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Forest Practice
California Department of Forestry and Fire Protection
135 Ridgway Ave.
Santa Rosa, CA 95401

SantaRosaPubliccomment@fire.ca.gov

RE: THP 1-15-042 SON, Dogwood

Dear THP Public Comment Review Team.

I am commenting on the Dogwood THP as requested by Friends of the Gualala River and Coast Action Group. I am a California Registered Professional Forester (#1776) and ARB Forest Carbon Verifier. A graduate of the University of California and Yale University, I have 35 years of consulting forestry experience, including forest inventory, management and planning in the redwood region. While working in the area I have walked and am familiar with forestlands and portions of the South Gualala River, but I never been on the proposed THP site.

I have reviewed the proposed THP and I have done GIS analyses and calculations based upon information presented in the THP. I am concerned that this THP could have serious consequences resulting from the magnitude of logging in flood prone areas along 9 miles of the South Fork Gualala and the cumulative effects impacts of other past, present and future THPs in these sensitive flood prone areas in the watershed. The cumulative effects discussion itself is dated and seems to address some of the minutia of Forest Practice Act requirements without recognizing or addressing the potential cumulative effect of this harvest itself added to the others. My comments concern flood plain area harvest and hydrology, threatened species, and carbon accounting, all which fit under the heading of cumulative effects, Section 4 of the THP.

Flood Prone Areas. The THP elaborates how little of each subwatershed is harvested in this THP, but what it ignores is that, in this single THP, essentially all of the flood plain area of the lower South Fork Gualala River is being harvested in 23 separate units¹. The Gualala River, an impaired water body, is being harvested in this THP, putting the hydrological balance of the entire watershed at risk. There is no amount of charts and spreadsheets that can obviate the fact that 100% of the sediments that flood flow from the entire aggregated watershed could pass through this THP, which is disturbing the soil with roads and skid trails over which will pass rubber-tired harvesting equipment such as skidders, forwarders, bunchers and loaders. This THP has the potential to remove a substantial portion of forest flood plain cover. At a minimum a qualified hydrologist should be involved in a thoughtful analysis of potential sedimentation and

¹ I am providing maps below. The first map below shows the timber harvest areas overlaid transparently on the topo map with the subwatershed boundaries (Calwater 2.2.1) indicated in yellow.

cumulative effects.

I also note that special rules and other requirements for THP's in Anadromous Salmonid Protection Rules are contained within the Forest Practice Rules, and some of the minimum Forest Practice requirements are reiterated in the THP (a no cut buffer plus the 13 largest conifer trees to be retained per acre and 80% residual canopy cover in Inner Zone A, and other applicable rules for other zones). Other than state the minimum protection standards, the THP does not seem to present site-specific plans for natural resource protection.

The plan proposes to use existing access roads adjacent to the areas being harvested. I have concerns regarding operational effects from sensitive ground disturbances, compaction, sedimentation, water quality impacts attributable to the use of equipment on roads, and the forest impacts of rubber-tired harvesting equipment such as skidders, forwarders, bunchers and loaders. Numerous exceptions have been requested by the THP applicant to the Forest Practice Act Rules and the incorporated Anadromous Salmonid Protection Rules. Other than a few stream crossing mitigations and suggested in lieu practices, the effects of road and skidding access does not seem to be fully considered in the plan.

The TMDL for the Gualala River calls for 95% reduction in sediments due to road related sources and 86% reduction related to timber harvesting. The plan does not demonstrate how such reductions are attained.

The THP does not seem to address concerns put forth in the 2005 CDF white paper "Flood Prone Area Considerations in the Coast Redwood Zone", which specifically addresses matters such as low wood loading and scouring on the Gualala River. The white paper recommends inventory and analyses of flood prone area biological functions, frequency of inundation, risk assessment, hydrologic process, stream shading, woody debris structure, microclimates and more. These riverside forest lands in flood prone areas, which obviously could be major sources of badly-needed large woody debris, instead are being harvested. Figure 4 below clearly shows the extent of timber harvest in the watershed. For example, all of the older THP's, and the "Plum" THP 1-16-094MEN, are not addressed in the cumulative effects analysis.

Figures 5 below clearly shows sediment deposition and the scoured nature of portions of the floodplain of the South Fork Gualala. Forestry interactions with river restoration and recovery are not adequately addressed in the THP cumulative effects analysis.

