Comment 1 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Brian
Last Name: Nowicki
Email Address: bnowicki@biologicaldiversity.org
Affiliation: Center for Biological Diversity

Subject: Forest Project Protocols
Comment:

At the upcoming September 24 meeting of the California Air Resources Board, the Board is scheduled to consider for adoption the “Updated Forest Project Protocols for Greenhouse Gas Accounting” as adopted by the Climate Action Reserve earlier this month. These protocols contain a provision that appears to explicitly encourage forest clear-cutting. We are writing to express our strong opposition to this provision, and to urge you not to adopt the protocols with this provision included. In addition, we urge you to postpone the adoption of the forest protocols, in order to allow the Board adequate time to consider the issue after receiving public testimony.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/1-centerforbiologicaldiversity2.pdf'

Original File Name: CenterforBiologicalDiversity2.pdf

Date and Time Comment Was Submitted: 2009-09-16 13:04:46

No Duplicates.

Comment 2 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Michael
Last Name: Bailey
Email Address: michaelebailey@cox.net
Affiliation:

Subject: Forest Project Protocol
Comment:

This is a well thought out report on the role and effectiveness of forest lands in carbon sequestration. I have not seen the earlier protocols but it sounds like this one is a major improvement over the ones that went before. This Protocol has a number of improvements in it. But the most important ones, I think, are the ones that allow for a greater increase in forest land with administrative requirements that are more fare and uniform than was the case in the earlier protocol. This one gives much more importance to the role of public lands and the role of larger private timber and woodland owners. The permanence component is of critical importance. This requires the onsite monitoring of the carbon stocks, the filing of annual monitoring reports and independent verification of the reports. There now are Project Implementation Agreements that obligate forest owners to give up some of their carbon credits to make up for the loss of forest land . And a new buffer pool is set up where each participant in the program contributes so many carbon credits to the pool to compensate for unavoidable destruction of forest lands by pests or wildfire. This protocol also has provisions in it to maintain forest eco-systems including trees of different ages. The Protocol also recognizes the importance of long term wooden products--wood products made to last 100 years or more either in use or in landfills. These products also help sequester carbon. This Protocol will be an important part of the larger cap and trade process now being set up. Thank you and best wishes, Michael E. Bailey, 25801 Marguerite Parkway, No. 103, Mission Viejo, CA 92692.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2009-09-20 00:19:57

No Duplicates.

Comment 3 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Brian
Last Name: Nowicki
Email Address: bnowicki@biologicaldiversity.org
Affiliation: Center for Biological Diverssity

Subject: Group Letter
Comment:

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A comment letter on behalf of the Center for Biological Diversity,
Sierra Club California, Ebbetts Pass Forest Watch, EPIC, and
Defenders of Wildlife, to express our strong opposition to the
forest clearcutting provision in the current version of the forest
project protocols, and to urge you not to adopt the protocols with
this provision included.
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Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/3-group_letter_to_carb_re_forest_protocols_09_18_09.pdf'

Original File Name: Group letter to CARB re forest protocols 09 18 09.pdf

Date and Time Comment Was Submitted: 2009-09-21 09:12:47

10 Duplicates.

Comment 4 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Dan
Last Name: Chia
Email Address: dan.chia@asm.ca.gov
Affiliation: Assembly Natural Resources Committee

Subject: Forestry Protocols
Comment:

see attached letter opposing the proposed forestry protocols.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/4-letter_to_mnichols_on_forest_protocols.pdf'

Original File Name: Letter to MNichols on Forest Protocols.pdf

Date and Time Comment Was Submitted: 2009-09-22 11:25:13

No Duplicates.

Comment 5 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Bruce
Last Name: Castle
Email Address: blcastle@comcast.net
Affiliation:

Subject: Forest Project Protocol - Clearcutting
Comment:

I looked at the Subject Protocol, Version 3.0, dated Sept. 1, 2009.

When I reviewed the list of people and organizations in the Work Group, I was incredulous that some of them could support such a flawed Protocol when it comes to supporting the clearcutting language that appears in Section 3.9.2 of the Protocol. (Of course, I expected this from the timber industry representatives in the Work Group.)

Section 3.9.2 Natural Forest Management, states, "Harvesting using even-age management must be conducted in stands no greater than 40 acres." I find this language to be most offensive. Meanwhile, the California Forest Practice Rules limit the acreage for evenaged management, in most cases, to 20 acres. Even this is way too much.

