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CALFIRE (California Department of Forestry)

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Via e-mail (attachment)

COMMENTS - THP 01-07-067 MEN Robinson Terrace (Bower)

To the California Department of Forestry:

Please include the following comments to the CDF file on THP 01-07-067 MEN Robinson Terrace (Robinson and China Gulch), Bower Family Trust, Gualala, Mendocino County.

I am a professional plant ecologist and botanist, specializing in coastal plant communities and species for 27 years. My professional experience includes NEPA compliance (EIS and environmental assessments) for U.S. Army Corps of Engineers (San Francisco District), and preparation of Endangered Species Act Section 7 consultations and recovery plans for the U.S. Fish and Wildlife Service (Sacramento Office); as an independent environmental consultant, I have co-authored Joint Environmental Impact Report/Statements for the California Coastal Conservancy, U.S. Fish and Wildlife Service, and the California Department of Water Resources, and I have provided critical technical reviews of EIR/EIS documents on behalf of many nonprofit conservation organizations.

The THP does not occur primarily within timberlands. It is proposed in an atypically sensitive environmental setting including residential and commercial land, and direct drainage to the lower reaches (estuarine, lagoon) of the Gualala River above Sonoma County regional parks. The biological, hydrologic, and esthetic impacts of the THP must be considered specifically in terms of this distinct environmental setting.

1. Regulatory issues

1.1. Timber Conversion Plan requirement. The proposed THP area lies within lands zoned for commercial and residential development, with the knowledge and participation of the landowner in the General Plan and GMAC (Gualala Municipal Advisory Council) administrative process over many years. Most of the proposed THP area has no history of commercial timber harvest with period of current family/trustee ownership. The Mendocino County Planning Department revises its

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general plan and land use zoning through a process that occurs at shorter intervals than the minimum feasible rotation of commercial timber harvest.

Due diligence by CALFIRE staff should have confirmed the land use zoning status and County planning records for the subject THP area. GMAC records refer to explicit and direct discussion of the future development of the THP area in a time-scale shorter than a minimum THP rotation. GMAC Special meeting on the Town Center Plan of April 7, 1993 report the following discussion of land use planning in the THP area:

*5. Proposed Commercial Zoning Classifications: Gualala Planned Development
GPD...Comments/Questions: John J. Bower -- Very happy with the existing C designation. Does not wish to have to go for a Use Permit for every project. Does not like PD and does not want it. Does not want to support the County with Use Permits. Does not want to do a Comprehensive Plan for the parcel because he believes that a plan is only good for five years and updating will only cost more money. If you require that only 30% is commercial and the rest is residential then you are down zoning the property and someone has to pay the difference."*

The GMAC Regular meeting of October 12, 1994 recorded the following: "6. Gualala Town & Area Plan...John Bower - Reiterated previous opposition to having his commercial parcel east of downtown designated as a Planned Development Parcel..." At the July 12, 2007 public meeting of the GMAC, open discussion referred to multiple references to expected future development. There is no substantive, credible evidence in any government agency record to indicate any future land use within the THP area within any reasonable interpretation of a minimum feasible timber rotation time other than commercial or residential development. This evidence, in addition to the designation of major portions of the THP area as count-zoned "GPD," (Gualala Planned Development), future residential and/or commercial development of the THP area, combined with a record of public statements by the landowner indicating nothing but interest in commercial development designations, constitutes constructive notice (CDF Administrative Manual Section 5471.2) of an intent to convert the land to non-timber uses.

It would be an abuse of CEQA and CDF discretion to authorize a THP as part of long-term rotation conserving forestland, when there exists "constructive notice" (substantive prior knowledge that both the landowner and the County intends to convert the THP area to commercial or residential development within a period of time less than the minimum feasible rotation for commercial timber harvest and FPR restocking standards) of an intention to convert the THP area to non-timber land uses. County records support a conclusion that the THP is direct to commercial or residential development that severely degrades sensitive, valuable natural resources that establish the environmental baseline for impact assessment under CEQA.

A TCP, not a THP, must be required by CALFIRE for all timber removal that is an incremental step towards urban development and expansion in Gualala, and an EIR for significant conversion impacts is necessary for conversion unless (a) parcels within the THP area are rezoned by the County as timberland or (b) a conservation easement retaining the THP area in perpetual timber production conversion, prohibiting conversion (*contra* the County land use designation), is attached to deed.