Rare and Sensitive Species.

This proposed timber harvest extends along 9 miles of the Gualala River. It is difficult to understand how biodiversity can be protected under the circumstances of logging along an impaired waterway in flood plains and potential wetlands. It is well known that rare plants and wildlife occur on flood plains, near seeps, watercourses and around other moist areas. The proposed THP proponent has not even done surveys for the many rare plants that are likely to occur within this plan area, and so it is difficult to present public comment except to request that biological impacts of this project be fully addressed prior to THP approval, and that rare species are afforded legal protection. The THP notes that Coho have not been seen recently in this area of the Gualala, but does not seem to address ways that this THP can contribute to the salmonid habitat restoration needs and recovery from impairment, a basic goal stated in the Forest Practice Act and Rules. Similarly, Ospreys and Bald Eagles are recolonizing river basins up and down the coast. Ospreys, Bald Eagles, and other species along the waterway have specific forest habitat requirements that should be addressed in this plan.

Carbon and Carbon Accounting (THP Section 4).

Contrary to the statement in the THP, California forests are not net sequesters of carbon. Black carbon emissions from burning forests and drought mortality have for the past several years far exceeded sequestration. The THP Section 4 discusses carbon impacts in broad, outdated, and inaccurate generalities. This section is obviously "boilerplate" that has been borrowed from other documents. None of the "scientific" references cited were produced during the last decade. We now have the tools to much more accurately assess carbon effects of harvest on forests and woodlands.

The THP developer used Calfire's THP_Greenhouse_Gas_Emissions_Calculator.xls Excel program to calculate the emissions. In the Project Accounting (step 2) it is estimated that there is a pre-harvest inventory 108 thousand board feet (mbf) /acre for Inner Zone A). Based upon satellite imagery it is easy to see that there is a dense existing redwood canopy on all of the units proposed for harvest. The proposed harvest volume (in the Excel spreadsheet) is only 10% of the volume or 10.8 mbf/acre (therefore leaving 97.2 mbf/acre, 90% of conifer volume), yet the proposed post-harvest stocking is as low as 75 square feet/acre of conifer with 80% canopy cover of which 25% is conifer—a fraction of the stated post-harvest carbon stocking. These numbers and statements are inconsistent with each other.

In Inner Zone B the project carbon report indicates an inventory of 85 mbf per acre with a 25% harvest (21 mbf/acre). Yet in Section 2 the residual conifer basal area is indicated as being between 75 to 125 square feet per acre depending on site. A nearby redwood forest that I recently inventoried had a stocking of 33 mbf/acre with a basal area of 271 square feet per acre. Again, the numbers in the carbon calculator worksheet do not make sense and are not consistent with statements in other parts of the plan.

Because of these inconsistent statements in the plan, I am left wondering, and concerned about, what level of harvest is actually going to occur on these sensitive sites. These inaccuracies and/or inconsistencies inhibit the process of making accurate determinations. The plan preparer presents no explanation of the reasoning behind the entries on the GHG Emissions Calculator and so, as a reviewer, I am skeptical of the numbers that are presented. The carbon calculations require detailed professional peer review as they do not seem to be credible as presented. Intuitively it seems to me that, depending on the harvesting actually planned, it could take many decades for the carbon stocking to recover, so the project is unlikely to contribute to California AB32/ARB climate goals, and as such, will have a significant impact.

Thank you for the opportunity to review this THP and for your careful review of these contributions towards natural resource protection.

