American Forest & Paper Association

Comments on the Draft Revised Forest Project Protocol

January 19, 2009

The American Forest & Paper Association (AF&PA) appreciates the opportunity to submit comments to the California Climate Action Registry on their Draft Revised Forest Project Protocol (released December 2008).

AF&PA is the national trade association of the forest products industry, representing forest landowners and pulp, paper, paperboard and wood products manufacturers. The U.S. forest products industry accounts for approximately six percent of the total U.S. manufacturing GDP, placing it roughly on par with the automotive and plastics industries. The forest products industry generates over $200 billion a year in sales and employs more than one million people earning $54 billion in annual payroll. The industry is among the top ten manufacturing sector employers in 48 states. In California the U.S. forest products industry generates over $16 billion in sales and employs close to 70,000 people earning over $4 billion in annual payroll. Forests currently cover 33.2 million acres or 33% of the land area in California of which 19.6 million acres are productive unreserved forestland.[1]

We understand that the reason the California Forest Protocol is being revised is to reduce transaction costs, increase potential benefits to landowners and provide fewer restraints on land management options so the program is attractive to a broader spectrum of landowners. Our view is that this new version has failed to meet any of these objectives. It remains a high cost, high restriction, long-term, conservation easement focused on wildlife habitat values thinly disguised as a carbon sequestration program.

This program will continue to be avoided by most private landowners, who value the choice to manage their forestland for their independent objectives. It also deliberately limits the participation of the tens of thousands of landowners who manage their forests intensively for wood products and economic returns. Most importantly, it severely limits the carbon benefits that these intensively managed forests could provide to help reduce atmospheric carbon dioxide.

[1] Estimated area of forest land by ownership and land status (Millions of Acres) (Source: 2005, USFS, FIA)

To increase the acceptability of this program it needs major revisions that:

1. Limit the restrictions on landowners to make land transactions;
2. Allow maximum flexibility to manage land for individual landowner objectives;
3. Simplify the mechanisms to verify sustainable forest management;
4. Let the market prices of wood products and sequestered carbon influence harvest cycles, not program rules;
5. Fully value the carbon sequestered in the long-lived wood products pool (in addition to the carbon related co-benefits of all harvested wood products);
6. Eliminate the measurement and information gathering requirements that are likely to show positive or de minimus carbon changes
7. Incorporate objectively determined, easily measured baselines that don't discriminate against intensively managed forests or forests growing on low or high fertility sites;

We submit that these revisions are possible without compromising the program's ability to produce real, verifiable, permanent, additional carbon sequestration. However, it will take a commitment to trust contracts and market forces and reduce the high command and control approach that this program currently embraces.

Our major concerns with the draft protocol lie in the following areas:

- BAU baseline and additionality criteria that are subjective, unrealistic, and overly perscriptive
- The project implementation agreement 100 year obligation is too restrictive
- The permanence obligation that goes with the land and not the landowner is too inflexible.
- Natural forest management definitions and tests are unnecessary and constraining
- The protocol has limited applicability in high intensity forest management regimes that are prevalent in areas like the US South.
- The recognition for carbon benefits of harvested forest products is overly conservative and inaccurate

- Entity wide reporting (carbon stocks on non-project lands) are unreasonable when an entities land ownership is spread over many areas of the country.
- Leakage risk assessment tests are too arbitrary
- De minimis thresholds for emissions from harvesting activities (under secondary effects) would be a constructive addition
- Administrative burden is unnecessarily high relative to carbon value
- General clarity of the protocol as written needs substantial improvement.

BAU baselines and additionality criteria (Sections 3.1 and 6.2)

We do appreciate the effort that has been put into revising the protocol to be more inclusive of managed forests. The addition of a baseline calculation method using Forest Inventory Assessment (FIA) means (rather than a future projected model of business as usual activity) is a welcome addition to the protocol (although it may be too complex (site quality * by species * by management scheme) to be fairly implemented in many areas of the country). It is critical that forest project protocols baseline criteria value carbon stocks with reasonable accuracy in all forests. It is critical that forest project protocols baseline and additionality criteria value carbon stocks in all forests. We applaud the Reserve's recognition that baselines based on "what would have happened in the absence of the project" are not appropriate. There are two fundamentally flawed assumptions inherent in this type baseline approach. The first is the assumption that BAU actually exists in dynamic markets and the second is the assumption that BAU baseline carbon levels will be maintained in a market system that does not recognize their value. Forests management schemes unlike factories can be readily changed. What is a high production forest this year could be a parking lot next year. High production schemes for one rotation could be conservation schemes or short rotation biomass schemes the next. More than half the forestland in the U.S. is privately owned-- roughly 424 million acres. Of that, 354 million acres are actively managed for timber. The carbon that U.S. forests and forest products currently store each year is enough to offset approximately 10 percent of all U.S. CO_2 emissions. However, land use is rapidly changing in many areas of the country as larger forest ownerships are parceled into smaller units and investment firms with short term management horizons take ownership of more forestland. Without proper recognition of the value of these huge carbon stocks, only a fraction of potential mitigation benefit may be realized, or worse, the U.S. could begin to lose this significant asset.

