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Re: Comments: MRC 80-Year HCP/NCCP/TMP

## **GENERAL**

Review of, and reasonable ability to comment on, the above noted project [MRC 80-Year HCP/NCCP/TMP] is limited by the organization (lack of organization) and lack of consistency in the discussion, standards, and various methods of identifying issues, standards, and outcomes. (i.e. statements or representations made in the HCP, or in other places in the EIS are conflicting). With documentation and discussion of issue raised in the HCP document and the EIS one would need a relative level of consistency to arrive at reasonable conclusions. The presentation, definitions, discussion, tables, and graphs in these two documents makes assessment and the ability to make findings next to impossible. However, and contrary to instructions from the lead agency(s), both documents (HCP and EIS) are subject to review and comment – as both documents are interdependent and the HCP would be considered the project description – where the EIS/CEQA document is the environmental review of actions proposed by the HCP.

CEAQ and NEPA requirements indicate that there must be accuracy and consistency in the

document(s) - project description - and stated information.

This document includes comment on both the HCP document and the EIS/CEQA document. The HCP document is part of the record and includes elements of the project description. The EIS/CEQA document fails to analyze, explain, or correct elements, conclusions, or statements in the HCP that are inaccurate or are not consistent with the EIS/CEQA document. This leads to confusion and failure to reach a conclusion on potential effects of the government action in approving the proposed HCP standards or any related alternative. Thus the core requirement to identify and disclose effects needs to consider both the HCP and EIS/CEQA document. (Note document and page or table numbers are identified).

Given the information contained in the HCP and EIS it is not clear if the operating standards are: 1) enforceable, 2) sufficient to conserve species of concern – beyond any currently employed responsibilities under various legal authorities, 3) are reasonably functional – where MRC employees and responsible agency staff can actually understand the document(s) and effectively apply appropriate control language to operations on the ground over time.

There is a general lack of timely and repeatable monitoring protocols that would allow for effective adaptive management.

We assume that inconsistencies will be explained and corrected and that the HCP proposal would be modified to entertain and accept superior alternatives (out of a combination of all that has been discussed and vetted). In short – fix it.

Note: No Action = No Project

## **Issues not Covered**

### **1 PURPOSE AND SCOPE OF THE PLAN**

HCP - 1.15: Use of pesticides is not covered in the document. Impacts as a result of unauthorized use of MRC owned roads is not covered in the HCP document. There is ongoing responsibility for road management and pollutant source control that goes with ownership. MRC is still responsible to maintain pollutant sources on all roads. MRC responsibility under Cal Water Code and the Basin Plan was not fully considered. (See below)

## **2 REGULATORY AND MANAGEMENT CONTEXT**

HCP - 2.6: The document makes determination that employment of the HCP will result in compliance with Water Quality Objectives. This claim remains to be determined. Only the Regional Board staff, and other responsible agency can make such determination. Gaps in analysis, vague areas, and uncertainty leave open the question of whether the policy and measures in the HCP actually do meet water quality objectives.

In the review of water quality management and responsibility by the State, the document fails to note State Non-Point Source Policy and the mandated implementation of the policy under agreement made with the EPA and NOAA with the re-authorization of the Coastal Zone Management Act. Nor does this section include discussion of State or Basin Plan anti-degradation language (which is legally enforceable). The MRC ownership is to a great extent, more the 70%, comprised of watersheds that are listed as impaired (State's List of Water Quality Limited Segments). Conservation measures noted have not taken anti-degradation language into account. There is no accurate accounting of how actions, conservation measures, meet the anti-degradation standard. It could be argued that conservation measures that do not meet the standards of the Forest Practice Act (current Rules – including ASP) are not sufficient to recover Water Quality Standards or meet the anti-degradation standards (language) in the Basin Plan.

HCP - 2.6.1: The statement “During review of THPs CAL FIRE considers the requirements of the Clean Water Act “ is inaccurate.

EIS - 1.6.2.5 briefly discusses the above – and – fails to arrive at appropriate conclusions.

## **8 CONSERVATION MEASURES FOR AQUATIC HABITAT**

There is a general lack of consistency with the discussion of conservation measures in the HCP and EIS.

Virtually all of the MRC forestlands are in impaired watersheds. Conservation measures contained in the HCP must demonstrate application effectiveness, better than the regulation contained in the Forest Practice Rules (including ASP) or the No Action Alternative. Conservation measures must be capable of attaining Water Quality Standards in MRC held lands in impaired waterbodies.

Will forestry conservation efforts increase near stream effective shade (near term or long term), sufficient LWD in streams, reduce sediment loading, or implement other activities that result in attainment of water quality standards? With conservation measures that are less than those of the Forest Practice Rules (where proposed AMZ standards do not meet ASP standards or the No Action Alternative and with limited surveys and inventory of stream conditions the question of effectiveness of proposed management measures is not supported by actions or analysis as proposed in the HCP.

HCP - 8.2.1.1.2 [EIS App. D]: Class II L protections are limited to 100 acre drainages. There are many cases, especially in impaired systems, where Class II L protections should be provided in drainage's of less than 100 acres. There is provision [not accounted for in EIS App. D] to adjust Class II S to Class II L if indicated by adaptive management. However, limited stream monitoring provisions and surveys (less than 15%) indicates that the response time for adaptive management corrections will be excessive. Procedures should all Review Team members to require such adjustment Provision for same should be considered in the environmental document.

