

Letter - G8

Page 21

-19-

Weathering is generally visually fresh-to-stained state. Natural separations occur along fracture planes or less commonly along interbeds. Most of the formations of the Wildcat Group strike northwest and dip to the north, however, local differences can occur along folds or shear zones.

Residual soil derived from this rock unit should have shear strength in the sandy textural class as summarized in Appendix B. Failures in the sandy textural class were found to occur on prefailure natural slopes ranging from 30 to 43 deg. (60 to 95 percent) with a 36 deg. (75 percent) average slope. The typical depth of failures for the sandy textural class (failures confined to the rooted zone) was similar to the RUF1, RUF2, and RUW1 rooted zone failures ranging from about 2 to 12 ft with a 6 ft. average depth.

Geotechnical - Shear Strength Parameters from Landslide and Road Cut-Slope Surveys

Appendix B summarizes the shear strength values derived from back analysis of the failure conditions for the various landslides. The unit weight, Gamma, in a moist and saturated state, and the effective angle of internal friction, Phi, of the soil were estimated first in this back analysis. This estimate was based on the Unified Soil Classification and relative density of the in-situ soils. The source references for this correlation are documented in USDA (1994, Section 4). An expanded version of Fig. 4B3 from that publication is included in Appendix F (Fig. F3) and is the core analysis programmed into the spreadsheet for field penetrometer data reduction. A limited amount of direct shear testing was performed in 1999 on soils from the Freshwater Watershed Study which have shear strength in the silt/clay textural class, together with penetrometer data from that study to validate the expansion of this core analysis to include CL clayey soils of high sand content and low plasticity. Appendix E summarizes the soil shear strength Group Numbers, Sn, which correspond to the textural classes defined in the landslide survey in Appendix B. The acid test on how applicable Gamma and Phi estimated by this approach were to the solution of practical slope stability problems was made in the analysis of the various landslides. If applicable, Gamma and Phi estimated by this method had to model the conditions at failure (factor-of-safety-against-failure, F.O.S. \leq 1.00) using a realistic relationship between the groundwater level, dw, (which was not measured but was definitely a contributing factor) and total cohesion, C, also at failure. Using the same method to estimate Gamma and Phi for the study of stability of existing cut slopes yielded values of total cohesion which were low (C averaging between 50 and 100 psf). The cut slopes selected were marginally stable and showed no evidence of failure as a result of high groundwater.

Groundwater was obviously a factor in all of the landslides studied as was evident by the mode of failure, but unfortunately, no critical groundwater information at the time of failure was available and realistic estimations of the aquifer conditions were necessary. To account for groundwater, the rationale used in the back-calculation was to use a median values for Gamma and Phi from the textural class as the first assumption and adjust these values (as well as the soil

Letter - G8

Page 22

-20-

shear strength Group Number, S_n , at a loose-to-medium-dense relative density) to establish a failure condition where:

- * the total cohesion was less than 100 psf (usually between 50 and 100 psf based on the cut slope survey) and
- * the depth of groundwater, d_w , (height of the phreatic surface above the confining surface) about in the middle of the soil column (with the soil depth in the mantle = d , d_w/d ratio is about 0.50).

As summarized in Appendix B for each textural class, very little adjustment of Gamma and Phi was necessary in a given textural class to achieve this relationship. At some point in the future, we may have better tools to measure and estimate groundwater. For now, using an average d_w/d ratio of about 0.50 leaves latitude to adjust in either direction and refine the estimates for Gamma and Phi accordingly.

As summarized in Appendix B, the computer program DLISA (Level I stability analysis, see USDA, 1994, Section 5) was used to analyze the translational section of every landslide. This was most useful to establish the relationship between C and d_w . If minor adjustments in Gamma and Phi were warranted for a given landslide, it usually could be detected rapidly with this analysis. The same adjustment to be made using the more-detail XSTABL (Level III stability analysis, see USDA, 1994, Section 5) computer program requires considerable more effort. XSTABL was used primarily on landslides with complex geometry such as road cut and fill slopes. There was general agreement between DLISA and XSTABL results for long translational failure (which more closely resemble an "infinite slope" without significant end conditions). Where there were variations in the two results, the results of XSTABL were considered to be the most accurate and were used as summarized in Appendix B.

The existing road cut slope survey results helped define values of total cohesion, C . A field method to allow one person to take these measurements and a data reduction spreadsheet were developed as a result of this study. These are described and include in Appendix F. This spreadsheet uses the critical height stability analysis developed by Chen and Giger (Level II stability analysis, see USDA, 1994, Section 5). Cut slopes that were selected for this study were of extreme height and/or slope (i.e., near the "critical" condition). This was important because the vertical height in this simple stability number solution is the "critical height", H . H can be visualized as the maximum vertical height that a road cut slope, Beta, can be expected to stand under the conditions analyzed. In addition to H and Beta, included as variables in the analysis are Gamma, Phi, and the ground slope above the cut, Alpha. The solution is for a stability number, N , from which total cohesion, C , is calculated by the spreadsheet. The results of this cut slope study are summarized at the end of Appendix B. The average C for the 195 cut slopes surveyed was about 100 psf. Unfortunately, there are no current field or laboratory methods to measure cohesion values this small and it is necessary to rely solely on back analysis to determine workable values.

Letter - G8

Page 23

-21-

Also bear in mind these factors about cohesive strength in selecting values for stability analysis:

Cohesion acts on the entire length of the failure surface. It may be appropriate to use different values for small rotational failure surfaces than for a long translational failure surface and for different soil units depending on the length of the failure surface in the various materials that the failure is expected to pass through.

Total cohesion includes root cohesion as well as all soil cohesion. This also depends on the relationship between the length of the failure surface in the root zone and the total length of the failure surface and should be considered in selecting the cohesion value for a given analysis.

Total Cohesion includes root cohesion in the third dimension. Most stability analysis procedure are two-dimensional (plane strain) taking into account only the conditions that are illustrated in a two-dimensional cross section. For translational slides such as the ones analyzed in the landslide study which have limited lateral extent (narrow in relationship to their length), some consideration should be given to the root strength which is mobilized on the entire perimeter of the slide and not just the rooted depth at the head scarp and toe. See also the root strength discussion in the timber harvest paragraphs on the significance of the soil stress conditions that probably exist at various locations around the perimeter and the mode of failure of the root.

Soil Cohesion (and in some degree root cohesion) may be affected by saturation. The capillary tension that tends to hold soil particles together (apparent cohesion) and the dry strength of fine-grained soils are both directly affected by seasonal groundwater fluctuations.

True Soil Cohesion can be reduced and/or destroyed through repeated shearing. Fine-grained soils which have true soil cohesive strength can loose all or part of that strength through repeated failures as the shear strength approaches a residual state (i.e., the residual value for true soil cohesion is probably zero).

Geotechnical - Field Tests & Reduction of Penetrometer Data

Williamson Drive Probe

In the watershed studies being conducted at the same time as these landslide and cut slope surveys were being made, it was necessary to determine the depth of the soil mantle, d , as one of the physical site characteristics. The overall depths as determined in the watershed studies agreed well with the mantle depths from the landslide survey. The tool used to determine these depths in the watershed study was the Williamson Drive Probe (WDP). This method was devised by Doug Williamson, an USFS engineering geologist, and is used by the U.S. Forest Service throughout the Northwest. This method is standardized and documented in USDA, 1994, Section 4. It is most useful at remote locations where the equipment can be hand carried to the site. However, because of its

Letter - G8

Page 24

-22-

light weight the amount of energy available limits its applicability to soils of loose-to-medium dense relative density. This did not prove to be a problem on Pacific Lumber property where soils in the mantle usually were within this relative-density category.