In the protocol, there appears to be discrepancy between the stated definition of baseline and additionality in Section 3.1 “what would have occurred in the absence of the Reserve’s programs and, more generally, a market for GHG reductions” and what is actually creditable under the program. Indeed, carbon sequestration levels measured over a regulatory, other minimum baseline or an FIA mean, rather than the actually inventoried baseline level, will likely produce credits for existing carbon stocks. Similarly, carbon stock changes measured over a baseline year inventory may not be incremental to what would have happened in the absence of Reserve’s program. We suggest that the Reserve edit the language on additionality in Section 3.1 to better reflect what will be considered additional under the protocol. Such transparency is extremely important to maintain the environmental integrity of the protocol and gain acceptance for forest-based offsets in future climate change policy.

Project implementation agreement 100 year obligation.

Project Implementation Agreement (Section 3.3 page 4) –

The elimination of the requirement for a conservation easement on project land is a positive step. However, the commitment to demonstrate compliance with the protocol for 100 years that replaced it is still a major barrier to participation by forestland owners.

While it may be reasonable from a scientific point of view that creditable sequestration should remove carbon dioxide from the atmosphere for 100 years to be considered “permanent” (and therefore equivalent to offsetting carbon emitted from regulated facilities), we believe this requirement is unrealistic and unworkable from a practical standpoint. We do not agree that landowners must commit their project lands for 100 years–quite simply, they will not do so. Allowing market flexibility for landowners and project developers to establish forest carbon contracts of different duration in response to market demand and realistic ownership and management patterns is imperative. Without this flexibility, participation in the program will be severely limited. Simply few landowners (small or large) will place 100 year restrictions on their land. This is especially true for large landholdings where unforeseeable circumstances may make portions of the property highly valuable for other uses. Many factors, including business and personal objectives, financial need, and land and carbon values dictate whether project land ultimately remains forested, sequestering carbon. Working forests are business entities and business entities as a rule do not make 100 year commitments. Clear rules should be established for replacing shorter-term credits so that environmental integrity is maintained.

Permanence obligation that is required to transfer with the sale of the project land

There should be no automatic permanence obligation required to transfer with the project land at time of sale. Like a conservation easement, this is an unworkable requirement with a similar effect of limiting participation rates. As with shorter-term offset credits, clear rules should address the sale of land to assure that the landowner makes appropriate arrangements for replacing the project credits sold or contractually arranges for the next owner to maintain the project.

Natural forest management definitions and tests (Section 3.5.1 page 5) and limited applicability outside California

Natural forest management is defined as management practices that promote and maintain native forests comprised of multiple ages and mixed native species at multiple scales from the harvest unit (less than 40 acres) up to the watershed spatial scale (third or fourth order watershed level) approximately 10,000 acres in size.

It is unclear from the definition whether each unit scale is required to maintain multiple aged mixed native species or if the combination of having various sized and purposed units across the landscape meets the intention of the requirement.

When looking at the evaluation criteria outlined in Table 3.1 (page 6), we assume that the criteria values are additive. Even so, depending on how literally or strictly one interprets the criteria it is possible that many managed forests, especially high production plantation forests, may not qualify. While most planted forests consist of native tree species, the requirement for management of distribution over background (unmanaged) levels is not realistic for a managed forest by definition. It is difficult to determine what is meant by "Management of species distribution appears to favor commercial species over background (unmanaged) levels by a factor of 25%" For example, does this mean that an upland pine –hardwood stand planted to loblolly pine (a native species) favors a commercial species and is therefore not allowed for more than 25% of the project? If this is the case than many landowners in the South would not qualify for the necessary 2 points. How would this aspect of the Native Forest – Presence and Composition test be quantified? How many points would a landowner with 50% get?

