Objection Reviewing Officer USDA Forest Service, Northern Region 26 Fort Missoula Road Missoula, MT 59804

Subject: Dead Laundry Project Objection

To Whom It May Concern:

Attached, please find my Objection to the Dead Laundry Project. I am objecting as a private citizen, and not on behalf of any organization. The Dead Laundry Project is located on the Nez Perce-Clearwater National Forests. The responsible official is Andrew Skowlund, District Ranger for the North Fork Ranger District. I was the North Zone Fisheries biologist for more than 9 year prior to my retirement in May 2020 and participated in the early planning for this project.

Mr. Skowlund has apparently decided to implement the Proposed Action as described in the Dead Laundry Environmental Assessment. The Proposed Action includes 3,580 acres of timber harvest, 1,351 acres of prescribed fire, 640 acres of non-commercial fuels reduction near private lands, and 140 acres of "old growth enhancement." To carry out these activities, the Forest Service also proposes to construct 52 miles of temporary roads, 12 miles of permanent roads, and to "reconstruct" approximately 100 miles of existing excavated routes (some segments may not meet a reasonable definition of "road.")

I filed timely comments on the Dead Laundry Project in response to the draft Environmental Assessment on June 27, 2021. The issues I raised in my comments included concerns about lack of necessary watershed restoration, compliance with Forest Plan components, stream habitat quality assessment, analysis of effects on ESA-listed bull trout, inadequacy of project mitigation features, and the incomplete description and inventory of the network of linear excavated routes. I asked the Forest Service to identify and incorporate watershed restoration activities related to roads and other linear transportation features into the project in order to achieve Forest Plan standards and conserve ESA-listed bull trout. A legal notice initiating the objection period was published in the Lewiston Tribune, the newspaper of record, on December 31, 2021. Objections must be submitted to the reviewing officer within 45 calendar days following publication of the legal notice. Objections to the Dead Laundry Project are therefore due no later than February 14, 2022, and thus this objection is being filed before the deadline.

Sincerely,

Daniel R. Kenney

Dan Kenney

Dead Laundry Project Objection

1. The Forest Service violated the National Forest Management Act by ignoring CNF Forest Plan Goals and Objectives relating to fisheries, watershed health, and aquatic restoration.

The Forests has Forest Plan obligations and justifications regarding timber harvest, wildfire suppression, and transportation systems, and so is entirely justified in proposing projects that address these management goals and objectives. That same Forest Plan also describes obligations regarding management of habitat to contribute to recovery of ESA-listed species (Goal 6); maintaining, rehabilitating, and improving fish habitat (Goal 7); management of watersheds, streams, and water quality consistent with State and Federal standards and which protects all beneficial standards (Goal 10), and the management of roads to provide optimal soil and watershed protection (Goal 12). Further, project components of the Forest Plan INFISH Amendment do not appear to be fully considered.

Forests projects with a narrow focus on timber harvest, etc. can be plausibly proposed if the projects are small and with obvious limited effects to other resources, but the Dead Laundry project is large and its implementation would clearly have effects and repercussions extending beyond its boundaries and far into the future. The Forests has clearly recognized the obligation to address all relevant Forest Plan obligations with the recent development of large integrated resource projects such as Middle Bugs, Barnyard South Sheep, and French Larch on the North Fork Ranger District. Each of these projects, as well as multiple projects on other Forests Districts, recognized some form of watershed restoration as a Purpose or Need and included a reduction of road density as a restoration method.

Beyond Forest Plan direction, there are also Clean Water Act TMDL, Bull Trout Recovery Plan Conservation Recommendations, and watershed assessment (BHROWS 1999) guidance regarding the need to take actions to reduce the effects of existing and legacy roads on watershed and aquatic conditions in the project area. INFISH Standard RF-3(a) also requires restorative road work under the circumstances that exist in the project watersheds. Although substantial road decommissioning was apparently (this information is not provided in the NEPA documents) conducted in the project area in years past, most of this work was apparently in the subwatershed without bull trout SR or UNK Critical Habitat (CH), and so is not sufficient to address current degraded conditions in those subwatersheds. The EA and several subsidiary reports confirm and describe the degraded baseline conditions in many project streams in the Moose Creek watershed and so buttress the need for restoration work to achieve Forest Plan compliance.