Unfortunately, the Forest Service has made relatively few studies which link the penetration resistance of the WDP to soil shear strength. The Standard Penetration Test (SPT) penetration resistance has been widely used throughout the industry and much reference material is available which does correlate the SPT blows per foot, N, to corresponding values for Gamma and Phi for various soil types which derive most of their strength from friction (generally referred to as cohesionless which is a misnomer). In order to use any of these empirical correlations to estimate Gamma and Phi from N, it is necessary to correct N to a standard overburden pressure of one ton per square foot and to determine its relative density. Dr. USDA, 1994, Figure 4B2 is used in Appendix F (Figure F2) to correct N and estimate Dr. Gamma and Phi can then be estimated from Dr and the soil texture. Two of the better of these references for this purpose are the US Navy, 1986, NAVFAC DM 7.01 and an ASTM publication (ASTM, 1972). These and other reference material were used in construction of the USDA, 1994 correlation data in Figure 4B3. Based on data from these watershed, landslide, and cut slope surveys, this chart was expanded to include finer-grained soils of lower frictional strength (Phi < 25 deg.) for which relative density is not likely to be applicable. This is the core analysis for the Williamson Drive Probe Data Reduction Spreadsheet, FIELDDP__WB3 (Appendix F, Figures F2 & F3).

In order to use the WDP as a basic tool for estimating Gamma and Phi, it was first necessary to develop an empirical correlation to the SPT. This was done at several sites in the Freshwater and Lower El watersheds by conducting both test at the same location and making a regression analysis of the results to correlate the blows per foot by both methods. The SPT (ASTM D1586) tests were made using a portable tripod and small motorized cathead. The results are shown in Figure F1 in Appendix F. Similar correlation tests have also been made by the Willamette N.F., Eugene, OR, geotechnical group using large truck-mounted cathead soil sampling equipment. A regression analysis of the correlative results of their tests has also been made but is not included in the data for Figure F1. The Willamette data yielded similar results, but with apparently more energy in the SPT probably due to the more efficient truck-mounted equipment. The regression equation developed from the Pacific Lumber shown in Figure F1 is the one programmed in the spreadsheet. Appendix F details the spreadsheet and documents the algorithms used in programming the cells.

Other Field Tests

In an effort to find a better tool for estimating the shear strength of fine-grained soils Hart-Crowder tested two other field-test instruments, the Torvane and a light field penetrometer. At 35 sites in the Freshwater Watershed, Torvane, penetrometer, and WDP tests were run. At 10 of these sites, SPT tests were also conducted. An attempt was made to correlate the results of the Torvane and penetrometer tests to the WDP; SPT; to particle size (percent sand, fines, silt, clay); and to the Plasticity Index. Data plots were

Letter - G8

Page 25

-23-

widely scattered and showed no obvious correlation on which to base a regression analysis. It appears unadvisable to use these light field instruments alone to estimate the shear strength of these fine-grained soils. The problem may be caused by the varying content of fine sand which would affect the Torvane and field penetrometer more than the WDP and SPT tests.

Geotechnical - Field Method for Road Cut-Slope Measurement

A total of 195 existing cut slopes were measured as part of this study to determine their height and slope. This data was most useful in estimating the amount of total cohesion that would have to be mobilized in the soil to allow the cut slope to be stable at a slope steeper than the angle of internal friction. To avoid the necessity of climbing to the top of these very steep slopes, a technique was developed to enable these measurements to be made from the road surface. This method is an adaptation of the technique used by foresters to determine the height of trees. One person can rapidly determine the height and slope of a cut slope using this technique. The data-reduction spreadsheet (CSCOH.WB3) in Appendix F uses the field measurements made from the road surface in conjunction with the soil unit weight and angle of internal friction to arrive at an estimated value for the mobilized total cohesion. Refer to Figure 6, the field technique for one individual requires the use of an H.I. mark (eye height) on a shovel handle and measurement of four angles and the width of the road between two measurement stations on a cross-sectional profile. One of these measurement stations is at the toe of the cut (where the H.I. indicator is located) and the other is usually at the outside road shoulder. The angle to a fixed focal point at the top of the cut slope is measured from each of these measurement stations and is the basis for the determination of the cut height and slope.

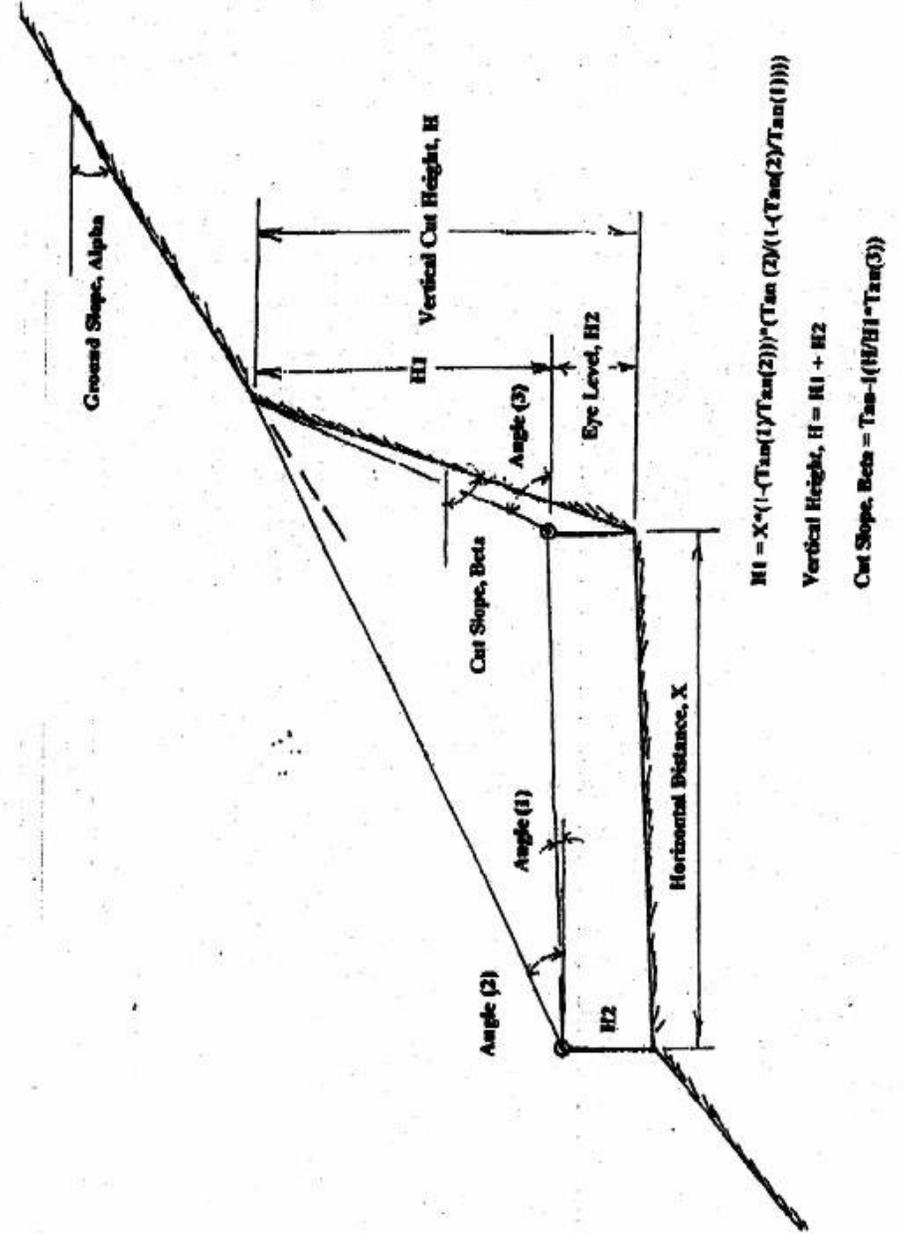
Geotechnical - Suggestions for Estimating S_u & Soil Shear Strength Parametric Values.

In order to estimate the soil unit weight and angle of internal friction using techniques described in this report, it is necessary to estimate the Soil Group Number, S_u . This is used in reduction of the WDP or SPT penetrometer data to correlate the relative density of the soil to the appropriate range of shear strength (Figure F3, Appendix F). It was determined in this study that, except for the M-Clay textural class (which are affected by the existence of low-shear-strength talc and/or serpentine) most of the soils on Pacific Lumber property derive their shear strength largely from frictional strength and not cohesive strength. This is true even for soils in the Silt/Clay textural class which would ordinarily be thought of as "cohesive" soils. The typical Unified Class for these soils is a CL, clay of low plasticity. The amount of frictional strength developed by these CL soils is relatively high (usually in the low 30's) which is probably due to the high percentage of fine sand in the soil. Figure 7 shows the average gradations for the five textural classes according to grain-size distribution (D60, D30, & D10 sizes) and by the percentage of sand, gravel, and fines (% passing No. 4 and 200 sieves). Note the difference in the relative relationship between the textural classes caused by the amount of the sand fraction. These high Phi values for CL soils (and other soils of similar sand content) required that these soils be treated as "cohesionless" and subject to relative density, D_r , data-reduction analysis. Figure F3 was modified accordingly for this project for Phi >25 deg.

