

September 24, 2007

Mary Nichols, Chair ([mnichols@arb.ca.gov](mailto:mnichols@arb.ca.gov))  
Members of the Board ([arbboard@arb.ca.gov](mailto:arbboard@arb.ca.gov))  
California Air Resources Board  
P.O. Box 2815  
Sacramento, CA 95812

**Re: Comments on Climate Action Registry Forestry Protocols as AB32 Early Action**

Dear Secretary Nichols and Members of the Board:

The California Forestry Association (CFA) recommends a facilitated discussion between stakeholders to assure California has technically sound forest protocols that provide incentives rather than barriers to forest landowner carbon registration. We encourage the California Air Resources Board (CARB) to immediately convene a panel of stakeholders to address creation of sound scientific forestry protocols for California and for the Western Climate Initiative.

As we will show below, there is no public policy imperative at this time to justify expedited endorsement of the California Climate Action Registry (CCAR) forest protocols by the CARB. The current version of the CCAR protocols will likely never lead to a substantial number of forest landowner registrants. Since the forestry protocols were completed (October, 2004), there has been only one registrant that is now in the third party certification process and a second entity going through the process of completing the requirements of the protocols in order to register.

There are two major reasons why CFA believes the CARB should carefully consider whether or not the CCAR forestry protocols should be endorsed at this time as an early action measure to AB32 implementation. First, there are at least three mandatory requirements of the CCAR forestry protocols that are barriers to registration for nearly all California forest landowners. Second, CFA believes there are at least three technical elements of the current version of the CCAR forestry protocols that should have further assessment.

**I.** The current version of the CCAR forestry protocols, and their associated mandatory requirements, are a barrier to registration for nearly all California forest landowners for at least three major reasons:

**A. Permanence**

The CCAR protocol requires an easement in perpetuity, which is a barrier to participation for nearly all private forestland owners and totally excludes public forest landowners. The CCAR protocols have been in-place and available for registrants since October 2004. There

has been one registrant to date and a second in process for a total of 28,000 acres out of the 33 million acres of California's forestlands (<1/10 of 1 percent).

There are many ways to address permanence. Easements are a tool, however, easements are primarily a land use tool and have nothing to do with permanence of carbon. A property with an easement in perpetuity in-place could burn up tomorrow in a wildfire. Carbon life cycle models with annual monitoring requirements for registrants, carbon contracts between willing buyers and sellers, 3<sup>rd</sup> party certifiers, and related instruments can be used to address permanence.

### **B. "Natural Forest Management"**

The CCAR protocol requires that a registrant is only able to use uneven-age or single-tree selection as a management scenario. This is a major barrier to participation in the Registry. This limitation would greatly reduce the profitability of working forests and significantly reduce the net sequestration rate for many properties.

CFA believes that the thrust for the CCAR forestry protocol, instead, should be full compliance with state and federal environmental laws. The CCAR protocol should be focused on verifiable and certifiable carbon accounting, not trying to modify active forest management with additional environmental factors.

### **C. Measurement**

Inventory, monitoring, and rigor of certification are all significant cost centers in the CCAR forestry protocols. The CCAR protocol has been found by the first registrant to have an upfront cost to the landowner of \$25/acre plus the cost of 3<sup>rd</sup> party certification just to register (Presentation by Laurie Wayburn at Sept. 6<sup>th</sup> "Public Consultation Meeting"). Annual monitoring, reinventory, and periodic recertification are all additional costs. For \$3-5/ton CO<sub>2</sub>e, it does not take many calculations to figure out that this level of cost may be a barrier to participation in registration and carbon trading for many forest landowners.

Inventory, monitoring, and certification rigor have to be commensurate with the value of the carbon if the protocol is going to attract registrants.

The result of the three barriers to registration in the current version of the CCAR forestry protocols is that there will be few additional registrants in the future. Hence, only a tiny fraction of California's forestlands will ever be registered under the CCAR forestry protocols.

**II.** There are at least three major technical issues with the current version of the CCAR forestry protocols that we believe need to be addressed immediately:

#### **A. Definition of Baseline**

The CCAR protocol defines baseline in 2 parts: 1) baseline can start anywhere between 1990 and the year of registration at the discretion of the registrant and 2) the registrant can use Option C of the California Forest Practices Rules to determine the carbon stock level that “Additionality” is measured from. Option C provides the opportunity for the registrant to “on paper” clearcut the entire growing stock over a relatively short period of time and thereby create a very low baseline. Of course, the CCAR protocol does not allow a registrant to propose this methodology for management of their property so it seems odd the protocol would allow this approach to defining baseline. In addition, the CCAR protocol makes it optional whether or not to track carbon storage in wood products. In addition to using Option C to defining a baseline, the registrant can choose not to determine the carbon storage that would be associated with the harvested wood from the clearcutting thus artificially keeping the baseline carbon stock number low. We do not believe this is a legitimate definition of baseline that would be widely accepted nationally for any carbon trading platform.

We believe there are better approaches to Baseline such as the Chicago Climate Exchange approach.

### **B. Optional tracking of carbon storage in wood products**

The CCAR forestry protocol leaves it optional to the registrant whether or not to track carbon storage in wood products in the owner’s baseline and Additionality methodologies. Apparently when the CCAR forestry protocol was developed, in part, it was felt that this was a difficult task and raised controversy over who would own the credit.

For a credible protocol, we believe carbon storage in wood products must be mandatory, not optional. More than sufficient information is available today that makes it relatively straightforward of how to track carbon storage in wood products.

### **C. Live tree carbon estimation equations could cause up to 35 percent errors in growth estimation**

The carbon equations provided in the CCAR forestry protocols are not for individual California species, but rather a national composite of species with similar morphological characteristics (Jenkins et al, 2003). For example, the ‘pine’ equation is a composite composed of 14 species of pine trees most of which come from data collected in the eastern United States. Virtually none of the data employed by Jenkins comes from California.

Jenkins notes that the equations are for national scale biomass estimation. In other words, they were designed to treat the whole United States as a single forest project. Only tree diameter breast height (DBH) was considered as a predictor variable because it was the lowest common denominator in the studies examined. Jenkins cites statistics indicating the difference between individual studies and the composite equations can be in excess of 35%.

A wealth of relatively precise stem-wood/bark volume equations using tree diameter and height is available for specific regions and species in California and should be incorporated into the CCAR forestry protocols. The Jenkins equations should be removed from the protocols.

The three noted technical issues are not an exhaustive list.

In summary, CFA believes the CARB should not endorse the CCAR forestry protocols until the barriers and technical issues have been addressed. Further, we request the CARB immediately convene a panel of stakeholders to address creation of sound scientific forestry protocols for California, and for the Western Climate Initiative, that will be incentives for all forest landowners, including public lands, to register.

Sincerely,



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Vice President-Public Resources

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