When I commented on the Forests' draft EA, I did not object to Purpose/Needs or an Action Alternative that included substantial timber harvest or road work; rather I stated that inclusion of watershed restoration components to the Purpose/Need and development of an alternative that included watershed restoration were also warranted. The Forests' response to these comments was that the project was "in alignment with management objectives" and that "all alternatives are analyzed." This avoidance of even the discussion of the concept that watershed restoration should be an objective of the project is capped with the complete absence of a mention of such an option under "Alternatives Considered..." on page 12 of the draft FONSI. As a response to one of my draft EA comments, the Forests replied: "The cost of road work has no direct bearing on the purpose and need of the project and does not necessarily impact the viability of the project on its own." I interpret this statement to mean that the Forests does not have the excuse that cost should be a factor in the development of a road work-based restoration Alternative.

The stubborn insistence of the Forests that it can propose and implement such a large and disruptive project without even considering proactive watershed and aquatic health restoration measures is clearly contrary to the express intent of the Clearwater Forest Plan.

I provided additional and supporting reasoning regarding the need for a comprehensive watershed improvement Purpose/Need/Alternative for this project in my June 27, 2021 General #1 and Specific #1 comments on the Draft EA for this project; please consider that I am incorporating those discussions by reference in this Objection component.

<u>Suggested Remedy</u>: The Forests should withdraw the Draft Decision Notice and FONSI for this project in order to revise the EA, relevant specialist reports, and other NEPA and ESA documentation to accommodate watershed and aquatic restoration as a Purpose/Need of the project and to develop and propose an Alternative and activities that would address the neglected Forest Plan components. The Forests has current resource specialist staff to review, revise, and develop these plans and documents, and I conducted some relevant analysis and documentation prior to my retirement. Alternatively, the finalization of the current NEPA documentation for the project could be suspended until separate watershed and aquatic restoration NEPA coverage can be developed and simultaneously finalized. Such a project would be conducted concurrently with and to complement the vegetation management focus of the current Dead Laundry project.

2. The location, type, and intended duration of roadwork in the Dead Laundry project is proposed without regard to effects on watershed health; terrestrial, riparian, and aquatic biological resources; or hydrology. The described nature of the roadwork is often vague and lacking in a firm analytical basis on which to describe likely effects.

Although an increase in road density or location is not identified as a project Purpose or Need, decisions and analysis regarding identification of desirable and undesirable linear transportation routes, the location and type of road treatments, and the post-project disposition of routes appear to have been made without regard to ecosystem costs and without a real assessment of future needs or ability of the Forests to maintain the ensuing road/route system.

Much of the road and excavated transportation route in the project area appears to have been developed with only the immediate utility for the historic logging and haul systems in mind and, to a large extent, was apparently left by the Forests to unravel and deteriorate with little or no maintenance in the decades since the original timber access and haul needs were fulfilled. The BHROWS watershed analysis (CNF 1999) recognized that road density was too high for proper watershed function in the project and adjacent areas, so the Forests accomplished substantial road decommissioning and active storage. Additionally, the passive forces of road surface vegetation growth, soil prism slumping and creep, and drainage system decay have since restored some of the function of the pre-excavation watersheds. Some of the timber in the project area has now matured to a desirable harvest size so the Forests proposes to once again implement scores of miles of road work without a full consideration of the costs of undoing many miles of passive and active restoration, and even proposes increasing road density and impacts in some locations. INFISH Standard RF-3 requires the Forests to "(d)etermine the influence of each road on the Riparian Management Objectives..."

The Forests' Transportation Systems Report, including an abbreviated description of a Transportation Analysis Process (TAP), provides a list of road and route segments which the Forests claims with a database number (Table 5); the numbering of a linear segment apparently self-justifies any subsequent treatment of a feature, including initial construction and purported reconstruction. Nearly 100 of these segments have 830000-series numbers, meaning that they are essentially either leftover scrapes in the landscape for which the Forests has previously taken no responsibility, or proposed new construction. Many of these routes are acknowledged (in the Forests' nominal TAP effort) as having adverse resource impacts or as not likely needed for future management, but without a recommendation to take any mitigatory or restoration action.

