

PETITION FOR REVIEW OF NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD ACTION OF ADOPTING ORDER NO. R1-2016-0004; MOTION FOR STAY OF ENFORCEMENT AND A CEASE AND DESIST ORDER

1. Petitioners

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Elk River Residents Association

2. Action or Failure to Act being Petitioned

Petitioners request that the State Board review and overturn the action taken by the North Coast Regional Water Quality Control Board on November 30, 2016 to adopt Order R1-2016-0004 (“Adopted Order” or “WDR”) based upon the allegations spelled out below.

3. The date of the Action Taken November 30, 2016

4. Statement of Reasons

These allegation reveal the historic pattern and practice of action and inaction whereby the Regional Board ignores and arbitrarily overrides Staff, best available scientific information, and their duty to protect health safety and general welfare in a manner that harmonizes with the laws of the State and our constitutions, to exemplify the reasons why SWRCB must overturn the Action:

The Elk River watershed is mantled with deep low cohesion soils and soft and unconsolidated parent rocks that are highly prone to erosion after logging, disturbance, derangement, concentration of runoff, or road building occurs.

In 1989 the Pacific Meridian Report predicted that the proposed harvesting posed the highest likelihood of significant peak flow increase and sedimentation of all the alternatives considered¹.

In 1991 Andrew Baker, Timber Harvest Inspector for the Regional Board reported that significant adverse cumulative effects were occurring in Elk River as a result of timber harvesting and related activity such as road building. Each of these CEQA approvals is based on findings that no significant adverse cumulative impacts are likely.

The Regional Board took little or no enforcement action in 1991 upon gaining observational knowledge that significant adverse cumulative effects from logging were ongoing in Elk River.

¹ Attached as **EXHIBIT A**.

By 1994 residents, including some petitioners, wrote letters describing increasingly severe impairment of sole source domestic water supply², sedimentation of the stream-bed and channel banks³, and entombment of the gravels that purify the water keeping the waters of the state wholesome for domestic supply and salmon. Residents said the river was getting “out-of-whack” and needed a rest⁴.

During the winters of ‘94-98 frequent and severe flooding deep over the County Road and into homes became increasingly frequent on less and less rainfall. As much as 6- 8 feet of sediment had buried the river bed and fence posts near the banks were almost buried⁵.

Finally, in 1997-98 a moratorium on new harvest plans was put into effect by CDF with support of the Regional Board, Department of Fish and Game, and Department of Mines and Geology. By 2003, Dr. Kate Sullivan of Pacific Lumber Company observed that the river bed downstream of the residential community was evidencing scour and declared that channel capacity was beginning to increase⁶. This observation creates a fair argument that a negative discharge TMDL incorporating stringent harvest reduction would attain Water Quality Standards (WQS) as a single action regulatory mechanism. Many residents would support this single action approach.

In 2000 and 2001, Regional Water Board Staff worked to prepare a Cease and Desist Order, as well as Cleanup and Abatement Orders in response to the immediate, long term, and irreparable harm

² Upper Elk River Technical Analysis: [5.2.1.1 Domestic and Agricultural Water Supplies](#)

Specifically, the North Fork has 12 surface domestic supplies, the South Fork has approximately 6-7 impacted surface domestic supplies, and the mainstem has at least 8 documented impacted domestic surface or shallow well water supplies

³ According to the Regional Water Board’s assessment (from USGS records - 10 years prior), the domestic water supply beneficial use was supported and there was evidence that suggests excessive flooding did not regularly impact residents in the Upper Elk River during this period (Dudik1998; RCAA 2003; Wrigley 2003). As such, these data offer a baseline condition on the mainstem of the Elk River, which represents a target condition. The estimated recurrence intervals of various peak flow events that are derived from these data are presented in Table 3.

⁴ The feedback mechanism between sediment input/output is central to the dynamic equilibrium of a river channel (EPA 2012). The relative balance in sediment input/output is also central to the attainment of WQS, including achieving WQOs for sediment, turbidity, suspended sediment, and settleable matter; protection of beneficial uses related to water supplies and aquatic habitat; and prevention of nuisance conditions related to flooding, property damage, and loss of free access to and use of property.

⁵ Beneficial uses must be protected, including downstream beneficial uses.”(State Water Board Order No. 2012- 0013 (Sacramento Regional Wastewater Treatment Plant).

⁶ **3.2.4** Specifically, existing control mechanisms are not correcting the sediment impairment and the sediment source analysis confirms that the impairment continues to persist and worsen. It is also important to consider that the CWA requires a TMDL when waters are impaired and a TMDL can be adopted as a single action if a single regulatory mechanism will attain beneficial uses.

resulting from discharge of sediment from logging operations⁷ and activity and to meet Water Quality Standards⁸.

In 2002, SWRCB ordered Pacific Lumber to begin monitoring suspended sediment concentrations and flow. Despite no demonstration that Water Quality Standards were attained⁹, harvest resumed after the effective moratorium was withdrawn circa 2002¹⁰. Harvest proceeded at a significantly reduced rate as Pacific Lumber Company slumped into bankruptcy. The limited CEQA logging approvals were based on findings that all impacts are mitigated to less than significance.

In 2005, Judge Freeborn held that a fraud committed in an effort to secure a logging permit is immunized as protected free speech.¹¹ This ruling sounded an alarm bell; higher margins of safety¹² are necessary to protect public trust resources as a result of inherent unreliability in CEQA proceedings.

During the Pacific Lumber Company Bankruptcy proceedings (circa 2007), California gave assurances that harvest could continue, and pledged support for HRC's business plan. No public CEQA

⁷ 4.1.

Suspended material: Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.

Settleable material: Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

Sediment: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Turbidity: Turbidity shall not be increased more than 20 percent above naturally occurring background levels.

⁸ Elk River was added to the 303(d) list in 1998. **The listing was based on evidence of excessive sedimentation/siltation loads from land management activities in the upper portion of the watershed.**

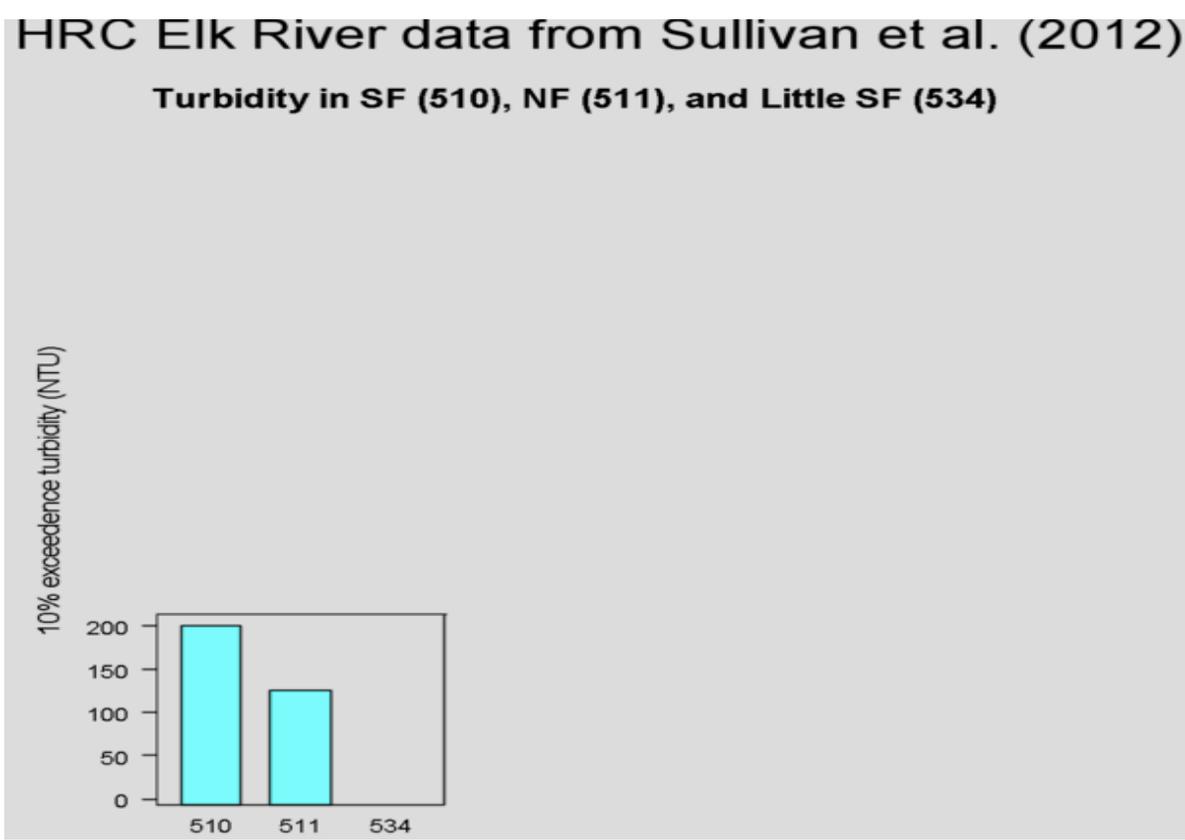
⁹ Beneficial uses must be protected, including downstream beneficial uses.”(State Water Board Order No. 2012- 0013 (Sacramento Regional Wastewater Treatment Plant).

¹⁰ The ISRP authored two reports (December 27, 2002 and August 12, 2003) and concluded that 1) a rate of harvest aimed at reduction of harvest related landslides could be determined with available landslide inventories and harvest history data, and 2) **flooding and water quality standard impairment would continue as long as sediment loads remained elevated.** The ISRP recommended that detailed sediment process data be collected to inform future analysis. They further found that the Timber Harvest Plan (THP) process defined by **the Forest Practice Rules (FPR) and the Habitat Conservation Plan/ Sustained Yield Plan (HCP/SYP) process was not sufficient to guarantee water quality protection and recovery**

¹¹ **PEOPLE v. PACIFIC LUMBER**, 158 Cal.App.4th 950 relying on Ludwig v. Superior Court (1995) 37 Cal.App. 4th 8 in, Kottle v. Northwest (1998) 146 F.3d.1056., Hewlett -vs- Squaw Valley Ski Corp. (1997) 54 Cal.App. 4th 499, Podolsky-vs-First Healthcare Corp. (1996) 50 Cal. App.4th 632,

¹² Letter from Janet Parish, EPA, to Regional Board, 2014 EXHIBIT B

proceeding with regards to these assurances was ever conducted; nor was an anti-degradation hearing¹³ held.

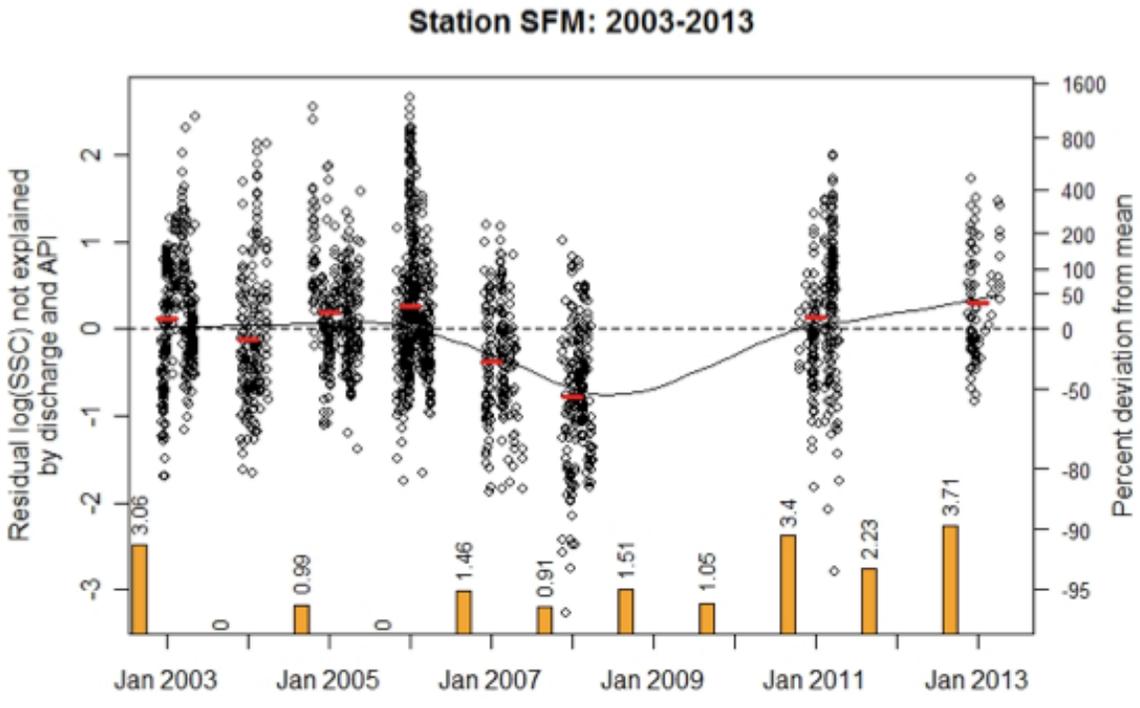


By 2008, following the 1997 to 2002 moratorium and the low rate of harvest as Pacific Lumber Company slumped into bankruptcy, mean suspended sediment concentrations (SSC) not explained by discharge and antecedent rainfall index had dropped by 59% at the South Fork of Elk River station SFM¹⁴. CDF and Regional Board permitted harvest increased in S.F. Elk River during the period 2011-

¹³ WQS are adopted by the Regional Water Board to protect public health and welfare, enhance the quality of water, and serve the purposes of the federal CWA (as defined in Sections 101(a)(2), and 303(c) of the CWA). WQS, as described in the Basin Plan (Regional Water Board 2011a), consist of 1) designated beneficial uses, 2) the WQOs to protect those beneficial uses, and 3) implementation of the Federal and State policies for **antidegradation**. In accordance with the federal CWA, TMDLs are set at a level necessary to achieve applicable WQS.

¹⁴ Graph: Station SFM 2003-2013 was presented and discussed at the Adoption Hearing.

2013 while SSC increased by 89%¹⁵. SSC below managed timber lands in Elk River remain 2700% above the naturally occurring background conditions of Little South Fork Elk for the period 2004 to 2011 according to Kate Sullivan¹⁶. Thus, a 20% reduction in landuse loading¹⁷ cannot attain WQS or protect the beneficial uses.



California held in reserve the beds and lower banks of rivers upon statehood, and the Water Board as Trustee exerts comprehensive control over the waters of the state¹⁸.

The Region 1 Basin Plan prohibits discharge of settleable solids in amounts that result in aggradation or cause nuisance.

¹⁵ Upper Elk River Technical Analysis: **Sediment delivery attributable to land use activities has reduced over time from a high of 85 percent in the 1988-1997 period to a low of 68 percent in the more recent period (2004-2011).** A 20% reduction.

¹⁶ Sediment yields from lands managed for timber production in the South Fork are 27 times greater than yields measured in the Headwaters Forest Reserve. The sediment yields from lands managed for timber production in the South Fork probably exceed 370 mton/km². The unit sediment yield from the old-growth Little South Fork watershed in the Headwaters Reserve averaged 13.8 mton/km² from 2004 to 2011 (Sullivan, 2013).

¹⁷ RWB staff anticipate continuing reductions in sediment production resulting from implementation of the Proposed Order and the change to uneven aged management in 2008

¹⁸ The State Water Resources Control Board and each Regional Water Board are the principal state agencies with primary responsibility for the coordination and control of water quality. (Wat.Code § 13001.)

Much of the huge volume of sediment that Regional Board permits to be discharged into Elk River infills the channel and bed. This reduction in channel cross-sectional area obstructs flood flows and creates dangerous conditions that divert the river flow onto adjoining residences and farms where it causes enormous damages to private property¹⁹ while frequently threatening lives and livelihoods.

No programs or activity has been devised and noticed to address the severe two decade long impairment issues. These include the lack of water treatment facilities on the South Fork and the Mainstem Elk, no plan to raise septic systems, private bridges, home and barn foundations, etc.. Instead of relying on sediment source control and harvest reduction and no winter hauling, the TMDL and WDR rely on undefined programs that are speculative.

The final TMDL calculations do consider a margin of error, but the WDR lacks a sufficient margin of error and is unenforceable.

The TMDL and implementing programs must comply with Water Code section 12342 and CEQA but compliance is lacking—the complete description, the complete water quality control plan, the analysis of effects, the mitigatory process, the monitoring program and funding, and it must be enforceable, and list the actions---specific operating standards for timber harvest that must be taken.