Letter - G8

Page 26

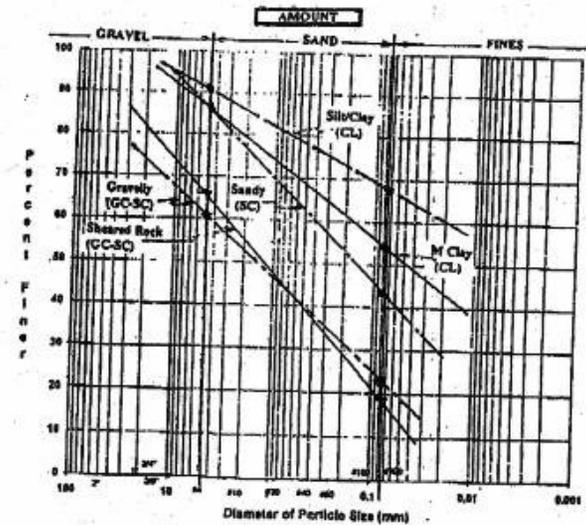
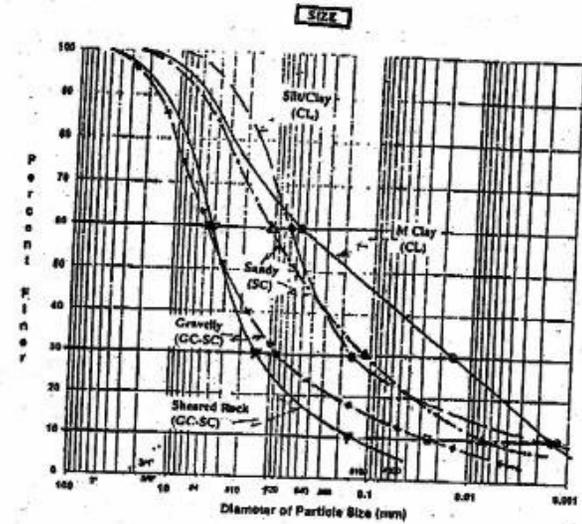
Figure 6. Definition of terms used in the field measurements and data-reduction equations to determine the vertical height and slope of simple road cuts.



Letter - G8

Page 27

Figure 7. Average particle-size distributions for the five soil/rock textural classes in the landslide survey according to size (D60, D30, and D10) and percent gravel, sand, and fines (% passing the No. 4 and 200 sieves).



Letter - G8

Page 28

The results of the laboratory analysis of the soil samples recovered from the landslides in this survey are summarized in Appendix D. The Sn as estimated at the time of sampling are also shown in Appendix D. These estimates were based largely on a field identification of the soil textural class, the Unified Class, and the parent rock unit. A regression analysis was made to correlate Sn to such index properties as % Fines and D30 for prediction purposes. The R² values from these regressions were low (in the 0.60 range) and were best for either a logarithmic or power function. The correlation based on group averages is strong, but there is significant "scatter" in the data. Therefore, it is unadvisable to depend too strongly on these laboratory index properties alone for predicting Sn. Used in conjunction with the Unified Class (as used in Figure F3, Appendix F), the textural class (Appendix E), and the parent rock unit, a good starting estimate can be made. Even then, these should only be a starting point for the estimation process. The acid test can only be in the field observations and application to known field conditions which duplicate those at the site in question as closely as possible.

General Conclusions - From a Geotechnical Perspective

Some general conclusions to be drawn from the results of these surveys are in order. These are made from a geotechnical perspective with the goal of providing geotechnical input into the management of landslide-prone lands. They are not listed in any particular order of importance.

- * Landslides are numerous on Pacific Lumber property and whether the lands are managed or not, the risk of landsliding will be there regardless. With that in mind, land-management decisions should not be made on risk alone, but on an evaluation of risk vs consequences as a result of land-management activities. Two primary consequences are obvious (there are undoubtedly more): future loss in productivity and irreversible watershed damage. If the land is not managed in an effort to landslide risk only (without regard to the degree of the consequences of failure), future productivity is already lost which should leave irreversible watershed damage as the primary concern.
- * Landslides that do occur as a result of land-management activities are most likely to be caused by road construction and not timber harvest. The primary culprit is the sidecast fill slope when it comes to watershed damage. With proper prescriptions for road construction, many of these road-related landslides can be prevented.
- * All management-related landslides can be quantified and analyzed using soil-mechanics-based stability analysis methods. These stability analyses provide a more-rational basis for the decision-making process in the prevention or mitigation of landslides.
- * Geotechnical field techniques tested in these surveys and in the watershed analysis studies for estimating and determining parametric values have been proven to be efficient, reliable, and cost-effective for use on Pacific Lumber property.
- * A sound geotechnical database has been established by these surveys and the watershed analysis studies which should be invaluable to future geotechnical investigators in analyzing landsliding potential to aid future land-management decisions at all levels.

Letter - G8

Page 29

-27-

List of References

- American Society of Testing and Materials. 1972. *Evaluation of relative density and its role in geotechnical projects involving Cohesionless Soils*. ASTM Special Technical Report 523. ASTM, Philadelphia, PA. 510 p.
- McLaughlin, et al. 2000. *Geology of the Cape Mendocino, Eureka, Garberville, and southwestern portion of the Hayfork 30-by-60 minute quadrangles and adjacent offshore areas, Northern California*. U.S. Geological Survey Miscellaneous Field Study Map MF-2336. 6 sheets, scale 1:137,000.
- Sharma, S. 1992. *A technical manual for slope analysis with XSTABL*. Final Report for U.S. Department of Agriculture, Forest Service Contract INT-89416-RJV, Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station, 149p.
- XSTABL ver 4.102. 1992. Moscow, ID: Interactive Software Designs, 953 N. Cleveland St.
- U.S. Department of Agriculture. 1994. *Slope stability reference guide for National Forests in the United States, Engineering Manual EM-7170-13*. Washington D.C., U.S. Department of Agriculture, Vol. II, Sect. 4 & 5.
- U.S. Department of the Navy. 1986. *Soil mechanics*. Design Manual DM 7.01. Alexandria, VA: Naval Facilities Engineering Command, 348p.

Letter - G9. Signatory -Earthjustice
Environmental Law Clinic at Stanford.

NOV. 19. 2002 5:46PM STANFORD OWEN HOUSE

NO. 112 P. 1

RECEIVED

Nat'l Marine Fisheries SVC
Arcata, CA

To: Ms. Amedee Brickey, FWS Fax: (707) 822-8241 #111

Mr. James Bond, NMFS

From: Brian Schmidt Date: November 19, 2002

Re: Pages: 37

CC:

Urgent For Review Please Comment Please Reply Please Recycle



Comments submitted regarding the Simpson HCP/CCAA.

The information contained herein is intended only for the use of the individual addressee or organization named above and may be confidential and attorney-client privileged. If the reader of this message is not the intended recipient, you are hereby notified that any distribution, dissemination, disclosure, copying or other unauthorized use of this communication is strictly prohibited and may be unlawful. If you have received this received this communication in error, please notify me at (650) 723-8939. Thank you.

Letter - G9

Page 2

Response to Comment G9-1

As demonstrated in the environmental analysis conducted in accordance with NEPA, implementation of the Operating Conservation Program would not result in significant impacts that cannot be mitigated. See response to Comment G6-42.

Regarding Footnote Number 1, comment noted.