On the other hand, it appears that any route segment (including those with 830000-series and those with lower numbers) shown in the TAP table as access for "Veg" or "Fire" has been listed as "Likely Needed," whether there are resource "Risks" or not. For example, the two segments of FR 5435 are shown as a tied score regarding risk and benefit despite the apparently unknown condition of the crossing of Sugar Creek (SR CH) for bull trout and recently documented to be occupied by the species). No criteria are provided and no IDT analysis is documented that would justify the necessity of any particular segment for vegetation or fire access.

The Forests claims (in the Transportation report page. 9) that: "No existing National Forest System Roads in the Travel Analysis area were recommended for decommissioning," but the table for the TAP

table (pgs. 11-13) shows that many roads were both determined to be "not needed" and scored in at least 1 of 4 risk categories. That no road decommissioning or other mitigative activities were proposed for even "not needed" roads implies strongly that the Forests had pre-emptively determined that no watershed/aquatics restoration activities would be part of the project, despite whatever negative effects might be discerned.

Further, in the Transportation SR (on pg. 10) is stated "Cost of maintenance on a Closed Level 1 road will be performed to minimize damaging effects on resources under a stored state. Although road maintenance funds are focused on roads open to public that access administrative and/or recreational sites, maintenance on roads with ML1 or 2 can also be funded by integrated restoration projects and timber sales under stewardship authority." Given that the project seems likely to comprehensively harvest the project area for decades, what integrated or stewardship projects would fund maintenance of Closed roads? The FS is tacitly conceding (if not baldly stating) that it has no intention of maintaining (Transportation SR, Table 1.) 113 miles of such road in the project area.

Table 4 of the Transportation Report is a list of road segments proposed for permanent construction, "reconstruction," or for (mostly deferred) maintenance; these are apparently a subset of the segments in Table 5. The FS is apparently counting on the inventoried status of the Table 4 road segments to authorize road work without fully considering the impacts of the activity, while simultaneously ignoring the impacts and density of other completely comparable linear excavation. (The Forests Response to one my Draft EA comment regarding road construction in RHCAs: "All but one new road proposed in (*sic*) on and (*sic*) existing template already on the landscape" is illustrative of the attitude that if a route segment is already present in at least database form, then no further analysis is necessary. The Forests is counting excavated routes when it suits them and ignoring similar routes when it doesn't.

Many miles of excavated route segments exist in the project area that do not appear to be depicted in the NEPA documents, or have effects assessed. Some of these routes exist within INFISH RHCAs or cross water features. Some of these features likely contribute sediment to project area streams or alter the hydrologic pathways with adverse effects to aquatic habitat. Hydrologic effects could be due to ditch lines, flow down excavated route prisms, alteration of ephemeral overland flow routes because of fill, or inoperable culverts.

The interaction of proposed project road activity routes with INFISH RHCAs, stream crossings, and other features do not appear to be fully depicted or assessed in the NEPA documents. The Forests has a GIS streams layer which appears to have been used for maps of vegetation treatment units in project documentation, but not for depiction (or, perhaps, analysis) of transportation routes. The NEPA documentation makes mention of a few proposed stream crossings, but I suggest that many crossings of non-fishbearing channels have been neglected; many of these crossings are likely to be close enough to named CH streams to transmit sediment and water temperature effects to occupied bull trout habitat.

I suggest that the Forests ensures that the public and its own specialists have a full and consistent understanding of the meanings of the terms used in describing existing and proposed transportation routes. I find that Forests-provided information in this regard sometimes appears to be missing, incomplete, or easily misunderstood. Is the distinction promoted by the Forests between system, non-system, and legacy routes one of inclusion in a database, likely utility for management activities, functional or desired condition, or something else?

Further, the terms "reconstruction" and "storage" (although key concepts in describing project activities and modeling of effects) do not appear to be fully or consistently described in project documentation, possibly leading to a flawed analysis of project effects by Forests specialists.