We have seen clear visual evidence of abuse in the forests in California and elsewhere. Google Earth views and over-flights of the Sierra provide this evidence. One example is Sierra Pacific Industries' (SPI) timber management practices. SPI owns about 1.7 million acres in California. Their Option A Demonstration of Maximum Sustainable Production is a 100-year business plan that will convert 2/3 of their forestland, or 1.1 million acres, to tree plantations. The great majority of this is produced by clearcutting and near-clearcutting. This is a visual blight, it stresses the biological resources on the land, and it contributes to adverse climate change, according to mounting scientific evidence.

To protect the public interest, this deforestation needs to be stopped. It will require State legislation to end clearcutting and near-clearcutting (visual retention grouped and dispersed, in SPI's language). The CARB can do its part.

My recommendation to the authors of the Forest Project Protocol is to eliminate clearcutting altogether from this document (with minor exceptions, such as the use of clearcutting to stop the spread of bug infestations).

Furthermore, it would be a positive step for this body to publicly take a position against clearcutting. This timber harvest method and its near-clearcutting relatives serve no useful purpose. It is harmful to the environment in many ways. Leaving this language in the Protocol will show that the CARB is putting the interests of the powerful timber industry before the public trust interests.

This is clearly the wrong priority . . . you need to do the right thing.

Attachment: "

Original File Name:

Date and Time Comment Was Submitted: 2009-09-22 21:22:19

No Duplicates.

Comment 6 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Patricia
Last Name: Lawrence
Email Address: adventures@AudioJourneys.org
Affiliation:

Subject: Greenhouse Gas Accounting Comment
Comment:

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Please see attached Word document.
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Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/7-california_air_resources_board_updated_forest_project_protocols_for_greenhouse_gas_accounting.docx'

Original File Name: California Air Resources Board Updated Forest Project Protocols for Greenhouse Gas Accounting.docx

Date and Time Comment Was Submitted: 2009-09-22 21:41:58

No Duplicates.

Comment 7 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Susan
Last Name: Robinson
Email Address: srmw@comcast.net
Affiliation:

Subject: Forestry Protocols - erroneous scientific infomation
Comment:

I do not believe that CCAR and CARB are considering unbiased scientific information in including clearcutting under the forestry protocols. My discussions with several members of the CCAR working group and with CARB staff lead me to believe that these groups and staffs are being unduly influenced by erroneous science which is being perpetrated by the powerful timber lobbyists. We are all well aware of how this happened in the Bush administration and hope that this perversion of true science due to political pressure will not occur in California's climate change efforts. I am attaching the work of a noted climate and forestry expert - Dr. Mark Harmon - into the CARB record to dispel the myths that have been "accepted" by CCAR and CARB staff regarding forestry methods and climate change.

The following is an exerpt from the attachment re Carbon Sequestration by Younger versus Older Forests.

"It is very disappointing to find that arguments are still being made that younger forests are better for climate mitigation than older ones. The mistaken basis for this argument is that younger forests store carbon at faster rates than older forests. There is a grain of truth to the assertion that forests at a relatively young age do have the potential to take up more carbon than older forests. But it is also true that forests younger than this optimum age also take up less carbon. Indeed immediately after disturbance very young forests are releasing carbon as the dead material caused by the disturbance (including timber harvests) decomposes. Averaged over the entire period between disturbances, the average flow into a forest equals the amount going out as long as the same type of disturbance is repeated. This finding has been repeatedly demonstrated in scientific examinations of this issue. The key is therefore not the rate of carbon uptake or release at any particular time, but the average amount stored over time. I am not aware of a single scientific study in which the average carbon store of a forest disturbed by clear cut harvesting at a long interval is smaller than one disturbed at a shorter interval. Not a single study, and I just performed a literature search on this very issue. In addition to the interval between disturbances, another important factor is the amount of carbon removed by each disturbance. Timber harvest, clear cutting in particular, removes more carbon from the forest than any other disturbance (including fire). The result is that harvesting forests generally reduces carbon stores and results in a net release of carbon to the atmosphere".

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/8-m_harmon_ltr_ccar.doc'

Original File Name: M Harmon ltr CCAR.doc

Date and Time Comment Was Submitted: 2009-09-22 22:45:28

No Duplicates.