Class III protections may be effectively less than the ASP/FPRs. The EIS (App.D) indicates 50% overstory is to be retained. Composition of the overstory is not discussed. Additionally will EIS stated protections including "regeneration harvest" allow for retention of 50% overstory and understory (with retention of 75% of the ground surface cover and other amenities) allow for more Class III protection than No Action Alternative? Will "restoration harvest" (stated to be no more than 5% of watersheds per year be applied to each watershed with consideration of impaired status? There has to be additional discharge from "restoration harvest" in Class IIIs. How is this assessed in terms of meeting Basin Plan and anti-degradation standards? There is inaccuracy/disagreement in the HCP document regarding the total acreage of AMZ for Class IIIs in the ownership (this was brought up by the science panel questioning the lack of Class III protections). The Definition of Class III - no aquatic habitat - needs refinement. Does this mean if there are aquatic plants it is a Class II? The science panel questioned under protected Class IIIs. MRC did not adequately respond to the science panel issues on this subject.

The area (total land base as a percentage of any drainage) of Class III watercourses and Class II S is a huge percentage of the ground to be managed. Very strict attention must be paid to measures applied to conserve resources in Class III and Class II S drainages. A number of total acres that fall into this category should be applied to assessment - proposed outcomes from various management methodology (some presented and some not presented).

Again, due to erosion potential related to Class III (and Class II S), it is important to understand the approximate total acreage of these drainages, and relative risk for erosion factors (e.g. number of acres of MRC Class III watercourse in TSUs 1-3), to make coherent policy decisions and meet sediment reduction targets. Given the terrain instability and erosion potential (or with relative risk determinations from modeling – or lack there of) how will proposed AMZ band widths effectively limit sediment delivery to surfaces waters (meet TMDL reduction Targets)? (See HCP, p. 8-5, 1.1)

Considering LWD targets for Class II S and Class III watercourses; MRC states that "Small Class II and Class III watercourses have reduced widths (for AMZ) because smaller LWD is sufficient for smaller stream channels; in addition, there is less need for streamside shade to cool the water temperatures because of the lack of year-round water flow." (HCP, p. 8-40, para 1). The issue being – do the proposed standards meet requirements for sediment reduction targets, stream habitat values (LWD), and canopy – stream temperature targets (considered with other external data – e.g. rainfall, global warming, etc.)?

Why are there so many “allowable uses” in the conservation measures regarding equipment exclusion in Small Class II and Class III AMZs? (HCP, p. 8-26, 8.2.3.2.5) (p.8-30, 8.2.3.3.5) Who is inspecting (what oversight is in place) the “rare” uses of skid trails and the ‘rare’ construction of other features?

Class II S watercourses do not receive benefit of effective shade canopy requirements necessary for temperature control. This leaves Class IIs out of objectives for effective shade and temperature targets. The EIS says Class S watercourses are to receive 50% overstory canopy (essentially managed similar to Class IIIs with 50’ to 100’ AMZ). However, the EIS (App. D) state that currently, under the No Action Alternative, that Class II S streams have Class I measures applied. I think we should go with the Class I protections – as stated in the No Action plan.

The HCP Class I and Class II L AMZs will have a target of 70% average canopy – even though the EIS App. D indicated that there are areas of no cut or 85% overstory/canopy. A large issue with Class I protections in the AMZ is that under the No Action/ASP there is a larger no cut buffer and larger area of 85% canopy that does not allow for any operations in the channel or core zones – where the EIS (App. D) allows for tree trading, less canopy, and lower standards of large tree retention effecting shade and LWD recruitment. Thus, the No Action alternative might be superior.

HCP - 8.2.2 Class II L AMZs are to meet 75% of sampled stands will meet target of 70% average canopy (effective shade?) In 30 years - going to 90% of stands meeting the 70% canopy target in 70 years. Will they cherry pick the stands sampled? Is this target to low considering what ASP might attain? This is a rather long period of time to meet these targets.

HCP - 8-3, 8.2.1.1, Table 8-1; MRC's re-classification of Small and Large Class II streams is based on very limited data: only 15% of the streams have been surveyed. Can we draw valid conclusions from limited sampling? MRC has linked class to drainage areas: >100 acres for Large Class IIs, <100 acres for Small Class II. In impaired systems such as these, we contend that in some cases Class II Large protections should also be extended to drainages of less than 100 acres. MRC offers adaptive management measures to make such changes; however, appropriate standards and methodology have not been applied to this proposed scenario.

Additionally: "At this time," MRC states, "our inventory is not robust enough to give accurate data at the planning watershed level." (HCP, 8-6, 8.2.2.1) They promise that their timber modeling program will include actual AMZ canopy measurements. This is another area where actual information and conditions is thin and without sufficient data to support conclusions.

HCP - 8.2.2.1: The 80 year projection for timberlands - a long horizon with limited data (for AMZs). How will surveys indicated there is movement towards this target in a reasonable period of time.