The proposed "reconstruction" activity (of which the Forests proposes about 100 miles), as noted above, can apparently be applied to any heavy work on an database-inventoried route segment. Is it biologically sound for the Forests to conflate, for example, the physical effects of reconstruction of FR 737 road with that of FR 74502, both closely paralleling Osier Creek CH and depicting both as a beneficial activity for

aquatic habitat? At what point does the proposed "reconstruction" of well-vegetated and apparently passively recovered excavated linear route have effects on aquatic habitat that are more-consistent with new road construction than repair of a purported existing route? Even if reconstruction (or maintenance or reconditioning) of a particular road segment corrects a baseline degradation problem, does the magnitude and likely duration of the existing degradation exceed that enabled by new soil disturbance or vegetation clearing?

Regarding the characteristics of project area routes currently considered to be in storage or proposed for a long-term storage condition after project activities (100+ miles), it is unclear to me what specific conditions relevant to aquatic habitat the Forests is presenting or proposing. For example, do these route segments have maintained culverts or ditches, or are drainage/crossing features removed and road surface contoured, outsloped, or otherwise treated to allow for natural drainage and vegetation growth? What rules are there for motorized travel and vehicle barriers? If open for motorized use, under what assurances and circumstances will the stored segments be maintained?

To summarize, the TAP and other transportation system proposals are skewed and taint the Dead Laundry NEPA process as a whole because of narrow focus and practical lack of consideration of factors other than timber and fire access.

I provided additional and supporting reasoning regarding the unsupported, confusing, and casual nature of the proposed road/route network and road-related activities for this project in my June 27, 2021 Specific Comment #3-7, 10, 13, and 15 on the Draft EA for this project; please consider that I have incorporated those discussions by reference in this Objection component.

Suggested Remedy: The Forests should withdraw the Draft Decision Notice and FONSI until a revised Travel Analysis Process (TAP) is prepared by an Interdisciplinary Team which identifies all linear excavations in the project area and assesses all of the consequences of the continued existence of each of the segments in this network. The IDT would then provide recommendations (based on a clear, documented, and objective rating system) regarding the project-term and long-term disposition of these segments which takes into account both the budget- and resource-based costs and benefits of the persistence of each segment of the network. Adverse perceived resource effects of the retention and development of a road segment would not preclude construction, activation, or retention or activities, but would inform the selection of accompanying mitigatory features. This revised TAP would inform the development of appropriate revised NEPA documents. Alternatively, the finalization of the current NEPA documentation for the project could be suspended until the TAP for separate watershed and aquatic restoration NEPA coverage can be developed, and it's findings applied (as supplementary information) to the current Dead Laundry project. Further, the Forest should develop a stand-alone NEPA and ESA document appendix which provides clear descriptions of road-related project activities, PDFs, MMs, and BMPs in enough detail that Forests specialists and regulatory agencies can realistically monitor project resource effects.

3. <u>The Project Design Features, Mitigation Measures, and Best Management Practices proposed by Forests are often arbitrary, disorganized, ambiguous, non-specific, or difficult to track or monitor. The analysis of the efficacy of these measures to reduce resource effects is, as a consequence, speculative.</u>

The Forests' Project Design Features (PDFs), Mitigation Measures (MMs), and Best Management Practices (BMPs) are often not described well enough for analysis of project effects, full implementation by Forests staff, or monitoring by regulatory agencies or the public.

As an example of a potential point of confusion regarding a mitigatory measure, the obliteration of temporary roads, NEPA documents state that this would occur "within 3 years of project completion." The proposed project is large and complicated, so I suggest that this term may be subject to misinterpretation because "project completion" is described in the EA as "including site preparation and planting." It may also include (there is no way to tell from documentation) other on-going harvest unit activities (such as gopher treatments and pre-commercial thinning) that could extend years beyond that envisioned by a regulatory agency or member of the public.

