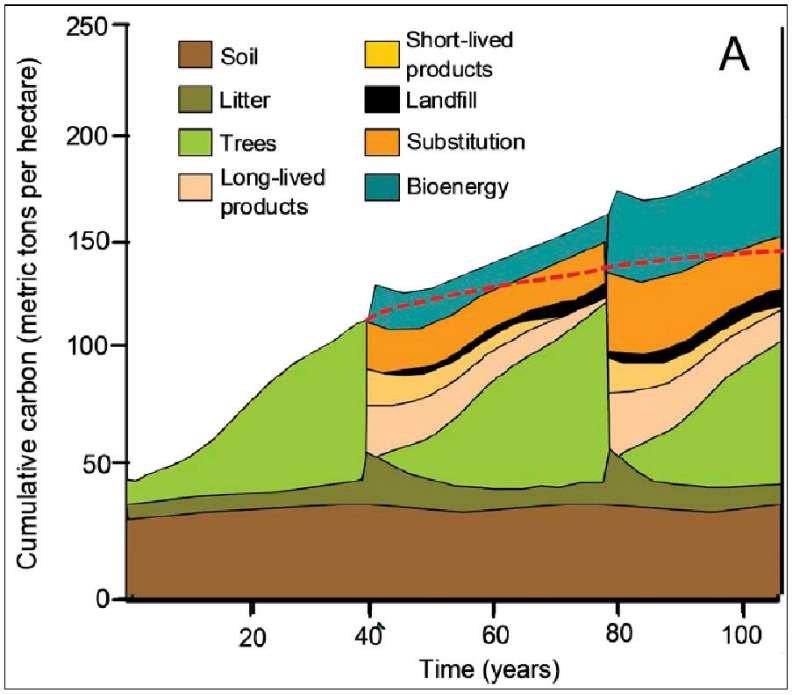

Figure 8.7—Carbon balance from a hypothetical forest management project in which the forest is harvested roughly every 40 years from land that started with low forest carbon stocks. This figure accounts for forest regrowth and carbon stored in wood products in use and landfills as well as the prevented release of fossil fuel carbon (also counted as stored carbon) via product substitution and biomass energy. It illustrates how forests can continue to accrue carbon over time with forest management. Figure is from McKinley et al. (2011) and adapted from IPCC (2007).

We believe that this graph encapsulates the forest management paradigm that would be most effective at maximizing carbon sequestration on a per-acre basis by "stacking" storage in wood products and regrowth of newly planted trees.

We would like to encourage the Field Office to consider several documents related to carbon sequestration related to forest management.

McCauley, Lisa A., Robles, Marcos D., Wooley, Travis, Marshall, Robert M., Kretchun, Alec, Gori, David F. 2019. Large-scale forest restoration stabilizes carbon under climate change in Southwest United States. *Ecological Applications*, 0(0), 2019, e01979.

Key points of the McCauley paper include:

- Modeling scenarios showed early decreases in ecosystem carbon due to initial thinning/prescribed fire treatments, but total ecosystem carbon increased by 9–18% when compared to no harvest by the end of the simulation.
- This modeled scenario of increased carbon storage equated to the removal of carbon emissions from 55,000 to 110,000 passenger vehicles per year until the end of the century.
- Results demonstrated that large-scale forest restoration can increase the potential for carbon storage and stability and those benefits could increase as the pace of restoration accelerates.

We believe that this study supports the notion that timber harvest and fuels reduction practices collectively increase the overall carbon sequestration capability of any given acre of forest land and, in the long term, generate net benefits toward climate change mitigation.

Gray, A. N., T. R. Whittier, and M. E. Harmon. 2016. Carbon stocks and accumulation rates in Pacific Northwest forests: role of stand age, plant community, and productivity. Ecosphere 7(1):e01224. 10.1002/ecs2.1224

Key points of the Gray paper include:

- Although large trees accumulated C at a faster rate than small trees on an individual basis, their contribution to C accumulation rates was smaller on an area basis, and their importance relative to small trees declined in older stands compared to younger stands.
- Old-growth and large trees are important C stocks, but they play a minor role in additional C accumulation.

We believe that this study supports the notion that, if the role of forests in the fight against climate change is to reduce global greenhouse gasses through maximizing the sequestration of carbon from atmospheric CO2, then increasing the acreage of young, fast growing small trees is the most prudent management approach.

Gustavsson, L., Madlener, R., Hoen, H.-F., Jungmeier, G., Karjalainen, T., KlÖhn, S., … Spelter, H. (2006). The Role of Wood Material for Greenhouse Gas Mitigation. Mitigation and Adaptation Strategies for Global Change, 11(5–6), 1097–1127.

Lippke, B., Oneil, E., Harrison, R., Skog, K., Gustavsson, L., Sathre, R. 2011 Life cycle impacts of forest management and wood utilization on carbon mitigation: knowns and unknowns, Carbon Management, 2:3, 303-333.

McKinley, D.C., Ryan, M.G., Birdsey, R.A., Giardina, C.P., Harmon, M.E., Heath, L.S., Houghton, R.A., Jackson, R.B., Morrison, J.F., Murray, B.C., Pataki, D.E., Skog, K.E. 2011. A synthesis of current knowledge on forests and carbon storage in the United States. Ecological Applications. 21(6): 1902-1924.

Skog, K.E., McKinley, D.C., Birdsey, R.A., Hines, S.J., Woodall, C.W., Reinhardt, E.D., Vose, J.M. 2014. Chapter 7: Managing Carbon. In: Climate Change and United States Forests, Advances in Global Change Research 57 2014; pp. 151-182.

AFRC believes that in the absence of commercial thinning, the forest where this proposed action would take place would thin naturally from mortality-inducing natural disturbances and other processes resulting in dead trees that would decay over time, emitting carbon to the atmosphere. Conversely, the wood and fiber removed from the forest in this proposed action would be transferred to the wood products sector for a variety of uses, each of which has different effects on carbon (Skog et al. 2014). Carbon can be stored in wood products for a variable length of time, depending on the commodity produced. It can also be burned to produce heat or electrical energy or converted to liquid transportation fuels and chemicals that would otherwise come from fossil fuels. In addition, a substitution effect occurs when wood products are used in place of other products that emit more GHGs in manufacturing, such as concrete and steel (Gustavasson et al. 2006, Lippke et al. 2011, and McKinley et al. 2011). In fact, removing carbon from forests for human use can result in a lower net contribution of GHGs to the atmosphere than if the forest were not managed (McKinley et al. 2011, Bergman et al. 2014, and Skog et al. 2014). The IPCC recognizes wood and fiber as a renewable resource that can provide lasting climate-related mitigation benefits that can increase over time with active management (IPCC 2000). Furthermore, by reducing stand density, the proposed action may also reduce the risk of more severe disturbances, such as insect and disease outbreak and severe wildfires, which may result in lower forest carbon stocks and greater GHG emissions.

Thank you for the opportunity to provide combined scoping comments for the Chloride Gold Project. I look forward to following this Project as it moves to the Draft EA phase in the coming months.

Sincerely,

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