Averaging the Class I and Class II AMZ canopy (effective shade?) Allows for target shortfall in areas. The words canopy and effective shade seem to be interchanged in the HCP discussion - without a good definition of what they mean.

Current AMZ inventories are not robust enough to give sufficient data to arrive at AMZ stocking and/or effective shade conditions. AMZ stands are not distinguishable from upslope stands

HCP - Table 8-3 shows greater canopy data than stated in the discussion.

HCP - Table 8-4 shows increasing inner and middle band projected harvest over 20, 40, 60, 80-100 years.

HCP - The volume of harvest is increasing and significant, over time, in the AMZ bands, including the near stream inner band. This raises several questions: What is the impact of disturbance from harvest in those bands? Will effective shade canopy levels increase at projected rates (see other tables for projections)?

HCP - This treatment, as a conservation measure - with a target of 70% canopy, effectively allows harvest of larger trees in the inner zones. And - averaging the canopy level (effective shade) allows for more flexibility of harvest in the inner zones. Forgetting inadequate Class III protection, do these conservation measures as proposed, deliver outcome equal to, or better, than if current ASP or No Action alternative?

HCP- 3-11, 3.3.5 As of 2010, MRC has limited stream habitat/condition surveys – having walked only 40-45 miles, a small portion of the, 500+ miles of stream comprising Class I and II aquatic habitat. We question that there is not sufficient data to make determinations and conclusions that lead to policy proposed in the HCP.

HCP - Tables 8-5, 8-6: These tables raise similar questions of tree size and distribution for effective shade and LWD recruitment in the AMZ

HCP - Tables 8-3 to 8-10: How will the size class distribution, occupancy, and existing basal areas be verified over time? Currently evidence of existing data is scant. How will adjustments be implemented if targets are not met? With the current scant data on existing inventory, after 12 years of ownership, and distribution of the forest occupancy, it is likely that the data needed for adaptive management will appear about year 80.

HCP - 8,2,3 (App. D) AMZ band widths and canopy standards are not as robust as ASP or No Action Alternative. Class I = no channel and core zone, smaller inner and outer zones. Class II L = no core zone, slightly less protection than ASP. Class I and Class II canopy (effective shade) is only target as per the HCP is 70%. These conservation measures allow for much more manipulation (including tree trading) than ASP or the No Action Alternative and probably indicate a longer time frame for meeting targets.

HCP - 8.2.3.2.5 Equipment Exclusion - exceptions to employment of conservation measures. There are exceptions to the equipment exclusion conservation measures = exceptions: Exclusion from Class II AMZ S - Existing skid trails, landings, or skid trail crossings - may use rarely (perhaps four times per year). Construction of new skid trails, landings, or skid trail crossings - may construct "rarely" (maybe once every 3 years). Who is watching or controlling this issue when operations are ongoing? These restrictions are very unlikely to be conformed to.

**Note: EIS – App. D is very unclear on equipment exclusion in any zone.**

HCP - 8.2.3.3.5-2 Class III AMZ Equipment limitations allow for some landings and crossings in the AMZ – with limited controls (i.e. limitations and controls are not sufficient to protect beneficial uses and need improvement).

HCP - 2.3.3.5.2 Class III equipment limitations - they plan to use existing roads and skid trails in Class III AMZs. They plan to construct new roads (not parallel), and landings in Class III AMZs. ( limitations and controls are not sufficient to protect beneficial uses and need improvement).

HCP 8.2.3.4 (EIS App. D): AMZ "Restoration" - they seem to want to cut or kill a lot of hardwoods to restore conifer stands. "Restoration" harvests would allow canopy of less than 50%. How will this fit with management objectives for canopy (over time), sediment reduction, LWD targets and stream habitat? This was discussed, above, with a question regarding temporal and spatial distribution of such harvests and erosion potential. How long will it take areas subject to "restoration forestry" to recover to appropriate target canopy levels? Was sediment production considered for these areas of reduced vegetative cover? Another, question that arises is the ratio of conifer to hardwoods – is there a preferred target ratio?

HCP - They say they will do post harvest monitoring in "select projects". Their monitoring seems spotty and not capable of providing sufficient information for adaptive management in a reasonable time frame.

HCP - 8.2.3.5 Conservation measures for wetlands/wet areas - measures are different for different size wetlands and created wetlands = 25' EEZ for wet areas more than 10 sq. ft to 50 sq. ft. - 50' EEZ for wet areas over 50'. Artificial wetlands get no EEZ. The rationale for less protections for smaller wet areas and artificial wet areas seem illogical and not consistent with wetland protection standards.

Note: Class II S do not get the same silviculture and basal area retention standards as per ASP or the No Action Alternative[EIS App. D]. This is bound to negative wildlife and water quality effects.

## **ADDITIONAL AMZ CANOPY AND SHADE PROJECTIONS**

MRC's canopy projections come not from ground surveys - but from CRYPTOS, a computer model better suited to even-aged silviculture. It is not clear if the CRYPTOS modeling is appropriate and capable of incorporating proposed conservation goals. Additionally CRYPTOS can be "adjusted" to meet pre-conceived outcomes. If MRC must wait twenty years for the harvest cycle - how long will it take to reverse the effects of planning based on inadequate data and the assumptions of CRYPTOS? This question applies to all adaptive management measures proposed.