Similarly, MM FF-3 states that "(a)ll reconstructed and temporary constructed road segments within RHCAs would be graveled 100ft. on either side of the crossing upon completion of reconstruction/construction." Does the term "upon completion" refer to the timeframe for all project roadwork, all road segment roadwork, roadwork at the specific crossing, or something else? Further, this MM apparently does not require graveling a road in an RHCA if there is no stream crossing—is the intent of the MM that a new or reconstructed segment of native surface road closely paralleling (but not crossing) a stream would not be graveled?

A further example is the lengthy "PACFISH/INFISH – Roads Management" Design Feature, which includes the production/implementation of plans, monitoring, maintenance, etc. that does not (to my knowledge) seem consistent with Forests historic project management, or at least documentation of such. Also included in this PDF is a requirement for specific road construction/reconstruction techniques and strategies under particular circumstances to avoid sediment delivery–successful implementation would require considerable attention by Forests engineers and timber sale implementation staff, but how does the Forests analyze effects or ensure compliance with these requirements if not specified?

Similarly, the project documentation states that "design criteria often include mandatory contract provision requirements, Best Management Practices (BMPs), Idaho State Water Quality Standards, Idaho Forest Practices Act Rules, and similar laws, rules or policy." Without specification of which BMPs, Standards, Rules, etc. would be applied, the details of each BMP, and the location to be applied, I don't know how the Forests, regulatory agencies, or public would be able to monitor compliance with BMP implementation. Claims that BMP monitoring and BMP research are sufficient to meet resource protection objectives ring hollow unless the Forests can demonstrate that it is proposing to implement the same BMPs as monitored or researched.

In summary, the PDFs, MMs, and BMPs proposed for use in the project need to be clear and specific to meet the resource protection intent of these features and to allow monitoring. The Forests cannot credibly claim that mitigatory features are commonly implemented and should be relied upon in the Dead Laundry project if it cannot provide a list and description of these features, or inform the public specifically where the features would be applied.

I provided additional and supporting reasoning regarding the mitigatory project activities for this project in my June 27, 2021 Specific Comment #14 on the Draft EA for this project; please consider that I have incorporated that discussion by reference in this Objection component.

<u>Suggested Remedy</u>: I suggest that the each design/mitigatory measure proposed in NEPA documentation for the project be separately (or solely) listed in a stand-alone appendix to the EA and that each measure be described specifically enough and in enough location detail to allow regulatory agencies and the public to conduct meaningful monitoring of Forests compliance. This clarity and specificity would allow these features to be consistently understood and applied/monitored by all current and future Service Forests staff and to other projects. This appendix could also list all potential mitigatory features of which the Forests may be aware, but do not propose for use in the subject project.

4. <u>INFISH compliance (i.e. Clearwater Forest Plan compliance) is not achieved in several proposed activities.</u>

INFISH was incorporated into the Clearwater Forest Plan one quarter century ago and it is my observation that the Riparian Habitat Conservation Area (RHCA) buffers are well-observed in timber harvest units, but the Dead Laundry project proposal includes several potential violations of INFISH standards associated with activities other than harvest. The primary problematic INFISH standards for the Forests in this project relate to fuel treatments, road construction and management, and measures related to vehicle and equipment fuel storage and use.

INFISH Standard FM-1 requires the Forests to "design fuel treatment..so as not to prevent attainment of Riparian Management Objectives, and to minimize disturbance of riparian ground cover and vegetation. Strategies should recognize the role of fire in ecosystem function and identify those instances where

...fuel management actions could perpetuate or be damaging to long-term ecosystem function or inland native fish."

The descriptions of fuel-reduction activities (both hand thinning and landscape burn) in Forests NEPA documentation, however, barely mention potential activities within RHCAs, and do not bother to locate, map, or quantify the proposed activity areas. Analyses of effects on potential effects on RHCAs are essentially absent. I will note that the description of RHCA hand thinning procedures on page 14 of the Fisheries Specialist Report seems relatively reasonable, but this description is not mentioned in the Fire/Fuels report or the draft EA, so the actual implementation of these measures seems in doubt.