Comment 8 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Marily
Last Name: Woodhouse
Email Address: Marily.Woodhouse@mlc.sierraclub.org
Affiliation: Sierra Club, Battle Creek Alliance

Subject: Comment
Comment:

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Comment letter attached
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Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/9-carb.pdf'

Original File Name: CARB.pdf

Date and Time Comment Was Submitted: 2009-09-23 00:20:41

No Duplicates.

Comment 9 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Marily
Last Name: Woodhouse
Email Address: Marily.Woodhouse@mlc.sierraclub.org
Affiliation: Sierra Club, Battle Creek Alliance

Subject: 2nd part comment
Comment:

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Addition to comment
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Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/10-american_west_chapter_01.pdf'

Original File Name: American West Chapter_01.pdf

Date and Time Comment Was Submitted: 2009-09-23 00:26:23

No Duplicates.

Comment 10 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Mauro
Last Name: Oliveira
Email Address: mauro@signaloflove.org
Affiliation: SOL Communications Inc. (501c3)

Subject: Opposition to the adoption of GHG protocols
Comment:

COMMENTS in OPPOSISION TO Adoption of the Climate Action Reserve Updated Forest Project Protocol for Greenhouse Gas Accounting

Deadline for Comment: September 23, 2009 by 12 Noon or at the Board hearing.

Comments made by
Mauro Oliveira,
a representative of the following groups:
SOL Communications Inc (501c3)
Battle Creek Alliance (Citizen Group)
Northern California Citizens for Clean Air (Citizen Group)
Mailing address:
Box 225
Montgomery Creek CA 96065

The comments are both statements and question.

Either or both may have a preface used to give context to the statement or question.

Please address both questions and statements.
Attached with comments is the Center for Biological Diversity Lawsuit/Comments that include the science Air Resources MUST consider.

SECTION ONE: GREENHOUSE GAS EMISSIONS AND CLEARCUTTING
A: The Government’s Responsibility
B: Preface to Questions
C: Question

The Government’s Responsibililty

This THP (and THP applicant- the OWNER(s), Managers and Corporate body of Sierra Pacific Industries) is in violation of the California Environmental Quality Act (CEQA) and the Forest Practices Act, because Sierra Pacific Industries does not analyze the greenhouse gas emissions of the planned clearcutting.

California Department of Forestry (CDF) is also in violation of

CEQA and the Forest Practices Act, because its REPRESENTATIVES and the Agency body fails to force the timber company to adhere to the law AND because CDF DOES NOT ANALYZE THE EMISSIONS ITSELF. ALL THPs approved by CDF are approved without ANY idea OR CONCERN of what is really “going on” with greenhouse gas emissions in timber management.

And in the ongoing struggle to gain attention to this dangerous forestry practice, it has become clear that the Shasta County Board of Supervisors is also in violation of CEQA and the Forest Practices Act for failing to act on the reasonable representation by Citizens that this violation of the CEQA law etc. was taking place in their jurisdiction.

The California Attorney General intends to close the gates on all industrial greenhouse gas emissions in the state and he EXPECTS the counties to follow the law:

Landmark CEQA/Climate Change Settlement
August 2007

On August 21, 2007, California’s Attorney General Jerry Brown announced a settlement of the recent controversial CEQA lawsuit his office brought against San Bernardino County, involving the extent to which the County’s EIR for its General Plan update should address impacts on climate change. The settlement is important because it requires a California agency for the first time to inventory historical (as of 1990), current, and projected greenhouse gas (“GHG”) emissions, to set a target for reducing GHG emissions, and to develop measures to reduce such emissions. – (Morrison Foerster)

The “Spirit” of CEQA and its relationship to the Citizenry is partly stated in the legislative intent:

“Citizens, ALL governing bodies and industry HAVE the responsibility to fulfill the acts objective of protecting the future’s resources. “

Therefore, however unfortunate, it becomes the RESPONSIBILITY of the Citizen to see to it that the government (CDF) does its job of applying the law on the industry, which fails to do its job (SPI). By making these comments in the public comment period, our organizations are now eligible to proceed with legal tools to remedy the unjust.