"At this time," MRC states, "our inventory is not robust enough to give accurate data at the planning watershed level." (HCP, 8-6, 8.2.2.1) They promise that their timber modeling program will include actual AMZ canopy measurements. When, where and to whom will such data become available? If inventories are not adequate, how will this affect CRYPTOS modeling projections?

MRC's graphic depiction of the Class I AMZ does little to clarify a proposed 10-foot no-harvest zone in the inner band. While the text states, "There will be a no harvest zone for all non-sprouting species within 10 feet of all Class I, II and III" ((HCP 8-14, para 2), it is unclear whether these 10 feet will be added or subtracted from the band. The EIS, however, states explicitly (2-48, l. 34) that there will be "...an additional 10-foot no-harvest band adjacent to the stream." Contrasting with the ASP rules and the HCP proposed standards that allow manipulation in the near stream bands, it is suggested that the No Action alternative will provide greater protection in the Class I AMZs. How effective can such a narrow band (10') be in achieving MRC's conservation goals for canopy and bank stability? Why is the additional core band of the No Action Alternative eliminated from the Proposed Action Alternative?

Question: How will the size class distribution, occupancy and existing basal area criteria be verified over time? Current evidence of existing data is scant. (HCP Tables 8-3 to 8-10)

Question: How soon and what type of adjustments will be implemented if targets are not met? Proposed monitoring and adaptive management is very unclear on this.

HCP - Table 8-4 (p. 8-10) shows increasing and significant harvest of inner and middle bands of Class I and Large Class II AMZ over time. What is the impact of disturbance caused by harvest in those bands, particularly that in the near stream inner band? Again, is not the No Action alternative more protective for Class I AMZs?

Question: Does averaging AMZ canopy cover allow too much latitude for manipulation and harvest of the inner band?

Question: Why aren't inner and outer band harvest figures reported separately?

Recommendation: Until accurate watershed data become available and canopy can be measured on the ground and that MRC gets their sediment risk management in order, we do not feel that MRC's many projections offer a sound enough basis for constructing a habitat conservation plan to protect covered species for 80 years. To better protect salmonids and amphibians we ask that the

following Anadromous Salmonid Protection Rules (ASP) be employed with improved protections for Class II L (entire stream length), Class II S, and Class III watercourses, particularly on 303(d)-listed streams and rivers: e.g., "150-foot maximum buffers around Class I streams, including a 30-foot no-cut zone adjacent to the stream, 80% overstory and 13 largest tree retention for an additional 70 feet, 50% overstory retention for an additional 50% overstory for an additional 50 feet and special operating zones for an additional 50 feet if adjacent to clearcut." (EIS, 4-7, l. 3-9) Why would such buffers not be preferable to those proposed by MRC?

## **EROSION AND MASS WASTING**

HCP pp 8-64 to 8-70: The HCP describes assessment criteria and actions to deal with potential mass wasting issues. The proposal includes training RPFs and aids to make such assessment - where geologists are to be relied upon as a last resort. However, the EIS (App. D indicates greater use of professional geologists). So - which is it? Please clarify and correct language. It should be pointed out that the entire HCP proposal places intense responsibility on RPFs and field aids to make assessments and discretionary decisions - much less than act as or have the eyes of a professional licensed geologists. (not to mention that the HCP/EIS forestry management criteria are confusing enough and place a heavy load on the RPF - thus limiting resources for appropriate decision making in areas of limited expertise) In fact, making geologic conclusions without a license is against the law. It is suggested that greater use of professional geologists be integrated in to the assessment and mitigatory procedure.

Note: As per the EIS (App. D) - requirement for geologic review may be less than the No Action alternative. Tractor controls on steep slopes are also not well defined in the HCP proposal (as compared to the No Action Alternative).

HCP - 8.3.1.2.1 The one major area that MRC is very good at is road maintenance and restoration issues related to road failure - including maintenance of an inventory of the road related issues. Still, in regards to geologic issues, professional geologic opinion should be part of the conservation matrix with road and skid trail construction in sensitive areas.

HCP - 8.3.2: Goals and Objectives for Sediment Input. The targets for sediment reduction are very long term and do not seem to meet reasonable outcomes for sediment reduction responsibility - 80 years to reduce 20% of sediment input from mass wasting - unrelated to roads (what % is hillslope sediment production from harvest, or type of silviculture method is part of that number - to be discussed below). The projected time frame for meeting sediment reduction targets is too long. First - it must be acknowledged that MRC is only responsible for and is to deal with anthropogenic mass wasting and other man made sources. Forty years to reduce 30% of road related mass wasting is too long of a time frame as is 80 years to reduce 60% of mass wasting from roads. Thirty years for 50% reduction from road point sources is also too long of a horizon. In actual fact, many of these sources are currently in violation of the Basin Plan and should be dealt with ASAP.