The August 30, 2016 version of the Adopted Order was calculated to achieve a 20% reduction in landuse load according to information cited to by the Official Response to Comments²⁰. At the November 30th hearing, the effectiveness of protective prescriptions (BMPs) were further reduced thus making a fair argument that Regional Board chose to impair²¹ beneficial uses of water²², while denying public comment. This violates Water Code 13263²³²⁴

¹⁹ See Chapter 3.1 of Upper Elk River Technical Analysis: Water quality problems cited under the listing include the following:☐ Sedimentation and threat of sedimentation; Impaired domestic and agricultural water quality;☐ Impaired spawning habitat;☐ Increased rate and depth of flooding due to sediment; and☐ Property damage.

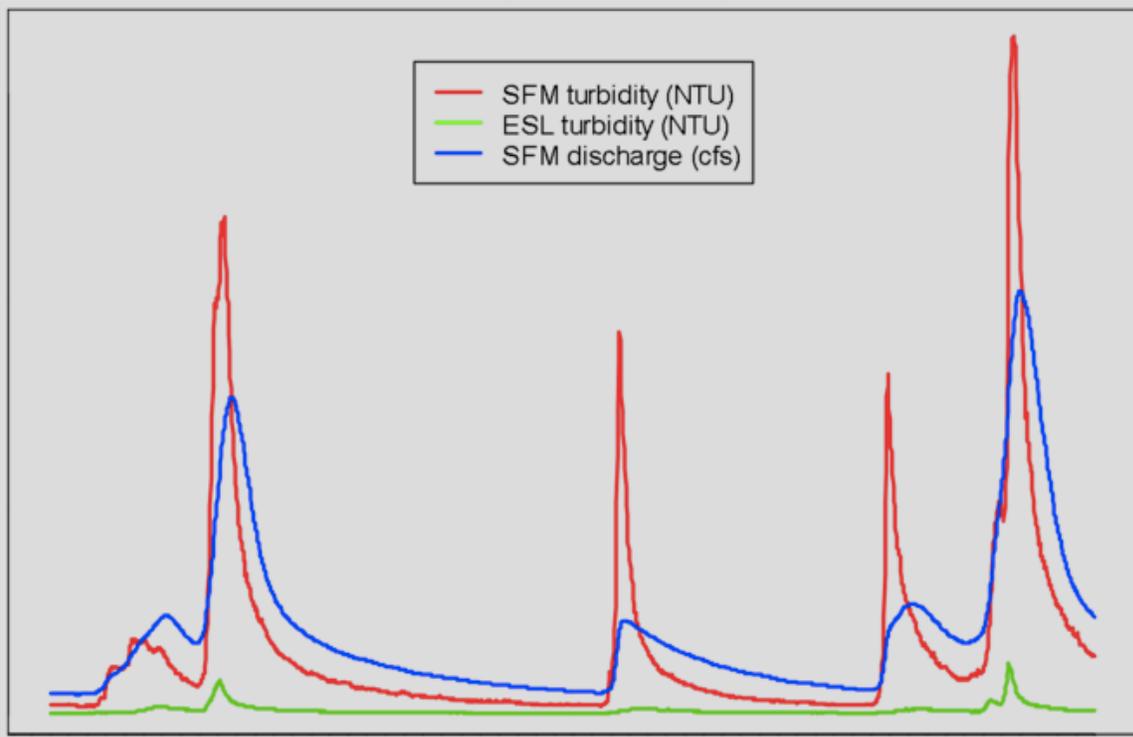
²⁰ Official Response to Comments pg 30: Sediment delivery attributable to land use activities has reduced over time from a high of 85 percent in the 1988-1997 period to a low of 68 percent in the more recent 2004-2011 period. RWB staff anticipate continuing reductions in sediment production resulting from implementation of the Proposed Order and the change to uneven aged management in 2008

²¹ Beneficial uses must be protected, including downstream beneficial uses.”(State Water Board Order No. 2012- 0013 (Sacramento Regional Wastewater Treatment Plant)

²² **4.1.5 State Policy for Control of Nonpoint Sources of Pollution**

The 2004 State Water Board *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Policy) establishes requirements for both nonpoint source dischargers and Regional Water Board regulation of those dischargers (State Water Board 2004). **The NPS Policy requires that the Regional Water Board use its administrative tools** (e.g., WDR, waiver of WDRs, and prohibition) **to address all nonpoint source discharges of waste and ensure compliance with all nonpoint source (NPS) pollution control requirements. In this way, the NPS Policy “provides a bridge between the NPS**

The 20% reduction in landuse load that is relied upon to attain WQS appears to be inadequate when suspended sediment concentrations average 2700% higher downstream of timber management in Elk River as compared to downstream of Little South Fork Elk in the Headwaters Reserve. (see footnote 14)



The administrative record contains information regarding controllable sediment discharge sources (CSDS) and only about 100 of the 450 controllable sediment discharge sources²⁵ remain uncontrolled. This evidence indicates that much or most of the

Program Plan and the [State Water Board] Water Quality Enforcement Policy” (State Water Board 2004)

²³ These waste discharge requirements, issued pursuant to Water Code section 13263, must implement the Basin Plan, take into consideration the beneficial uses to be protected, water quality objectives to achieve that purpose, and the need to prevent nuisance. (Comment 1. Mr. Thibeault)

²⁴ Beneficial uses must be protected, including downstream beneficial uses.”(State Water Board Order No. 2012- 0013 (Sacramento Regional Wastewater Treatment Plant).

²⁵ From the Upper Elk River Technical Analysis----3.2.1 Humboldt Redwood Company. HRC currently operates under Order No. R120060039, an Elk River watershed specific WDR issued by the Regional Water Board in 2006 (Regional Water Board 2006a).Treatment of road related controllable sediment discharge sources (CSDS) have been conducted under CAO Nos. R120040028 (for the South Fork and Main stem Elk River) and R120060055 (for the North Fork Elk River). All Orders that pertain to HRC’s current activities were originally issued to Palco and amended by Order No. R120080100 to reflect HRC’s ownership of the former Palco holdings. These orders were developed to compliment the HCP that covers the HRC properties (Palco 1999).

landuse load is related to recent activities because few or no new landslides have been reported, almost all unmaintained road systems are reported to be fully controlled, and the evidence indicates that there are few CSDS sites left to offset future loads from logging. HRC has not identified and put into action any further prescriptive measures or BMPs that can effectively abate increasing flooding or that avoid the destruction of existing beneficial uses of water.

Also the Orders found in footnote 25 are old and do not address continuing adverse effects from timber operations that are documented in the Technical Analysis and lack a list or outline of factors that must be controlled to attain WQS.

Anti-degradation is an enforceable standard for TMDLs and WDRs and other implementing programs. So is the water code—it is an enforceable standard and so are prohibitions. These must be made enforceable in the Adopted Orders. Non-point source requires actions and standards too, to attain WQS. Instream WQIs too, the TMDL needs to address those in Table 5. All need time schedules, sequences, monitoring programs, adaption if things are not working or are delayed. The WDR failed to completely address the Phase I controllable sediment inputs from timber harvest activity as d escribed in chapter 8. And consistent with section 7.2 Phase I. Restoration needs all standards and schedules and sequences and monitoring and controlling pollutant inputs and creating mass balance and dynamic equilibrium is required---if it isn't all there it won't comply with CEQA and the water code and the basin plan.

Stream condition targets have not been applied to the TMDL and WDRs. This information is partially available to schedule recovery goals and potential given some known and comparable conditions.²⁶

See severity of ill effect scores for two models for salmonids that are based on SSC on the next page, stations HHB and FTR are in Freshwater Creek, stations KRW and SFM are in Elk River.

Model 3: juvenile salmonids only:

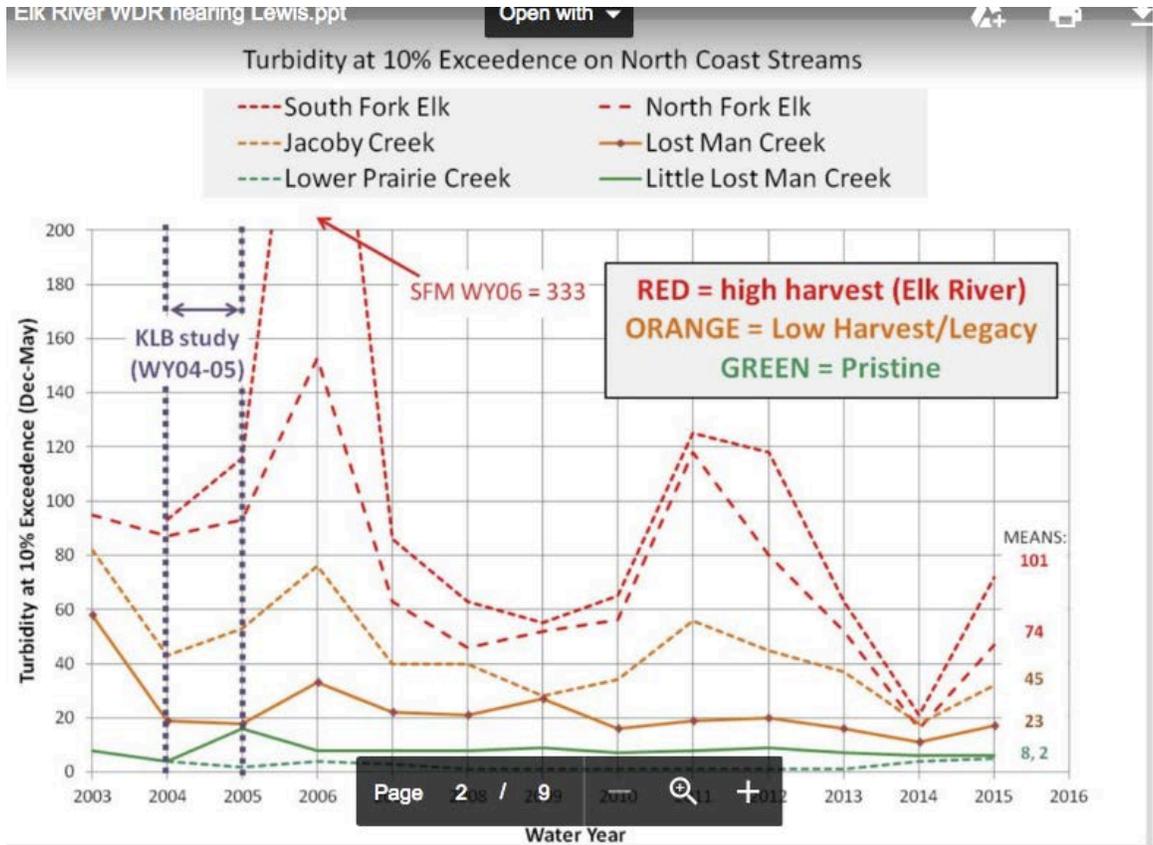
Model 4: salmonid eggs and larvae:

-Model 3	Suspended Sediment Concentration (mg/L)						Model 4	Suspended Sediment Concentration (mg/L)					
Site/HY	2981	1097	403	148	55	20	Site/HY	2981	1097	403	148	55	20
SFM/03	7.7	8.3	7.9	7.9	7.6	7.8	SFM/03	8.2	10	10.1	11	11.3	12.4
KRW/03	0	7.8	7.7	7.3	7.1	7.3	KRW/03	0	9.1	9.8	9.9	10.5	11.6
FTR/03	0	7.5	7.6	7.1	6.5	6.7	FTR/03	0	8.7	9.6	9.6	9.5	10.7
SFM/04	0	6.8	7.4	7.4	6.9	6.8	SFM/04	0	7.6	9.3	10.1	10.1	10.7
KRW/04	0	6.2	7.3	7.2	6.8	7.2	KRW/04	0	6.7	9.2	9.9	9.9	11.4
FTR/04	0	6.4	6.9	7	6.5	6.3	FTR/04	0	6.9	8.6	9.6	9.6	10
SFM/05	0	7.2	7.3	7.4	7.4	7.3	SFM/05	0	8.2	9.3	10.1	10.9	11.6
KRW/05	0	7.2	7	6.8	7.2	7.5	KRW/05	0	8.3	8.8	9.2	10.6	11.9
FTR/05	0	6.7	6.9	6.6	6.4	6.5	FTR/05	0	7.5	8.6	9	9.4	10.3
HHB/05	0	5.9	6.6	6.7	6.3	6.6	HHB/05	0	6.2	8.1	9	9.3	10.5
SFM/06	5.7	7.9	8.3	8.6	8.5	7.9	SFM/06	5	9.4	10.8	12.1	12.6	12.6
KRW/06	0	7.3	7.6	7.4	7.7	7.9	KRW/06	0	8.3	9.6	10.1	11.4	12.5
FTR/06	7.2	7.3	7	7	7	7.2	FTR/06	7.4	8.4	8.8	9.5	10.4	11.4
HHB/06	0	6.8	7.1	7.1	7.1	7.2	HHB/06	0	7.7	8.8	9.7	10.5	11.4
SFM/07	0	7.6	7.6	7.3	7.5	7.3	SFM/07	0	8.8	9.6	10.1	11.1	11.5
KRW/07	0	6.2	7.2	7	7.5	7.1	KRW/07	0	6.7	9	9.5	11.1	11.2
FTR/07	0	5.7	6.9	6.7	6.5	6.8	FTR/07	0	5.9	8.6	9	9.5	10.8
HHB/07	0	0	6.7	6.7	6.8	6.8	HHB/07	0	0	8.3	9	10.1	10.8
SFM/08	0	7.6	7.6	7.6	7.5	7.9	SFM/08	0	8.9	9.6	10.5	11.1	12.6
KRW/08	0	6.5	7	6.9	7.4	7.1	KRW/08	0	7.2	8.7	9.3	10.9	11.2
FTR/08	0	6.6	6.6	6.5	6.8	6.8	FTR/08	0	7.4	8.2	8.7	9.9	10.7
HHB/08	0	6.4	6.6	6.5	6.4	6.8	HHB/08	0	6.9	8	8.8	9.4	10.8
SFM/11	7.4	7.6	8.1	8.2	8.5	8	SFM/11	7.8	8.9	10.4	11.4	12.7	12.6
KRW/11	0	7.3	7.3	7.3	7	7.6	KRW/11	0	8.4	9.2	9.9	10.3	12.1
FTR/11	7	7.3	7.1	6.8	6.5	7.3	FTR/11	7.2	8.3	8.9	9.1	9.5	11.6
HHB/11	0	6.4	7	6.8	6.6	6.8	HHB/13	0	7	8.7	9.2	9.6	10.9
SFM/13	0	7.6	7.8	7.4	7.2	7.2	SFM/13	0	8.8	9.9	10.1	10.7	11.4
KRW/13	0	7.2	7.1	7.3			KRW/08	0	8.2	8.9	10		
	SEV8-8.9		SEV9-9.9		SEV10-10.9		SEV11-11.9		SEV≥12				

Severity-of-ill-effects (SEV) scores for two models based on (SSC) durations

²⁷¹ A severity of 12, shown in purple in the table to the right, is defined as a lethal effect with 40-60% mortality. Yellow with a severity of 8-8.9 is defined as major physiological stress. Yellow-orange-tan with a severity of 9-9.9 is defined as reduced growth rate and density, delayed hatching. Model 4 SEV scores above 10 (dark orange) occurred every year at all stations, suggesting 0-20% mortality, increased predation, and moderate to severe habitat degradation. Red is defined as 20-40% mortality.

Downstream of managed timberlands evidence shows that SSC discharges average 27 times higher than naturally occurring background levels. Therefore, most future reductions in logging related loads will have to come from cessation of logging, winter operations, and road use and by letting the watershed heal.



The actions called for above rely on:

1. 1) **Implementation (through promulgation of a WDR) sufficient land use controls on timber operations to limit sediment inputs to a point where there is some kind of balance between discharge and transport. That has not occurred.**
2. 2) **The programs discussed in this section rely on such improved conditions to where adaptive actions, supported by monitoring and an informed process, can be designed to aid in recovery. However, the adaptive actions (and proposed Stewardship Program) rely on the success of the indicated controls and design of these actions is also dependent on similar success in the pollutant reduction load. It absolutely clear that none of the restoration actions or processes have been designed or put in place. The very foundation of this process in shaky and incomplete – and fails to be consistent with the requirements of State Code.**

Conclusion:

California Law requires: TMDL and related Implementing Programs (WDRs, Waivers, COAs), as Water Quality Control Plans, must meet statutory requirements (noted above in this paper). The State requirements, in short, insist on actions that will attain WQS.