Response to Comment G9-2

Preparation of HCPs for different actions and different covered activities must take into consideration the unique aspects and conditions of the species for which an applicant is seeking coverage, the specific activities for which the applicant is seeking coverage, and the unique physical features of the landscape to be affected by issuance of ITPs. In other words, each HCP must be developed in a way that addresses the specific impacts and identifies measures that would, to the maximum extent practicable, minimize and mitigate the impacts of incidental take given the particular biology, habitat and other characteristics of the HCP planning area. This approach is affirmed by the Services' guidance on preparing HCPs - the HCP Handbook (Habitat Conservation Planning and Incidental Take Permit Processing Handbook. November 4, 1996. U.S. Department of the Interior, Fish and Wildlife Service; U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service). Chapter 3 of the HCP Handbook states:

"Mitigation programs under HCPs and Section 10 permits are as varied as the projects they address. Consequently, this handbook does not establish specific 'rules' for developing mitigation

NOV. 19. 2002 5:46PM

STANFORD OWEN HOUSE

NO. 112 P. 2



EARTHJUSTICE

BOZEMAN, MONTANA DENVER, COLORADO HONOLULU, HAWAII
JUNEAU, ALASKA NEW ORLEANS, LOUISIANA SAN FRANCISCO, CALIFORNIA
SEATTLE, WASHINGTON TALLAHASSEE, FLORIDA WASHINGTON, D.C.
ENVIRONMENTAL LAW CLINIC AT UNIVERSITY OF DENVER
ENVIRONMENTAL LAW CLINIC AT STANFORD

Brian A. Schmidt
Direct Line: (650) 723-8999
E-mail: bagschmidt@earthjustice.org

DATE, 2002

Via Facsimile and U.S. Mail

Amedee Brickey
1655 Heindon Road
Arcata, CA 95521
fax: (707) 822-8411

James Bond
1655 Heindon Road
Arcata, CA 95521
fax: (707) 822-8411

Re: Comments Regarding Simpson Resource Company Aquatic Habitat Conservation Plan/Candidate Conservation Agreement with Assurances and Draft Environmental Impact Statement

Dear Ms. Brickey and Mr. Bond:

On behalf of the Environmental Protection Information Center ("EPIC"), we submit these comments regarding the Simpson Resource Company ("Simpson") Aquatic Habitat Conservation Plan/Candidate Conservation Agreement with Assurances ("HCP/CCAA"). The Fish and Wildlife Service and National Marine Fisheries Service (collectively, "Agencies") may not approve the HCP/CCAA as currently designed, because it and its associated Draft Environmental Impact Statement ("DEIS") violate both the Endangered Species Act ("ESA") and the National Environmental Policy Act ("NEPA").¹

G9-1

G9-2

I. Fundamental Flaws Affecting Both ESA and NEPA Compliance.

Fundamental flaws in the HCP/CCAA result in multiple legal violations. The most striking omission consists of deliberately ignoring the Pacific Lumber HCP ("PL HCP") and its associated documentation.² Pacific Lumber owns land in the same area as Simpson, with the same kinds of habitat and the same rare species. Pacific Lumber received an HCP that covers the same activities for which Simpson seeks coverage. Yet the Simpson HCP/CCAA wholly fails to make comparisons to the PL HCP in order to understand the Simpson HCP/CCAA's

¹ Unless specified otherwise, any reference to the Simpson HCP/CCAA in this letter refers to all the documents furnished by the Agencies: the draft HCP/CCAA, the DEIS, and the draft Implementation Agreement.

² EPIC incorporates by reference the PL HCP and associated documentation. The same FWS and NMFS offices considering the Simpson HCP/CCAA were the ones that approved and currently manage the PL HCP, and they should have all the PL HCP documents referenced herein. If the offices lack any of these documents, EPIC will provide them upon request.

EARTHJUSTICE ENVIRONMENTAL LAW CLINIC AT STANFORD
OWEN HOUSE 553 SALYATIERRA WALK, STANFORD, CA 94305-8628
T: 650 725-8571 F: 650 723-8909 W: www.earthjustice.org

programs that would limit the creative potential inherent in any good HCP effort. On the other hand, the standards used in developing HCPs must be adequate and consistent regardless of which Service office happens to work with a permit applicant. Mitigation programs should be based on sound biological rationale; they should also be practicable and commensurate with the impacts they address.”

The ESA requires the Services to compare the Plan and EIS against standards provided in the ESA and NEPA - not against measures provided in other HCPs.

The EIS does, however, address the Pacific Lumber Company's HCP in the context of cumulative impacts analysis (see EIS Section 4.1.2 and Master Response 3), which is appropriate given that the Pacific Lumber Company's HCP meets the NEPA criteria of “other past, present, and reasonably foreseeable future actions” (40 CFR 1508.7). Also see Master Response 6.2 regarding consideration of the Pacific Lumber Company HCP as an alternative and Master Response 10, generally regarding alternatives.

Regarding Footnote Number 2, comment noted.

Letter - G9

Page 3

Response to Comment G9-3

As drafted, under the No Action Alternative, unauthorized take of the covered species would be prohibited. The EIS states that under the No Action Alternative, NMFS and USFWS would not issue Green Diamond an ITP or an ESP (EIS Section 2.1). In addition, the EIS states that this would result in Green Diamond remaining subject to the ESA's prohibitions on unauthorized take of listed species. See also AHCP/CCAA Section 8.1 and Master Response 2.

Regarding comparisons with the Pacific Lumber Company HCP, see Master Response 6. Regarding Footnote Number 3, comment noted.

Regarding Footnote Number 4, the Services considered whether their conclusions would change if they applied the standards reflected in the NMFS letter to the California Department of Forestry and Fire Protection (CDF) (cited in Footnote 4 of the commenter's letter), which the commenter appears to cite as an example of what was necessary in a particular THP to comply with the ESA take prohibition. The Plan and the issuance of the associated Permits allows for incidental take of the Covered Species. Implementation of the Plan measures do not avoid take.

For all these reasons, the Services determined that there is no reason to adopt a different no action alternative and no significant benefit in adding even another action alternative such as that referenced by the commenter. The Services are satisfied that the description, analysis and comparison of alternatives serve the purposes of NEPA and the ESA.

effects, or to verify that the Simpson proposal meets applicable legal standards.

Rather than being a model for the Simpson HCP/CCAA, the PL HCP has numerous flaws and legal inadequacies. These failings require the Agencies to closely compare the Simpson and PL projects in order to avoid similar failings. Still worse, the Agencies used different methods of measuring mitigation in the two HCPs that make it exceedingly difficult to provide comparison comments. Worst of all, however, EPIC finds that to the extent the two projects can be compared, the Simpson HCP/CCAA often fails to meet even the inadequate standards found in the PL HCP. The failure to compare the two projects, including the various mitigation proposals, as well as comparing the two project's overall effects on covered species, results in the legal violations detailed below.

G9-2

G9-3

The Agencies make a similarly-fundamental mistake by proposing a No Action Alternative ("NAA") that permits "taking" of species covered by the HCP, which can only be permitted by the Proposed Action and the various action alternatives. If the preceding sentence sounds confusing and arbitrary, the fault lies in the design of the NAA. The failure to cross-reference the PL HCP may have resulted in this mistake. The NEPA No Action Alternative discussed in the Pacific Lumber HCP ("PL NAA") does not contain the same flaw, and at least attempts to be designed so that no "taking" of covered species may occur.³ Final Environmental Impact Statement ("FEIS") for the PL HCP at 2-22 to 2-27. The Simpson NAA is eerily silent on the issue of whether taking in violation of the ESA will occur. However, one notes that the permissible activities in the PL NAA are fundamentally more restricted than in the Simpson NAA, indicating that the activities allowed in the Simpson NAA cause take and accordingly would be prohibited under the PL HCP. In just one striking example, the PL NAA has a no-logging, riparian buffer zone with a width of 340 feet on fish-bearing streams, while on similar streams the Simpson NAA has a buffer zone width of only 150 feet, and permits selective logging within that zone. PL FEIS at 2-24; Simpson DEIS at 2-10.

Given the evidence of take allowed in the NAA, EPIC respectfully requests answers to the following questions:

- Do the Agencies acknowledge that the activities described in the Simpson NAA will have the effect of causing "take" of listed species? For example, will the 80,000 cubic yards of road-related sediment released in a single year take even a single individual of the listed species? Will any of the other mechanisms for causing take described in the HCP/CCAA and DEIS actually occur under the NAA?
- Do the Agencies generally expect Simpson to comply with legal requirements, or do they anticipate that Simpson may not comply when it may be difficult to prove non-compliance? Are they anticipating that Simpson will violate the law and cause take under the NAA, but will not violate the conditions placed upon it in the Proposed Action?