It is noted that there is a lack benchmarks for measurable instream sediment parameters. Without such a measurable parameters, trend analysis and objectives will be very difficult to measure. Additionally, any adaptive management program is limited by such lack of benchmarks (or measurable thresholds). Additionally, without more robust AMZ protections, reasonable measurement of trends or a water quality attainment horizon is questionable. MRC and responsible agencies might look at the Garcia River TMDL sediment parameters. These measurable benchmark parameters should be part of any Waste Discharge Requirement applied to this HCP (along with anti-degradation analysis)

Question: Are MRC's timelines for point source and surface erosion too long in these sediment impaired watersheds – i.e., 50% in the first 30 years and 70% by year 80? (HCP - 8-92)

Question (s) : Is MRC's implementation of best practices, claimed to be sufficient to meet the State's Nonpoint Source Management Plan sufficient for 303(d)-listed water bodies? Is there any real benefit of the proposed HCP over the No Action alternative – where both must comply with NPS policy and TMDL or WDR Targets?

Question: Why does MRC not propose more specific conservation measures or reduced timelines for attainment in regards to reduction of delivery of sediment to surface waters? Relate answer to the target of 30 years to reduce current sediment loads by 50%, and where harvest will increase significantly in decades 4-8 - does the increased harvest with a high percentage of even-aged silviculture pose increased risk and sediment production? (HCP, p. 8-92, 8.3.3.3)

Question: Without setting benchmarks for instream sediment objectives, how can MRC measure long-term trends? (HCP, p. 8-75, note 1)

Question: Why do certain default conservation measures seem to contradict themselves? E.g., Re: Inner Gorge (HCP 8-77) Under "timber Harvest" we see "Do not harvest timber." The following line, however, states, "Maintain greater than or equal to 50% canopy..." which would seem to indicate that harvesting, prescribed in the line above it, is occurring

Question: Is "...50% canopy retention on potentially hazardous or erosion prone ground ... adequate to minimize the impact of harvest-related landslides? (HCP, p. 8-95, para. 5)

Question: What assurances can MRC give that RPFs will not be over-utilized in lieu of licensed geologists?

Question: Would not Alternative A's additional restrictions in inner gorge and other areas prone to mass wasting (EIS, p. 3-44) provide greater protection to salmonid habitat downstream?

## **EIS ENVIRONMENTAL EFFECTS – POLLUTION PRODUCTION AND CONTROL**

The focus here is on sediment and temperature effects related to proposed HCP and alternatives. Presentation of information notes existence of EPA (not State) TMDLs. However, information provided is not linked to TMDL findings, waste load allocations, and sediment reduction targets.

Additionally, reference in this chapter is made to State Water Board (and Regional Water Board) authority. However, discussion and linkage is not made regarding how compliance with existing authority (necessary Waste Discharge Requirement and compliance with the Basin Plan) will effect HCP compliance with these regulatory mandates – o r – how any of the comparative alternatives would be affected by WDR compliance. This analysis should be part of the HCP/EIS. It is suggested that in the necessary revisions of the HCP, and re-circulation of revised environmental documents, include such analysis. All alternatives and associated outcomes are affected by what is required under Cal Water Code regulatory authority.

Linkage of analysis with TMDL findings, or independent analysis should provide other baseline information – including background, non-anthroprogenic, sediment delivery rates for comparison with sediment delivery rates aggravated by roads, road construction, skid trails, hillslope, and delivery rates related to rate of harvest and loss of vegetative cover by various silviculture applications.

As stated in the HCP and in discussion above, MRC claims the proposed project is in compliance with the Basin Plan and future Waste Discharge Requirements. How can this be true when WDR conditions have not been considered at this time? Analysis under WDR conditions would provide a better platform for arriving at a optimum decision with superior outcomes.

EIS 3-4: There is acknowledgement of erosion prone geologic and soils conditions.

EIS 3-5: Discussion of Terrain Stability Units. These units are grossly defined and present only very general application to sediment source analysis and control methodology. Use of TSUs apply only rough estimate of relative risk – to provoke more in-depth analysis, assessment and control language for specific situations. More precise relative risk models exist and should be used for extensive mapping and management purposes. Under the proposed HCP use of TSUs (1 &2) to provoke review by a licensed geologist is too limiting. There are many situations were geologic hazard, or erosion potential, indicates the use of professional geologic expertise is needed – outside of TSUs 1 and 2.

Question: Has TSU MAPPING of MRC land been completed? Would not a more acceptable and reasonable relative risk GIS mapping and risk management plan be more likely to produce better outcomes and information for adaptive management plans?

Question: How many acres of MRC watershed lie in the TSUs of inner gorges, steep streamside slopes and steep dissected topography, respectively?

Question: Should deviations from default conservation measures be permitted on terrain with high propensity for erosion? (HCP, p. 8-77). What additional actions would be needed to mitigate for this activity?

Question: Are MRC's conservation measures for these TSU's more effective than those dictated

by the Forest Practice Rules or what may be required by compliance with the Basin Plan or WDRs?

EIS 3-7, Table 3.2.3: This table has not been correlated with information and estimates in the EPA and State TMDLs. The Table is broken down by riverine drainage and by TSU. The table does not deal with road surface erosion. It is unclear if skid-trail erosion is considered – and –if it is, it would be nice to have that number. Hillslope erosion from timber operations is not included in the table. All of these factors, plus number of acres in the drainages of Class I, Class II L, Class II S, and Class III streams (by river and by total acres) – are all relevant numbers that aid in analysis of effectiveness probability of different pollutant control scenario.