The Technical Analysis provided for (and as part) for this TMDL establishes that pollutant

sources from land use (timber harvest) is causing exceedance of capacity for the water course receive pollutants and function without severely diminished beneficial uses. The Technical analysis provides the amounts of exceedance that need to be reduced and points to actions (in a permit/WDR) that must occur to meet the necessary reductions.

In this case the TMDL is not a stand -alone document. The TMDL may provide the necessary Problem Statement, Source Analysis, and Load allocations and indicate the necessary reductions in pollutant loading that is necessary. Under State Code, as a Water Quality Control Plan the TMDL must have an Implementing Program (or Action Plan) that has a reasonable potential for success. That attributes and issues indicated by the Technical Analysis for what is necessary for Phase I source control are not extant in the newly approved WDR. Those actions are necessary for proper TMDL approval.

Additionally the TMDL Action Plan, and WDR are not stand-alone documents. Together, and as a whole, they are a project and must be considered as same – with full description, analysis of impacts and related mitigations – and – with consideration of project alternatives.

Due to the fact that those actions are not in place, the TMDL needs to be returned to the Regional Board for further work in the development of a WDR that will attain sediment reductions called for in the TMDL.

5. How Petitioners are aggrieved:

Petitioners are aggrieved by the Regional Board's improper action to promulgate the Adopted Order that lacks regulatory assurance of compliance with the TMDL load allocation codified in the North Coast Regional Water Quality Control Plan for the Upper Elk River watershed. The effect and consequence of the Adopted Order will manifest as a result of timber operations conducted pursuant to the Adopted Order.

Petitioners are aggrieved by lack of ability to provide meaningful comment and input on major substantive changes in the Adopted Order and have their comments considered and responded to prior to the Regional Board's final decision approving the Adopted Order.

Petitioners are aggrieved because the Adopted Order forces their homes and farms and property to be subjected to preventable, unreasonable, unfair, and unjustified flood water invasion and occupation for decades, under duress. The Adopted Order denies Petitioners of the fundamental constitutional right to exclude physical invasion and occupation by the waste products of a stranger. The Adopted Order denies this and future generations the sustenance, joy and awe of a thriving salmon fishery.

Petitioners are aggrieved because the Adopted Order forces their homes and family and farms and property to be subjected to oppression purposefully created by wrongful improper undue application of government power-- that forces petitioners to suffer super induced flood water invasion and occupation for perhaps the rest of their lives[even after 20 years of acknowledged logging caused flooding]---so that an absentee special interest is assured of greater profits while destroying a salmon fishery and once

majestic wild and bountiful river. The Adopted Order denies Petitioners' fundamental constitutional right to exclude physical invasion and occupation by an irresponsible stranger.

Petitioners are aggrieved because the Adopted Order denies them the liberty to freely use and enjoy their homes and farms and property without being subjected to flood water invasion and occupation. The Adopted Order denies Petitioners of the fundamental constitutional right to exclude physical invasion and occupation by the waste products of a stranger. The Adopted Order denies petitioners equal protection under the law, environmental justice and environmental equity.

Petitioners are aggrieved because the Adopted Order sets a precedent that the Water Board members can carry out a deliberate and systematic policy of inflicting harm, injury and damage on selected individuals and communities so that an important person will profit at petitioners' expense, for decades upon decades to come.

Petitioners are aggrieved because the Adopted Order will result in harm by the continued failure of the river to meet its beneficial uses and because petitioners spent more than twenty years of their lives trying to participate in proper implementation of the laws of this state, at great personal and family expense are now forced to endure endless damages to their homes and community by political appointees' execution of State Laws or actually the lack thereof.

Petitioners are aggrieved because the Adopted Order will result in the further degradation of already severely-impaired watershed conditions in the Upper Elk River Watershed that affect forests, watersheds, fish, and people alike, and will result in the non-attainment of Basin Plan-specified Water Quality Objectives as articulated in the TMDL Action Plan.

Petitioners are aggrieved because the Adopted Order represents the only legally-binding and enforceable component of the TMDL Action Plan, and the only component over which the Regional Board maintains discretion and control and petitioners were denied the ability to meaningfully participate in an important public trust decision that will greatly impair and impoverish this and future generations.

Petitioners are aggrieved because their once thriving farms cannot be invigorated or maintained due to the heightened water table in the soil, increased flood height and frequency; destruction of private property, fences, septic systems, foundations, and homes, water supply, crops and access.

Petitioners are aggrieved because their access to emergency services such as ambulance, fire and police will be unduly denied for another 20 years and probably more.

6. The action requested of the State Water Board

Petitioners hereby request that the State Board: (1) Stay the effect of the Adopted Order; (2) Schedule a hearing on the Petition for Review and the Motion for Stay; (3) Review the Adopted Order and the manner in which the Order was adopted, and; (4) Set-aside the adoption of the Adopted Order and remand the decision back to the Regional Board for reconsideration, and provide adequate opportunity for noticed public review and comment. Or (5) issue a Cease and Desist Order till the WQS are attained.

7. Statement of Points and Authorities and Rendering of Causes of Action

The Regional Board prejudicially abused its discretion by the action of promulgating the Adopted Order on the basis that: (1) the Regional Board's action is in violation of the Porter- Cologne Water Quality Control Act, and its implementing regulations, including the North Coast Regional Water Quality Control Plan ("Basin Plan"); (2) the Regional Board's action violates the provisions of the California Environmental Quality Act and its implementing regulations, and; (3) The Regional Board's action and conduct in promulgating the Adopted Order is in violation of the California Administrative Procedures Act.

A. Violations of Porter-Cologne Water Quality Control Plan and Water Quality Control Plan for North Coast Region

The Adopted Order promulgated by the Regional Board is not consistent with the California Porter-Cologne Water Quality Control Act, or its primary regulatory implementing vehicle, the Basin Plan. The Adopted Order will exacerbate ongoing unreasonable and significant degradation of the quality and beneficial uses of water in the Upper Elk River watershed, and will likely exacerbate already well-recognized nuisance conditions as pertains to the level, frequency, and intensity of over-bank flooding in the residential portions of the Upper Elk River watershed.

The Basin Plan plainly establishes that the Regional Board must regulate "controllable" water quality factors to achieve water quality objectives: Controllable water quality factors shall conform to the water quality objectives contained herein. When other factors result in the degradation of water quality beyond the levels or limits established herein as water quality objectives then controllable factors shall not cause further degradation of water quality. Controllable water quality factors are those actions, conditions, or circumstances resulting from man's activities that may influence the quality of the waters of the State and that may be reasonably controlled.

Basin Plan at 3-1 (emphasis added). Controllable water quality factors includes discharges of settleable materials, suspended materials, or discharges that are resultant from discretionary actions, such as sedimentation from wet weather road use, as these actions may be reasonably controlled to minimize discharges.

Additionally, the Basin Plan contains the Action Plan for Logging, Construction and Associated Activities, and contains the following Prohibitions:

1. The discharge of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature into any stream or watercourse in the basin in quantities deleterious to fish, wildlife, or other beneficial uses is prohibited.
2. The placing or disposal of soil, silt, bark, slash, sawdust, or other organic and earthen material from any logging, construction, or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities which could be deleterious to fish, wildlife, or other beneficial uses is prohibited. Id. at p. 4-29.00.

The Upper Elk River Technical Analysis for Sediment (“Tetra Tech Report”), prepared as part of the TMDL development process, found that the Upper Elk River watershed is presently overwhelmed with sediment and has no further assimilative capacity for inputs of additional sediment discharges. .” Tetra Tech Report at 7.2, p. 74 (“Because of sediment aggradation, there is current no apparent loading capacity for additional sediment within the impacted reach . . . without apparent capacity for additional sediment, the impacted reach of the Upper Elk River watershed has a current conceptual and regulatory sediment loading capacity of zero.”) A true and correct copy of the Tetra Tech Report is attached as Attachment No. 5 in the EPIC filing and filed at: http://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/151222/03_20151021_Upper_Elk_River_Tech_Analysis_for_Sediment.pdf

According to the Tetra Tech (2015), “[t]he sediment supply in Elk River has overwhelmed the transport capacity of the river resulting in rapid channel and flood-plain aggradation.” Id. at 5.1, p. 30. Further, the Tetra Tech Report suggests that current regulations and voluntary practices, such as conformance with HRC’s Habitat Conservation Plan (“HCP”) and Watershed-Specific Prescriptions developed through HCP-mandated Watershed Analysis, are insufficient to prevent sediment from continuing to degrade the Elk River. The Tetra Tech Report estimates that Elk River is still currently capturing a mass retention rate of 7,300 metric tons of sediment per-year, based on estimates from the year 2004-2011. Id. at 6.2.4.4, pp. 6869.

The excess amounts of sediment overwhelming the Upper Elk River watershed are precipitating increases in the frequency, magnitude, and intensity of over-bank flooding, creating nuisance, and endangering the lives, health, and safety of citizens living in the residential areas of the upper watershed. Id. at 5.2.2, pp. 38-39.

The scientific conclusions, and the call for more stringent land use regulations to prevent controllable sediment pollution, were heard by the Regional Board and incorporated into the TMDL Action Plan. The TMDL Action Plan recognized that both the loading capacity—defined by the plan as the “as the total sediment load (natural and management-related) that can be discharged into the Upper Elk River and its tributaries without impacting beneficial uses of water, causing an exceedance of water quality objectives, reducing the quality of high quality water, or creating nuisance conditions”—is “zero.” TMDL Action Plan at § IV. While the TMDL Action Plan further found that the loading allocation is not an effluent limitation or waste load allocation, the zero loading allocation still underscores the drastic extent of degradation and the necessity for stringent controls on controllable discharges.

The Adopted Order fails to adequately regulate controllable water quality pollution. Take, for example, sediment pollution from roads. The Tetra Tech Report found that “road surface erosion” was an anthropogenic factor contributing to sediment pollution in the Elk River. (Tetra Tech, 2015, at Figure 15, p. 61.). The amount of sediment loading depicted demonstrates that existing regulations and voluntary actions are insufficient to prevent road surface related sediment pollution. The Adopted Order repeatedly recognizes that sediment from wet weather road use is a controllable source of sediment:

Conducting timber operations during wet weather increases the potential for sediment production and discharge from roads, landing, and skid trails. Use of trucks and heavy equipment during saturated soil conditions can result in soil compaction, create ruts which affect road drainage, and increase production of fine sediment. Typically the most effective way to prevent impacts from

operations during saturated soil conditions is to avoid operations during the period of the year when rain is likely to occur. This allows for timely implementation of seasonal erosion control, and the completion and stabilization of construction and reconstruction of roads, landings, skid trails and watercourse crossings. In the North Coast, over 90% of average annual precipitation falls between October 1 Adopted Order at 59, p. 18 (emphasis added). While the Adopted Order states, “Wet weather road use shall be avoided or limited to well rocked, paved, or chip sealed surfaces,” the Adopted Order fails to prohibit wet weather road use. Indeed a prohibition on wet weather road use was present in previous iterations of the WWDR but, as recounted above, supra section II.B., these prohibitions were excised from the dais at the November 30, 2016 Regional Board meeting. By recognizing that wet weather road use was a controllable source of sediment and by removing prohibitions against its use, the Regional Board violated the Basin Plan. Basin Plan water quality objectives for sediment, turbidity, settleable and suspended materials in the Upper Elk River watershed will continue to be exceeded and impaired as a result of the Adopted Order

B. CEQA Claims

The Regional Board’s action on the Adopted Order violated the California Environmental Quality Act (“CEQA”) by: (1) relying on an inadequate Mitigated Negative Declaration; (2) failing to adequately analyze and disclose all activities and factors that may result in significant adverse impacts on the environment; and (3) failing to conduct a supplemental analysis subject to public review and comment following substantive changes made to the Adopted Order. We address these three factors in turn.

1. Mitigated Negative Declaration is not the Proper CEQA Compliance Vehicle for the Project

A Mitigated Negative Declaration (“MND”) is not the proper vehicle for analysis of potentially significant adverse environmental effects of the Adopted Order for the purpose of demonstrating CEQA compliance. California Public Resources Code section 21064.5 defines the criteria for an agency to rely upon an MND:

[A] negative declaration prepared for a project when the initial study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment. (Emphasis added). See also 14 CCR § 15369.5.

An MND is an inappropriate vehicle for this action. The December 4, 2015 Initial Study intended to support adoption of a MND, as originally provided to the public for notice and comment, was not predicated upon agreement with the Project applicant, HRC, on measures necessary to either avoid or mitigate to a level of insignificance certain potentially significant adverse impacts on the environment that were identified in the Draft Initial Study. The record and proceedings before the Regional Board in promulgating the Adopted Order clearly show substantial disagreement between Regional Board staff and HRC over the measures necessary to ensure that significant adverse impacts on the environment were either avoided or

mitigated to a level of insignificance, which, by definition, should have disqualified the use of an MND as the CEQA compliance vehicle. Again, CEQA requires that all revisions and mitigations to a project proposal must be agreed upon and incorporated into the Initial Study and the proposed action prior to release of the MND and Initial Study for public review. This clearly is not what transpired here. As outlined above, supra section II.B., there were extensive changes to the Adopted Order from what was circulated for public review and comment. For example, Humboldt Redwood Company’s August 28, 2015, Report of Waste Discharge (“ROWD”) for its Elk River ownership—which constitutes its application for coverage under a new Watershed-Wide Waste Discharge Requirement (“WWDR”) for Upper Elk River—originally contemplated continuing timber harvesting activities in all sub-watersheds within its ownership. See HRC August 28, 2015 ROWD, at Figure 4.3, page 24; a true and correct copy of which is attached as Attachment No. 6. By contrast however, the first public draft of the WWDR, dated November 18, 2015, contemplated a “temporary prohibition” on timber harvesting in five (5) sub-watersheds identified in the Draft Order as “high-risk.” See November 18, 2015 Draft Order, section I(A)(4); a true and correct copy of which is attached as Attachment No. 7. This dramatic difference between logging vs. a temporary prohibition illustrates the certain lack of agreement for purposes of the project mitigation.

The Regional Board was well aware of the disagreement with the Applicant over measures necessary to either avoid or mitigate to less-than-significant the identified potential impacts to water quality in the Upper Elk River watershed in a final and adopted WWDR permit. Rather than circulate an Initial Study and MND with the mitigation agreed to, the Regional Board erred in continuing to rely upon the draft Initial Study and MND which was not the basis of an agreement, and contrary to the clear language in the Public Resource Code and CEQA guidelines.

There are numerous other examples where the project applicant, HRC, and the project application, ROWD, were not consistent with the Draft Proposed Order at the time of the December 2015 release of the Draft Initial Study and MND. This disagreement was not remedied in the revised Initial Study and MND released on August 30, 2016. The record and proceedings before the Regional Board in promulgating the final Adopted Order demonstrate a fundamental lack of agreement between the Regional Board and HRC about mitigations and prescriptions necessary to avoid or lessen to a point of insignificance potential adverse impacts on the environment and water quality in the Upper Elk River in conjunction with HRC timber operations in the watershed. While the Regional Board does retain a measure of discretion in adoption of WWDRs for purposes of the Porter-Cologne Water Quality Control Act, it does not have discretion to utilize a MND when it has failed to document that all mitigation is agreed.

2. Regional Board Failed to Adequately Disclose, or Analyze Potentially Significant Adverse Impacts of the Proposed Project in its Initial Study and Mitigated Negative Declaration

The Regional Board also erred and violated CEQA by failing to adequately disclose, analyze, and mitigate to less than significant the potentially significant adverse impacts on the environment and to water quality in the Upper Elk River watershed that would occur as a **result of the Adopted Order.**

The December 4, 2015 Draft Initial Study intending to support the MND circulated for public review in support of the proposed action does not provide specific analysis of the timber harvesting methods and prescriptions contemplated in HRC's August 28, 2016 ROWD. Section H of the Initial Study is entitled, "Specifics of Proposed Project and General Environmental Concerns." See December 4, 2015 Initial Study at § H, pp. 8-22. The Regional Board cites broad-brushed and highly generalized concerns about the potential adverse impacts of timber harvesting on water quality, and then articulates the mitigation measures contemplated in the Proposed Action, but provides no specific analysis of the actual impacts of the activities specifically-proposed either in the HRC ROWD or the Draft Order circulated to the public.