³ EPIC cites to the NAA in the PL HCP only for the purpose of showing deficiencies in the Simpson NAA in violation of legal standards. EPIC states no opinion in this letter regarding whether the NEPA No Action Alternative in the PL HCP fully complies with all legal standards.

Response to Comment G9-4

See Master Response 1 regarding baseline, Master Response 2 regarding the No Action Alternative including, no take, Master Response 10 regarding alternatives and Master Response 6 regarding the relationship between this Plan and the Pacific Lumber Company HCP and other HCPs.

To provide clarification, the Final EIS has been revised (see Section 3.1) to clarify the definition of the existing condition.

Regarding Footnote Number 5, see Master Response 1.

Regarding the assertion that the No Action Alternative improperly permits take, see Master Response 2. For all the reasons discussed in Master Responses 1 and 2 and responses to Comments G4-2, G4-24, and G9-7, among others, the Services believe that the No Action Alternative is properly described and that the conclusions that flow from the comparison of the No Action Alternative with the Proposed Action are valid. The Services are satisfied that the description, analysis and comparison of alternatives are consistent with the requirements of NEPA and the ESA.

Response to Comment G9-5

The AHCP/CCAA (Section 1.1.4.1) and EIS (Section 1.5.1) also include a detailed summary of the ESA Section 9 and 10 provisions that relate to the approval of an ITP. The Services are aware of these requirements and related policies as well as the guidance provided in the Services' HCP Handbook. As described in Master Response 8, the Plan meets the ESA Section 10 approval criteria for ITPs and ESPs.

Comments on the Simpson HCP/CCAA
November 19, 2002
Page 3

If the Agencies anticipate that take will occur under the NAA, do they also anticipate that the Agencies will not take steps to enforce compliance with the ESA? Do Agencies also anticipate that environmental groups will not take steps to enforce compliance?

G9-3

As the above questions suggest, EPIC emphatically believes that the NAA must be constructed so as to not permit any take, and that its current format results in multiple legal flaws.⁴

G9-4

Along with ignoring the PL HCP and using an improper No Action Alternative, the Simpson HCP/CCAA incorrectly determines the Proposed Action to be beneficial on the basis of comparison against either existing conditions or to the NAA. The proper baseline for comparing the positive or negative effect of the project is with a NAA that does not permit take of covered species, such as that attempted in the PL HCP.⁵ Comparison to present, highly-degraded environmental conditions does not determine the actual effects that the project will have on the environment over the course of the next 50 years. Comparison to the improper NAA used in the HCP/CCAA also does not demonstrate the effects of the action, because the NAA allows take of covered species, which would not be allowed under a legally-adequate NAA. Failing to properly measure the Proposed Action's effects causes violations of both the ESA and NEPA as discussed below.

G9-5

The remainder of this letter discusses general ESA violations, general NEPA violations, and problems in specific portions of the HCP/CCAA relevant to both laws.

II. General Endangered Species Act Violations.

A. The Endangered Species Act Places Strict Limits on the HCP/CCAA.

The ESA requires the Agencies to determine whether a given species qualifies for protection as endangered or threatened, and confers significant protection on species so listed.

⁴ EPIC submits for the record the attached letter from Patrick J. Rutten, NMFS Santa Rosa Field Office, to William E. Snyder, California Department of Forestry, dated 10/31/01. In particular, the letter states that absent an ITP, "the standard for harvest planning and approval in California is no take." The letter also describes "no-take" conditions for the closely related central California salmonids that are much more restrictive than those described in the Simpson NAA, despite the fact central California suffers less from erosion and sedimentation problems.

⁵ In what amounts to the same thing, the Agencies could alternatively use the present conditions as the baseline, but recognize that included in present conditions are certain environmental trends and legal regimes. Present-day trees continue to grow back from overharvest, and present legal restrictions placed by the ESA prevents actions that cause take, until and unless the proposed action takes place. The analysis would determine how the project changes the environment in the future with respect to those existing baseline conditions, trends, and legal regimes.

Comments on the Simpson HCP/CCAA
November 19, 2002
Page 4

Section 9 of the ESA makes it unlawful for any person subject to the jurisdiction of the United States to "take" any member of any endangered species. 16 U.S.C. § 1538(a)(1). Section 4(d) allows the Agencies to extend the same protection to species listed as threatened. *Id.* § 1533(d). The ESA defines "take" as "to harass, harm, pursue, hunt, wound, kill, trap, capture, or collect." *Id.* § 1532(19). "Harm" is further defined by regulation to include killing or injuring a protected species through "significant habitat modification or degradation" that impairs "essential behavioral patterns, including breeding, feeding, or sheltering." 50 C.F.R. § 17.3.

Section 9's broad prohibition on take is limited by several exceptions identified in Section 10. Section 10 allows the Secretary to issue an incidental take permit ("ITP"), which authorizes its holder to take some members of protected species when the taking is incidental to carrying out an otherwise lawful activity. 16 U.S.C. § 1539(a). The permittee under an ITP is not liable for any taking that falls within the scope of the permit.

To obtain an ITP, an applicant must develop and submit a habitat conservation plan ("HCP"), which specifies (1) the likely impact from the proposed takings; (2) the steps the applicant will take to minimize and mitigate such impacts and the funding available for such mitigation; (3) alternative actions considered, and the reasons for not selecting them; and (4) such other measures as the Secretary may require as necessary or appropriate for the purposes of the plan. 16 U.S.C. § 1539(a)(2)(A). Upon submission of a permit application and related conservation plan, "the Secretary shall issue the permit," if he finds, after opportunity for public comment, that

- (i) the taking will be incidental;
- (ii) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;
- (iii) the applicant will ensure that adequate funding for the plan will be provided;
- (iv) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and
- (v) other measures required by the Secretary will be met.

16 U.S.C. § 1539(a)(2)(B) (emphasis added). Courts will reverse any decision by an Agency to approve an HCP that fails to meet these standards. *See, e.g., National Wildlife Fed'n v. Babbitt*, 128 F. Supp. 2d 1274, 1291-93 (reversing approval of an HCP for failure to show mitigation to the "maximum extent practicable").

The Agencies have published the detailed Habitat Conservation Planning Handbook for the express purpose of establishing "clear standards that ensure consistent implementation of the section 10 program nationwide." HCP Handbook at 1-1. Comparison to the Handbook standards therefore indicates whether the Agencies have complied with their statutory duties.

In addition to the HCP process, Section 10 of the ESA also allows the Agencies to issue Enhancement of Survival Permits ("ESP") that cover take of species not yet listed under the ESA, should those species become listed in the future. 50 C.F.R. § 17.32(d). To obtain an ESP,

Letter - G9

Page 6

Response to Comment G9-6

To the contrary, as explained below, the Plan meets the requirements of the ESA and is consistent with the guidance suggested by the Services' HCP Handbook. ESA Section 10(a)(2)(A) specifically states:

"No permit may be issued by the Secretary authorizing any taking referred to in paragraph (1)(B) unless the applicant therefor submits to the Secretary a conservation plan that specifies:

"(i) the impact which will likely result from such taking;

(ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps;

(iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and

(iv) such other measures that the Secretary may require as being necessary or appropriate for purposes of the plan."

The table below shows where in the Plan each of these requirements has been addressed.

(i) Chapter 5: Assessment of Potential Impacts to covered species and their Habitats that May Result in Take, and

Chapter 7: Assessment of the Conservation Strategy's Effectiveness in Fulfilling the Plan's Purpose

Comments on the Simpson HCP/CCAA
November 19, 2002
Page 5

an applicant must enter into a Candidate Conservation Agreement with Assurances ("CCAA"). The Agencies may not approve a CCAA unless they determine that the benefits of the conservation measures implemented by a property owner under a Candidate Conservation Agreement with assurances, when combined with those benefits that would be achieved if it is assumed that conservation measures were also to be implemented on other necessary properties, would preclude or remove any need to list the covered species. Announcement of Final Policy for Candidate Conservation Agreements with Assurances, 64 Fed. Reg. 32,726 (1999). "Other necessary properties" are other properties on which conservation measures would have to be implemented in order to preclude or remove any need to list the covered species. *Id.* In other words, even a CCAA that provides benefits to a covered species cannot be approved unless the benefits, if applied universally, suffice to avoid the need for listing.