EIS 3-12: The number for Road Surface erosion – gross number for all watersheds is not very useful. However, Table 3.2.7 does show road density, skid trail surface erosion, and road surface erosion by watershed. The numbers for the later are not in sink with EPA estimates. I am not sure whose numbers are more correct. All numbers show reductions are needed. Road densities indicated are very high (they should be looking getting this number down towards 3 mi/mi<sup>2</sup>). Yet, the management plan proposed for the HCP and alternatives fails to deal with road and skid trail area reduction targets. Additionally, road location is a factor (% of roads in AMZ or in unstable areas) – should be assessed for reduction.

EIS 3-34 MRC has a recent history of good road management. However, a 30% target for reduction of road related sediment, and 60% by decade 8 is too slow/low. These targets would be attained by either the HCP and or the No Action alternative (under WDRs). Thus, superior reductions under HCP can not be claimed.

EIS Table 3.2-9: Estimate of sediment controllable sources. This table does not consider the yearly contribution of sediment from these sources – nor linkage to EPA and TMDL loading reductions. Additionally, reductions are not linked to what might be required under Waste Discharge Requirements. Controllable source reduction should have some sort of targets – for reduction over time.

EIS Table 3.2-10: Miles of streams by various classes. This table does show the total miles of various classes. Total miles of Class II S and Class IIIs (combined) is 2 to 3 times that of Class I and Class II L in all watersheds. Does this mean the total acreage in each class would be similar? Total acreage in each class would be a useful number for assessment and management purposes. It would be very useful to understand how much land, acreage (and/or acreage referenced by relative risk of erosion), would be affected by different management conditions. This information would be a very useful guide in assessing management preferences.

EIS 3-17,17,18: Channel morphology. Channel morphological signatures for salmonid habitat can be sought for instream targets – as part of a adaptive management methodology. Specific morphological standards or references have not been established for same.

EIS Table 3.2-14: This table indicates “sediment delivery factors by silvicultural factors.” This is very interesting for several reasons – including: 1) This is a substantiation of the fact that different silviculture treatments are capable of producing varying amounts sediment (from operations and/or loss of vegetative cover – dependent on slope, geology, soil type, and rainfall), 2) This substantiates findings in papers on this subject by Randy Klein and Pete Cafferata (Pete Cafferata and Leslie Reid), 3) This is an admission of hillslope sediment production that to this point has not been addressed by Regional Board private lands Waste Discharge Requirements (Note: this is a huge gap in policy requiring consideration and control of hillslope sediment production factors from silviculture), 4) This is a controllable sediment source and must be addressed under the Basin Plan (including anti-degradation language), 5) Timber harvest operations on unstable/erosion prone areas ( including shallow and deep seated landslides) should be controlled (mitigated) under the FRPs. The table indicates potential erosion impacts from various silviculture applications due to loss of canopy and conifer basal area. Other implications, not noted, are these potential impacts would be most intense over the term of the first 40 years of applications of very significant (large) amount of even-aged silvicultural practices proposed for that period. Thus, sediment delivery scenario, due to intense even-aged application, is not correctly analyzed relative to other project alternatives and responsibility to comply with water quality sediment reduction standards (TMDLs, Basin Plan, WDRs, etc.). The case is made by MRC that the proposed HCP will provide less sediment production than other alternatives due to less timber harvest operations on unstable areas over time. Under the No Action alternative (and the HCP as proposed) - to meet mandated sediment control standards under the Forest Practice Act and Water Code obligations hillslope sediment production must be considered and controlled. Increasing, or increased, sediment production due to increased operations on unstable soils or soil loss due to increased canopy loss due even-aged silviculture applications is not permissible (controllable under water code or the FPRs).

EIS 3-25,: As stated in the above discussion, the proposed project analysis makes the claim of less sediment production than the No Action alternative, Impacts of sediment production from intense even-aged silviculture over the initial 40 year period is not fully analyzed. The assumption that under the No Action alternative increasing levels of operations on shallow landslides would be allowed (under the FPRs or Water Code authority) to occur.

See EIS Figure 3.2-1.

Permitting such operations on slides, at increasing amounts, for the next 80 years is patently ridiculous (and illegal, or should be illegal, under regulatory authority).

MRC has presented a highly biased and inaccurately based composition of factual manipulation to support their case that the HCP actually provides better long term protections than the current regulatory authority that is now in place (in terms of water quality protections). This is simply not true. And, in fact, what MRC is basically saying is that if the HCP is not approved they will move forward and act as bad managers by imposing operations that will not substantially protect and enhance water quality factors. This wrong.

EIS Figure 3.2.2: Again, this figure is based in increased operations on slides over 80 years And does not fully consider water quality protection obligations under the FPRs or Water Code. Rate of harvest and silvicultural effects must be considered as well as limitations to operations on unstable area curtailment.