Section H, of the December 4, 2015 Draft Initial Study at Section H, page 8, acknowledges generalized water quality concerns in the Upper Elk River watershed to which timber operations could potentially contribute, thus resulting in a significant adverse impact of the environment and water quality. These are:

- a. impaired domestic and agricultural water quality;
- b. impaired spawning habitat; and
- c. increased rate and depth of flooding due to channel in-filling by sediment.

However, the summary paragraph in the December 4, 2015 Initial Study for this subsection simply concludes:

The overall result of timber harvesting as described in HRC's management strategy is a "managed" forest, which is qualitatively different from an untouched old growth forest. However, the management strategy is designed to retain much of the wildlife and watershed functions of the forest and will maintain or improve those values over current conditions. While it is difficult to quantify, when the proposed rate of harvest and partial harvesting methods are considered together with the emphasis on landslide avoidance strategy, landslide hazard analysis, and land management prescriptions, the potential for watershed impacts from timber harvesting is considered to be fairly low. That said, new discharges of sediment from harvesting and associated activities can be significant due to the existing impacted and degraded water quality of the watershed."

December 4, 2015 Initial Study at § H, p. 9 (emphasis added).

The December 4, 2015 Draft Initial Study does not specifically analyze how HRC's specific timber operations and activities might adversely impact the environment or water quality in the Upper Elk River or why the risk of potential watershed impacts from HRC timber operations is considered "low." What constitutes a "low" risk, or how this has been determined, and using what criteria is similarly not disclosed. The Regional Board has not provided a substantial evidentiary basis in the December 4, 2015 Initial Study, or the Final Initial Study and adopted MND that accompanies the Adopted Order, to allow it to determine, based on the evidence in the record that HRC's timber operations would have a "low" potential adverse impact on the environment or water quality in the Upper Elk River watershed. The Regional Board erred in not conducting a thorough analysis based on substantial evidence either in the 2015 Draft Initial Study which it used to determine a MND was an appropriate CEQA vehicle, or in the Final Initial Study and approved MND when it promulgated the

Adopted Order. The CEQA documentation lacked substantial evidence to demonstrate that potentially significant adverse and cumulative impacts resulting from implementation of the Adopted Order had been avoided or mitigated to a point of less than significant.

The December 4, 2015 Initial Study does not even incorporate within it information from HRC's own permit application—the August 28, 2015 ROWD—to extrapolate how much additional sediment pollution the Proposed Action and Adopted Order might contribute over the life of the permit to waters of the state, thus exacerbating existing conditions of already impaired life of the permit to waters of the state, thus exacerbating existing conditions of already impaired beneficial uses of water. The Regional Board also does not provide an analysis of anticipated changes in water quality objectives resulting from the permitting of any discharges of sediment pollution that might result from implementation of the Adopted Order. Instead, the Regional Board relies almost exclusively on summary, conclusory, and unsubstantiated statements and claims in its December 4, 2015 Initial Study, and Final Initial Study, to conclude that the Proposed Action and Adopted Order will result in a less than significant impact on the environment following contemplated mitigations, even though some of these were a point of contention and dispute between the Regional Board and the Applicant.

The Regional Board's December 4, 2015 Initial Study also fails to analyze the potentially significant adverse environmental and water quality impacts of promulgating the Adopted Order on hydrology and water quality in the Upper Elk River watershed. It fails to provide substantial evidence that further sediment inputs as authorized by the Adopted Order would be consistent with the TMDL Action Plan load allocation set at "zero." The December 4, 2015 Draft Initial Study Check List, at IX., p. 88, clearly stipulates that the Sediment Source Analysis recommended a "zero" load allocation in light of the severely impaired environmental and water quality conditions in the Upper Elk River watershed, many of which are directly attributable to the Proposed Activity, i.e., timber harvesting. Yet, the Regional Board permits continued discharges when it states, "For discharges associated with continued timber operations, combined measures required under the Order, as itemized below, are protective of water quality within the [Upper Elk River] watershed." December 4, Draft 2015 Initial Study, at, p. 57.

The Regional Board's Draft Initial Study refers to no evidence of any kind to support such a statement. Instead, it assumes no significant adverse environmental effects because of the manner in which HRC logs, using selection harvest rather than clearcutting, with a rate of harvest. However, these practices in isolation do not demonstrate no environmental effects. What matters here is the sediment discharges, which may—or may not—be lessened depending on the silvicultural method. However, there is no analysis that they will be eliminated, which is needed to be consistent with the "zero" loading capacity.

These errors were not remedied by the Final Initial Study and Adopted MND. For example, the same statement about HRC's use of selection as opposed to clearcutting as a basis for an MND also appears in the August 30, 2016 version of the Initial Study. See August 30, 2016 Initial Study, at section H, p. 10. The same statement is also included in the Final Adopted Initial Study and MND from November 30, 2016. See Final Adopted Initial Study and MND, November 30, 2016, section H, at p. 9

3. Regional Board Failed to Re-Consider its Analysis and Findings and Failed to Recirculate the Adopted Order Following Substantive Change

The Regional Board violated CEQA by not recirculating, before approval, the and its Final Initial Study and MND for noticed public review and comment following substantive changes made on November 30, 2016 to these environmental review documents as well as the Adopted Order. The changes made to both the Adopted Order and to the Final Adopted MND and Initial Study constitute significant new information that was not available to Petitioners or the public in advance of the decision. On August 30, 2016 the Regional Board circulated a Notice of Public Comment Period and Notice of Intent to Adopt a Revised a Proposed Order and the Revised Initial Study and MND. The public comment period was closed on September 29, 2016, although the Regional Board solicited oral comments at the November 30, 2016 meeting. On November 30, 2016, the Regional Board conducted the hearing pursuant to the August 30, 2016 Notice of Intent to Adopt the Adopted Order, but did not reopen the public comment period which ended on September 29, 2016. Prior to the November 30, 2016 meeting, the Regional Board formally responded to written comments submitted by the September 29, 2016 deadline, however because the Regional Board responded to comments before the November 30, 2016 meeting, the Regional Board provided no response to oral comments delivered at the meeting.

The August 30, 2016 Revised Order itself represented a weakened version of its previous iteration, dated June 16, 2016. Specifically, the August 30, 2016 version of the Draft Order made the substantial change eliminating protections of a “temporary prohibition” on HRC timber harvesting activities in five-identified “high-risk” sub-watersheds in the Upper Elk River for an initial five-year interim period, to instead allowing timber harvest activities under a “harvest limitation.” See August 30, 2016 Draft Order, at I.6, p. 3; I.28, p.8; I.29 & 30, p.9; I.57, at p. 18; I.59, at p. 19; I.84, at p. 29; I.88, at p. 30; I.89, at p. 31; IA.4, at p. 33; II, at p. 39.

At its November 30, 2016 meeting and hearing to consider approval of the now-Adopted Order, Regional Board staff provided Regional Board members with yet another and changed version of the August 30, 2016 Draft Order. The November 30, 2016 version of the Draft Order was not made available to the general public for review and comment prior to the meeting, and was not the version of the Draft Order upon which the public based its comments to the Regional Board or the version upon which the Regional Board provided its November 30, 2016 response to comments on the August 30, 2016 Draft version of the Order. Furthermore, the Draft Order was not the version considered by the Initial Studies or proposed MND.

The November 30, 2016 version of the Draft Order provided to Board Members on the day of the hearing contained significant substantive changes from the August 30, 2016 version upon which public comments were provided, and upon which the Regional Board based its written response to public comments. These changes are explained in detail above, supra section II.B., but in summary, the Regional Board may three major changes from the dais.

First, the Regional Board changed what it considered high-risk areas of concern from one based on sub-watershed areal extent to one based on soil type. This substantive change meant harvest limitations would apply only on a certain soil type, the Hookton soil group, rather to readily-identified five high risk sub-watersheds. The effect of this change is substantial

because the geographical area within which the harvest “limitation” would apply was reduced, thereby allowing an increase in timber harvest activities that would previously have been limited.

Additionally, the change in criteria itself from a sub-watershed basis to a soil type basis represents significant new information that was not available to the public at the time of the comment period or close of public comment, and was not the criteria upon which the public provided comment or that the Regional Board provided its response to comments. This change alone has the potential to result in an additional significant adverse and cumulative impact upon the environment and the likelihood of attainment of water quality objectives in the Upper Elk River watershed. It appears that the changes provided to the Regional Board at the time of the November 30, 2016 meeting were made in response to HRC’s submittal of an Amended Revised ROWD on October 4, 2016, the period between the close of public comment and the hearing date. Not only was the public deprived of the opportunity to comment on the changes provided to the Board, but it was also deprived of the opportunity to comment on the Amended and Revised ROWD.

Second, at the November 30, 2016 meeting, the Regional Board reduced protective requirements within Riparian Management Zones (“RMZ”) from applying across HRC’s entire Upper Elk River ownership to just to apply in the newly-delineated “high-risk areas.” See Adopted Order, Specific Requirements at IB, p. 31. The effect of this change has the potential to result in significant adverse cumulative impact on the environment and to the likelihood of attainment of water quality objectives in the Upper Elk River watershed, as it removes important protections for stream corridors. These additional potential impacts were not analyzed or considered by the Regional Board in its December 4, 2015 Draft Initial Study and MND, or in the Revised August 30, 2016 version of the Draft Initial Study and MND. Furthermore, these changes were not contemplated or disclosed in the August 30, 2016 Notice of Intent and August 30, 2016 version of the Draft Order. The public was denied its opportunity to comment on this substantive change. Therefore, the Regional Board could not possibly have analyzed or considered the potentially significant adverse impacts on the environment of water quality in the Upper Elk River as a result of subsequent changes at the time of the analysis.

Third, the Regional Board removed wet weather restrictions on hauling and on yarding within high-risk areas, despite recognizing that such restrictions would prevent sediment pollution. Again, these changes were not previously contemplated or disclosed and the public was denied its right to comment on this substantive change.

The changes made in the period between the August 30, 2016 Notice of Intent and Draft Order and the November 30, 2016 hearing and version of the Draft Order, as well as changes made from the dais enshrined in the Adopted Order are substantive in nature and have the potential to result in additional significant adverse and cumulative impacts that have not been analyzed by the Regional Board, or made available for the public to provide meaningful feedback and comments and testimony. At a minimum, such changes require an Addendum under CEQA, or more appropriately, recirculation of environmental documentation for public review and inspection prior to final action. See PRC 29012.2.

C. California Administrative Procedure Act

Whether the Regional Board was acting in a rulemaking or adjudicative capacity, the Regional Board failed to provide the necessary guarantees for public participation and review under its own Meeting Regulations in Title 23, California Code of Regulations, sections 647 et seq., and under the Government Code and California Administrative Procedure Act. The Regional Board erred by making substantive changes to the Adopted Order from the dais without providing an opportunity for public comments on these substantive changes. The Regional Board also inappropriately made changes in the record of proceeding after the close of the public hearing and the public comment period.

1. Changes to the Adopted Order Made from the Dais Require Public Comment

The Regional Board made substantive changes at three stages of the proceedings that require additional notification and circulation for public comment as it reached the decision to promulgate the Adopted Order. **First**, the Regional Board erred by relying upon and considering a version of the Draft Order provided by staff only at the time of the November 30, 2016 hearing, rather than the August 30, 2016 version, which had been noticed to the public as part of the Regional Board's Notice of Intent to Adopt. **Second**, the Regional Board erred by making changes from the dais during the hearing that were substantive in nature. These changes were much more than clarification or grammatical changes. Before acting, the Regional Board was obligated to provide an opportunity for the public to review and comment upon those changes. **Third**, as identified above in the CEQA discussion, the Regional Board erred by making substantive changes to the Final Adopted Initial Study and MND for the Adopted Order following the hearing at which it promulgated the Adopted Order for purposes of achieving consistency and harmony in both. These changes are identified above, supra sections II.B. and VII.B.3. This constitutes a post-hoc rationalization, and is clearly unlawful under the APA.

The APA requires that the state agency "shall consider all relevant matter presented to it" before taking action, and "shall not add any material to the record of proceedings after the close of the public hearing or public comment period." Gov't Code section 11346.8(a),(d). Additionally, the agency may not make changes, without providing a 15-day public notice and comment period, unless they are "nonsubstantial or solely grammatical in nature," or "sufficiently related to the original text that the public was adequately placed on notice that the change could result from the originally worded proposed regulatory action." Id.

At a minimum, the Regional Board needed to issue a supplemental Notice of Intent, and recirculate the final Proposed Order and the final Proposed Initial Study and MND for the public comment before finalizing the action it took on November 30, 2016. Its failure to do so has aggrieved Petitioners by denying us the right to review and provide meaningful comments on the changes, and for the Regional Board to respond, in writing, to our concerns and comments regarding the changes made.

VIII. Statement that the Petition has been sent to the Regional Board and the Discharger(s)

True and correct copies have been sent to both the Regional Board, and Discharger Humboldt Redwood Company via email at the following addresses

Humboldt Redwood Company, LLC
125 Main Street
P.O. Box 712 Scotia, CA 95565
mmiles@hrcllc.com
North Coast Regional Water Quality Control Board
Attn: Executive Office Matt St. John
5550 Skylane Blvd., Suite A Santa Rosa, CA 95403-1072
Matt.St.John@waterboards.ca.gov
Nathan.Jacobsen@waterboards.ca.gov

IX. Statement that the Issues Raised in the Petition were Presented to the Regional Board Before the Regional Board Acted or Failed to Act or an Explanation of Why the Petitioners could not Raise Those Objections Before the Regional Board

All issues pertaining to alleged violations of the Porter-Cologne Water Quality Control Act and its Implementing Regulations were raised before the Regional Board prior to the action to promulgate the Adopted Order. Not all issues pertaining to CEQA compliance or Administrative Procedures allegations were raised before the Regional Board prior to the action because these issues have arisen in light of the action taken by the Regional Board and the manner in which it acted in promulgated the Adopted Order on November 30, 2016, and therefore, Petitioner was afforded no opportunity to raise said issues in advance of the filing of this Petition.

X. Motion for Temporary Stay

Pursuant to Cal. Water Code § 13321, Petitioners request a temporary stay of effect of the Adopted Order (Order No. R1-2016-0004). Petitioners will be substantially harmed if a stay is not granted. Logging is imminent and is reasonably certain to result in controllable sediment pollution above limits prescribed by the Basin Plan. This pollution, in turn, will directly harm Petitioners and will continue the degradation of the Elk River. By contrast, a stay will not affect the long-term interests of Humboldt Redwood Co. and will only minimally harm the company in the short-term, as its planned harvesting within the Elk River watershed in the immediate future is minimal. Lastly, Petitioners raised numerous questions of law and fact and are likely to succeed on the merits.

A. Petitioners will be Substantially Harmed if a Stay is not Granted

This petition and request for stay centers on the North Coast Regional Water Quality Control Board's ("Regional Board") duty and authority to protect water quality pursuant to the Porter-Cologne Water Quality Control Act, Cal. Water Code § 13000 et seq. Prime among the Regional Board's directives is to develop regulations sufficient to achieve water quality objectives, including the development of water discharge requirements. Failure to achieve water quality objectives is not an esoteric or intellectual problem; it affects the daily lives of Petitioners and Elk River community.

The Elk River watershed is located within the temperate coastal rainforests of Humboldt County, California, and is one of the primary tributaries to the Humboldt Bay, the second largest estuary in California. Historic and ongoing land management, predominantly logging operations, have drastically altered the Elk River. The Elk River watershed is identified on the Clean Water Act Section 303(d) List of Impaired Waterbodies[since 1998] as impaired for sediment, meaning that sediment pollution impairs and destroys the beneficial uses, such as domestic water supply, civil rights, recreation, habitat for endangered species including the coho salmon, historical property use and business opportunities.

Sediment pollution is so severe that the Regional Board has recognized that the Elk River has a loading capacity—defined by the board as the “total sediment load (natural and management-related) that can be discharged into the Upper Elk River and its tributaries without impacting beneficial uses of water, causing an exceedance of water quality objectives, reducing the quality of high quality water, or creating nuisance conditions”—of zero. In other words, any additional controllable sediment pollution within Elk River will negatively impact water quality in the Elk River. In turn, individuals, including Petitioners, who are harmed by poor water quality will continue to be harmed.