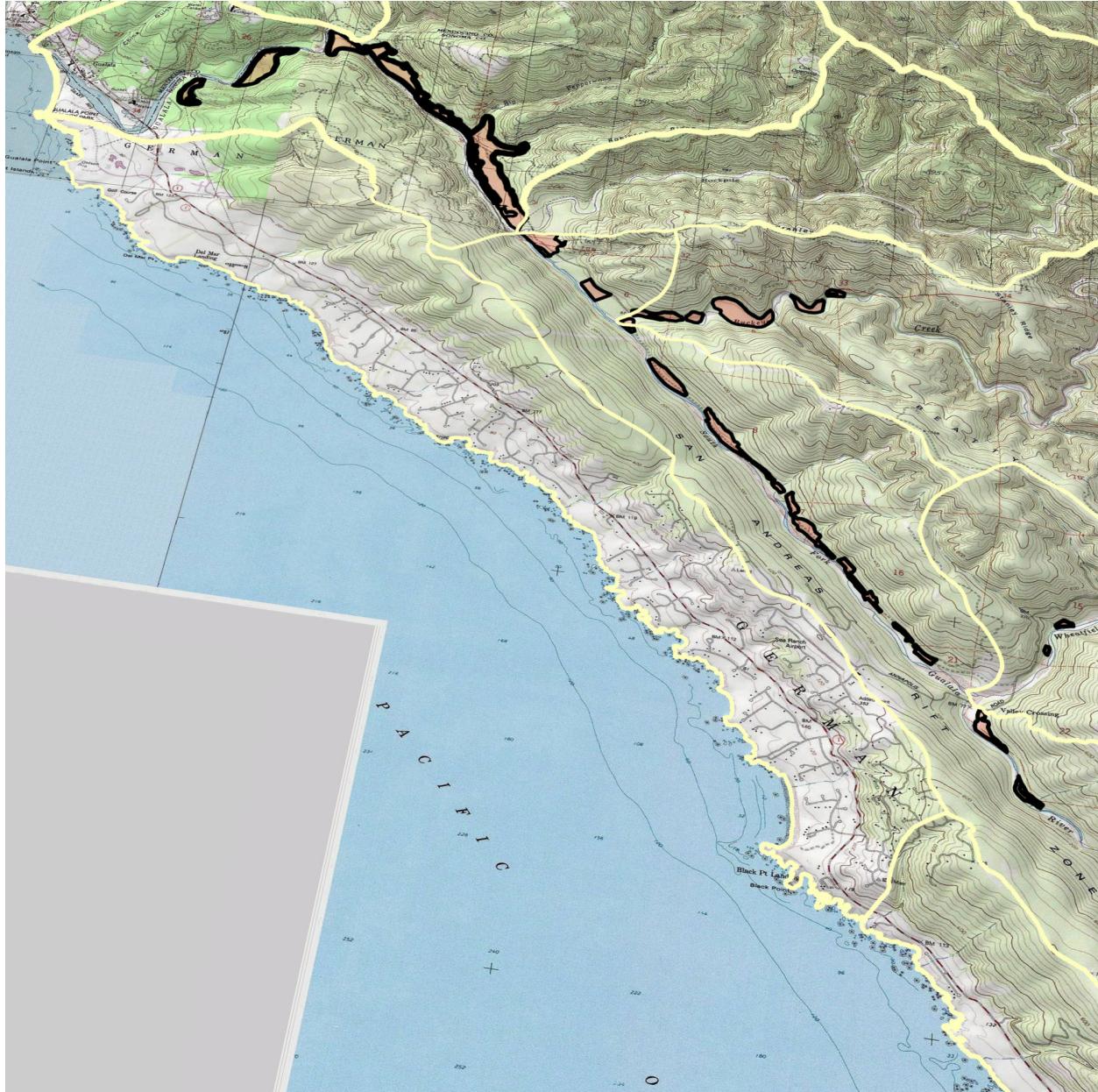
Sincerely,

A handwritten signature in black ink, appearing to read "Tom Gaman".

Tom Gaman
RPF #1776

Maps:

Figure 1. Dogwood THP occupies virtually the entire floodplain of the South Fork Gualala River, and drains the entire watershed complex. The maps and images below show the extent of the harvest units in and near flood prone areas along the South Fork Gualala.