B. Omitted Information and Documents Required by the ESA Make It Impossible for the Agencies to Legally Approve the HCP/CCAA.

1. The Agencies Failed to Provide Adequate Section 10 and Section 7 Analysis of HCP/CCAA.

In violation of the Agencies' own directives, NMFS and FWS failed to provide information to allow the public to determine whether the HCP/CCAA meet ESA Section 10 standards. The materials that the Agencies have made available concerning the HCP/CCAA consist only of the Draft HCP/CCAA, the Draft Implementation Agreement, and DEIS. None of these documents analyze whether HCP/CCAA meets the standards discussed above for permission under Section 10 take listed species. In the "Providing HCP Documents to the Public" section of the HCP Handbook, a clear standard states that "[t]he Services should provide information that documents compliance with the requirements of section 10(a)(2) of the ESA." HCP Handbook at 6-22. The information provided in the documents does not adequately substitute for a proper Section 10 analysis. EPIC points in particular to a lack of analysis of whether the HCP mitigates take to the maximum extent practicable, and to the absence of a draft Incidental Take Permit, as two of many missing analyses required by the ESA. The Agencies' failure to provide this analysis would also make approval of the HCP/CCAA an arbitrary and capricious action, in violation of the Administrative Procedures Act.⁶

In addition to the missing Section 10 analysis, the Agencies failed to include analysis from a draft Biological Opinion required under Section 7 of the ESA. Section 7 requires each federal agency to "insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical habitat]." 16 U.S.C. § 1536(a)(2).

⁶ The similar failure to provide analysis of whether the project meets the CCAA standards also prohibits approval. The identical public notice and comment provision in the Endangered Species Act applies to both Incidental Take Permits and Enhancement of Survival Permits, so there is no reason to provide less disclosure of Section 10 analysis for a CCAA than there is for an HCP.

(ii) Chapter 6: Conservation Program

(iii) Chapter 8: Alternatives Considered

(iv) No other measures have been determined by the Secretary to be necessary or appropriate for the Plan

The ESA does not require the Services to circulate a draft ITP or draft ESA Section 7 biological opinion with the release of an HCP and EIS for public review. The Plan and Permits address ESA Section 10(a) requirements. The ESA Section 7 process is separate, and is being addressed separately. The Services believe that the Operating Conservation Program is based on a sound biological rationale. See responses to Comments G10-58 and G10-51, among others. Regarding Footnote Number 6, see response to Comment G9-3.

Regarding the comment on harm to covered species, see responses to Comments G9-7 through G9-44.

Response to Comment G9-7

As discussed in EIS Chapter 2, the Services evaluated five alternatives in detail, including the Proposed Action and the No Action Alternative. EIS Section 2.6 provided the basis for considering, but not evaluating in detail, three other alternatives. The alternatives evaluated in the EIS were selected on the basis of CEQ regulations (40 CFR 1502.14), which require that agencies shall:

- “(a) Rigorously explore and objectively evaluate all reasonable alternatives and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
- (d) Include the alternative of no action.
- (e) Identify the agency’s preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.
- (f) Include appropriate mitigation measures not already included in the proposed action or alternatives.”

Comments on the Simpson HCP/CCAA
November 19, 2002
Page 6

To comply with § 7(a)(2), an agency considering action that may affect a protected species is required to engage in a consultation process with either NMFS or FWS, depending on the species affected. When the action agency is the Service (NMFS or FWS) itself, as when the Service is considering whether to issue an ITP, it must engage in internal consultation under § 7, and may issue the permit only upon a finding that it “is not likely to jeopardize the continued existence of” a protected species, or result in the destruction or adverse modification of critical habitat. *Id.*; 50 C.F.R. § 402.01(b). Formal consultation typically culminates in the issuance of a biological opinion by the Service, which addresses whether jeopardy is likely to occur for any protected species, and if so, whether “reasonable and prudent alternatives” exist to avoid jeopardy. Generally, the no jeopardy finding required by ESA § 7(a)(2) is identical to the survival finding required under § 10(a)(2)(B)(iv).

The HCP Handbook states “[i]t is now Service policy to begin integrating the section 7 and section 10 processes from the beginning of the HCP development phase; and to regard them as concurrent and related, not independent and sequential, processes.” HCP Handbook at 3-16 (all underlined in original). Despite this policy, the Agencies have failed to release a draft Biological Opinion. They have violated their own policy expressed in the HCP Handbook, and they fail to provide any proof that the HCP/CCAA avoids jeopardizing covered species, as required by both Section 7 and the similar provision in Section 10(a)(2)(B)(iv). As EPIC demonstrates below, the HCP/CCAA actually harms, rather than benefits, covered species, so the action of approving the HCP/CCAA could very well jeopardize the species.

G9-6

G9-7

2. The Agencies Failed to Include an Alternative That Is More Restrictive than the Proposed Action Alternative.

To ensure that an HCP minimizes and mitigates take to the maximum extent practicable, the Agencies must scrutinize both the proposed HCP and potential alternatives that would provide greater mitigation and minimization of the take. 16 U.S.C. § 1539(a)(2)(A)(iii) (HCP application must describe alternatives the applicant considered and reasons they are not being utilized); *National Wildlife Federation v. Babbitt*, 128 F. Supp.2d 1274, 1292 (E.D. Cal. 2000) (“the most reasonable reading of the statutory phrase ‘maximum extent practicable’ nonetheless requires the Services to consider an alternative involving greater mitigation”). Only then can the Services make the statutorily-mandated finding with confidence. The HCP Handbook also verifies that a more protective alternative than the one proposed must be considered. HCP Handbook at 3-35. The absence of a more restrictive alternative also means that the Agencies have not provided information to the public documenting compliance with Section 10(a)(2) of the ESA, as required by the HCP Handbook. *Id.* at 6-22.

None of the alternatives in the DEIS involve greater mitigation than does the Proposed Action.⁷ The DEIS itself finds that the No Action Alternative (“NAA”) as described by the

⁷ The HCP/CCAA itself only has four and a half pages of alternatives analysis, which is plainly inadequate for a reasoned Section 10 analysis. HCP/CCAA at 8-1 to 8-5. EPIC assumes the Agencies rely on the more detailed analysis in the DEIS for ESA Section 10 conclusions.

The EIS complies with this directive by:

- Identifying and evaluating a reasonable range of alternatives (EIS Sections 2.1 through 2.5)
- Identifying and providing the basis for alternatives considered but eliminated (EIS Section 2.6)
- Including appropriate mitigation measures (EIS Chapter 4)

The comment is correct that the No Action Alternative would result in less removal of sediment than would occur under the Proposed Action. Neither NEPA nor the ESA, however, requires a NEPA No Action Alternative to provide greater mitigation than a proposed action. The EIS compares the No Action Alternative and the Proposed Action relative to sediment removal for the purposes of the assessment of hydrology and water quality (EIS Section 4.3.3.3) and states: “Under the Proposed Action, sediment production and delivery that could result in increased sediment loading, sedimentation, and turbidity levels would be reduced compared with both existing conditions and conditions anticipated to occur over time under the No Action Alternative.” This is an appropriate conclusion, given that the No Action Alternative does not include issuance of ESA Section 10 permits and, therefore, would not result in implementation of the conservation measures for sediment reduction in the Plan’s Operating Conservation Plan. Please see EIS Section 2.2 and AHCP/CCAA Sections 6.2 and 6.3. The range of alternatives also is discussed in Master Response 10 and their measures compared in EIS Table 2.7-1. Based on the analysis provided in the Plan and EIS, the Services believe that alternatives presented in the Plan and EIS meet the criteria required by the ESA and the guidance suggested in the HCP Handbook.

Regarding Footnotes Numbers 7 and 8, see the response to this comment and the response to Comment G9-13.