Sedimentation in the Elk River, much of which is attributable to relatively recent and ongoing logging in the watershed, has “infilled” much of the Elk River channel, raising the natural water level of the river. This infilling has resulted in an increase in flooding events. These flooding events have caused property damage to Petitioners in the Elk River. Flooding also put area residents in danger as flood waters often close bridges and roads in the area, including the North Fork Bridge, Elk River Road, Berta Road, and the Berta Road Covered Bridge, preventing egress and ingress for local residents, emergency responders, elder caregivers and visitors.

Sediment impacts local water supply for watershed residents. Because of virtually nonexistent water tables, owing to the clay-rich soil of the watershed, residents are forced to obtain their water supply from the surface water of the Elk River. However, pumping from the Elk River is often prohibitive due to high suspended sediment and/or algae blooms. As a result, landowners must truck in and store potable water for their personal use.

Sediment pollution also impacts local and regional fisheries through habitat modification. For example, salmonids, such as the Elk River’s coho salmon, require clean, cool water for survival. Fine sediment smothers salmon redds, gravel nests made by female salmon on gravel bottoms of rivers and streams, preventing the emergence of salmon fry from the redd. Salmon also prefer deep pools that form around large pieces of wood in the waterbody. Sedimentation infills large pools, causing a loss of pool volume and the destruction of important salmon habitat. Suspended sediment, fine sediment which is suspended in the water column as opposed to settling at the bottom, causes turbidity. High turbidity, in turn, is correlated with stunted juvenile growth, likely due to impacted feeding ability. Harm to salmonids harms Petitioners who appreciate these fish and their declines and delayed recoveries harm the aesthetic, recreational, subsistence and commercial interests of Petitioners.

This ongoing sediment pollution also adversely affects recreational values. As the backyard for Elk River residents, the river is an important recreational spot for swimming, floating, and aesthetic enjoyment. Contact recreational uses, such as swimming and wading, are impaired by the changes in the river caused by sediment pollution—deep pools are filled and the river bottom, once gravel, has been covered by a “substantial layer” of muck. Non-contact recreation uses, like floating, are impacted by the noxious odors arising from shallow, stagnant water.

Against this background, the Regional Board’s Adopted Order and actions at the November 30 meeting are puzzling because instead of doing everything possible to reduce controllable sediment pollution and, in turn, the harm to Petitioner members, other Elk River residents, and others impacted by the poor water quality of the Elk River, the Regional Board systemically weakened the WDR, as outlined above, *supra* section II.B. and VIII.B.3.

Humboldt Redwood Company has expressed that it would like to begin logging under the new WDR as soon as possible. The Regional Board has further indicated that it would begin enrolling approved timber harvest plans as soon as the WDR is accepted by the State Water Resources Board. Without a stay, this logging may commence and discharge additional controllable sediment pollution—pollution that is prohibited by the Basin Plan—that will continue to affect the lives of Elk River residents.

B. A Temporary Stay Will Not Cause Harm to Other Parties

Only two entities may be harmed by a stay: Humboldt Redwood Co. and the Regional Board. Neither would be substantially harmed in the time of a temporary stay, especially in comparison to the real and immediate harm likely to be suffered by Petitioners. Turning first to potential harm to Humboldt Redwood Co., any potential harm is limited in both temporal and geographic scope. A stay until a final decision by the State Board would be limited in temporal scope. Petitioners are asking for temporary injunction against logging for now and a stay of action until the Regional Board drafts a new WDR that complies with the Basin Plan and harmonizes with all other laws. The geographic scope of harm is also limited. The ownership in Elk River is a small portion of Humboldt Redwood Company’s overall ownership, accounting for around 10 percent of their ownership. Much of this area is not subject to immediate harvest, either because of harvest limitations pursuant to the company’s Habitat Conservation Plan, or because potential timber units are not ripe for harvest.

The Regional Board is not likely to suffer any substantial harm. Petitioners’ prayer for relief would require the Regional Board to go back to the drawing board and complete regulations that comply with California law. To the extent that this harms the Regional Board by causing additional staff hours and money, the Regional Board invited this harm by promulgating regulations in a manner prohibited by California law and by ultimately adopting illegal regulations.

In summation, the likely harm caused by a stay is minimal, especially in light of the continued, long-term harm presently imposed on Petitioners by Regional Boards actions and inactions to enforce State Laws.

C. The Regional Board's Action and the Adopted Order Violate Laws

As articulated above, supra section VII, the Regional Board's action and Adopted Order violate numerous laws, including the Porter-Cologne Water Quality Control Act, the California Environmental Quality Act, the Antidegradation Policy, and the Administrative Procedure Act

D. Conclusion

For the foregoing reasons, the State Board should issue a stay of the Adopted Order until resolution of the petition for review given the balance of harms and the likelihood of success on the merits. Government denial of citizens' civil rights is a grievance of fundamental importance.

Statement of Petitioners: For the past 20 years Petitioners continuously alerted RWB that it continues to fail to remedy worsening conditions in our public watercourses, fails to control discharges and fails to prevent accelerated erosion. Instead RWB knowingly enables worsening conditions to manifest. These conditions directly threaten the lives and health and safety of Petitioners, and directly damage Petitioners' property. In desperation, we wrote and then read the Environmental Equity/Justice Petition to the RWB on May 7, 2014 in Fortuna, CA and the issues were referenced again at the June 19 meeting in Santa Rosa, CA where RWB directed Petitioners to follow the directions for petitions (appeals) on the State Water Board website. Petitioners have participated in all the TMDL noticed meetings and hearings and all the various WDR meetings and hearing dates and spoken and written clearly of our continued damages and deteriorating conditions. Still after 20 years of trying, Petitioners find they cannot raise these issues in a manner that is treated as a proper objection before the Regional Board. Petitioners have been repeatedly denied due process. At this point we can only conclude that the Regional Board exercises some unidentified discretionary basis to provide dischargers with exemptions from compliance with Basin Plan Objectives, Prohibitions, the Water Code, and the Clean Water Act and other Laws.

Dated December 30, 2016

Respectfully submitted,
Petitioners:

Jesse Noell

Kristi Wrigley

**DECLARATION OF KRISTI WRIGLEY IN SUPPORT OF NOTICE OF MOTION AND
MOTION FOR LEAVE TO INTERVENE**

I, Kristi Wrigley, declare:

1. My name is Kristi Wrigley. I make this declaration based on my own personal knowledge. I am over eighteen (18) years of age and competent to attest to the matters declared herein if necessary.
2. I am a current member in good standing of the Environmental Protection Information Center (“EPIC”). I joined EPIC because I support the organization’s attention to the relationship of logging to water quality and flooding in upper Elk River. I believe that EPIC should participate in this case because they have a long term understanding of the issues in Elk River and can best represent the residents like myself and those similarly situated in upper Elk River. EPIC has closely watched the timber activities in Elk River for many years, and knows intimately the short and long term cumulative effects that logging has caused and is causing here in upper Elk River.
3. In this declaration, I refer to the “Elk River watershed.” I understand a “watershed” is defined as an area of land that drains all the streams and rainfall to a common outlet. The mainstem Elk River is fed by the North Fork Elk River and the South Fork Elk River, as well as other smaller tributaries. In turn, each of these forks are fed by numerous tributaries, some named and some unnamed. All of these waters compose the Elk River watershed.
4. My life is intimately attached to the Elk River watershed as I grew up in the watershed, own two properties within the watershed, and currently live within the watershed.
5. I was born in 1946, and raised at “Apple Farm,” my family home and apple orchard located at 2550 Wrigley Road, Eureka, CA, 95503, ~~near~~ on the North Fork Elk River. I lived here until 1968. I moved away for 10 years, but ultimately came back to Eureka in 1978 to help my parents at Apple Farm. I assumed ownership of Apple Farm in 1995 following my father’s death.

6. In 1995, I purchased my uncle's property ~~near~~ at the confluence of the North and South Forks of Elk River, 7968 Elk River Road, Eureka, CA, 95503. I purchased this property with the intention of residing at it. This property has been in the family for many years, starting with the construction of the family home by my uncle in 1950. I call this property the "Red House" because of its barn-red paint.
7. This case is especially important to me because of the harmful impacts that the logging has had on water quality, which has affected my enjoyment of my property, my orchard business, and my health and safety. I routinely document the negative effects in the hopes that someone will pay attention. Through my documentation, I have noted my observation that conditions in the Elk River continue to deteriorate. I believe that the proposed Humboldt Redwood Company logging operations for which the North Coast Regional Board Water Quality Control Board has denied enrollment under General Waste Discharge Requirements will contribute to and exacerbate these negative conditions.
8. I was forced to move from the Red House to Apple Farm because of routine flooding. Figure one shows the aftermath of flooding that occurred on January 17, 2016 at the Red House. The darker color is sediment deposited by the flood. The lighter color is my wood floor after cleaning. This sort of property damage has become too routine to risk living at this property.



Figure 1: Evidence of flooding on January 17, 2016. The dark is sediment left by the flood. The lighter color is a section of flooring after I cleaned off the sediment. Photo by Kristi Wrigley.

9. In the last 8 years, I have seen increased sediment deposition from logging in the South Fork Elk River and the upper main stem of Elk River. The smaller tributaries of Railroad, Clapp, and other unnamed gulches have become extremely sediment impaired as evidenced by the huge sediment deposits in the lower reaches where they drain into the lower main stem Elk River. Tom's Gulch, which drains land owned and operated by

Humboldt Redwood Company, is also depositing significant amounts of sediment into the South Fork Elk River. These have all contributed to the further deposition in the lower watershed where my Red House is located and cause increasing flood frequency and height in my house.

10. High turbidity and sediment infilling has also affected my domestic water supply at both Apple Farm and the Red House. I remember the North Fork Elk River, which runs near Apple Farm, as having a gravel bottom and the river was full of riffles and pools in my childhood through the mid 1980's. My parents used the cool and clear surface water of the Elk River for our domestic water all their lives. Today, because the North Fork is so full of suspended sediment in winter and algae growth in summer, I am unable to pump surface water from the river and must often rely on water deliveries for my domestic water even though I have a complex water system which is supposed to purify the water. The water is often so polluted the system does not work. Figure 2, taken on September 23, 2014, shows the North Fork Elk River near my domestic water intake for the Apple Farm.



Figure 2: Picture of North Fork Elk River near my domestic water intake, taken by Kristi Wrigley on September 23, 2014.

11. The Apple Farm is the first downstream land below Humboldt Redwood Company on the North Fork of Elk River. While the Apple Farm had supported my family while I was growing up, since flooding has increased, I am unable to have a productive and economically viable apple crop on my farm. Flood waters destroy my fences allowing deer and bear to enter and destroy my trees and apple crop. The flood waters and ensuing clay sediment deposits smother the apple tree roots from above and the increased water table in the ground drown the roots from below causing trees my father and I planted from the 1970's to the early 1990s to be stressed and ultimately die. Figure 3 shows my apple orchard under flood waters, despite being over 200 feet from the banks of the North Fork Elk River. I took these photos on January 17, 2016.



Figure 3: My apple orchard routinely floods, preventing a productive and economically viable apple crop. This picture was taken by Kristi Wrigley on January 17, 2016. This part of my apple orchard is over 200 feet from the North Fork Elk River.

12. Routine nuisance flooding over the years now often puts myself and others at risk.

Because sediment has filled in much of the river channel, flood waters quickly rise after rain. Very quickly, many roads in the areas, including roads I frequently use such as Elk River Road, Wrigley Road, and the North Fork Bridge become impassable. Figure 4 shows the North Form Bridge, which connects Wrigley Road and Elk River Road, on January 17, 2016. This bridge routinely closes due to flooding.



Figure 4: North Fork Bridge on Elk River Road at intersection with Wrigley Road. Note, only the guardrails of the bridge are visible. Photo taken by Kristi Wrigley on January 17, 2016.

13. I believe enrollment of the approved and currently constituted THP 1-12-110 HUM by the North Coast Regional Water Quality Control Board under General Waste Discharge Requirements will directly and immediately impact me by contributing to increased frequency and severity of flooding events. As the evidence will show, the Elk River is drastically overburdened with sediment—so much so, that any additional sediment will negatively affect water quality and increase flood frequency and severity.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this ~~2nd day of March~~, 20th day of December, 2016 at Eureka, California.

Kristi Wrigley



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

June 24, 2014

Mr. Matthias St. John
Executive Officer
North Coast Regional Water Quality Control Board
5500 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

Dear Mr. St. John:

EPA appreciates the progress you and your staff have made toward developing and revising the Elk River Sediment TMDL, and I am pleased to have the opportunity to clarify and complete my truncated comments from Thursday's Informational Meeting.

The point I would most like to emphasize is that EPA fully supports expedited adoption of this TMDL. This commitment was originally made in 2002, and initially included the entire Elk River watershed and Freshwater Creek. It became clear that a focus on the upper watershed, which we support, would prioritize attainment of water quality improvements and facilitate TMDL adoption and implementation. I realize there are complexities of sediment impacts and land ownership in the basin, as well as many long-standing differences of opinion on every effort your staff have made to date, but this should not preclude finalizing the documents and moving forward with implementation.

I have reviewed the analysis related to the project thus far; it is based on sound science and practical considerations for implementation. The data have also been subjected to rigorous, unbiased peer review, by scientists who were not paid to come to any particular conclusion. I have fielded incredulous inquiries from my management about the many delays for over a decade now, and I have urged and encouraged TMDL completion—using “best available data,” as required by regulation, —not the Mercedes version that some continue to strive for. We have heard rejections of *adequate* data and analysis in favor of theoretically “better” data, “better” analysis, or more recent data. Legally-mandated TMDL pacing obligations cannot be met this way.

Last Thursday's discussion in front of the Board also entertained the idea of waiting another year or two in favor of the next round of “newer” data. The conclusions have not changed substantively even with all the fine tuning of the data and analysis, because the additional information has not added additional substance. It is unclear why you would want to devote more resources or consider more delays. It would be impossible to attain water quality standards in a timely fashion if we duplicated, for all impaired watersheds, the time and resources spent on this relatively compact basin, since your time and resources are limited. I hope the calls for more delays are not intended to prevent timely remediation.

You understand the details of the impairments, and you know what needs to be done. Except for the scientific peer review, the delays are better classified as “analysis paralysis.” Every speck of sand in the river overturned and meditated upon—but still: not remediated.

Some of the delays seem to be in favor of considering more relaxed sediment targets or controls than what have been proposed in the draft technical TMDL documents, despite the scientific peer reviews concluding that the existing analysis is sound, and suggesting that any changes to be made should be toward *more* protective rather than less protective measures. Regulations pertaining to TMDLs also require a Margin of Safety, so that any errors in analysis fall on the side of protection and improvement of existing water quality conditions over the potential for further degradation; delaying further to consider more lenient measures seems counter to the data.

We applaud early implementation efforts Humboldt Redwood Company (HRC) and Green Diamond Resource Company (GDRC) have taken in the watershed, in cooperation with the Regional Water Board. HRC deserves extra praise for their efforts to develop innovative timber harvest methods, and for beginning to address Palco’s legacy. Clearly, the river would be in much worse shape without these actions. Unfortunately, however, continued degradation has been documented over the last decade. The efforts have been *worthy*, but insufficient.

We understand that calling for additional or more aggressive actions is disappointing, to say the least. But that doesn’t make it unnecessary. The need for remediation is clear, and the time is now. There is also precedence for this type of TMDL, essentially calling for a “negative loading capacity,” to address, in this case, ongoing buildup of sediment in the river channel.

You have adequate data and analysis, and a range of targets, strategies, and existing tools. Linkages between hillslope sediment production and in-channel sediment are clear. And, although it’s a difficult notion to consider, temporarily reducing the rate of timber harvest is an option that may expedite recovery; keeping this option on the table provides some protection against continued cumulative effects. Once the excess sediment is removed, loading capacity will increase, and the harvest rate option can be revisited.

