

Friends of Gualala River

An affiliate of the Redwood Coast Watersheds Alliance P.O. Box 1543, Gualala, CA 95445 GualalaRiver.org

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September 8, 2016

SUBJECT: THP 1-16-047 SON (Gualala Redwoods Timber LLC "German South" THP)

Dear CAL FIRE:

Friends of the Gualala River submits the following comments and recommendations regarding the "German South" THP (1-16-047) Gualala Redwood Timber LLC (successors in interest to Gualala Redwoods Inc.) on, bordering, or affecting the lower Gualala River and tributaries, Sonoma and Mendocino County. The plan is sited in a flood prone area of redwood forest and further up steep erosion-prone slopes above the lower Gualala River and tributaries. This letter endorses and incorporates comments submitted by EPIC dated September 2, 2016 and submitted by Rob DiPerna from EPIC, the Environmental Protection Information Center, Arcata, California and comments by Roland Pesch submitted September 9, 2016. Also attached are comments from Stewart Siegel on the adjacent "Dogwood" 1-15-042 SON THP that shares identical potential impacts from operations in the flood plains as does 1-16-047SON.

Summary

The "German South" THP as proposed, and if implemented, will violate the California Forest Practice Act and Rules and the California Environmental Quality Act (CEQA), the Porter-Cologne Water Quality Control Act, and the federal Clean Water Act and the associated Total Maximum Daily Load (TMDL) in place for the Gualala River. The THP does not conform to the Forest Practice Rules and therefore must be denied pursuant to 14 CCR 898.2(c) & (h).

Project Summary

The "German South" THP is located in the Mouth of the Gualala River planning watershed, just inside the Sonoma County line, in Sonoma County, California. The THP as proposed comprises 198 acres of harvest area, of which 85 acres is clearcutting, 96 acres selection, and 17 acres no-harvest zones. The selection harvest unit area is generally situated along the flood-prone areas of the Gualala River, with clearcutting silviculture acreage upslope. Both Unit 1 and Unit 3 of the plan as proposed are "oversized" even-aged regeneration units to be tractor yarded, of 26 and 29 total acres in size, respectively.

The Gualala River watershed and the Mouth of Gualala River planning watershed specifically have had and presently continue to have extant populations of federally-threatened Steelhead trout, and state and federally-endangered listed Central Coast Coho salmon. The Mouth of the Gualala River watershed is in the coastal anadromy zone for purposes of Forest Practice Rules implementation, and, as such the coastal anadromy zone rules contained in 14 CCR 916.9 (ASP Rules), apply to the "German South," THP. The Gualala River watershed is also listed as water quality impaired due to excessive sedimentation under section 303(d) of the federal Clean Water Act, and a Total Maximum Daily Load (TMDL) has been established. (EPA 1998).

The Mouth of the Gualala River planning watershed has been subjected to extensive harvesting in recently-recorded history, with a cumulative total area of over 2,509 acres of harvest foot-print area since 1997 in the 5,302-acre planning watershed, according to records maintained by CAL FIRE.

According to Section III, page 96 of the proposed THP, stands to be harvested are approximately 90-100 years-old, with pre-harvest stocking ranging from 100 to up to 400 sq. ft. basal per-acre. Site productivity capacity is rated generally as Site Class III with some areas in the flood-plain characterized as Site Class I.

Significant Environmental Concerns

1. Exemption to 916.3(c) - Class I WLPZ Protections

The authorization of proposed "German South" THP would require an extreme and unjustified exception to 14CCR 916.3(c) of the Forest Practices Rules that require avoidance of logging disturbances and water drafting in WLPZ and wetlands areas. The German South THP is located in flood prone redwood forest of the lower Gualala River's alluvial floodplain. It does not avoid or minimize logging disturbance in flood prone areas; it maximizes the THP footprint in flood prone areas, contrary to the ASP Rules pointing to the need to minimize or exclude equipment operations. New sections of skid trails are being requested in the Class I WLPZ. In addition, the "German South" THP provides no analysis of public interest or overriding considerations relevant to Forest Practice Rules and Board of Forestry policy that justifies such an extreme exception (in effect, an inversion) of the FP Rules. Similarly, the "German South" THP disregards the science-based policy recommendations of CAL FIRE's Flood Prone Area Considerations in the Coast Redwood Zone" report (Cafferata et al. 2005).