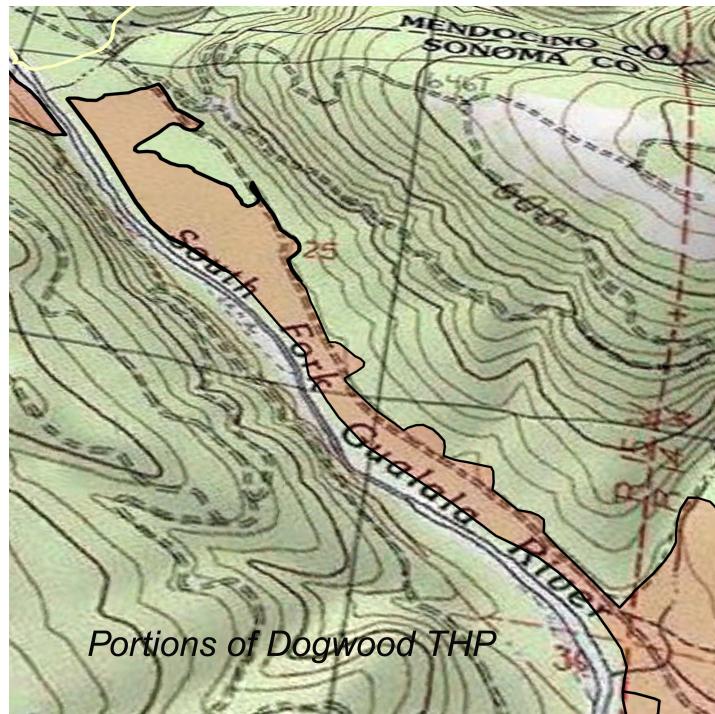


Figure 2. Low Lying Flood Plain Units Typical of the Dogwood THP

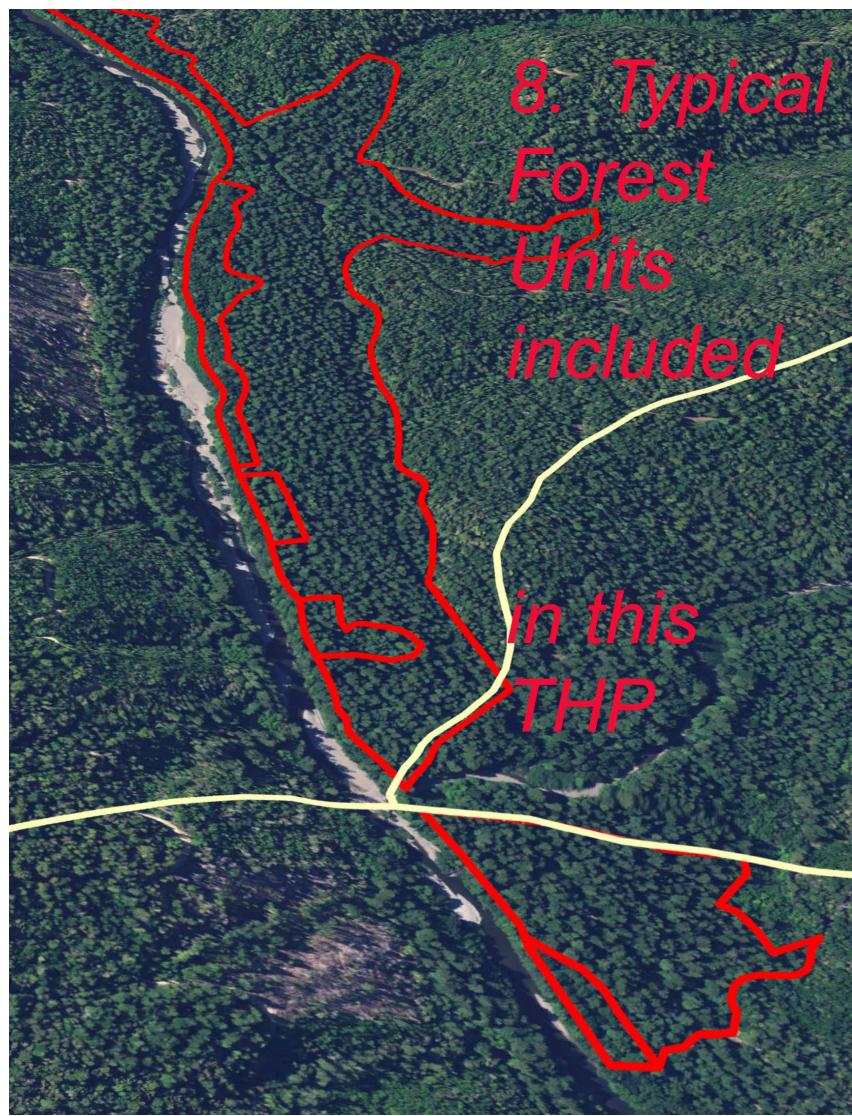


Figure 3. Cutting Blocks are well stocked with large second growth trees.



Figure 4 THP's in the Gualala Watershed from Calfire database



Figure 5. THP's in the Watershed (from Calfire shapefiles) are shaded in red. This satellite imagery from Google Earth clearly shows the lack of woody debris and the scoured nature of the Gualala River South Fork during a period of low water.