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(attention: Allen Robertson)

October 27, 2006

SUBJECT: "Annapolis Area Timberland Conversions Project" (Roessler-Martin TCP joint Environmental Impact Report, Sonoma County).

To the Department of Forestry:

Please consider the following comments submitted in response to the Notice of Preparation (NOP) for the Draft Environmental Impact Report (EIR) now in preparation for two Timber Conversion Plans (TCPs) at two sites in Annapolis, Sonoma County (Roessler, APN 122-090-008; Martin, APN 122-190-007). These written comments supplement my oral comments at the public scoping meeting at the Horicon School, Annapolis, on October 19.

I incorporate by reference my two letters commenting on the former negative declaration/initial study documents for the essentially similar projects. Please include these letters dated August 9, 2004, and June 2, 2004, for TCP/THP 1-04-059 SON and 1-04-055 SON in the administrative record for the current EIR scoping, since the substantive and regulatory issues are substantially similar or identical.

1. "Project" and geographic scope. The EIR appears to be a hybrid between programmatic or master EIR and a project-specific EIR. The "program" comprising the "project", however, consists of only two arbitrarily selected projects regulated by CDF in Annapolis, and omits others that are cumulatively significant for any area-wide or program EIR. This is likely to have the effect of piecemealing (segmenting approvals of incremental projects without sufficient focus on their additive and interactive effects at larger geographic scales). The larger antecedent timber conversion (same basic project purpose), Fairfax/Artessa, is geographically closer to Martin than Roessler, and occurs in more similar soils and topography; it also lies partially within the Little Creek watershed. The NOP states (p. 2) that Roessler and Martin projects are considered in the same EIR because they are both in the same watershed (Little Creek) and are only 4,000 feet apart.

Following the same objective criteria cited in the NOP for combining Roessler and Martin into one EIR, Fairfax/Artessa vineyard conversion should be included within the scope of the "Annapolis Area Timberland Conversions Project". There are no objective reasons given for excluding it. Moreover, the same CEQA consultant, Raney Planning and Management, is preparing EIRs for all these projects.

The EIR as proposed is effectively gerrymandered around two projects that failed as Initial Study/Negative Declarations because they had potential significant impacts. This circumstantial relationship born out of shared legal history is not a valid geographic scope for an EIR. If the purpose of the EIR is to analyze impacts of vineyard conversion in the "Annapolis Area", the area of proposed or reasonably foreseeable vineyard conversions should set the geographic scope of analysis. This would be feasible as a hybrid program EIR with two tiered projects analyzed in greater detail because they are currently seeking authorization.

The arbitrary omission of Fairfax/Artessa conversion from the "Annapolis Area Timberland Conversion" EIR has particular significance for cumulative impact assessment. The baseline for impact assessment in CEQA is normally based on the environmental conditions prevalent at the time of the NOP. The extraordinary lag between the date of the Fairfax/Artessa NOP and the (still pending) release of its DEIR, and the NOP date for Roessler-Martin, indicates a significant gap in the baseline for cumulative impacts between these projects. To correct this, the long-overdue (2 years!) DEIR for Artessa should be amalgamated with the Martin and Roessler projects to establish a proper "Annapolis Area Timberland Conversion Program EIR" from which CEQA documents may be individually tiered. To do otherwise would arbitrarily fractionate the geographic scope of analysis and truncate cumulative impact assessment of the gerrymandered "projects". This should be practical because the same consulting firm is preparing all these documents anyway. Whether Artessa is included in the "project" or not, its cumulative impacts must be rigorously assessed to the same extent in the Martin-Roessler EIR.

The "Preservation Ranch"/Premier Pacific Vineyards conversion in Annapolis has been publicly proposed and discussed in Sonoma County planning meetings with the Board of Supervisors and Permit and Resource Management Staff. It is therefore now "reasonably foreseeable", and must be considered a cumulative project within the scope of impact assessment of the EIR.

2. <u>Cumulative impacts and risks of pesticides and adjuvants</u> (sticker-spreaders in tank mixes of pesticides).