It is also difficult to see where Southern plantation forests could garner the 5 points necessary to meet the Natural Forest Management test even if they are certified sustainable. Only one point is awarded for third party oversight, only one point is awarded for internal policies to protect sensitive sites without state regulations so landowners would have to manage at least 15% of their land in stands of ages greater than 80% of maximum MAI to reach 5 points. This requirement compromises their ability to generate adequate financial returns from their forestry investment. We

suggest that a sustainable forest management test is more appropriate for carbon offsets than a natural forest management test.

To alleviate these concerns and help make the protocol more applicable to jurisdictions outside of California, we recommend that project developers have the option to show that the project lands are certified to a 3rd party sustainable forestry certification system (SFI, FSC, CSA, Tree Farm, etc) in lieu of using these tables. This will simplify the process significantly for those project lands that are already practicing sustainable forest management.

Perhaps more importantly, the native species restriction is too restrictive to allow enhanced productivity plantations, which frankly are critical internationally (and nationally) for meaningful and affordable GHG mitigation. Use of faster growing species in highly managed plantations will be needed to expand use of this renewable resource and to reap the low carbon commodity and carbon storage benefits that forest products provide. This is particularly true given the desire to conserve or preserve large tracts of non-working forest for recreational purposes. Perhaps California will choose not to participate in this critical mitigation measure, but other areas clearly will and maximizing forest productivity in carefully managed working forests is a necessary element to meeting societal needs while pursuing climate change mitigation objectives.

Proper recognition for carbon benefits of harvested forest products is imperative

It is essential that the protocol account for Harvested Forest Products (HWG) in a manner that does not devalue their important contribution to keeping CO_2 out of the atmosphere.

The climate benefits of sustainably managed forests, when coupled with timber production, provide several positive carbon benefits that are quite significant when compared to unmanaged forests. These include:

- ***Carbon storage in wood products:*** Approximately one-third of the carbon in wood harvested for the industry ends up in long-lived products such as lumber and wood-based panels,[2] and is sequestered in some cases for decades, even centuries.[3] Even paper products in controlled landfills (which dominate existing disposal paths) provide 10 to 100 year storage prior to use for heat value. EPA is working towards meaningful quantification techniques for this benefit. *Long term storage of carbon in such products is internationally recognized by climate scientists and policymakers, including the recently released guidelines by the Intergovernmental Panel on Climate*

[2] *Based on data from the FAO database FAOStat http://faostat.fao.org/.*
[3] *Based on half-lives in Annes 3.12 of* USEPA 2007, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 7 1990 – 2005

Change.[4] The U.S. government estimates that the amount of carbon stored in forest products is equivalent to removing over 100 million tons of carbon dioxide from the atmosphere every year.[5] This is equivalent to eliminating the carbon dioxide emissions from 18 million passenger cars - 13% of all passenger cars on the road in the U.S.[6]

- ***Lower Carbon Footprint:*** Wood as a building material requires less energy to extract, process, transport, construct and maintain over time and is a better insulator than other building materials such as cement and steel.[7] In addition, harvested wood that is not made into products is used as a substitute for fossil fuels, often through co-generation which further amplifies the benefits of using this GHG-neutral fuel. Wood fiber for other uses, such as packaging material, provides many of the same advantages. According to the latest DOE figures, in 2002, 89 percent of electricity generated at paper mills was cogenerated.[8] Moreover, economic returns to active forest management can have substantial effects on landowner decisions about whether to convert forests to non-forest uses.[9]

In section 6.4 (page 24) the current protocol inappropriately calculates "*additional*" carbon in wood products by adding "*the difference between actual and baseline carbon in wood products produced in the current year that will remain sequestered for at least 100 years.*" For sustainably managed forests, by definition, the renewable supply of annually harvest material is always additional. Furthermore, as the annual increment of carbon, if not harvested, would be considered additional under the protocol, the annual increment harvested (adjusted for the 100 year permanence requirement) is also additional. It is not emitted to the atmosphere. It is the same carbon whether on the stump or off.