Letter - G9

Page 8

Response to Comment G9-8

See Master Response 2 regarding the No Action Alternative, and Master Response 10 regarding analysis of alternatives in the Plan and EIS. Regarding the CFPRs, see Master Response 7. Regarding the quote in the comment from page 1-11 of the EIS, this text discusses the application of the CFPRs as part of the No Action Alternative. This is appropriate given the fact that the CFPRs would continue to apply under the No Action Alternative.

The Section of the HCP Handbook cited in the Comment (page 3-35) states a "no action" alternative means that "no Permit would be issued and take would be avoided or that the project would not be constructed or implemented." The No Action Alternative in the EIS (EIS Section 2.1) complies with this definition because under the No Action Alternative, permits would not be issued to Green Diamond for the covered species in the Plan and Green Diamond would be subject to the ESA Section 9 take prohibition. In addition, "NEPA's Forty Most Asked Questions," (see Question 3A) states that there are two distinct interpretations of "no action" that must be considered, depending on the nature of the proposal being evaluated. The first situation described in that document (see quote below) is applicable to Green Diamond because Green Diamond will continue to conduct timber operations, regardless of whether an ITP or ESP is issued.

"The first situation might involve an action such as updating a land management plan where ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed. In these cases "no action" is "no change" from current management direction or level of management intensity."

Comments on the Simpson HCP/CCAA
November 19, 2002
Page 7

Agencies provides less protection to covered species than the Proposed Action, in part because the NAA offers less mitigation for reducing sediment. DEIS at 4-48. Alternative A, covering listed salmonid species only, has the same mitigation as the Proposed Action, not greater mitigation. *Id.* at 2-29. Alternative B, offering simplified prescriptions, fails to include many of the mitigations found in the Proposed Action, and the Agencies themselves conclude that Alternative B provides less sediment reduction mitigation. *Id.* at 4-62.⁹ Alternative C covers more species, but provides less mitigation for the species covered by the Proposed Action. *Id.* at 4-62. Accordingly, none of the alternatives meet the standard required by the HCP Handbook and by *National Wildlife Federation*.

3. The Simpson No Action Alternative Fails to Meet ESA Standards.

As mentioned earlier, the No Action Alternative in the Simpson HCP/CCAA fails to prevent take of covered species, in violation of what Agency guidelines require. The HCP Handbook defines the no-action alternative as not engaging in the activity or modifying it to avoid take. HCP Handbook at 3-35. Complying with existing state laws or continuing business as usual may not be an appropriate point of comparison. Since it is generally presumed that people will act to comply with the law, the no-action alternative should assess what is necessary to avoid running afoul of the ESA's take prohibition.

The California Forest Practice Rules, which form the basis of the Simpson NAA, do not prevent take. The DEIS acknowledges this point. "NMFS continues to find that the CFPRs do not ensure the achievement of properly functioning habitat for conservation of the anadromous salmonids throughout their range in California, although forest practices operations conducted pursuant to this process in a particular area, land ownership, or region under this process may achieve such conditions." DEIS at 1-11. NMFS official liaison to the State of California has stated that the CFPRs are inadequate to protect and conserve salmonids, even with interim changes adopted by the Board of Forestry. Declaration of Joseph Blum, June 2, 2000 (attached).⁹ Nowhere in the HCP/CCAA do the Agencies find that the Simpson NAA ensures the achievement of properly functioning habitat. Even if the NAA would eventually achieve functioning habitat decades from now, the massive sediment release and other mechanisms of take will still happen beforehand, therefore violating the Agency requirement for a NAA.¹⁰

⁹ The DEIS does note, however, that Alternative B would develop and maintain the highest level of canopy closure and Large Woody Debris ("LWD"). *Id.* at ES-11; 4-62. Mitigating to the maximum extent practicable therefore requires incorporating into the Proposed Action those components of Alternative B that promote canopy closure and LWD.

⁹ EPIC submits for the record the attached declaration of NMFS' official liaison to the State of California.

¹⁰ Any release of road-related sediment constitutes a take. But even excluding what limited release comes from "legacy" roads that have not been used since the covered species were listed, there remains significant release of sediment due to use, especially wet-season use, and that

This definition of the No Action is appropriately applied in the EIS.

Regarding Footnote Number 9, the declaration in Attachment B does not address the site-specific application of the CFPRs together with the prescriptions imposed pursuant to Green Diamond's NSO HCP and the prescriptions that would apply following Plan approval and issuance of the Permits. Therefore, because it relates to only one aspect of a mosaic of regulations and requirements, the declaration is not germane to the Services' consideration of this application.

Regarding Footnote Number 10, the Services do not agree that any release of sediment constitutes a take. Harm is contained in the definition of "take" in the ESA (63 FR 24148). NMFS interprets the term "harm" as an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering (November 8, 1999, 64 FR 60727). See Section 4.4.3.3 of the EIS for an analysis of the impacts from sediment in the context of the Operating Conservation Program of the Plan.

Letter - G9

Page 9

Response to Comment G9-9

See Master Response 9. Further, the Handbook recognizes that in certain circumstances, determining the level of take may not be possible. Page 3-14 of the Handbook states that the ability to calculate the level of take "depends on the ability of the HCP participants to determine, to the extent possible, the number of individual animals of a covered species occupying the project or land use area or the number of habitat acres to be affected." The distribution of species in the Plan Area and the spatial and temporal variation of this distribution precludes the ability to determine the number of individuals of the covered species that would be affected by implementing the Plan. In addition, activities unrelated to and outside the Plan Area could affect the covered species. It is not possible, however, to control or enumerate the impacts from these unknown or out-of-area activities. In addition, the Plan's Operating Conservation Program minimizes and mitigates impacts of the taking of the ITP species. See AHCP/CCAA Section 7.1 and the response to Comment G9-13.

Regarding Footnote Number 11, the Services have reviewed and do rely on the analysis provided in the Plan and EIS. Neither the ESA nor NEPA require recirculation of this information.

Comments on the Simpson HCP/CCAA
November 19, 2002
Page 8

G9-9

4. The Agencies Failed to Provide Information Quantifying the Level of Take in Terms of Individuals or in Terms of Habitat Affected.

The HCP Handbook explains that "[f]our subtasks must be completed to determine the likely effects of a project or activity on federally listed . . . species." HCP Handbook at 3-10. The fourth task is "quantifying anticipated take levels." *Id.* This involves three steps: (1) deciding how incidental take will be calculated; (2) identifying the level of take from the proposed activity; and (3) setting the level of take authorized by the incidental take permit. *Id.* at 3-14.

The Handbook allows for incidental take to be expressed in terms of the habitat acres or units affected where the specific number of individuals is unknown or indeterminable. *Id.* The Handbook envisions that take will be assumed for all individuals in a specific area, and that the Services will compare the expected take levels with species distribution in order to make the statutorily mandated findings (i.e., "the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild").

The HCP/CCAA does not even attempt to quantify take in terms of individuals, and it also fails to properly quantify take of covered species either in terms of habitat affected. First, the closest that the Agencies come to a description of the impact is in the Section 7 of the applicant's HCP/CCAA, where Simpson provides a series of one paragraph generalizations of how the company's activities may affect covered species.¹¹ These qualitative descriptions suggest HOW species may be affected, but they fail to meet the legal requirement of describing HOW MUCH of an effect will occur. *See, e.g.*, HCP/CCAA at 7-18 to 7-19 (listing how covered activities may adversely affect the microclimate used by covered species, without quantifying the effect). Failing to quantify the impact according to area and severity of effect renders these descriptions inadequate. The closest any description comes to properly quantifying take is the admission that between 80,000 and 3,000 cubic yards of road-related sediment will be flushed annually into streams used by covered species. HCP/CCAA at 7-11 to 7-13; DEIS at 4-15 to 4-16. Even this, however, describes the sediment alone, but not the severity of this impact on the habitat.

The failure to quantify take traces directly back to the refusal to consider a No Action Alternative showing what the Simpson lands would be like if no permit were issued AND no take were allowed to occur over the course of the 50 years that the proposed permit were run. By comparing the Proposed Action to a legally-adequate NAA, the HCP/CCAA would be able to quantify take of covered species in terms of habitat impaired by the covered actions but not

release indisputably constitutes take.