EIS Figures 3.2.3, and 3.2.4: The proposal indicates more dangerous operations (increased sediment production) under both No Action and the HCP alternative from either operations on slopes or increased rate of harvest Under the No Action you get a rather large increase in risky silviculture on slides (however, with the No Action more canopy is retained). With the HCP you get increased harvest, with a lot of even-aged silviculture – also with increased risk. When you consider the all the unstable ground does not fall into TSUs that trigger intervention by a trained geologist (where foresters might be making the calls) you are asking for trouble.

EIS 3.34: Road-related erosion. Road inventories and fixes should be as robust under the No Action alternative as in the proposed HCP. (This should be WDR mandated).

EIS Table 3.2-16: Total sediment delivery indicated is very similar under the No Action vs. the proposed HCP. Again, this is based on assumption of increased operations on slides under the No Action alternative – and – does not fully consider FPR and Water Quality mandates. Sediment yield from even-aged silviculture and level of harvest is not fully considered. It would be appropriate for this table to be presented in tons 2/year. Linkage with EPA and State TMDL estimates and Targets should occur.

EIS Table 3.2.-17: Road related sediment source control should be the same under the No Action and HCP proposal (as per FPR and WQ mandates).

EIS Table 3.2 – 18: This table should be in tons<sup>2</sup>/year. These numbers should be compared to EPA and State TMDLs loading information and Targets.

EIS Table 3.2-19: Table of comparison of impacts of project alternatives. These findings are incorrect do to factors not considered – FPR and Water Quality mandates for operations on slides and road management. (see discussion above) Estimates do not comport with EPA and State TMDL estimates.

EIS 3.3 Hydrology: Peak discharges (diminished lag to peak flows) and increased sediment production related to same would increase under the HCP due to increased even-aged silviculture and increased level of harvest.

EIS 3-66: TMDL development – The document references TMDL development. No direct analysis is offered in reference to existing EPA and State TMDLs on Big River, Albion River, Noyo River, Navarro River, or Garcia River TMDL and Implementation Plan.

EIS 3-71,72: Stream Temperature: “current summer stream temperatures do not appear to support the coldwater beneficial use for salmonids and amphibians.” A ground breaking statement. No

analysis of impacts under HCP or the No Action alternative. Though, the No Action alternative appears to provide better canopy. There are min. and max. temperatures provided by river (not reach), There are no numbers on MWAT by stream, or location, or during the critical summer months. Thus, there is insufficient information to make determination regarding effective policy for meeting temperature targets.

Stream temperatures are critical to salmonid rearing and survival. No analysis has been provided.

Citing the difficulty of controlling stream temperatures because neighboring landowners on shared watersheds lack adequate riparian conditions, MRC states, Achieving optimal temperatures for covered species, therefore, is not a target of our HCP/NCCP. Reaching achievable temperature is (our) target..." (HCP, p. 3-13, para 6). It is suggested that a more appropriate rational be applied. If there are temperature impaired listings, and current monitoring (in MWATs) shows continued impairment – mitigations should be applied until appropriate targets are attained.

Instead of linking canopy to effective shade, then, MRC has indicated that "A stream is on-target for effective shade if stream temperatures...are below 15 degrees C., even if canopy cover is deficient." (HCP, p. G-33, para 4). This is an inappropriate application of policy. There is spatial variation in stream temperatures. This variation may have a whole host of causal effects. A stream segment meeting temperature standards does not diminish the necessity to maintain canopy standards. Has global warming or weather change been considered in this policy?

The vast majority of MRC planning watersheds are either deficient or marginal for effective stream shade or LWD to provide in-stream shade or habitat to support all salmonid life stages. (HCP, p. 32-35, figures 3-3 to 3-6) The absence of data in these figures is remarkable but is explained by the fact that "Conducting a survey of the entire WAU is too labor-intensive." (HCP, p G-38, para 3). We need better information, data, for decision making – and appropriate criteria of any adaptive management considerations.

EIS - 3-130: With only 3% of MRC's 303(d) streams "on target" for shade, will the responsible managing agencies concur with MRC's decision to de-emphasize the importance of canopy?

EIS- 3-84: Why are Basin Plan temperature objectives not addressed quantitatively by MRC?

## **WETLANDS**

EIS – Total Area of wetlands: What is the actual area of MRC's wetlands? The EIS reports 360 acres (p. 3-218, 1.32 but also quotes USFWS figures from the National Wetlands Inventory of 2011B as 2,267 acres and 14,733 acres in the primary and secondary assessment areas, respectively. (EIS p. 3-225, Table 3.5-9)

Question: Why is there no comprehensive wetland inventory of MRC lands, given that such areas are crucial to various life stages of listed amphibians?

Question: Are conservation measures for wetlands, wet areas and meadows adequate?

Question: Given the sometimes ephemeral nature of wet areas as well as anticipated temperature increases of global warming, would not a 50-foot EEZ provide greater protection to all such areas, regardless of size, and to the covered species which rely upon them?

Question: Are pre-project surveys adequate to detect the presence or absence of red-legged and coastal tailed frogs?

Question: How can a 60-minute survey (30 minutes each, day and night) guarantee the frog's absence or their reappearance five days later? (HCP, p. 10-12)

Question: Are "artificial wetlands" has MRC created to be treated as functional wetlands? If not, why not? What is their level of successful function and for which species?