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[4] Intergovernmental Panel on Climate Change (IPCC). 2006. *2006 IPCC guidelines for national greenhouse gas inventories*

[5] http://www.epa.gov/climatechange/emissions/downloads06/07LULUCF.pdf page 7-11

[6] USEPA 2007, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990 – 2005 and information from EPA's personal greenhouse gas calculator website http://www.epa.gov/climatechange/emissions/ind_calculator.html

[7] http://www.beconstructive.com/pdf/Factsheet4.pdf based on http://www.corrim.org/reports/2006/final_phase_1/index.htm

[8] Energy Information Administration 2002 report on Energy Use in Manufacturing, Table 11.3 www.eia.doe.gov/emeu/mecs/mecs2002/data02/pdf/table11.3_02.pdf

[9] The forest and agricultural sector optimization model (FASOM): model structure and policy applications. 1996. Adams, Darius M.; Alig, Ralph J.; Callaway, J.M.; McCarl, Bruce A.; Winnett, Steven M. Res. Pap. PNW-RP-495. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 60 p

Long-lived wood products should be treated as another carbon pool. Carbon in long-lived wood products (over 100 years) is not emitted so requiring a debit when the trees are harvested overstates the carbon going to the atmosphere. For managed forests, carbon credits should be awarded on the amount of carbon that is sequestered in all carbon pools (including long-lived wood products) above the established baseline. This baseline should not include an assumption that there will be harvesting in the future.

We disagree that BAU should be used as a baseline. Landowners have the option to convert their land to other uses, to not regenerate, or to discontinue harvests altogether, so to assume a baseline based on continued forest management and continued harvests is not appropriate given the options most land owners have to manage their land. We propose that if landowners can show that they are sustainably managing their forest (most likely with third party certification), that this is a practice that is above and beyond normal practice and should be sufficient to meet the additionality test. The baseline should be the amount of carbon in the project at its inception.

DOE 1605(b) tables provide net additions (new carbon sequestered minus old carbon emitted) of carbon to the long-lived wood products carbon pool. The DOE 1605(b) protocol also provides tables for 100 year carbon sequestration at both the harvest level (at the landing) and the manufacturing level (at the loading dock) that negate the need to track the carbon pool year by year on individual projects. Landowners should be able to use the harvest level tables in order to simplify record keeping. In addition, landowners should be able to transfer the long-lived carbon rights to the entity manufacturing the long-lived wood products, who in turn can claim credits using the manufacturing level tables.

We hope that the forth coming draft section on Harvest Forest Products expected later this month will make the necessary changes to value this important carbon pool appropriately.

Entity wide reporting and carbon stocks on non-project lands.

- Emissions related to managed forests and land management should not be regulated or included under a cap and trade program. Forestry practices should be eligible to participate voluntarily in offset programs on a project basis. All existing GHG international protocols treat forestry in this manner.

- The requirement for entity wide reporting to address internal leakage (if project lands are >10% or <90% of ownership) needs to be revised to more realistically reflect the risk of leakage. In reality, the risk of leakage attributed to a particular project is more related to geographic supply chains. For example, if an entity owns land in the west and the southeast, a project located in the west should only report inventories from non-projects lands for their western land and only the

portion of western lands that could reasonably be assumed to service the same purposes (forest product mills, recreation, etc). The appropriate reporting boundaries should be commonsensical and can be assessed by the project verifier. The current approach is unnecessarily burdensome and provides no added value in terms of assessing leakage.

- If the reporting entity includes manufacturing as well as timber growing operations, these activities would be combined and reported under rules comparable to the CCAR General (GHG) Reporting Protocol, in a voluntary consolidated account. Any increases in carbon stock should be considered credits and similarly, any reductions in carbon stock should be considered emissions. Consolidated registrations would be held to net changes (increases and decreases) from a consolidated baseline. Note that for an entity reporting under this scenario the Forest Project Protocol would be unnecessary.

- In order to avoid unnecessary and expensive carbon accounting, it is important that such entity-wide reporters have the option to be exempt from reporting carbon fluxes from forests (not included in a project) that are sustainably managed. This is based on the fact that carbon stocks on sustainably managed forests are likely to be stable or positive over time. This provision would allow entities to avoid expensive carbon accounting and verification procedures on land that likely will have *de minimis* changes over time. This reporting option for lands certified to a sustainable forestry standard, such as the Sustainable Forestry Initiative, Forest Stewardship Council, Canadian Standards Association Sustainable Forest Management certification, or the American Tree Farm System, has been adopted by the Department of Energy's Voluntary Reporting of Greenhouse Gases 1605b Program.[10]

Leakage Risk Assessment for Improved Forest Management Projects

We address internal leakage in our comments above on entity-wide reporting. The current assessment test for external leakage is arbitrarily complex and does not address substitution away from wood products, as it claims in the introductory part of this section (6.2.2). As it is unlikely that a single project will affect supply at levels that could be readily discerned nor would it make sense for any project originator to have to evaluate its own effect and that of all other pending projects, external leakage should be addressed through market assessments at the state or regional level.