The "landscape fuels" units proposed in the project are in the upper Moose and Ruby Creek drainages, both of which are CH for bull trout. The only relevant PDF (FF-2) provided in the NEPA documentation regarding the treatment of these units is that burns would not be ignited within RHCAs "unless needed to meet safety, control, or protection objectives," which I find a rather broad and malleable set of exceptions (and which are also omitted from the Fisheries Specialist Report discussion of potential effects). Further, the NEPA document map showing the location of these units appears to display insufficient stream buffer widths in some cases.

INFISH Standard RF-2 states that "(f)or each existing or planned road, meet the Riparian Management Objectives and avoid adverse effects to native fish by a) completing watershed analyses prior to construction of new roads or landings in RHCAs within priority watersheds, and b) minimizing road and landing locations in RHCAs." Has the Forests surveyed all temporary and new road locations for presence of small streams, springs, and wetlands or are they relying on maps? What streams layer is the Forests using for determination of potential RHCAs and stream/wetland crossing sites? What watershed assessment recommendations is the Forests relying on to justify RHCA road construction?

Part c) of Standard RF-2 is paraphrase of the "PACFISH/INFISH – Roads Management" Design Feature (on page 15 of the draft EA) which includes the production/implementation of plans, monitoring, maintenance, etc., and requirements for specific road construction/reconstruction techniques and strategies under particular circumstances to avoid sediment delivery to streams. Given the Forests included this PDF in the EA, it should not be difficult to demonstrate compliance, but does not (to my knowledge) seem consistent with Forests historic project management, or at least documentation of such.

INFISH Standard RA-4 prohibits "storage of fuels and other toxicants within RHCAs" and "refueling within RHCAs unless there are no other alternatives." Further, "(r)efueling sites within RHCAs must be approved by the FS...and have an approved spill containment plan." The plain text of this Standard is not reflected in the PDF on page 17 of the draft BA which states only that "(t)he Purchaser/Contractor shall take all reasonable precautions to prevent possibility of fuel spills" and makes no mention of RHCAs at all.

<u>Suggested Remedy</u>: I suggest that for the Forests to achieve INFISH-related Forest Plan compliance: a) regarding RHCA fuels treatments, the Forest should develop and include in a revised EA or Decision Notice a site-specific analysis (including both the likely effects and efficacy) of the proposed fuel-reduction activities within RHCAs. A good start would be maps and tables showing/describing the potential RHCA treatment units. For the hand thinning components of these treatments, this discussion should include the potential for drying/reduction of humidity of RHCA vegetation/soil/microclimate as a result of the proposed thinning and pruning (Dwire et al. 2016), and the extent to which this potential adverse effect on RHCA condition reduces the intended effects of the activity on the private inholdings. The Forests should also fully describe maintenance of fuel reduction areas, both within and outside of RHCAs, beyond the initial treatments, and disclose the temporal extent and schedule of follow-up of treatments.

For the landscape burn units, the Forests should provide a detailed description of procedures (similar to those applied in the Fisheries Specialist Report for hand thinning) to ensure the FM-1 compliance. Procedures and analysis for similar treatments in the nearby East Saddle project were described on pg. 8 and 10 of the East Saddle Biological Assessment) regarding minimization of potential RHCA, stream channel, and other relevant aquatic, riparian, and ESA effects.

Regarding compliance with INFISH Standard RF-2, the Forests should demonstrate and describe in a revised EA or Decision Notice its compliance with all aspects of this Standard; I note that paraphrased versions of the Standard are included as PDFs in the EA and so documentation of basic compliance with the Standard should not be difficult. A site-specific analysis of the Standard/PDFs would allow these features to be consistently understood and applied/monitored by all current and future Service Forests staff and used in other projects.

Regarding compliance with INFISH Standard RF-2, the Forests should demonstrate and describe in a revised EA or Decision Notice its plans to comply with all aspects of this Standard.

5. The modeled analysis of likely short and long-term fine sediment transmission impacts of disclosed project effects is opaque. The sediment analysis does not appear to fully appreciate the degraded baseline condition for project subwatershed and does not demonstrate that Settlement Agreement compliance or acceptable effects to bull trout and bull trout CH would be achieved.