As stated on the website, www.stopclearcuttingcalifornia.org, clearcutting produces, and /or releases tremendous amounts of carbon dioxide, methane and other greenhouse gases into the atmosphere AND California state officials fail to take that into consideration when approving clearcutting operations by timber companies. Approving this THP will show total disregard for the scientific facts and worse yet, for the welfare of ALL FUTURE GENERATIONS OF HUMANS AND WILDLIFE.

B: PREFACE TO SECTION ONE QUESTIONS:

The Timber industry commonly states THEIR ARGUMENT, that ALL carbon that is lost during clearcutting is recaptured in the approximate 100-year cycle of their tree plantations (though they occasionally admit that some plantations take much longer to reach

THIS POINT).

Though it would be prudent to challenge that generalized statement on many different and distinct scientific points, AND WE DO SO at stopclearcuttingcalifornia.org, we will allow their argument ONLY for the purpose of demonstrating the irrelevance of their argument, further collapsing their moral and legal right to this THP.

CDF cannot rely on a POSSIBILITY that ANY forest will recover its greenhouse gas emissions within ANY timeframe. Monocropped plantations are commonly crippled by beetles, draught and wildfire (even aged crowning) as well as scores of other problems that will increase in the future climate conditions.

SPI and CDF rely upon reports that project 100 years as the time frame of plantation carbon RECOVERING and arriving at carbon neutral. But no one can ignore the IMMEDIATE AND DANGEROUS consequences of NOT REIGNING IN greenhouse gas emissions in the next 10-20 years. CEQA, AB32 are ALL ABOUT this time frame.

The world's nation's, including the United States, has recognized the consensus of the International Panel on Climate Change (IPCC) findings, reports and recommendations.
As part of the IPCC findings, scientists have determined that deforestation is the third leading cause of greenhouse gas emissions. The IPCC is stressing urgency and co-operation in the all out effort to avert disaster.

The Center for Bio-diversity has stated that globally, deforestation accounts for about a quarter to one half of all greenhouse emissions. (Other notable sources put that up to 50%)

A key player in the IPCC is the United States Department of Energy. The Department of Energy's 2001 Northwest Report, states that the northern California region will suffer major temperature increases with drier and longer draught conditions over the next 100 years. Chapters Nine and Ten of that REPORT IS ATTACHED AND IS SPECIFIC TO THESE THPs.

In the 9th Chapter (Potential Consequences of Climate Variability and Change For The Pacific Northwest), WHICH IS INCLUDED BECAUSE OF ITS SPECIFIC RELEVANCE to THIS THP, it is stated:

•Regional warming is projected to continue at an Increased rate in the 21st century, in both summer and winter. Average warming over the region is projected to reach about 3°F (1.7°C) by the 2020s and 5°F (2.8°C) by the 2050s.

• Annual precipitation changes projected through 2050 over the region range from a small decrease (-7% or 2″) to a slightly larger increase (+13% or 4″).

• Projected precipitation increases are concentrated in winter, with decreases or smaller increases in summer. Because of this seasonal pattern, even the projections that show increases in annual precipitation show decreases in water availability.

It should be noted that the DOE report considers Northern

California’s Sierra and Cascade Range as having the characteristics of both the Pacific Northwest and the Pacific Southwest, but trending towards desertification.

Dr James Hansen, Director of GISS at NASA had stated several YEARS ago that the world had about ten years to curb and curtail human generated green-house gas emissions or humanity would suffer runaway global warming. This would directly cause massive species die-offs, worldwide migrations and economic and political collapse.

Therefore it is far SAFER to say the conservative approach is the ONLY approach. The world cannot afford timber, oil and coal to be wrong, ALTHOUGH the world COULD afford the IPCC and the leading climate scientists who have called for a halt to emissions to be wrong. The uncertainty of too many known variables and UNKNOWN variables weighs too heavy to be dismissing the facts at hand. And to be sure that at least some of the facts, NOT YET AT HAND, will most certainly be working against us.

This is clearly stated in the IPCC Summary of Policymakers (2001 report):
Climate change decision making is essentially a
uncertainty. Decision making has to deal with uncertainties
or irreversible changes, entails balancing the risks of either
involves careful consideration of the consequences (both
likelihood, and society’s attitude towards risk.

The SCIENCE SUMMARY BEHIND THE LAW:

A standing forest will be a carbon sink most of its “life” as photosynthesis absorbs CO2 and then “banks” the CO2 into is bark, wood, leaves, root systems and even transferring CO2 into the surrounding soils.