Permits developed for the watershed were initially seen as a precedent-setting, creative approach. They are now somewhat inadequate to the task, but they can be modified to reflect the current state of knowledge. HCPs are excellent tools, but they are not designed to support beneficial uses, nor will they attain water quality standards on their own. TMDLs alone are just stepping stones to the goal, but they are *required* if other actions will not ensure timely attainment of water quality standards. They are not stone monuments, and the proposed adaptive management actions and cooperative stewardship program can incorporate new information consistent with water quality goals as it becomes available.

While finalizing and adopting the TMDL appears to be the best course of action, EPA will also encourage your staff to pursue more aggressive implementation, if for some reason the TMDL is not adopted in a timely manner. Alternatives that could result in removing a waterbody from the 303(d) list, working with other agencies and stakeholders, and other efforts to streamline attainment of water quality standards —*with TMDL adoption as a backstop*—are consistent with EPA’s new TMDL “Long Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program (also known as the “Vision” documents), which I have shared with your staff. Maintaining the status quo in this watershed, however, will not suffice as an “alternative,” particularly considering the additional sediment impairments that have been observed since we first began talking about his watershed 15 years ago. Until you have evidence to support the hope that remediation is successful, and

evidence to prove that the excess in-channel sediment load has largely been abated, you will continue to allow the watershed to degrade—making remediation that much more painful when you do get to it.

I understand that you have also heard arguments against the “single action” proposal in favor of a full Basin Plan Amendment. State law allows you to develop single action TMDLs. Other Regional Water Boards have successfully used this tool to conserve limited resources and efficiently meet their pacing commitments, and I have encouraged its use. It’s not appropriate for every watershed, but this is a near-perfect case. You don’t need the additional delays of a Basin Plan Amendment, OAL and State Board approval, which would change nothing, and waste resources better spent elsewhere. Remediation in the Upper Elk Watershed will likely result in “trickle down” improvements for the lower watershed, and will, at the very least, inform the process for future TMDL development and implementation.

In summary, I recommend that you facilitate completion, adoption, approval, and implementation of this single action TMDL. If that is untenable for some reason, I hope you will direct staff to append or revise the current permit, to address urgent needs for additional remediation. Either way, you have an opportunity to achieve genuine success. Lessons learned from this example—the good, the bad, and the ugly—can help streamline the process in the future, and for other impaired watersheds, including, of course, the lower Elk River and Freshwater Creek.

I am sure that you all are doing your best to reverse the continued sediment impacts in this watershed, and I am looking forward to receiving a new revision of this document soon.

Sincerely,



Janet Parrish
TMDL Liaison
USEPA Standards, Monitoring, and Assessment Office

DF, UNIT, FC WQ, RPF, XT, MJ, TTT, R, RU

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Lki

THE PACIFIC LUMBER COMPANY SCOTIA, CALIFORNIA 95565 • (707) 764-2222

June 22, 1990

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RESOURCE MANAGEMENT

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RESOURCE MANAGEMENT
DEPARTMENT OF FORESTRY
AND FIRE PROTECTION

California Department of
Forestry and Fire Protection
Resource Management
P.O. Box 670
Santa Rosa, Ca. 95402

Attn: Mr. Tom Hoffman
RE: THP 1-89-762H and 1-89-793H

Dear Mr. Hoffman:

Enclosed please find a copy of the Executive Summary of the Pacific Meridian report referred to in my response to the recommendations of the review team chairman. Within this, I believe, you will find a discussion of many alternatives to logging these plans as well as a discussion of the current logging objectives of The Pacific Lumber Company and alternatives to these plans.

I am not enclosing a copy of the entire document as it contains data and numbers I consider not appropriate for public distribution.

Once more, thank-you for your patience and cooperation during the lengthy review of these plans.

Respectfully submitted,

THE PACIFIC LUMBER COMPANY

Robert Stephens

Robert Stephens
Forest Manager

RS:pd
Enclosure

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RESOURCE MANAGEMENT

Bob

AN ANALYSIS OF ENVIRONMENTAL IMPACTS
ASSOCIATED WITH PACIFIC LUMBER COMPANY'S
TIMBER MANAGEMENT PROGRAM

EXECUTIVE SUMMARY

Prepared by

Pacific Meridian Resources
Emeryville, California

JUN 25 1990

RESOURCE MANAGEMENT
**AN ANALYSIS OF ENVIRONMENTAL IMPACTS
ASSOCIATED WITH
PACIFIC LUMBER COMPANY'S TIMBER MANAGEMENT PROGRAM**
EXECUTIVE SUMMARY

Introduction

At the request of the Pacific Lumber Company, Pacific Meridian Resources investigated four long-term management alternatives for the company's timberlands, and analyzed their potential environmental and social impacts. While timber harvesting is an "exempt" program under California's Environmental Quality Act, most of the elements commonly associated with an environmental impact report are covered.

Four questions regarding environmental impact need to be answered during the environmental impact analysis process. Included are:

- 1) Do the proposed actions result in environmental effects?
- 2) Are the effects significant?
- 3) If the effects are significant, can they be mitigated?
- 4) If they cannot be mitigated, does an overriding public interest in the outcome of the proposed action exist to compensate for the environmental effects?

Compliance with State Forest Practice Rules is assumed for all alternatives considered, ensuring that impacts to certain forest resources are minimized. Mitigation measures are available for many of the other foreseeable impacts reported. Because of the lack of research, questions remain about:

- 1) Specific habitat requirements of eight wildlife species of concern (northern spotted owl, marbled murrelet, red tree vole, northern goshawk, Pacific fisher, Olympic salamander, tailed frog and the Del Norte salamander); and
- 2) Potential cumulative impacts of timber harvesting on these species and watershed hydrology on P.L. timberlands.

This summary is organized as follows. An overview of Pacific Lumber's timber resources and opportunities is followed by a review of each alternative and its anticipated environmental and social impacts for the period 1989-2008.

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Timber Resources and Opportunities

RESOURCE MANAGEMENT

- Due to past harvesting practices and the productivity of much of P.L.'s lands, its ownership has a greater variety of timber types than is generally found in the north coast region. Pacific Lumber is unique among north coast industrial timberland owners in that more than half of the Company's timber is contained in trees exceeding 30 inches in diameter. This gives the company a large array of feasible management opportunities (p. 2).
- With careful planning, P.L. can minimize the environmental and social impacts of their timber management program, while continuing to operate profitably (p. 29).
- Pacific Lumber's ownership and timber resources allow for the dispersal in time and space of management activities. This enables managers to reduce the significance of potential environmental and economic impacts (p. 29).
- Approximately 8% of P.L.'s forested ownership is currently occupied by virgin timber (Table 1). Pacific Lumber's virgin redwood represents only a small fraction of the virgin redwood already preserved in parks (p. 20).
- Nearly 33% of P.L.'s forested ownership currently supports residual old growth timber (Table 1).

Four Management Alternatives for Pacific Lumber: 1989-2008

The four management alternatives span the range of feasible timber management regimes available to the Pacific Lumber Company. Alternative A continues the current regime. Alternative B maximizes timber production, with harvest going up substantially and then declining. Alternative C resumes pre-1985 harvest levels and timber management practices. Alternative D is identical to A except a 3000 acre tract of virgin old growth is preserved.

Some potential environmental impacts are common to all alternatives. Significant impacts to rare and endangered flora are unlikely under all alternatives (p. 20). Additionally, impacts to visual quality and archaeological and historical resources are possible but can be mitigated or prevented (p. 26,28). Retention of streamside vegetation to protect water quality and fisheries is employed in all alternatives. Impacts to recreational opportunities are unlikely under Alternatives A, B, and C (p. 26). The timber management activities of all alternatives have the potential to affect visual quality but can be effectively mitigated (p. 26).

Information is lacking on relationships between timber harvesting activities and various wildlife species. Thus, considerable uncertainty remains regarding habitat requirements for the eight species of concern thought to occur on P.L. lands. As a result, conclusive statements regarding specific impacts to these species are difficult to make. Comparisons of relative potential impact by alternative can be made however, and are found in the discussion of environmental impacts for each alternative. Further research is needed to better determine specific habitat requirements of these species. Pacific Lumber has initiated research to investigate the occurrence of these species on Company lands and is collecting valuable data on habitat use and structure.

Alternative A continues the current management regime, harvesting between 250-280 MMBF per year for 20 years. Substantial quantities of residual old growth remain after 20 years of this regime. Most of the virgin old growth is cut. Additional harvesting takes place in unthinned and thinned stands of timber.

Environmental Impacts

Relative to the other alternatives analyzed, Alternative A is intermediate in its propensity to result in sedimentation, adverse soil effects, elevated water temperatures, increased peak flows and induce mass movement events. Additionally, as Alternative A is intermediate in terms of the scale and frequency of land-disturbing activities, the likelihood of Alternative A producing cumulative watershed effects, while difficult to assess in absolute terms is also in the middle relative to the other alternatives. (p. 17-19)

All of the alternatives will alter existing plant communities. Virgin ecosystems will be reduced in extent under Alternative A, while earlier successional communities will be increased. Overall vegetative diversity will be reduced, although the reduction is intermediate in relation to the other alternatives analyzed. (p. 19-20)

Alternative A will affect wildlife populations, as changes in vegetative cover resulting from timber harvesting take place. Its effects are expected to be less than those resulting from Alternatives B and D, while more pronounced than those associated with Alternative C. (p. 20-21)

In absolute terms, the extent to which the actions proposed under Alternative A will jeopardize any of the eight wildlife species of concern noted above is unknown. Nevertheless,

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Pacific Lumber is in a unique position to manage habitat for all eight wildlife species of concern as a secondary goal under Alternative A. Retention of stands of large second growth, large conifer trees (at least 50' in diameter, stands with dense crown cover, snags, downed material, and vegetation in streamside zones are all feasible mitigation measures that will protect habitat. (p. 23-25)

- Alternative A is intermediate in its potential impacts to the eight wildlife species of concern. Approximately 22,000 acres of virgin and dense young growth timber will remain in 2008, with sufficiently dense crown cover to provide potential habitat for spotted owls, and other avian and terrestrial species. (p. 22-23)
- Alternative A is unlikely to have any impact on traffic. (p. 26)
- Alternative A is intermediate in its impact on air quality due to the amount of slash burning that would occur. However, impacts to air quality are not expected to be significant. (p. 28-29)
- Timber harvest will remain stable under Alternative A for 20 years, after which it would decline and stabilize. (p. 15, 27) See Figure 1 attached.
- The acreage reduction of old growth, residual, and young growth/thinned young growth stands is intermediate to the reductions found under the other alternatives. The increase in submerchantable stands is likewise intermediate. See Figures 3a-d attached.
- Pacific Lumber's employment will be stable for 20 years under Alternative A, declining and stabilizing after 2008. (p. 27) See Figure 2 attached.
- Derived employment in the regional economy will also be stable for 20 years under Alternative A after which declines would take place. (p. 27-28)
- Yield tax revenues will fluctuate during the 20 year period in response to changes in the market for redwood and Douglas-fir, but timber harvest volume remains even during the period, providing a stable basis for predicting revenues to state and local government. (p. 28)

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RESOURCE MANAGEMENT

Alternative B maximizes timber production, converting stands with low growth rates to plantations. Harvest would initially increase substantially to 394 MMBF per year and then decline to 203 MMBF per year in 1999, rebounding to 213 MMBF per year by 2004. Large older trees would be harvested and by 2008, the standing inventory would consist of trees smaller than are currently used by P.L.'s mills.

Environmental Impacts

- Due to its accelerated rate of harvest, Alternative B as well as Alternative D are most likely of the alternatives considered to cause significant levels of sedimentation, adverse soil effects, elevated water temperatures, increased peak flows and induce mass movement events. Nevertheless, these impacts are largely mitigatable at individual harvest sites. Alternatives B and D are the most likely of the alternatives analyzed to produce cumulative watershed effects, although the likelihood and magnitude of such effects is unknown. (p. 17-19)
- Virgin ecosystems would be reduced most rapidly under Alternative B (p. 20) Vegetative diversity would be reduced, with the extent of that reduction being exceeded only by Alternative D. (p. 19-20)
- Impacts to wildlife populations associated with reductions in ecotones between contrasting vegetation types and overall vegetative diversity would be most pronounced under Alternatives B and D. (p. 21)
- The extent to which implementation of Alternative B would jeopardize any of the eight wildlife species of concern is unknown. However, virgin and dense young growth timber, considered to be potential habitat for spotted owls will be eliminated by 2008. (p. 22-23)
- Alternative B would increase log truck traffic but since most of this traffic would be on private roads controlled by P.L. and public roads that are used far below capacity, the impacts are not considered to be significant. (p. 26)
- Reductions in air quality would be possible from increased slash burning. This would not be expected to result in significant impacts however, due to the seasonal nature of this activity, proximity to the coast and sparsely populated nature of the region. (p. 28)

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- Timber harvest would increase significantly under Alternative B during the first 10 years of the planning horizon. Harvest would then drop significantly and climb slowly at the end of the period. (p. 15) See Figure 1 attached.
- The acreage reduction in old growth stands is intermediate to that of other alternatives. Residual stands see the greatest reduction under Alternative B, while the acreage of young growth/thinned young growth stands remains unchanged until the last five years of the analysis period when a moderate reduction occurs. The increase in submerchantable stands is intermediate. See Figure 3a-d attached.
- Pacific Lumber's employment would increase significantly at first, dropping as harvest declined. Employment during the last 10 years of the period would be substantially below that for Alternative A, but above that for Alternative C. (p. 27) See Figure 2 attached.
- Derived employment would follow the pattern of employment at P.L.'s facilities, increasing initially and then dropping significantly. (p. 27-28)
- Yield tax revenues would increase initially as timber harvest increased, but would drop during the last 10 years of the period. (p. 28)

Alternative C is a return to the 1985 harvest level of approximately 140 MMBF per year which is actually below the long-term, sustained yield capacity of P.L.'s timberlands. Alternative C would necessitate the closure of one of P.L.'s existing sawmills.

Environmental Impacts

- Alternative C is least likely of the alternatives considered to produce significant levels of sedimentation, adverse soil effects, elevated water temperatures, increased peak flows and induce mass movement events. It would also be least likely to produce cumulative watershed effects. (p. 17-19)
- Virgin ecosystems would be reduced in extent, but more slowly than the other alternatives. Likewise, the reduction in overall vegetative diversity would be less than that for the other alternatives during the planning period. (p. 20)

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- Wildlife populations would be affected under Alternative C, but because changes in vegetative cover would be less extensive than under the other alternatives, impacts to wildlife populations would be less than expected under the other alternatives. (p. 20-21)
- The extent to which the actions proposed under Alternative C would jeopardize any of the eight wildlife species noted above is unknown. Approximately 32,000 acres of virgin and dense young growth timber, representing potential habitat for spotted owls and other avian and terrestrial species would remain at the end of the 20 year period, more acreage than left by any of the other alternatives. (p. 22-23)
- Traffic would be reduced by 70 trips per day. (p. 26)
- Alternative C would reduce the amount of slash burning on P.L. lands. (p. 28)
- Timber harvest would decline to 140 MMBF and remain stable throughout the period. Total wood production, in terms of harvest and growth would decline. (p. 26-27) See Figure 1 attached.
- Old growth, residual and young growth/thinned young growth stands would see the lowest acreage reductions of the alternatives analyzed, and the increase in submerchantable stands would be correspondingly lowest. See Figures 3a-d attached.
- Employment at P.L.'s facilities would decline significantly under Alternative C but would remain stable at levels far below the other alternatives throughout the analysis period. (p. 27) See Figure 2 attached.
- Derived employment in the regional economy would also decline substantially as a result of the reduction in P.L.'s labor force. (p. 27)
- Yield tax revenues would decline, reducing payments to both state and local government. (p. 28)

Alternative D is identical to Alternative A except 3000 acres of old growth are reserved from harvest in the Salmon Creek and Elk River watersheds. A larger area is harvested annually than under Alternative A.