The "German South" THP also failed to analyze timber harvest impacts to critically important floodplain functions affecting water quality, sediment trapping, and ephemeral salmonid feeding habitat – ecosystem services that were expressly identified as necessary for analysis in CAL FIRE's Caferrata et al. 2005 report. Finally, the "German South" THP provides no rational alternatives analysis that justifies, from CAL FIRE or Forest Practice Rules or any

other public/private interest balancing perspective, why alternatives that avoid or at least minimize disturbances in flood prone forest were not analyzed. Full suspension cable yarding is fully possible in this area of the river as per recommendation of the ASP rules. Because the "German South" THP requests such an extreme precedent-setting exception to FP rules with such inadequate and unacceptable justification (based on Forest Practice Rules, relevant CAL FIRE scientific reports, sound science, and Board of Forestry policies), we strongly urge CAL FIRE to elevate this THP for policy review by the Board of Forestry and CAL FIRE Sacramento office.

14CCR 916.1 of the Forest Practice Rules describes the regulations for In Lieu Practices. It clearly states: "In rules sections where provision is made for site specific practices to be proposed by the RPF, approved by the Director and included in the THP in lieu of the stated rule, the RPF shall reference the standard rule, shall explain and describe each proposed practice, how it differs from the standard practice, and the specific locations where it shall be applied; and shall explain and justify how the protection provided by the proposed practice is at least equal to the protection provided by the standard rule." emphasis added. 14CCR 916(c) notes that it is the intent of the Board to maintain, protect and contribute towards the restoration of the native aquatic and riparian associated species in the WLPZs. The goal of every timber operation is also addressed in 916.9(a) (ASP Rules).

All of the environmental metrics listed in 14CCR 916.4(b) (a.-g.) should be provided protection in the in lieu practice applied for that is at least equal to that provided by the standard rule. These have not been properly addressed in the RPF response and justifications. The RPF narrowly addresses the difficulties in complying with the standard rule due to space restrictions on the road system.

The response from the RPF addressing the required justifications starting on page 105 in Sec.III of the THP does not address the issue of the impacts to the wetlands that are located in the WLPZ areas. Specifically, the response does not address how the approval of logging operations in these areas, including the the use and construction of new of tractor roads and construction and use of landings, will not set back the restoration of these flood plain wetlands, either perennial or seasonal. These WLPZ protections are central to the intent of the Forest Practice Rules and the Anadromous Salmonid Protection Rules.

Not only does the response not address the site specific impacts to the beneficial uses of water, native aquatic and riparian-associated species, and the beneficial functions of riparian zones, it does not address the cumulative impacts from this and other adjacent flood plain THPs such as the Dogwood and Kestrel THPS and potential future plans.

2. Water Drafting

Another grave defect in the "German South" THP, along with the 300 acre "Dogwood" flood plain THP and the related adjacent "Apple" THP with which it shares water drafting, roads,

and THP boundaries, is its failure to avoid water drafting in flood prone areas as is required under the Anadromous Salmonid Protection Rules. The THPs merely claim, without explanation or evidence, that it is not feasible to avoid water drafting in protected flood prone areas. Yet the "Apple" THP discloses that GRI in the past has used alternative dust-suppressant road treatments and may do so again. The THPs fail to analyze impacts of drafting for all three concurrent plans from the Gualala River in drought years (like the last 2 and current year) when the river flows fall below critical levels. The THPs cite only a 2010 hydrologic study that assessed non-drought conditions (under significantly higher summer low flows) and concluded that water drafting less than 25,000 GPD would have no effects. That pre-THP report's conclusion applied to the "German South", "Dogwood", and "Apple" THPs is unreasonable in drought conditions that may recur. Water drafting of this magnitude in a drought year would have significant cumulative impacts whenever the river flows are already below critical thresholds.