Clearcutting disturbs the forest more negatively than any other form of logging. Each square inch of living tissue in a clearcut is removed above the soil. All the leaves and lesser foliage rots or is burned and ALL the CO2 and other greenhouse gases are released into the atmosphere. The soil is both poisoned with herbicides and / or tilled in preparation for plantation trees (primarily a single species). The herbicides kill any remaining vegetation above the soil and kill living tissue, microorganisms, mycelium and other “life” below the soil. This of course releases more greenhouse gas emissions.
Tilling the soil also breaks free loosely bound CO2 (and other greenhouse gases) from the soil itself, releasing it into the atmosphere.

B: QUESTIONS THAT NEED TO BE ANSWERED ABOUT GREENHOUSE GAS EMISSIONS AND THIS THP

It is CDF’s responsibility to answer these questions ABOUT ALL THPs:

1- How much CARBON will be released by the decay created (and other adverse affects of the herbicide) by the FIRST herbicide application, PRIOR to the cutting phase of all planned cuts? (this application usually happens a season or two before cutting)

2- How much METHANE will be released by the decay created (and other adverse affects of the herbicide) by the FIRST herbicide application, PRIOR to the cutting phase of planned cuts? (this application usually happens a season or two before cutting)

3- There will be below-the soil decay as a result of this application of herbicide therefore a release of greenhouse gas emissions. What will be the CARBON emissions from below-the-soil decay?

4- What will be the METHANE emissions from below-the-soil decay?

5- During the cutting phase, much debris will be created and end up decaying as matter, including STUMPS and ROOT SYSTEMS. How much CARBON will be released by the decay of surface AND below-the-surface “forest”?

6- How much METHANE will be released by the decay of surface AND below-the-surface “forest”?

7- And much of the debris created by the cutting phase will be piled up and burned during the rainy season. How much CARBON will be released by the slash-burning phase in this planned operation?

8- How much METHANE will be released by the slash-burning phase in planned operations?

9- After the cutting operation, in preparation for replanting, the land is “tilled” down sometimes to three feet. This phase creates MAJOR disturbance to the soil and releases loosely bound greenhouse gases into the atmosphere (out of the soil). How much CARBON will be released by the prepping for the replanting phase of all planned cuts?

10- How much METHANE will be released by the prepping for the replanting phase of planned cuts?

11- How many YEARS before the SOIL again sequesters the SAME amount of CARBON that it does on the date of THIS COMMENT?

12- How many YEARS before the SOIL again sequesters the SAME amount of METHANE that it does on the date of THIS COMMENT (IE PRIOR TO ANY DISTURBANCE? HERBICIDE USE)?

13- What study are you referencing in the calculations and answers required for the above questions?

14- Wood products, such as homes, more often than not, last less than one hundred years. Older homes burn or are torn down and occasionally are partially recycled. Therefore the sequestered carbon is then lost, OFFSETTING an unknown percentage of carbon stored in that homes original forest (where the wood products were timbered). Please reveal any studies that THPs rely upon to mitigate, BUT DIRECTLY ADDRESSES this negative aspect of the carbon cycle.

Temperate forests trump rainforests when it comes to storing carbon, reports a new assessment of global forest carbon stocks published July 14th in Proceedings of the National Academy of Sciences (PNAS). The findings have important implications for efforts to mitigate climate change by protecting forests. This

study has been adopted by the IPCC as new and revealing data.

QUESTION
15- How have THPs, Sierra Pacific and CDF moved to “plug in” the data found in this study (published July 14th in Proceedings of the National Academy of Sciences {PNAS})?

The FOLLOWING SECTION CHALLENGES SPI’s stance that old growth forest (AND second growth mature) does not maintain ENOUGH carbon sequestration to NOT CUT. This challenge is here because of the obvious…SPIs claims are bogus and the more bogus is revealed the more uncertainty is cast upon the remaining claims. The future of the planet cannot be handed to the Blackwaters and Halliburtons of this world. SPI has misrepresentation, fraudulent claims and heavy investments in contrived science. For instance…(1) The long-standing view that old-growth forests are carbon neutral was originally based on ten years' worth of data from a single site and has been supported by research that shows a decline in net primary productivity with age in plantations, according to the authors. SEE BELOW

The following exists on this website:
http://news.mongabay.com/2008/0911-forests.html

Old growth forests are important carbon sinks that help global warming, reports a study published in the journal Nature. The results run counter to claims by the forestry industry that old growth forests are carbon neutral or even net emitters of carbon dioxide.