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Environmental Impacts

RESOURCE MANAGEMENT

- Alternatives D and B would have the highest likelihood of the alternatives considered to produce significant levels of sedimentation, adverse soil effects, elevated water temperatures increased peak flows and induce mass movement events. Alternative D would be the most likely to produce cumulative watershed effects because timber harvest would be concentrated on lands available for management. In absolute terms, the likelihood and extent of occurrence of cumulative watershed effects is unknown. (p. 17-19)
- By reserving 3000 acres of virgin forest, Alternative D would have the least significant impact on virgin ecosystems. Other P:L. lands would, however, experience a substantial reduction in vegetative diversity. Virtually all old growth outside of the 3000 acre block would be harvested, most of it in the first 15 years of the period. (p. 14, 19-20)
- Wildlife populations would be affected under Alternative D. Less variety of habitat types for wildlife use would be available than Alternatives A and C. (p. 21) The extent of those impacts would be similar to those expected under Alternative B. (p. 20-21)
- The extent to which the actions proposed under Alternative D would jeopardize any of the eight wildlife species of concern is unknown. Nevertheless, 3000 acres of old growth would be reserved under this alternative, providing potential habitat for spotted owls and other wildlife. (p. 22-23)
- Recreational opportunities could increase under Alternative D, depending on the disposition of the 3000 acre old growth reservation. (p. 26)
- Traffic would not be significantly affected. (p. 26)
- Slash burning would increase under Alternative D, but due to its seasonal nature, significant impacts to air quality would not be expected. (p. 28)
- Timber harvest would be identical to that of Alternative A during the first 10 years, but would decline thereafter. (p. 15) See Figure 1 attached.
- After the reservation of the 3000 acre old growth tract, Alternative D would result in the most rapid reduction in old growth acreage, with the extent of that reduction being passed by Alternative B in the last five years of the analysis period. The reduction in residual stands would be exceeded only by

Alternative B. Young growth/thinned young growth stands see their greatest reduction under Alternative D, and the acreage of submerchantable stands correspondingly increases most under this alternative. See Figures 3a-d attached.

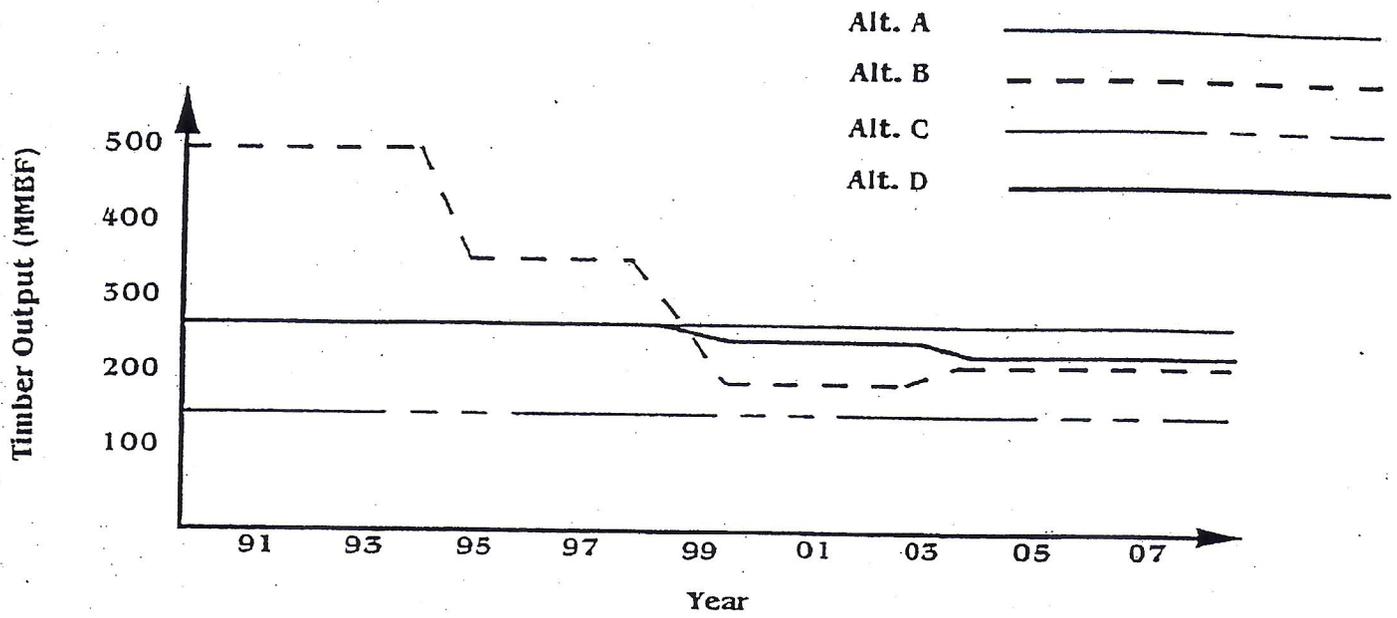
- Pacific Lumber's employment would be stable for 10 years and would then decline as timber harvest volume went down. (p. 27) See Figure 2 attached.
- Derived employment would follow the same pattern of initial stability and then decline parallel to reductions in P.L.'s employment. (p. 27)
- Yield tax revenues to state and local government would be the same as under Alternative A for the first 10 years and would then go down as harvest volume declined. (p. 28)

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Figure 1: Timber Output by Alternative, 1989-2008

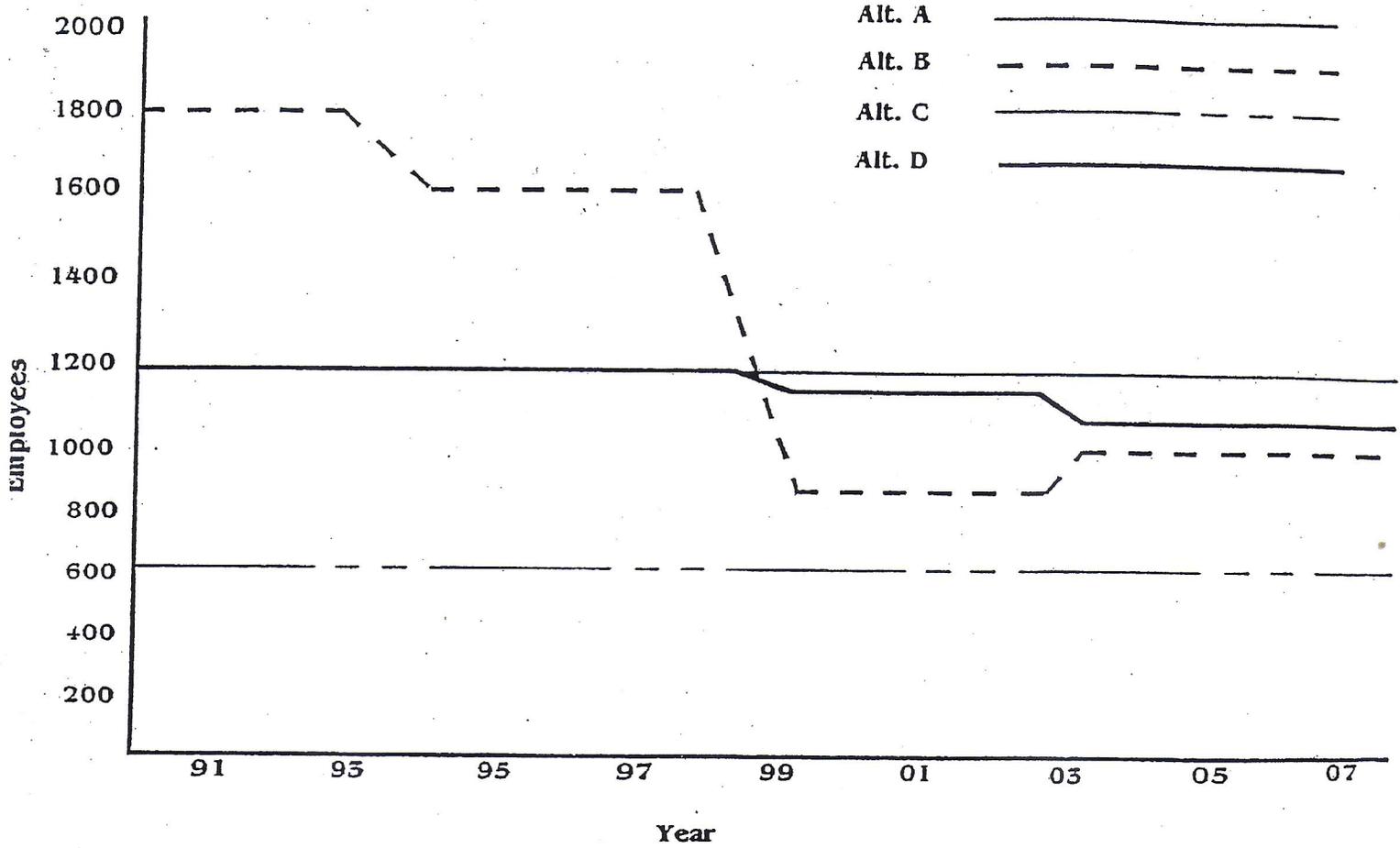


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Figure 2: Employment by Alternatives, 1989-2008

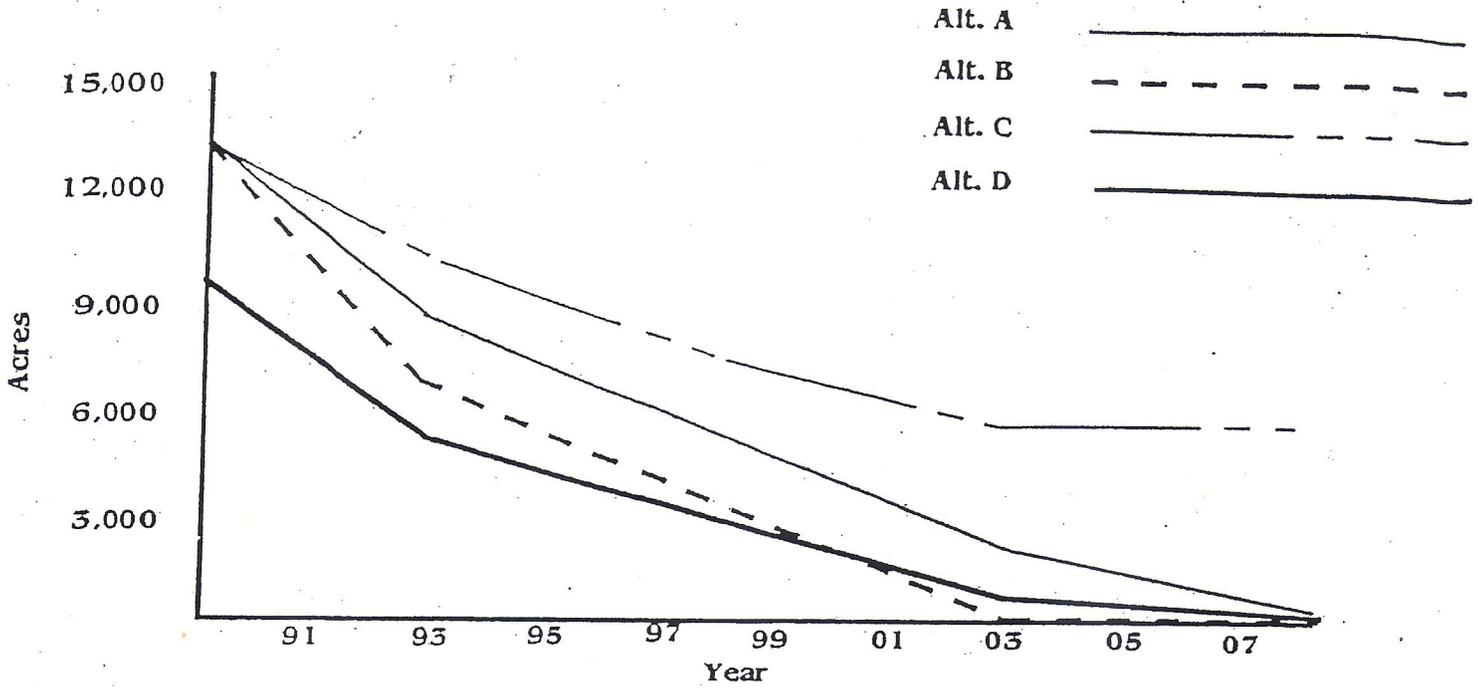


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Figure 3a: Old Growth Remaining After Harvest
1989-2008



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Figure 3b: Residual Stands Remaining After Harvest
1989-2008

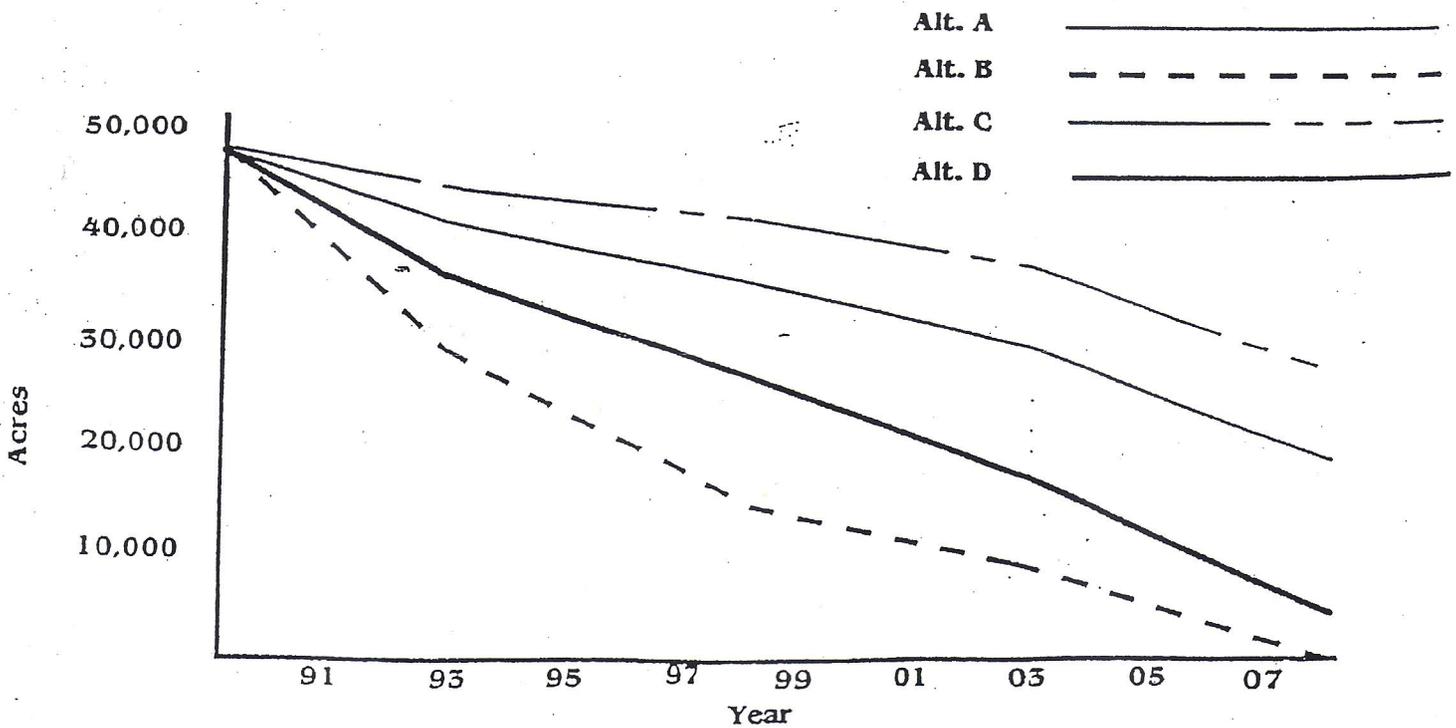
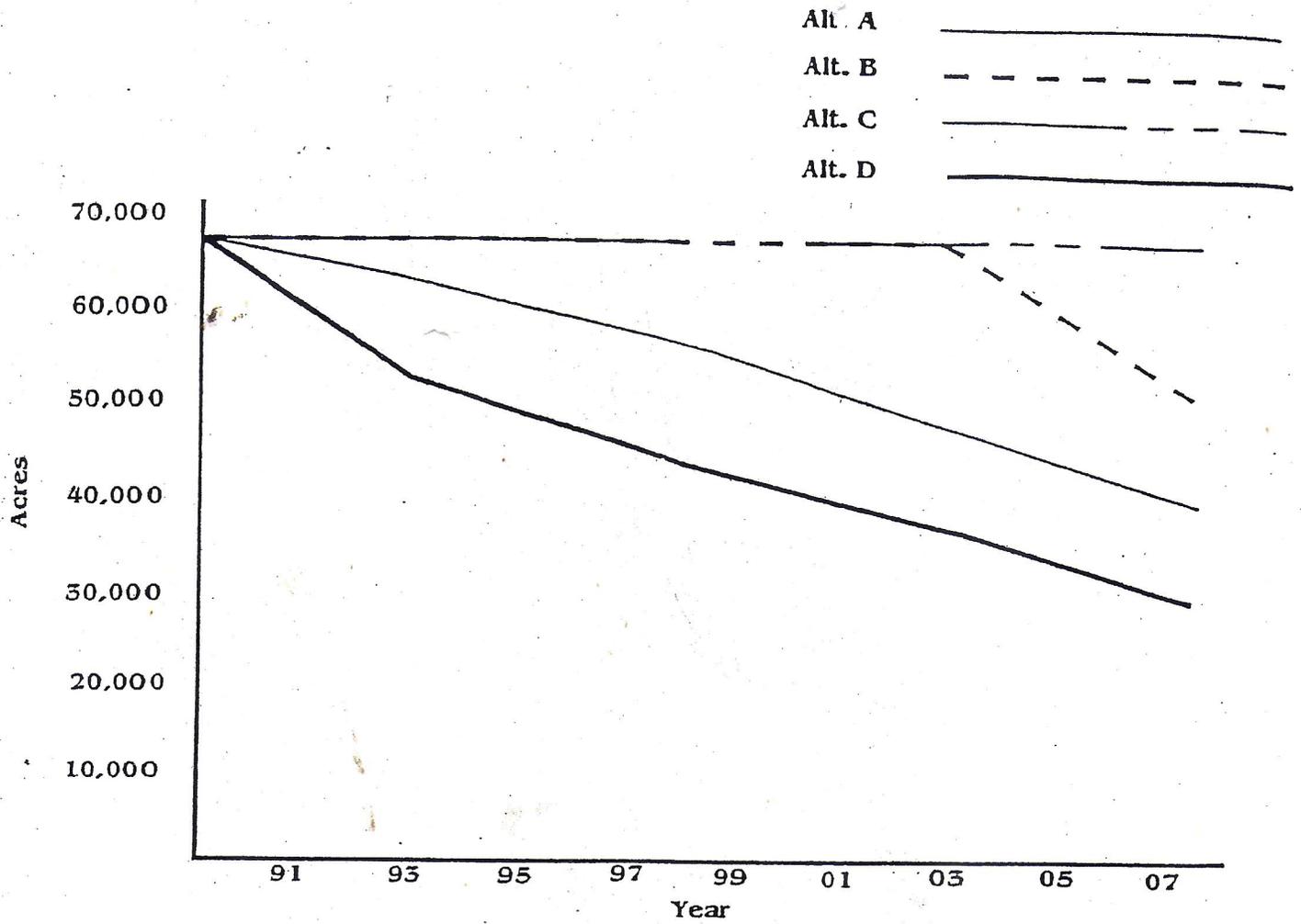