¹¹ Because the agencies have provided such limited information regarding this HCP/CCAA, EPIC assumes for purposes of these comments that the Agencies adopt the applicant's entire analysis in the HCP/CCAA. If the Agencies do not adopt the materials in their entirety, then the Agencies must recirculate the materials as revised to show what they plan to adopt.

Response to Comment G9-10

See Master Response 1 regarding baseline; and the response to Comments G9-6 through G9-8 and G9-11 through G9-44 and Master Responses 2 and 10 regarding the No Action Alternative. See Master Response 8 regarding ESA Section 10 Permit issuance criteria; and the response to Comment G9-2 and Master Response 6 regarding the relationship between this Plan and other HCPs such as the Pacific Lumber Company HCP. The Plan and EIS address ESA Section 10(a) Permit issuance. The ESA Section 7 process is separate, and is being addressed separately.

Response to Comment G9-11

See Master Response 6 and responses to Comments G9-2 and G9-10 regarding the relationship between this Plan and other HCPs, such as the Pacific Lumber Company HCP, and Master Response 8 describing how the Plan meets the ESA Section 10 approval criteria.

Chapter 3 of the Services' HCP Handbook states that mitigation programs under HCPs and Section 10 permits are as varied as the projects they address." Accordingly, it would not be appropriate for Green Diamond to develop its Plan on the basis of the Pacific Lumber Company HCP, or any other HCP.

Green Diamond and the Pacific Lumber Company incorporated different conservation measures in their respective HCPs. However, as suggested in the comment, the Services evaluate each conservation program as a whole, rather than on a measure-by-measure basis, to determine whether it meets the ESA Permit

Comments on the Simpson HCP/CCAA
November 19, 2002
Page 9

affected under the NAA. The NAA as written, however, allows take of covered species without a permit. Comparing the Proposed Action to the NAA does not reveal the level of take, because both alternatives allow take.

EPIC emphasizes that the ESA requires the Agencies to quantify the permissible take in large part because that level of take becomes a condition for permit compliance, since the failure to limit take would defeat the assurances that HCPs provide for species' survival and recovery. EPIC requests confirmation from the Agencies that they view any take in excess of a quantified level as not covered by a permit. The HCP/CCAA notes that Simpson mitigation measures will be designed around taking certain actions rather than achieving certain biological parameters. EPIC requests confirmation that this design emphasis, however useful it may be for monitoring permittee compliance, does not purport to lift the ESA's strict requirement that take be limited to a quantified level. Simpson accordingly should be allowed to cause take only from the identified activities in the permit, and only up to the level of take identified in the permit. Among other things, this restriction means that activities that the HCP/CCAA describes as not causing take, such as the loss of Large Woody Debris ("LWD") from the harvest of standing trees (HCP/CCAA at 7-14), are not protected by the permit if those activities are shown to actually cause take.

G9-9

C. The HCP/CCAA Fails to Meet ESA Substantive Standards.

For numerous reasons, the Simpson HCP/CCAA fails to satisfy ESA Section 10 and Section 7 requirements for approval, or at least fails to provide information that would satisfy those standards. For example, the proper baseline for measuring whether the HCP/CCAA has positive or negative impacts on covered species is by comparison to a No Action Alternative that does not allow take. Such a NAA might be like the one in the PL HCP, which offers substantial protections not found in the Simpson HCP/CCAA Proposed Action. *Cf.* FEIS for the PL HCP at 2-22 to 2-27; Simpson DEIS at 2-17 to 2-29. Rather than validating the conclusion in the HCP/CCAA that the Proposed Action is beneficial, this comparison shows it to be harmful. Such harm may "appreciably reduce the likelihood of the survival and recovery of the species in the wild," which Section 10 and Section 7 prohibit. Other important examples follow.

G9-10

1. The Simpson Proposed Action Fails to Mitigate Take to the Maximum Extent Practicable.

The PL HCP uses many types of mitigation that exceed those found in the Proposed Action for the Simpson HCP/CCAA. As mentioned previously, the PL HCP mitigation measures are inadequate, but the Simpson Proposed Action fails to meet even those deficient mitigation levels. The Agencies should be intimately familiar with the differences, as the same field offices from both Agencies are involved with the PL HCP and the Simpson HCP/CCAA. EPIC points out some of those mitigations below in a non-exclusive list:

G9-11

- Simpson HCP/CCAA allows harvest on certain types of mass wasting areas while the Pacific Lumber ("PL") HCP prohibits harvest until further analysis occurs. *Cf.* DEIS at

issuance criteria discussed in Master Response 8. As defined in EIS Section 1.2, the Services are responding to Green Diamond's applications for incidental take authorization pursuant to a Plan that provides protection and conservation to listed, proposed, and unlisted species and their habitats consistent with the requirements of Section 10(a)(1)(A) and Section 10(a)(1)(B) of the ESA. The Services' approval of the Plan and issuance of the Permits are the NEPA actions analyzed in the EIS. As suggested in the comment, the Services are not required to place each HCP side by side to determine whether they are consistent or how they "balance out," as stated in the footnote number 12 to this comment. The Services must evaluate the Plan independently and make a determination whether it meets the Permit approval criteria discussed in Master Response 8.

For the reasons discussed above, the Services believe that approval of the Proposed Action would be consistent with both the ESA and NEPA, and would be neither arbitrary nor capricious.

Comments on the Simpson HCP/CCAA
November 19, 2002
Page 10

4-12 to 4-14; PL HCP § 6.3.3.7.

- PL HCP restricts wet-weather road use, Simpson does not. PL HCP § 6.3.3.6.
- Simpson HCP/CCAA permits Simpson to eliminate mass-wasting protections without giving federal agencies ("Agencies") a veto over their elimination. PL HCP reserves veto power to the agencies. *C.f.* DEIS at 4-13; PL HCP § 6.3.3.7. This mitigation costs nothing, and is eminently practicable.
- The HCP/CCAA's adaptive management process fails to include the "peer review" provision required in the PL HCP. "Peer review" would not be impracticable, and is unlikely to be expensive.

EPIC notes that the riparian buffer zones in the two HCPs utilize very different mitigation standards. These differences are unnecessarily difficult to compare, but it appears that the PL HCP uses stricter mitigation standards than the Simpson HCP/CCAA. For example, the PL HCP uses a 100-foot no-cut buffer with an additional 70 feet of partial harvest area. FEIS for the PL HCP at 2-31. The Proposed Action in the Simpson HCP/CCAA allows partial harvest even in the inner-most 50 to 70 feet, and a more-intensive partial harvest out to a distance of 150 feet, compared to the total of 170 feet in the PL HCP. DEIS at 2-23. Examining the totality of riparian protections shows the PL HCP to be superior to the Simpson Proposed Action.

Failing to meet previously-established mitigation standards violates both Agency policy and established caselaw. In *Sierra Club v. Babbitt*, 15 F. Supp. 2d 1274, 1281-82 (S.D. Ala. 1998), the court struck down a FWS HCP that used inconsistent mitigation relative to previous HCPs. The court approvingly quoted the HCP Handbook as stating that "mitigation measures required by individual FWS or NMFS offices should be as consistent as possible for the same species", and that consistency is "essential". *Id.* (citing HCP Handbook at 3-23 to 3-24). The Handbook goes on further and states that consistency is to be accomplished by (1) establishing good communication between offices, and (2) establishing "specific standards". *Id.* Moreover, "the Service should not apply inconsistent mitigation policies for the same species, unless differences are based on biological or other good reasons and are clearly explained." Courts prohibit the application of "inconsistent mitigation policies for the same species in the same geographic area, unless differences are based on biological or other good reasons and are clearly explained." *Sierra Club*, 15 F. Supp. 2d at 1282. EPIC "can find no evidence that the [agency] paid any attention to its own guidelines." *Id.*

Besides being inconsistent by reducing the mitigation levels in the Simpson HCP/CCAA from those in the PL HCP, the Simpson HCP/CCAA appears designed to make it very difficult to compare it to the PL HCP. For example, in the partial harvest area of riparian buffer zones, the PL HCP uses a basal-area retention figure, while the Simpson Proposed Action uses a canopy cover retention measure. The Agencies failed to place each mitigation measure from the two proposals side by side and provide their own determination as to whether the Simpson