Analyzing 519 studies of plots from forests around the world, Sebastian Luyssaert of the University of Antwerp and colleagues found that old growth forests in boreal and temperate zones of the Northern Hemisphere alone — about 15 percent of global forest cover — sequester 0.8 to 1.8 billion tons of carbon per year.

"Old-growth forests accumulate carbon for centuries and contain large quantities of it," the authors write. "We expect, however, that much of this carbon, even soil carbon, will move back to the atmosphere if these forests are disturbed."

The findings — which are based on a broader data set than prior studies1 — are significant because old-growth forests worldwide are being replaced by forest plantations 2. Previous research has shown that once plantations reach maturity, they become net emitters of carbon. In contrast, old-growth forests continue to accumulate carbon in their vegetation and soils.

"In fact, young forests rather than old-growth forests are very often conspicuous sources of CO2 because the creation of new forests (whether naturally or by humans) frequently follows disturbance to soil and the previous vegetation, resulting in a decomposition rate of coarse woody debris, litter and soil organic matter... that exceeds the net primary production of the regrowth," Luyssaert write.

"The current data now makes it clear that carbon accumulation can continue in forests that are centuries old," added co-author Beverly Law, a professor of forest science at Oregon State University and director of the AmeriFlux network, a group of 90 research sites in North and Central America that is monitoring the current global "budget" of carbon dioxide.

The authors end by arguing for the inclusion of old-growth forests in climate change mitigation programs.

"Carbon-accounting rules for forests should give credit for leaving old-growth forest intact," they conclude.

CITATION: Sebastiaan Luyssaert et al (2008). Old-growth forests as global carbon sinks. NATURE| Vol 455| 11 September 2008

(1) The long-standing view that old-growth forests are carbon neutral was originally based on ten years' worth of data from a single site and has been supported by research that shows a decline in net primary productivity with age in plantations, according to the authors.
(2) U.N. data shows that more than 15 million hectares of forest were destroyed each year during the 1990s, including 6 million hectares of primary forests. Meanwhile tropical forest plantations expanded by almost 5-fold since 1980. In 2006 alone Brazil planted more than 627,000 hectares of industrial forest plantations.

QUESTION:
16- What CURRENT STUDY does Air Resources, the Board of Forestry, SPI, Roseburg (and others) and CDF use to REFUTE THE STUDY BY Sebastiaan Luyssaert of the University of Antwerp?

Attached are chapters 9 and 10 of the Department of Energies 2001 Northwest Report. This report projects EXTREME temperature rises, increased draught and declining water availability in the Northern California, Oregon and Washington Region. DOE reports and other reports, have shown that the South West region will suffer hotter, drier and extreme water availability problems. All DOE reports indicate desertification headed north.
Based on the DOE Northwest Report:

QUESTION:
17- Where are the timber industry, Air Resource, Board of Forestry etc. studies to show that reforestation, water availability, increased wildfires and GLOBAL WARMING EMISSIONS won't INCREASE (get worse) in the hotter, drier Sierra, that is already being impacted by climate change? They are required by CEQA to maintain functional wildlife habitat-- Where are the surveys, studies, population counts from their lands, where it has been clearcut, to prove that they calculated future projections into current clearcutting operations? Do NOT use DiTomaso' study from over a decade ago, WHICH NO LONGER APPLY. Please show the published research.

18- Please show ALL the studies the timber industry, Air Resource, Board of Forestry etc. are using to prove that Climate Change WILL NOT affect forest growth in a NEGATIVE way in the Sierras and Cascade Range where SPI makes forests disappear and plantations

appear.

SECTION TWO: LACK OF UNDERSTORY RECOVER AFTER CLEARCUTTING

A: Preface to Questions
B: Question

Preface:

Do Appalachian Herbaceous Understories Ever Recover from Clearcutting?

DAVID CAMERON DUFFY
Institute of Ecology
University of Georgia
Athens, GA 30602, U.S.A.

ALBERT J. MEIER
Institute of Ecology
University of Georgia
Athens, GA 30602, U.S.A.