The EIR should quantify and assess at multiple geographic scales (Little Creek and Gualala watersheds) the cumulative load of insecticides, fungicides, herbicides, and associated adjuvants that may affect aquatic species and communities in (a) local seep wetlands; (b) channel pools in spring and summer; (c) the extreme downstream "sink" for all of the watershed, the lagoon of the Gualala River mouth during non-tidal phases when

the barrier beach impounds the lagoon. All pesticides that may be reasonably likely to be used by either the current applicants or their successors in interest (i.e., potential sale of vineyard after approval, as proposed for the "Preservation Ranch"/Premier Pacific Vineyards conversion in Annapolis). This should be assessed under Biological Resources, Water Quality, Hazardous Materials, and Human Health and Safety discussions. The sensitivity of children to pesticides and their decomposition products should be assessed as a cumulative impact of the proposed projects location (in addition to of all the foreseeable vineyards) near the Horicon School in Annapolis. The assessment should utilize data from agricultural communities exposed to pesticides in California.

Adjuvants such as surfactants with weak estrogenic activity or strong ecotoxicity to amphibian larvae and fish larvae (shown in recently published research) should be given equal or greater attention than the active ingredients in tank mixes sprayed on or near vineyard crops. Effects of adjuvants with potential endocrine-disruptor activity (particularly in children) must also be assessed under Human Health and Safety sections.

The "routine" or "normal" use of pesticides should not dominate discussion of pesticide impacts and risks. Pesticide impacts associated with conversion rather than ongoing viticulture (soil sterilants), and pesticide impacts associated with low-probability but high-stakes infestations specific to vineyards, such as the glassy-winged sharpshooter, must be rigorously assessed. The magnitude of mass aerial spray response to an outbreak of the glassy-winged sharpshooter, and the specific types of pesticides that are likely to be used (such as organophosphates, other neurotoxins) should be disclosed. Again, this must also be assessed under Human Health and Safety sections as well as Biological Resources, Water Quality, and possibly Hazardous Materials. The pesticide impact analysis should also quantify the frequency of accidental pesticide spills in agricultural practices in California, using the best available data; this should not be treated as mere speculation.

The risk assessment for pesticide response to glassy-winged sharpshooters should assess the probability of establishing a founder population of this pest in relation to available "habitat" – the cumulative extent of vineyard. An outbreak is a joint probability of the species' introduction and the availability of suitable crop hosts. As the crop area increases, so does the risk of successful founder populations of the pest. This should be the foundation of a cumulative impact and risk assessment.

The watershed-level load of soil sterilants (broad-spectrum biocides such as methyl bromide or other sterilants used to establish new vineyards) should be quantified and assessed. The project-specific use of soil sterilants used for timber conversion to vineyard should be disclosed, quantified, and assessed for aquatic and terrestrial biota. This assessment should quantify leakage and contamination, as well as quantified risks of accidents during application. This should be assessed under Biological Resources, Water Quality, Hazardous Materials, and Human Health and Safety discussions.

3. Nutrient loading of streams and the Gualala River lagoon (summer-impounded, closed "estuary"). The EIR must assess the cumulative nutrient loading of the Gualala River watershed in terms of the incremental contribution of the proposed projects and all intensive agricultural conversions in the watershed. As vineyards proliferate, the crop agriculture component of the watershed contributes to total nitrogen loading of spring-summer baseflows from gradual leaching of cropland. The low cation exchange capacity of Ohlson Ranch formation soils (Goldridge and related series) and Hugo soils indicates a high long-term potential for diffuse, non-point N transport to streams through runoff and subsurface solution transport (groundwater, seeps). The assessment should be based on quantitative estimates of the likely range of fertilizer (organic or synthetic) additions during vineyard establishment and ongoing cultivation, including vine replacement.

The impacts of nitrogen and phosphate loading of the Gualala River, which otherwise has minimal additional N, should consider the impacts on algal production and dieback (high summer biological oxygen demand/hypoxia) in summer channel pools, and in the lagoon. These impacts should also be considered specifically for survivorship of existing federally listed steelhead populations (particularly young of year), and the recovery of listed coho salmon.