This is just one example of how the plan submitter has failed to provide evidence to support claims made with regard to avoidance or mitigation of significant adverse impacts to listed salmonids and other beneficial uses of water from proposed alternative, non-standard, and inlieu practices in sensitive riparian Class I and II WLPZ and in flood-prone areas. Again, these activities are plainly contrary to the goals of the Forest Practice Rules and ASP Rules specifically, and allowance of such activities must not only be explained and justified, but also predicated upon a finding by CAL FIRE that significant adverse impacts will be avoided or mitigated to insignificance; such determination predicated upon professional judgement and discretion must be supported by substantial evidence in light of the whole of the record before CAL FIRE at the time of approval; it is simply not good enough to accept whole-sale the contents of the plan submitter to the extent these contentions and statements are not supported by actual evidence.

3. Failure to Ensure Compliance with Gualala River TMDL, Load Allocation, and Sediment Reduction Target Objectives

The "German South" THP does not provide adequate information or mitigation to ensure compliance with the TMDL for the Gualala River (EPA 1998), which requires assurance of compliance with the designated load allocation and the Sediment Reduction Targets established. The TMDL establishes a sediment load allocation for the Gualala at 125 percent, and establishes a 475 tons/sq. mile/per-year on a ten-year average. (EPA 1998, p. 16 of 21). The TMDL notes that given that at time of analysis the rate of anthropogenic sediment delivery from timber harvesting related activities was 840 tons/sq. mile/per-year, that "significant reductions," in human induced sediment are needed to protect listed salmonids. (Ibid.).

Yet, the landslide information available in the THP at Section V, pages 241-245 of the "German South" THP is extremely antiquated and likely, entirely useless to allow CAL FIRE or the public to assess baseline conditions and thereby make a reasoned assessment and determination of how or if landslides resulting from timber operations will add to existing conditions, which are not known or disclosed, or if new or reactivated landslides that could result

from timber operations will contribute to the ongoing sediment impairment in the Gualala River in quantities that will result in exceedance of Numeric Targets, or serve to hinder overall Sediment Reduction Targets and Objectives necessary to attain water quality standards. The landslide information provided does not present information for any period more recent than 2004, some 12 years ago. This lack of recent and relevant information and disclosure betrays a lack of substantial evidence and information to inform CAL FIRE or the public about the potential for significant adverse impacts resulting from THP operations, and therefore calls into question the evidentiary integrity and basis for findings by the RPF that no significant adverse impact will occur as a result of timber operations as proposed.

The THP appears to completely lack any acknowledgment of the TMDL Load Allocation or Numeric Sediment Reduction Targets and Objectives, generally, and simply does not contain enough information for anyone to verify or have any confidence in sweeping unsubstantiated qualitative statements made in the Plan by the RPF and plan submitter. Again, there is a notable lack of substantial evidence to support large portions of the analysis provided and statements made in the THP, particularly as pertains to baseline conditions, and anticipated future conditions resulting from harvesting as proposed, and how these may affect attainment of TMDL Load Allocations and Sediment Reduction Numeric Targets and Objectives.

The lack of recent data and other information to support conclusions made that would rise to the level of substantial evidence not only leaves the THP, if implemented, at risk of violating the TMDL and Clean Water Act, but also violate the goals of the Forest Practice Rules and the ASP Rules, which plainly provide that compliance with applicable TMDLs is an overarching goal and mandate. (See: 14 CCR 916.9(a)(1)).