Abstract: Life history characteristics of many herbaceous understory plants suggest that such species recover slowly from major perturbations such as clear cutting. We examined herbaceous cover and richness in the understories of nine primary ("old-growth'? Forests in the southern Appalachian Mountains and of nine comparable secondary forests, ranging in age from 45 to 87 years since clear cutting. Neither cover nor richness increased with age in the secondary forests. This suggests three possibilities: (I) that r e c o v q is so slow or variable among sites that 87 years is insufficient time to detect it; (2) that such forests will never recover to match remnant primary forests because climatic conditions are different today than when the forests became established; or (3) that herbaceous plants colonize pit and mound micro topography caused by the death of trees, so that recovery must await the growth, death, and decomposition of the trees of the secondary forest. Whatever the mechanism, herbaceous understory communities in the mixed-mesophytic forests of the Appalachians appear unlikely to recover within the present planned logging cycles of 40-150 years, suggesting a future loss of diversity of understory herbaceous plants.

STUDY ATTACHED

QUESTIONS:

19- Show the published studies that SPI and CDF have that CONTRADICT or OPPOSE the above study.

20- Show the studies or research published that SPI and CDF use to determine that herbaceous understory plant species recover completely from clearcutting.

21- Show that the studies you are citing reflect up to date climate information, enough to “trump” the above study.

22- If you attempt to dismiss this study because it refers to Appalachian forest, then show the WESTERN study you rely upon to

show that climate affects understory species growth different in the west, FROM THE EAST.

SECTION THREE: WILDLIFE AND BIODIVERSITY DECREASE AFTER CLEARCUTTING

A: Questions

23- Since there is diminishing biodiversity after the logging of primary forests, how much worse will the loss of biodiversity be after clearcutting secondary forests? Show the research.

24- SPI and CDF claim “wildlife thrives in wildlife retention areas” {Redding Record Searchlight January 2006}. Yet we cannot find a SINGLE satellite image (they are ALL daytime) with a single deer, bear, turkey or any other animal in it. Show the research and photographs of THRIVING wildlife. We are all certain that animals pass thru clearcuts to get to other forested areas, so the photographic evidence would contain nesting sites, animals feeding in herds, mating etc. Show these photographs. The question is “where are the photographs and research that shows retention areas are thriving with wildlife.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/11-cbd_commentsgirard.pdf'

Original File Name: CBD_CommentsGirard.pdf

Date and Time Comment Was Submitted: 2009-09-23 07:25:34

No Duplicates.

Comment 11 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Susan
Last Name: Robinson
Email Address: srmw@comcast.net
Affiliation:

Subject: Forestry Protocols - clearcutting and CO emissions
Comment:

The current CCAR Climate Change Forestry Protocols do not adequately address the significant soil emissions caused by clearcutting practices. The attached picture shows a recent clearcut in Calaveras County, CA. It clearly shows the deep tilling that commonly occurs following clearcutting. It is very well documented in numerous studies that CO2 emissions from this type of activity are significant. The picture also shows that most of the "litter and duff" and other material has been destroyed. The area contains little lying dead wood, and of course the ecosystem in this clearcut has been destroyed. Please note this is only a 20 acre clearcut and in 5 years the remaining adjacent forest can also be clearcut under the protocols. Clearcutting and inadequate emissions accounting is not acceptable
Susan A. Robinson

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/12-picture_of_severe_soil_disturbance_in_clearcutting.jpg'

Original File Name: Picture of severe soil disturbance in clearcutting.jpg

Date and Time Comment Was Submitted: 2009-09-23 10:02:11

No Duplicates.

Comment 12 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Marily
Last Name: Woodhouse
Email Address: Marily.Woodhouse@mlc.sierraclub.org
Affiliation: Sierra Club, Battle Creek Alliance

Subject: Addition to my comments
Comment:

I would like to add to my comments the petition against clearcutting that we have over 1300 signatures on. Attached is a scan of just 1 page as the scan of all of the pages is too many MB to send by email. If you would like a CD copy of all of the pages, let me know.

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/13-petition_1_pg007.pdf'

Original File Name: Petition 1 pg007.pdf

Date and Time Comment Was Submitted: 2009-09-23 10:20:48

No Duplicates.