Question: Why do artificial wetlands lack EEZ protections? (HCP, p. 8-34, 8-35)

Question: Under what conditions and in which areas might MRC find sub-basins containing larval forms of breeding frogs? (HCP, p. 10-12)

Question: Have larval forms been discovered in Class III streambeds? If they have, it is suggested that reclassification of such watercourses occur.

## **HCP APPENDIX E ROADS AND LANDINGS**

HCP - E.2.3, E.2.4 Request Regional Board assessment of side cast controls. Large areas of sidecast (depending on steepness) may be subject to rill erosion or mass wasting.

HCP - E.3: Sidecast standards to be applied in the AMZ areas – as well as road and landing constructions standards.. This should also require Regional Board assessment.

It was noted, above, that consultation with geologist should be considered for sensitive areas of construction.

HCP - E.4: Standards for Road Maintenance and Inspection: With the proposed inspections standards you would think attainment horizons for sediment control would not be so far out there.

## **HCP APPENDIX S. TARGETS FOR LWD AND EFFECTIVE SHADE**

HCP - Table S-1 Field Survey of Class I streams. This table indicates that a very small percentage of all Class I AMZ and instream condition surveys have actually occurred. Yet, robust canopy conditions and mid to long term AMZ conditions were claimed in the Conservation Measures S-1 and S-2, indicating deficient LWD and Effective stream shade. Does this correlate with discussion

and tables? The areas, segments, surveyed = 11.5% of Class I streams. I don't think this is sufficient sampling for conclusions or target estimates.

Effective shade deficiency is 50% to 70%. LWD deficiency = 70% - with 80 years out to be on target.. It is suggested that this calls for more robust AMZ conservation measures (as per ASP or No Action Alternative)?

HCP - 5.3 Effective Shade (it is not clear what this term really means): Average canopy value is applied to segments. This may not give a good reading of effective shade/canopy. Also, this averaging technique and diminished AMZ protections can allow for manipulation of leave tree, canopy, and stocking standards. Tables indicate the wider bankfull widths have less percent canopy closure. They claim 80% effective shade segments on target, 60-80% on target effective shade or 70% canopy, less than 60% of segments deficient effective shade or less than 70% canopy. Again – there are a limited % of segments surveyed, diminished retention requirements, and very long time frames for compliance in the HCP proposal.

HCP – p. S-18: Table shows that 40 years out 30% of area will be on target for effective shade, 80 years out = 100% effective shade target. This is also an overly long term to target compliance.

## **HCP APPENDIX V. SCIENCE PANEL RECOMMENDATIONS**

3 B, C, p V-3: Questions analysis and protection of the near stream zones. Would not targets be more readily attained under FPRs/ASP?

3 E, p. V-4: Asks for more comprehensive discussion of road design. Issues raised above.

7 D. E p. V-7, V-8: The science panel raised questions on Class III protections. This concern was not fully addressed by MRC.

14, p. V12: Erosion potential conservation measures need to be site specific and may need professional geologic evaluation.

17 B. P V-13 Indicates AMZ buffers not sufficient.

25 C, p. V-19 Indicates AMZ widths not sufficient.

30 B, p. V-21: Monitoring and adaptive management for riparian function not sufficient - not comprehensive, not consistent.

## **MISCELLANEOUS**

The absence of a user-friendly index – or any other index at all – makes for extreme difficulty in navigating the huge HCP/NCCP document.

The EIS index is virtually useless and appears to be nothing but a printout of a computerized word search

Tables and texts frequently allude to ‘existing conditions’. Yet there is no concise description of precisely what these conditions are in either the HCP or its EIS. We propose for the typical comparison-of-alternatives chart an additional column describing existing conditions or current management.

### **ADDITIONAL EIS RELATED ISSUES**

It is very difficult to follow issues related to different alternatives - by use of the tables - and by discussion as:

- \* Tables do not always show effects/relationships of management criteria for all alternatives.
- \* There are often omissions or errors.
- \* Core terms are not clearly defined (e.g. Canopy and effective shade is often used in the HCP discussion without a clear definition of the exact meaning of each and their relative effectiveness and use.)
- \* Comparison tables are not all accurate – revealing comparable standards with complete discussion.

#### **2.2 No Action Alternative misstates the WLPZ canopy requirements under ASP**

Tables provided showing acres harvested by silvicultural prescription should be displayed so comparison can be made.

Tables for comparison of alternatives related to road management criteria should be available.

Tables for comparison of alternatives related to LWD management criteria should be available. Given the information provided in the HCP and EIS it seems clear that approval of the HCP may not be superior to No Action. This statement is made with the assumption that the Regional Board, with promulgation of a ownership-wide WDR (or under Waiver criteria) would enhance road management criteria, controls for operations in unstable areas, require more use of professional geologists, enhanced LWD requirements, and set additional limitations for operations in near stream erosion and temperature threatened areas. Alternative A (Enhanced HCP) may also fit in this category.

Approval of the proposed HCP will require additional modification and fixing to raise it to the standards that could be achieved by the above.

Presented for review by CalFire and National Marine Fisheries Service

By Alan Levine  
For Coast Action Group.