The draft BA presents stream sediment baseline data which indicate degraded habitat in many stream reaches. Roads and other excavated transportation features are common sources of sediment transmission to streams. Thus, the NEPA and ESA documentation for the project should (and does) include an analysis of the transportation route sources of baseline sediment transmission and the likely project-caused effects on that baseline.

The GRAIP_Lite road-related sediment transmission analysis described in the BA and NEPA documents appears to be an appropriate method to describe some aquatic quality trends and project effects. However, the GRAIP_Lite modeling includes only the effects of "system road, all temporary roads" (Water Resources Analysis, page 19). Many miles of excavated route segments exist in the project area that do not appear to be depicted in the NEPA documents, or have effects assessed (see my Objection component 2 discussion). Some of these routes exist within INFISH RHCAs or cross water features. The GRAIP_Lite analysis includes the assumption that PDFs, MMs, and BMPs are appropriately employed on project activity roads, but, as discussed in Objection component 3, this assumption is based on non-specific and unenforceable Forests implementation. The Forests also makes the claim that sediment is overestimated in the disturbed and recovered conditions.

As a result, the Forests reports that "the long-term benefits of improving drainage and armoring road surfaces would outweigh any short-term increases in sediment delivery." The GRAIP_Lite analysis demonstrates an up to 15X greater sediment transmission from project activities (at the subwatershed scale and in the undefined short-term; the duration of this predicted impact does not appear to be disclosed) than under baseline conditions.

The Forests' assumption that undefinable and apparently small long-term benefits of the project versus the baseline is an acceptable outcome of the project is an unsupported concept for the Forests to promote. That "short-term" increases in sediment delivery to currently degraded stream channels is an acceptable outcome of the project is another unsupported concept. As discussed in Objection component 1, the Forests has obligations beyond maintaining degraded habitat in a degraded condition. Further, the Forests NEPA analysis has not presented information that the GRAIP_Lite-predicted "short-term" spike in sediment transmission is an acceptable outcome regarding effects on bull trout and bull trout CH, or compliance with the 1993 "no new sediment" Settlement Agreement.

<u>Suggested Remedy</u>: The Forests should withdraw the Draft Decision Notice and FONSI until a clarified and (possibly) revised sediment modeling effort is prepared by Forests hydrology staff. In particular, the Forests should ensure that the impacts of reconstruction of substantially passively recovered route segments, non-modelled "legacy" routes, conditions of post-project "stored" roads, etc. are accounted for and adequately reflected in the GRAIP_Lite model. This revealed or revised model information should be incorporated into the NEPA and ESA analyses for the project, as should an actual analysis of compliance with the sediment Settlement Agreement, based on the revealed/revised model information. The results of this re-analysis should be integrated into the Interdisciplinary Team effort that will be providing recommendations (based on a clear, documented, and objective rating system) regarding the project-term

and long-term disposition of project area road segments. This IDT road/route analysis recommendation should form a substantial basis for the development of a comprehensive watershed improvement Purpose/Need/Alternative for the project.

Additional Suggested Remedies That Would Promote Bull Trout Conservation::

- 1) Avoid reconstruction of FR 5435 accessing timber harvest units near Sugar Creek (or at least the units in S13) and remove or bypass culvert at the Sugar Creek crossing if it is suitable for hand restoration.
- 2. Gravel and otherwise hydrologically inactivate the 737 road where it is within the Osier Creek RHCA buffer–from the China Creek confluence upstream to the crossing of the 737 road in S20.
- 3. Decommission, following harvest, the roads proposed for accessing units in S35 just north of Lake Creek.
- 4. Find an alternative route to FR 74502 for access to timber harvest units on the slope above Osier Creek, pull the culvert on the Osier Creek crossing of that route, and decommission the road back to the FR 5437 junction.

Literature Cited

- Dwire, K.A., K.E. Meyer, G. Riegel, and T. Burton. 2016. Riparian fuel treatments in the western USA: challenges and considerations. Gen. Tech. Rep. RMRS-GTR-352. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 156 p.
- USDA Forest Service. 1999. BHROWS Assessment: North Fork Big Game Habitat Restoration On a Watershed scale Watersheds within the North Fork Clearwater River Subbasin. Clearwater National Forest, Orofino, Idaho, USA.