2. Significant environmental impacts and mitigation issues:

2.1. Wetlands. The forested slopes and terrace within and around the vicinity of the THP area (mostly marine terrace sandstone-derived soils of the Quinliven-Ferncreek-Shinglemill complex) support many wetland inclusions related to surface discharges of groundwater, particularly diffuse seeps indicated by sedge and rush vegetation, or shrubs tolerant of prolonged waterlogging. The seasonally wet (saturated) soil conditions are well documented in the NRCS descriptions of the site-specific soils in the THP area (including Bruhel-Shinglemill complex loams with poor drainage and slow permeability, low shear strength when seasonally saturated). The THP activities, particularly soil disturbance, road grading, and post-harvest application of herbicides, would cause significant impacts to seep-fed slope wetlands, including loss of sensitive wetland-dependent plant species, rapid invasion by non-native plant species, and adverse topographic, drainage, and other hydrologic modifications. The wetlands in the vicinity of the THP area are formed on mature forest soils, and will not self-regenerate after timber harvest disturbances.

A wetland delineation and assessment based on Coastal Zone (coastal commission policy) standards is needed to identify and protect wetlands. A wetland mitigation plan (subject to review and approval of CDFG) emphasizing protection of existing wetland hydrology, soils, and vegetation is needed to minimize significant potential impacts to wetlands.

2.2. Sensitive plants – The cursory, general, reconnaissance-level botanical surveys are insufficient to detect inconspicuous or intermittently emergent populations of sensitive and rare plant species that may be expected to occur on mature forested marine terrace soils of the THP area. This nutrient-poor clayey sand loam soils with well-developed surface horizons rich in organic matter occur in a low-transpiration, high fog-drip coastal microclimate, and is associated with high density of regionally declining, uncommon to rare floor herbs, including tree root fungus-dependent (mycorrhizal associates; mycotrophic) forbs, especially orchids, ericads. Widespread use of herbicides following timber harvest contributes significantly to regional declines and rarity. Many of these species (particularly “saprotrophic”, mycotrophic forbs) are only intermittently emergent among years, and require focused protocol surveys for detection during a limited seasonal window. Otherwise, significant botanical resources are likely to be underreported. The THP lacks focused botanical surveys for regionally rare plants. The THP earthmoving and herbicide use would likely cause extirpation of seed and bud banks of undetected sensitive plant species. These impacts would occur as a result of silvicultural treatments (clear-cut, group selection with intensive soil disturbance, loss of soil profile and seed bank; post-harvest herbicide treatment) and its immediate consequences (post-harvest surface soil erosion, rapid invasion by non-native weeds). The THP would be likely to result in extirpation of local populations of undetected rare plants.

Examples of regionally rare plants likely or known to occur in the vicinity of the project in local soil and climate conditions, but were not subject to sufficient survey methods and sampling intensity, are presented below.

Ferns

Botrychium multifidum (S. Gmelin) Ruprecht

Grape-fern

Only 3 records in Mendocino Co CAS: Acid wetland soils: shaded forest, scrub thickets, sedge meadows

Grasses, sedges, and allies

Calamagrostis stricta ssp. *inexpansa* (syn *C. crassiglumis* Thurber. Only 3 Mendocino Flora records

Carex mendocinensis Olney

Mendocino sedge

Very rare in California and Mendocino County; known to occur in seeps along the southern Mendocino/Northwest Sonoma Coast from Point Arena to Sea Ranch. High survey effort needed for detection

Lilaceous (broad sense) bulbs and forbs

Lilium maritimum Coast lily. Seedlings and shrub-canopy suppressed, non-flowering individuals are likely to be underdetected.

Veratrum fimbriatum Corn-lily. Seedlings and shrub-canopy suppressed, non-flowering individuals are likely to be underdetected.

Mycotrophic ericads, orchids

Allotropa virgata A. Gray Ericaceae

Sugar stick

Short season of flowering shoot emergence, no leafy structures. Obligate mycotroph/parasite of moist conifer forest. High survey effort needed for detection.

Chimaphila umbellata (Linnaeus) Bartram Ericaceae

Prince's pine

Rare in mature forest and woodland soils with thick organic soil horizons.

Corallorhiza striata Lindley

Striped coral-root

Uncommon in Mendocino County, rare in south County and NW Sonoma Co. Easily mistaken for more widespread *C. maculata* prior to or after flowering. High survey effort needed for detection.

Hemitomes congestum A. Gray Ericaceae

Gnome plant

Rare in Mendocino County, non-green plant limited to mature forest soils (primarily coastal redwood forest) with thick organic horizons. Reported from Gualala as recently as 1964 (Flora of Mendocino County; only 4 Mendocino County records in CAS). High survey effort needed for detection.

Monotropa hypopithys Linnaeus. Pinesap.

Rare in Mendocino County, uncommon in California; non-green plant limited to mature coniferous/mixed forest soils. Known to occur on coastal terrace north of Gualala in vicinity of Iverson Road, similar to soils and climate of THP area. High survey effort needed for detection.

Pityopus californicus (Eastwood) Copland.

Rare in California; non-green plant locally frequent in portions of Mendocino County. Known to occur in Gualala and coastal terrace north to Iverson Road vicinity, similar to soils and climate of THP area. (Flora of Mendocino). High survey effort needed for detection.