4. San Andreas Fault

The fact that the active San Andres Fault traverses the length of the THP is not adequately addressed as to its impact on design of the plan, placement and use of roads and skid trails. Nor has adequate mapping been included to inform the mitigations needed to avoid road failure and sediment delivery to the 303d listed Gualala River below. The sag pond features are a result of fault movement and need the protections provided by study of historic slide mapping to allow proper setbacks and protections to be put in place.

5. Lack of Adequate and Meaningful Cumulative Impacts Analysis

The Forest Practice Act and Rules require a comprehensive evaluation of potentially significant adverse impacts on the environment in accordance with the requirements of CEQA, which include an analysis and consideration of cumulative impacts. (See: 14 CCR 898). As noted by the Board of Forestry's FSOR for adoption of the ASP Rules:

"Under 14 CCR section 898, CALFIRE is also required to supplement the information provided by the RPF and the plan submitter when necessary to ensure all relevant information is considered. Timber harvest plans located in watersheds with listed salmonids and meeting the geographic scope of the Anadromous Salmonid Protection

(ASP) rules will also have to comply with the CEQA and FPR requirements for cumulative impacts analysis and disclosure, and the requirement to substantially reduce or avoid adverse effects, including adverse cumulative effects of the proposed harvest and operations. The ASP rules do not substitute for this requirement." (FSOR at p. 10 of 14).

Furthermore, the intent of the Board in adopting the ASP Rules was not to simply maintain status quo or avoid additional impacts:

"Secondly, the proposed rules are designed to make positive cumulative improvements to riparian areas and their beneficial functions for creating and maintaining salmonid habitat in watersheds hosting listed anadromous salmonids. The proposed Anadromous Salmonid Protection Rules approved by the Board are intended to address the legacy cumulative impacts and improve the future condition of riparian areas and salmonid habitat in these watersheds." (Ibid).

This mandate is borne out at 14 CCR 916.9(c), which provides that any timber operations within an ASP WLPZ shall have the protection, maintenance, and restoration of properly functioning aquatic habitat conditions for listed salmonids among the primary objectives of any such operations. Thus, the goal, and indeed the mandate, is not to simply avoid or mitigate to insignificance, but rather to contribute to protection, enhancement, restoration and recovery of habitat for listed salmonids. Doing this requires a genuine consideration and rendering of pre-existing conditions in the watershed to be impacted by proposed timber operations; however, almost all the offsetting mitigation information provided in the THP in Sections IV and V as pertains to road work and remediation and LWD recruitment and placement are for the South Fork Gualala River planning watershed, and not the Mouth of the Gualala planning watershed, where the THP is actually located.

More generally, the "German South" THP is lacking in documentable, verifiable, information of any kind to support any of the conclusions reached in the cumulative impacts assessment provided in Section IV to comply with 14 CCR 912.9. For example, a basic and fundamental requirement and standard of professional practice is to "list and briefly describe," all individuals and sources of information utilized in the cumulative impacts assessment. (See: Technical Rule Addendum No. 2, "Identification of Information Sources."). No such list of sources or citations is provided for the watershed impacts assessment section or the biological resources assessment section, and the assessment of Greenhouse Gas impacts and climate change appears contain a list of references, but none are more recent than 2007, some nine years ago.

It is impossible to imagine how CAL FIRE, or the reviewing public can have any confidence in the sweeping assertions made by the RPF and plan submitter in the cumulative impacts assessment when no source citations, material, or in truth, evidence of any kind, is provided to support the statements and assertions. It appears from a thorough review of the cumulative impacts assessment provided in Section IV of the "German South" THP as propose that the RPF and plan submitter have "mailed it in," and provided nothing of use or meaning in the

way of a meaningful evaluation and assessment of the THP and how or if its impacts on the environment may combine with pre-existing cumulative impacts to result in further significant adverse cumulative impacts.

The THP does not include a complete list of all other relevant THPs, those from the past, present and potential future, including those within the knowledge of GRT, that should be disclosed for meaningful and adequate cumulative impacts assessment.