Figure 3c: Young Growth Stands Remaining After Harvest
1989-2008

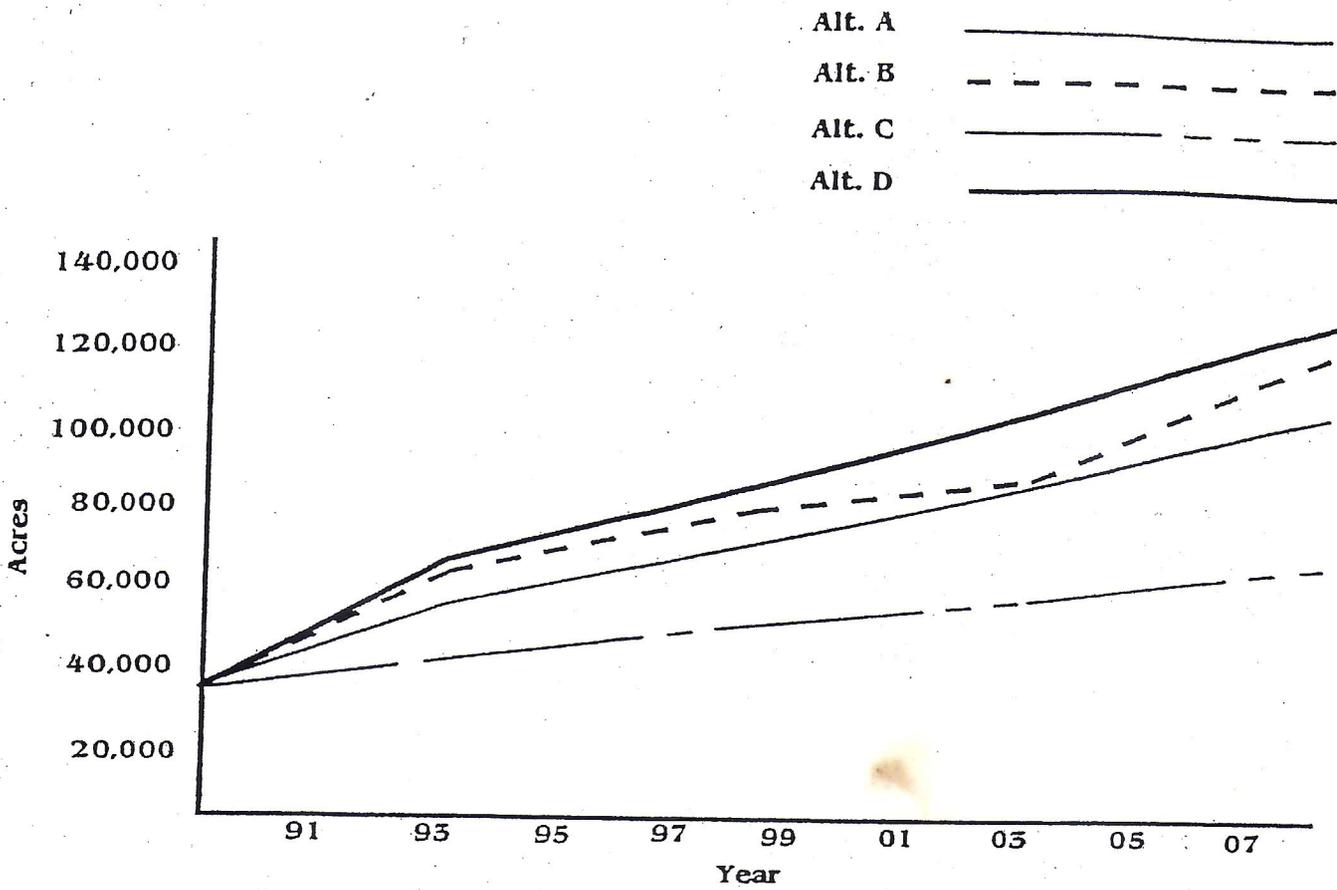


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Figure 3d: Submerchantable Stands Remaining After Harvest
1989-2008

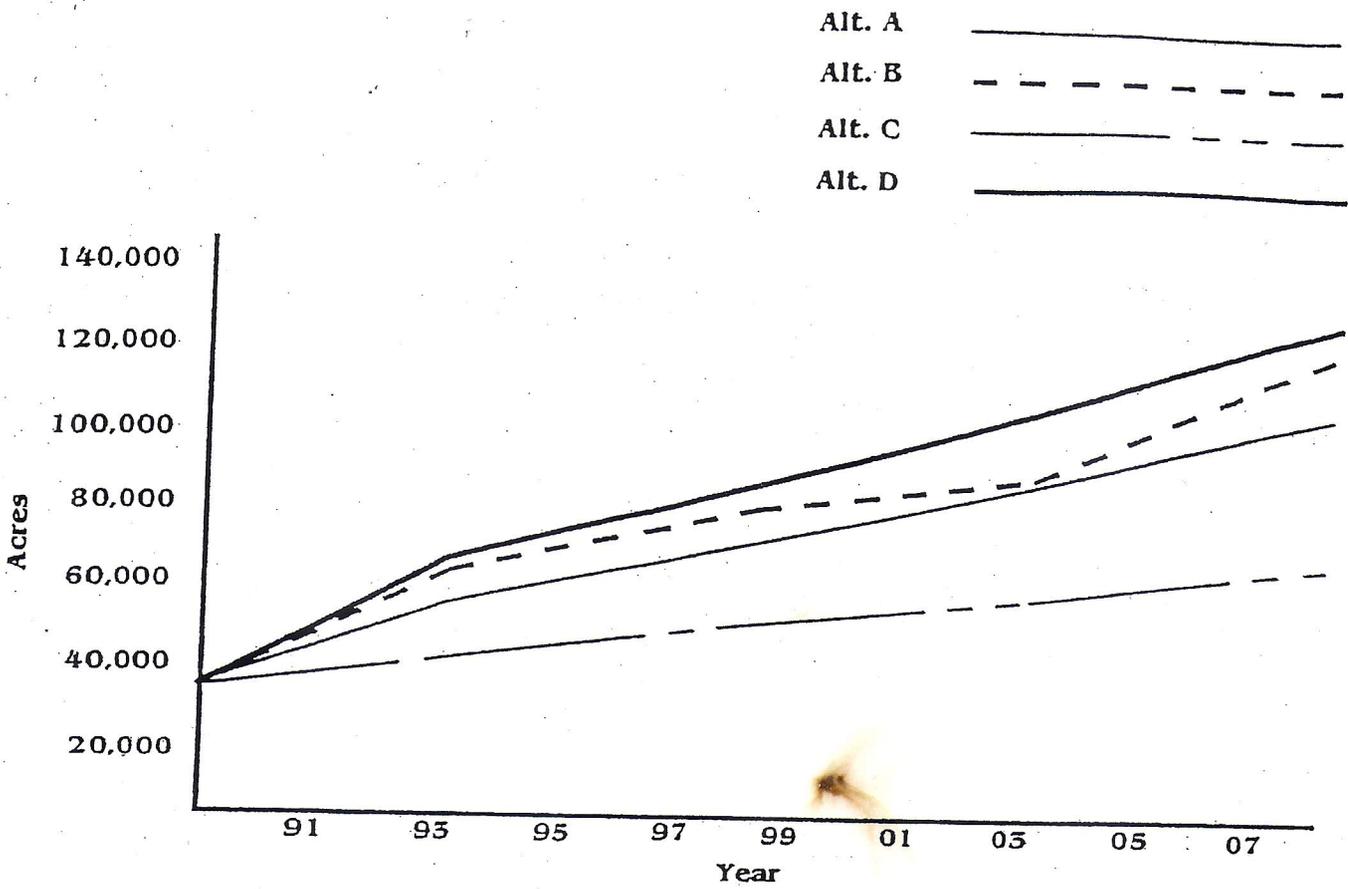


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Figure 3d: Submerchantable Stands Remaining After Harvest
1989-2008



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Exhibit 3

KNOWLEDGE

87-359

ANALYSIS OF THE EFFECTS OF INCREASED HARVESTS ON
PACIFIC LUMBER'S FOREST AND THE NORTH COAST ECONOMY

EXECUTIVE SUMMARY

At the request of Pacific Lumber, Hammon, Jensen, Wallen and Associates have investigated the effects of Pacific Lumber's planned increase in harvests on PL's forests and the economy of Humboldt County. Hammon, Jensen, Wallen and Associates are in the final stages of an extensive inventory of Pacific Lumber's timberlands and have comprehensive knowledge of Pacific Lumber's inventory and acreage.

1. Pacific Lumber will not run out of timber if they increase harvests from 1985 levels to planned harvest levels for twenty years.

2. At the end of the twenty year period Pacific Lumber forest will support a substantial timber inventory. The inventory will contain old growth trees. The majority of the forest will, however, be comprised of second growth trees.

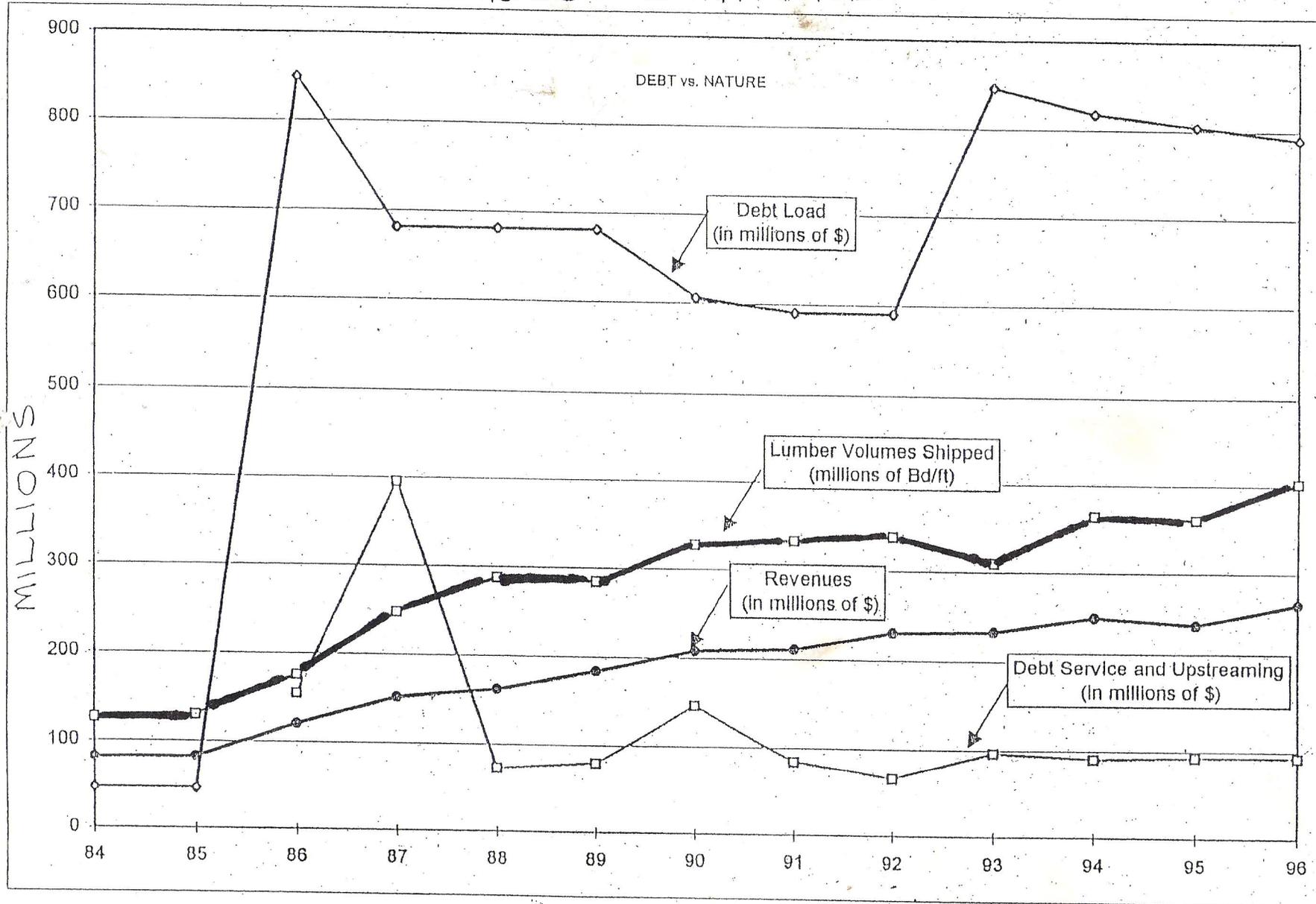
3. At the end of the twenty year period, forest volumes and growth will enable Pacific Lumber to reduce harvests to 1985 levels and continue at that harvest level in perpetuity. Thus, Pacific Lumber harvests need never drop below 1985 levels and continuous yield at 1985 levels can be maintained in perpetuity.

4. By increasing harvests without jeopardizing long run continuous flow, Pacific Lumber can play an important role in alleviating the North Coast's employment problems.

5. Pacific Lumber's forests cannot sustain a doubling of 1985 harvests indefinitely. Continuance of double 1985 harvest levels for many years beyond year 20 will result in liquidation of the forest and the creation of an age class gap in 30 to 40 years.

6. Nondeclining evenflow harvest levels are estimated to be 170 MMBF per year or 24 percent above 1985 harvest levels. Long run sustained yield levels are estimated to be 216 MMBF per year or 58 percent above 1985 levels.

MAXAM / PACIFIC LUMBER CO.
DEBT VS. NATURE



BANKRUPTCY FOR PROFIT

This graph was presented to Humboldt County Board of Supervisors 7/15/97 by Dan Ihara, Ph.D.