- 4. Growth-inducing impacts or facilitation of development and land use change by conversion. The EIR should objectively estimate the lifespan of converted vineyards and estimate the subsequent fate of the converted timberland, just as state authorization for long-term surface mining requires a post-mining reclamation plan. Once forest resources are removed, so is the primary land use barrier for more intensive development. Most of the San Francisco Bay area (of which the local real estate market is now an outpost) has exhibited an expanding zone of land use succession from native vegetation and habitat to managed habitat (rangeland or timberland), intensive agriculture (cropland), rural residential, and finally suburban or urban development. This pattern of land use succession should be assessed in terms of forecast population trends, as well as county-level land use policies and plans. The EIR should consider and include appropriate mitigation for growth-inducing/facilitating impacts, such as post-agricultural reclamation (reforestation) measures or conservation easements.
- 5. <u>Land use policy impacts</u>. Please include the letter from Sonoma County Permit and Resource Management Department dated July 19, 2001 to CDF, re: THP 1-01-171SON (Fairfax/Artessa), which applies equally to Annapolis vineyard projects in terms of land use policies. The County PRMD stated that "The County objects to conversion of timberland...greatly concerned about potential cumulative impacts of these conversions....", and reiterated county goals and policies with which they conflict to a significant degree. The county emphasized that the primary purpose of RRD zoning designation in Annapolis is to protect lands needed for timber production, watershed, fish and wildlife habitat, and biotic values. The congruence between these policies and the goals of the Forest Practices Act itself should be explicitly addressed in the Land Use and Policy section.

- 5. Alternatives analysis. The boilerplate, generic discussion of project alternatives in the Negative Declarations for these projects is unacceptable for any CEQA document, particularly for an EIR. The alternatives analysis should consider (a) offsite alternatives reasonably available (either for sale or assessed for landowner willingness to sell at or near market value) that have less existing forest resource value than the proposed sites; (b) on-site alternatives with reconfigured, reduced conversion area, that are feasible from the perspective of overall cost, logistics, technology in relation to the basic project purpose (regardless of whether they are preferred by the applicant); (c) mitigated alternatives (proposed project modified by application of full suite of mitigation measures, including reduction of conversion area or impacts). If the "basic purpose" is interpreted primarily as economic, then an objective economic threshold for "reasonable return on investment" should be assessed for the "project", and compared with a fair market value appraisal of the land in the context of potential conservation purchase. The interest of land trusts or open space districts in protecting Annapolis forestlands at risk of agricultural conversion should be investigated rather than arbitrarily presumed to be lacking.
- 6. Agricultural water use and availability, hydrologic and aquatic resource impacts. The EIR should not speculate about quantitative water use in vineyards, or uncritically adopt assertions by applicants about water use. The EIR should obtain the best available scientific and commercial data about water use in new vineyards in Annapolis, and proxies in Napa, Sonoma, and Mendocino (Navarro River watershed) counties, to objectively and quantitatively estimate water use for new vineyard establishment and ongoing grape production. The impact of normal and drought-year water use and availability should be objectively assessed. This assessment should consider the effects of intercepted runoff on: groundwater recharge; peak flows in tributaries of the Gualala river; channel-forming consequences of diminished peak flows in channels below reservoirs; and effects of modified baseflows on hydroperiods and depths of channel pools. Biological thresholds should be considered for population viability of young-of-year steelhead. The analysis of water use and availability impacts should also consider the best available climate change forecast models currently applied by the California Department of Water Resources.

Hydrological assessments and analyses should not be speculative or based on untested assumptions. They must include site-specific data to calibrate hydrological models used in assessment. At least one year of dry season and wet season data collection should be mandatory if it has not already been done.