6. Green House Gas Impact Analysis

The proposed "German South" THP, 1-16-047 SON, is far from adequate to establish that the proposed harvest would meet legal obligations under AB-32 (the California Global Warming Solutions Act). The analysis of alternatives presented by the proponent is self-serving and misleading. The greenhouse-gas analysis presented in the THP is based on outdated methods which have been invalidated by published empirical research (Sillett et al 2010, Sillett et al 2015). The proponent's argument is based on the hypothesis that redwood growth stagnates with age, so that carbon capture can be replaced or even enhanced by the growth of younger redwoods in place of those harvested.

This hypothesis has been conclusively shown to be false; the purported evidence for it is based on faulty estimation methods. As Sillett et al. 2015 concisely put it, "Except for recovery periods following temporary reductions in crown size, annual increments of wood volume and biomass growth increase as redwoods enlarge with age until extrinsic forces cause tree death."

Moreover, the discussion in THP 1-16-047 SON provides of the effects on GHGs of substitution avoids an essential point: the issue here is not substitution of wood products with non-wood products, as the THP discussion pretends. If redwood were less available, the substitute material is most likely to be some other softwood, from a source that might actually capture more carbon in younger trees.

The THP's description of how wood products continue to store carbon is irrelevant; obviously, living redwood trees continue to store that carbon as well, while also sequestering more carbon than younger trees would. Likewise, the advantage cited by the THP of avoiding "catastrophic wildfires" and the concomitant emission of carbon dioxide is a red herring, as catastrophic wildfire is unlikely in coastal redwood forests.

In order for your agency, and the public, to determine whether the proposed timber harvest can possibly meet the legally required goals of AB-32, you must require the proponent to resubmit the greenhouse gas analysis under the following conditions:

- avoid misleading carbon-sequestration estimates based simply on ground-based trunk-diameter measurements;

- measure and extrapolate carbon sequestration accurately, according to the methods established by Sillett et al;
- avoid specious conjectural arguments such as those about materials substitution.

The importance for California carbon-capture goals of coastal redwood forests (such as the one threatened by this THP) is greater than ever, as less fire-resistant forests inland perish in the face of climate change. In order to maintain current carbon sequestration levels, as required by law, the state cannot afford to sacrifice any carbon-capture potential in the forests that are more likely to remain, such as the one threatened by this THP.

Accepting the misleading greenhouse-gas analysis presented by this proposal would neglect your responsibilities to the State's goals of carbon capture. You cannot accept the greenhouse-gas analysis in this THP as it stands; if no better analysis is possible, you must presume the "no project" alternative is superior, and deny authorization for this THP.

7. Wetlands

The THP still fails to include any baseline information on the extent or location of wetlands in the flood prone area, other than "wet areas" narrowly defined (e.g. perennially wet areas: marsh, springs, seeps, sag ponds, and swamps) in the FPRs. This is inconsistent with the THP's identification of the dominant soil type in the THP area, Bigriver series, which is described as prone to seasonal wetness consistent with seasonal wetlands: "The main limitation affecting the harvesting of timber is the seasonal wetness. Ponding limits the use of equipment to dry periods. Unsurfaced roads and skid trails are soft when wet."

The THP also describes alluvial topography conducive to depressions and basins ("low areas") trapping sediment and water precisely the environment forming floodplain seasonal wetlands. Yet the THP still fails to survey, map, or describe or name seasonal wetlands despite the geomorphic wetland-prone setting of the floodplain, and despite their high importance for wetland-dependent sensitive wildlife and plant species. No cumulative impact assessment of floodplain wetlands was performed because there is no assessment of all of the wetlands in the THP flood prone area. This remains a major omission of a significant resource impact.