Comment 13 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Gary
Last Name: Gero
Email Address: gary@climateactionreserve.org
Affiliation: Climate Action Reserve

Subject: comment on Forest Project Protocol, Version 3.0
Comment:

```
Please see attached letter.
```

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/14-reserve-workgroup_letter_to_arb.pdf'

Original File Name: Reserve-Workgroup Letter to ARB.pdf

Date and Time Comment Was Submitted: 2009-09-23 10:47:07

No Duplicates.

Comment 14 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Addie
Last Name: Jacobson
Email Address: addie@lqei.com
Affiliation: Ebbetts Pass Forest Watch

Subject: EPFW Comments on Possible Adoption of CAR Forest Project Protocol
Comment:

```
Attached please find additional comments from Ebbetts Pass Forest
Watch on possible adoption of CAR Forest Project Protocol.

Thank you.

Addie Jacobson
```

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/15-epfw_carbcomment9.24.09.doc'

Original File Name: EPFW CARBcomment9.24.09.doc

Date and Time Comment Was Submitted: 2009-09-23 11:44:05

No Duplicates.

Comment 15 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: Brian
Last Name: Nowicki
Email Address: bnowicki@biologicaldiversity.org
Affiliation: Center for Biological Diversity

Subject: Forest Project Protocols
Comment:

September 23, 2009

We are writing to update the list of conservation organizations wishing to express our strong opposition to the forest clearcutting provision in the current version of the forest project protocols, and to urge the Air Resources Board not to adopt the protocols with this provision included.

Audubon California
Battle Creek Alliance
Butte Environmental Council
Cascade Action Now
Center for Biological Diversity
Central California Forest Watch
Central Sierra Environmental Resource Center
Conservation Congress
Defenders of Wildlife
Ebbetts Pass Forest Watch
Environment Now
Environmental Protection Information Center
Forest Ethics
Forest Forever
Forest Issues Group
Forest Unlimited
Friends of Lassen Forest
Friends of the Earth John Muir Project
Northcoast Environmental Center
Sequoia ForestKeeper
Sierra Club California
Sierra People's Forest Service
StopClearcuttingCalifornia.org

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/17-group_letter_to_carb_re_forest_protocols_09_23_09_final.pdf'

Original File Name: Group letter to CARB re forest protocols 09 23 09 FINAL.pdf

Date and Time Comment Was Submitted: 2009-09-23 11:45:26

No Duplicates.

Comment 16 for Forest Project Protocol for Greenhouse Gas (forestry09) - Non-Reg.

First Name: John
Last Name: Turner
Email Address: josanbird@gmail.com
Affiliation: Central Sierra Audubon Society

Subject: Forest Project Protocols
Comment:

```
Hello CARB

I just submitted our comments in Word form, and thought that you
may prefer pdf format and so that is attached here.
Also, I wish to correct my telephone number.

Respectfully,
John Turner, President Central Sierra Audubon
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Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/18-csas_letter_to_carb.pdf'

Original File Name: CSAS letter to CARB.pdf

Date and Time Comment Was Submitted: 2009-09-23 11:54:37

No Duplicates.

Comment 17 for Forest Project Protocol for Greenhouse Gas (forestry09) - 45 Day.

First Name: Nancy
Last Name: Skinner
Email Address: Non-web submitted comment
Affiliation:

Subject: California Legislature
Comment:

```
Please see attached
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Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/19-calilegis.pdf'

Original File Name: calilegis.pdf

Date and Time Comment Was Submitted: 2009-09-23 17:14:16

No Duplicates.

Comment 18 for Forest Project Protocol for Greenhouse Gas (forestry09) - 45 Day.

First Name: John
Last Name: Mills
Email Address: john.mills@bos.sccgov.org
Affiliation:

Subject: Forest Protocols
Comment:

please see attached

Attachment: 'https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/21-john.pdf'

Original File Name: John.pdf

Date and Time Comment Was Submitted: 2009-10-06 16:02:58

No Duplicates.

Comment 1 for Forest Project Protocol for Greenhouse Gas (forestry09). (At Hearing)

First Name: Susan
Last Name: Robinson
Email Address: Non-web submitted comment
Affiliation:

Subject: Mountain Alliance
Comment:

please see attached

Attachment: https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/forestry09/20-susan.pdf

Original File Name: Susan.pdf

Date and Time Comment Was Submitted: 2009-10-06 10:11:47

No Duplicates.