7. <u>Ignition sources and fire risk</u>. As several commenters noted at the public scoping meeting, all recent forest fires in Annapolis (including today's) have been associated with agricultural or forestry operations. All Annapolis vineyards border forestlands, and all utilize gas-engine equipment. The EIR should accurately assess what proportion of the laborers used in local vineyards are adequately capable of reading and complying with safety instructions of potential fire-igniting equipment or materials. The EIR should also assess related risk factors to fire hazards, such as the frequency of cigarette smokers

among vineyard labor, or drug and alcohol use. The issue of fire risk should be given especially rigorous treatment because of the mandate of the CEQA lead agency, CDF. CDF should also identify appropriate mitigation for increased fire ignition risks in the "Annapolis Timberland Conversion" area in general.

- 8. <u>Socioeconomic and cultural impacts</u>. The physical changes of cumulative agricultural conversion in Annapolis have significant effects on non-resident and resident labor, traffic (commute and commercial trucks) on rural roads, schools, medical care and emergencies, community cohesion due to conflicts with established rural residential communities, and economic stratification of the local community. These should be assessed with a focus on mitigation (or unavoidable significant cumulative impacts).
- 9. <u>Biological surveys and baseline data for biological resource impact assessment.</u>
  Adequate biological surveys for sensitive organisms (including regionally rare or rapidly declining species or population segments) should be conducted before, not after, the DEIR. Surveys should be performed by qualified biologists with knowledge of regional or local habitats and species. These should include multiple seasonal surveys for California red-legged frogs, yellow-legged frogs, western pond turtles, steelhead, Pacific and California giant salamanders, California newts, clouded salamander, arboreal salamander, bats, pileated woodpeckers, northern spotted owls, California bellflower, coast lily, mycotrophic or parasitic ericads, rare or uncommon orchids, and species at the limits of their ranges.

Wetlands should be identified during the wet winter-spring season, not in late summer/fall, when seasonal wetlands are often obscured to inexperienced field biologists. For purposes of wetland impact assessments, "jurisdictional wetlands" (in the narrow context of discharges of earthen fill regulated under Section 404 of the Clean Water Act) and "wetland habitat" (in the broader CEQA and Fish and Game Code context) should not be equivocated.

- 10. Northern spotted owls: indirect and cumulative impacts of habitat conversion on habitat fragmentation, predators and competitors. The effects of vineyard conversion on northern spotted owls should not be arbitrarily limited to the legal (not biological) threshold of "take", or the highest impact threshold of mortality. Impact assessment should consider edge effects of ag/forest habitats on the abundance and distribution of great horned owls (predators of NSO), and the southward spread and "invasion resistance" of the landscape to barred owls (non-native competitors and also hybrid assimilation threat to NSO). The impact assessment for NSO should not be speculative, but should apply the best available scientific data and expertise.
- 11. "Restoration Forestry" practices as mitigation or impacts. The previous Martin project proposed to offset forest conversion (loss) by applying so-called "restoration forestry" practices to the remaining steep, unconverted forestlands on the parcel. In fact, the operator (Raul Hernandez/Old Growth Again/Old Growth Again Restoration Forestry) this has consisted of harvest of irreplaceable downed old-growth redwood logs

(significantly depleting loads of coarse woody debris), aggressive thinning of ground layer and shrub layer vegetation to park-like conditions, and commercial harvest of redwood "thinnings" and "poles" (as offered on the website links to <a href="www.oldgrowthagain.org">www.oldgrowthagain.org</a>), with no monitoring data to demonstrate actual benefits to wildlife, forest community diversity, or other non-production forestry beneficial uses. The same operator also conducted an unauthorized and illegal summer burn pile in 2006 on a Little Creek parcel. If this "restoration forestry" is proposed as mitigation, its practices should be compared with pre-commercial or commercial thinning (which at least leaves coarse woody debris intact) in terms of forest mitigation potential. Since this operator has a current NTMP application, the scope of analysis should include the cumulative impacts of the NTMP, including significant impacts of downed old-growth redwood log harvesets.

12. The "Ratio approach" to cumulative impact assessment is impermissible in CEQA. CDF has consistently applied it to Annapolis TCPs, THPs, and negative declarations. If it is improperly used again in this EIR after repeated admonitions, it would indicate a willful disregard (or contempt) for CEQA case law and regulation.

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