10 http://www.pi.energy.gov/enhancingGHGregistry/documents/January2007_1605bTechnicalGuidelines.pdf (Section 1.I.3.5 Sustainably Managed Forests Page 244 4.)

We also note that the external leakage adjustment methodology for avoided conversion projects is inappropriate and does not reflect the real changes to the carbon to the atmosphere as development will likely relocate.

Secondary Effects – Quantifying Net Changes at Other Affected GHG Sources
(Section 6.2.2 page 16)

Calculating emissions from mobile sources involved in forest management activities is administratively burdensome particularly given the minor impact on the net carbon project levels. We have been told by several companies that have examined these emissions that they represent around one percent (give or take) of a pulp and paper mill's direct emissions (but this will of course vary depending on how large the mill's direct emissions are). Furthermore, because the estimates our companies make are usually based on facility or corporate-wide fuel use data, these emissions, to the extent they are direct emissions for the company, are usually included in the emissions totals that we calculate.

However, in most cases, these emissions are not direct emissions for the reporting company. Rather, these emissions are attributable to a portion of the supply chain. Collecting such disperse, detailed information for these activities, often contracted out, is unrealistic and unnecessary particularly if only increased emissions are relevant. For example, if longer rotations are proposed in a project, this logically means a net decrease in such emissions as fewer acres will be harvested and replanted annually on a fixed land base. In any case these emissions should be considered de minimis and subject to a threshold under which they are not required to be included in the baseline or annual reporting calculations. Furthermore, emissions associated with mobile sources will most likely be accounted for in the transportation sector of a cap and trade or other climate program.

Administrative burden is unnecessarily high

As we have noted throughout these comments, the administrative requirements of the protocol are often unnecessarily burdensome and will be a barrier to participation for many landowners. We recommend that CCAR work to reduce these burdens particularly in areas where their inclusions provide little or no value in furthering carbon sequestration objectives.

General clarity of the written protocol

Section 6.2 Improved Forest Management Projects -6.2.1.1 Estimating the Baseline: Because the protocol retains language regarding modeling of future carbon stocks and also describes a method for determining creditable baselines using FIA mean data, the reader is led to believe that baselines are based on both. To make the section requirements less confusing, we recommend eliminating references to BAU modeled baselines in this section. Once completed, the "Required Modeling Procedures" may help clarify this section. In the meantime, inclusion of illustrative examples of baseline and creditable carbon stock levels would be extremely helpful to the reader.

Please clarify why is there a requirement that carbon stocks cannot go below certain levels? In section 6.2.1.1 there are additional constraints, described below, that depend on the initial forest inventory to ensure conservative calculations.

1. Forests with above-average stocks and forests and forests with below-average stocks have different baseline projections based on programmatically assessing common management behavior.
2. For forests with above-average stocks, the modeled baseline activity cannot deplete stocks below the landscape average established by Reserve, even if such activity might be legal and feasible.
3. For forests with below-average stocks, the average stocks for the baseline activity cannot fall below the initial stocks.

These requirements are unnecessary as the Reversals section (Section 7) requires that landowners must compensate the Reserve for reversals.

Section 3.5.2 Promotion of Onsite Forest Carbon Stocks (page 9) is confusing in that it states that reductions shall not be registered where a decrease in the standing live pool cannot be attributed to one of several conditions which includes "the harvest is part of a non-harvest disturbance." Is the buffer pool meant to cover wildfire and insect disturbances such that these reductions need not be registered? Please clarify.

When looking at the evaluation criteria outlined in Table 3.1 (page 6), we assume that the criteria values are additive, however it would be helpful if this was stated in the protocol.

Summary

We thank you for the opportunity to comment on CCAR's Forestry Protocols. We appreciate the work that has been done to date to revise these protocols, however, we believe that much more work needs to done before these protocols would be acceptable for use in carbon markets. We hope that these comments will lead to the incorporation

of additional alternatives that will make the Forestry Protocols more inclusive of managed forestry operations. We believe it is possible to include such provisions while maintaining the level of integrity necessary to support the Registry's objectives of measuring real, additional, verifiable, and permanent reductions in green house gases.

Please do not hesitate to contact us as we would like very much to provide any supporting information needed or work with you to refine any of the options outlined in these comments.

Sincerely,

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