CAL FIRE should not approve the floodplain THP without a baseline survey and map of wetlands that includes mitigation protection of seasonal and perennial wetlands from disturbances (including skid roads), filling, and adverse alteration of drainage. CAL FIRE should also require enforceable monitoring and reporting of pre-project and post-project wetlands that may overlap with skid roads and other disturbances in the floodplain that are proposed in the THP without geographically explicit maps. The THP's failure to map and avoid earth-moving disturbances to wetlands incurs risks that inadvertent fill discharges may cause violations federal and state laws. The limited Clean Water Act Section 404 exemption for "normal" forestry practices does not include conversion of wetlands to non-wetlands (e.g., fill that destroys wetland hydrology).

Conclusions and Recommendations

The "German South" THP is woefully inadequate to allow either CAL FIRE as lead agency or the public at-large to have any confidence in the conclusions and assertions being made by the RPF and plan submitter that no significant adverse impacts or cumulative impacts will result from the operation of the THP as proposed when past, present, and likely future activities are considered. The very fact that this THP was recommended for approval by the CAL FIRE review team chair raises substantial questions about the integrity of administration of the THP program as Certified Regulatory Program that is functionally equivalent to that of and Environmental Impact Report for purposes of CEQA. The conclusions made in the THP with respect to potentially significant adverse and cumulative impacts on the environment are not supported in any way by evidence present in the THP itself or elsewhere in light of the whole of the record as presented at this time, yet CAL FIRE seems all too willing to allow its review and approval process to facilitate the approval of an inadequate and likely ineffective environmental document that provides no assurance of compliance with the Forest Practice Act or Rules, CEQA, or other applicable governing laws and standards. Given what is articulated herein, and in other public concerns, the "German South" THP simply does not comply with the law and must be denied or substantially revised. This action is needed to address completeness, adequacy, and integrity to assure the public that the rules and standards of the Board of Forestry truly constitute a comprehensive and effective system of regulation that complies with the Act, CEQA, and other laws.

The THP has been prepared by a registered professional forester however the inadequacies of data, analysis and supporting arguments submitted for 1.) claims of insignificant levels of impacts and 2.) use of mitigations to provide at least equal levels of resource protection as provided by the standard rules - must be provided by trained professionals in the areas of science that apply to each of the claims. This need is made plain by the clear lack of evidence submitted in this THP to support the conclusions in numerous portions of the plan. Stand out examples of this can be seen in the following: justifications for in lieu practices, green house gas impacts analysis, TMDL compliance, wetlands surveys and potential impacts, geological hazards from faults and associated slides, and cumulative impacts analysis for example. We strongly recommend that CAL FIRE suspend the "German South" THP and require that the applicant, GRT, resubmit a complete and adequate THP for public recirculation, including:

- 1. a rigorous and objective alternatives analysis that addresses flood prone area protection
- 2. the proper explanations, justifications, and analysis submitted to back the request to exempt the plan to 916.3(c) which prohibits tractor roads in Class I, II, III or IV watercourses.
- 3. mapping and analysis of seasonal wetlands by an appropriate professional to incorporate into mitigation design and cumulative impacts analysis

- 4. resubmit an adequate GHG analysis incorporating the most recent scientific studies as they pertain to tree age and carbon sequestration rates
- 5. current special-status species surveys acceptable to fish and wildlife agencies
- 6. analysis of hydrology, geomorphic, and ecological impacts the flood plain and river (with emphasis on sediment, water quality, and salmonids)
- 7. analysis of specific measures needed to be put in place for sediment reduction that meet targets set forth in the TMDL for this river
- 8. analysis of fault related slides that would guide an adequate geological assessment and mitigation design to minimize sediment input and road failure
- 9. results of policy-level review by Board of Forestry and Sacramento CAL FIRE office, specifically addressing the THP's requested major exceptions to Anadromous Salmonid Protection Rules for flood prone areas.

Thank you for your attention. We anticipate future CAL FIRE review and decisions in the public interest, consistent with Board of Forestry policy and Forest Protection Rules. Respectfully submitted,

Chris Poehlmann

President, Friends of the Gualala River

For the Board of Directors, Friends of Gualala River