Pleuricospora fimbriolata Gray. Fringed Pinesap.

Rare in California, non-green plant restricted to coast, similar to *Pityopus*; known to occur in Gualala and coastal terrace north to Anchor Bay. High survey effort needed for detection.

Piperia michaelii Ackerman.

Rare in coastal Mendocino county, uncommon county-wide. High survey effort needed for detection.

Piperia transversa Suksdorf.

Rare in Mendocino County; often in partially shaded slump or gully scars, road cuts, in seasonally moist soil. Inconspicuous summer-flowering tiny green-flowered orchid; high survey effort needed for detection.

Spiranthes porrifolia Lindley. Western ladies-tresses.

Rare in forested wetland of Mendocino County; congener *S. romanzoffiana* with similar habitat requirements is known from Gualala vicinity. High survey effort needed for detection.

Wetland forbs

Campanula californica California or swamp harebell. Some populations were detected in THP botanical surveys, but the “mitigation” of a 50 foot EEZ timber harvest exclusion zone is insufficient to protect the viability of the population that depends on the microclimate and drainage (surface and shallow subsurface hydrology) of the surrounding forest. Shaded populations flower very late, in late summer or fall, and may not be detected by early season surveys.

Horkelia tenuiloba (Torrey) Gray. Globally rare plant present on sandy clay or claypan marine terrace soils in vicinity of Gualala and Sea Ranch. This plant is likely to occur in areas of forest gaps or exposures of subsoil. Detection depends on surveys during summer flowering period.

2.3. Erosion and sedimentation, water quality impacts.

The THP proposes to operate roads and timber harvest during winter months in soils described by the NRCS Soil Survey of western Mendocino county to have extremely high risk of erosion (“very severe” water erosion hazard due to surface runoff). CALFIRE should fully consider and not understate or trivialize the NRCS expertise and the warnings of the California Department of Geology regarding hazards of soil erosion above sensitive receptors in Gualala: residential water supplies, developed private property and public roads, and above all, the lower Gualala River Estuary. Conventional THP-required erosion controls for forested landscapes are not sufficient for this particular environmental setting. CALFIRE should fully consider the environmental setting and context of significant impacts related to soil erosion caused by road and timber harvest actions.

The Gualala River’s lower reaches alternates between a tidal and choked tidal or non-tidal (lagoon) condition. The choked or non-tidal lagoon condition is particularly sensitive to turbidity pulses in fall and early winter because high-density turbidity plumes affect concentrations of steelhead juveniles and adults that undergo smoltification in brackish salinity conditions. China Gulch discharges directly

into the lower estuary. Excessive short-term pulses of fine sediment into the lagoon prior to natural (high river discharge) lagoon breaching is a potential significant impact that is not mitigated by conventional erosion controls for upland or headwater forest conditions. Proposed clear-cuts are inappropriate and unacceptable risks for China Gulch in particular because of the risk of extreme fine sediment pulses. Estimation of erosion risk based on average monthly rainfall conditions is invalid and highly misleading. The probability of threshold rainfall events that trigger high risk of erosion and sediment transport must be analyzed, and impacts mitigated. CALFIRE should review pertinent scientific study of the aquatic habitat and fisheries resources of the lower Gualala River funded by the California Coastal Conservancy and implemented by the Sotoyome Resource Conservation District as part of its CEQA evaluation of sedimentation impacts.

Cumulative impacts - The THP underevaluates cumulative impacts to biological resources (wetlands, sensitive plants, and aquatic resources, including steelhead and water quality of the Gualala River lagoon. The unsubstantiated cumulative impact checklist (a substitute for an actual assessment) is grossly deficient in view of the sensitivity and magnitude of existing natural resources and probable impacts in the THP setting. CALFIRE should prepare a narrative, site-specific and area-specific cumulative impact analysis sufficient for CEQA standards.

Alternatives – The THP fails to consider feasible environmentally superior alternative silvicultural prescriptions and phasing of timber harvest to minimize and avoid significant impacts to the lower Gualala River estuary/lagoon and its aquatic resources, sensitive plant populations, and domestic water supplies and public roads. CALFIRE should prepare an alternatives analysis sufficient for CEQA standards.

Conclusion and recommendations: CALFIRE should suspend processing of the subject THP and require the applicant to resubmit a Timber Conversion Plan (TCP) with full disclosure of all relevant public agency documentation of land use designation and its history, as well as a formal declaration of a time-explicit intent of future land use during the minimum period required for a timber harvest rotation. CALFIRE should initiate preparation of a general or program-level EIR with Mendocino County as the co-lead agency for the TCP. The CEQA document should include a full and adequate impact analysis and mitigation and monitoring plan.

Respectfully submitted,



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