THE WILDERNESS SOCIETY

California/Nevada Regional Office

September 21, 2007

Mary D. Nichols, Chairman
California Air Resources Board
1001 I Street • P.O. Box 2815
Sacramento, California 95812

**Re: Endorsement of the California Climate Action Registry Forest Protocols**

Dear Chair Nichols and Members of the Air Resources Board:

We applaud your efforts to encourage voluntary actions to reduce greenhouse gas emissions in California and we appreciate the opportunity to provide comments as you consider endorsing the California Climate Action Registry (CCAR) Forest Protocols. In California and throughout western North American effects from climate change are already occurring (e.g., increasing temperatures, declining snowpack, earlier snowmelt, altered hydrology, shifts in species distributions, increasing fire frequency, changes in the timing of natural events) and because global warming emissions remain in the atmosphere for decades or centuries the severity of the consequences will depend on how rapidly governments act to reduce greenhouse gas (GHG) emissions. The window of opportunity to avert the most serious environmental consequences is rapidly closing. Now is not the time for timid leadership. Early voluntary action measures, like the Registry's Forest Protocols, offer a critical opportunity to initiate immediate steps to reduce our GHG emissions and diminish the consequences posed by a rapidly changing climate.

Our forests store vast amounts of carbon and have the potential of sequestering millions of additional tons through activities that promote conservation, reforestation and changes in forest management practices. Forests in the United States currently sequester about 10% of U.S. industrial emissions and that proportion could increase substantially under the right policies[1]. The CCAR Forest Protocols provide a GHG accounting platform that presents an opportunity for the Air Resources Board (ARB) to engage forest entities in early actions that could measurably increase the carbon sequestered by California forests and help the state meet the AB 32 mandated emissions levels.

[1] Ingerson, Ann L. 2007. U.S. Forest Carbon and Climate Change. Washington, D.C.: The Wilderness Society.

The CCAR Forest Protocols were developed through an extensive four-year multi-stakeholder process and are based on broadly accepted greenhouse gas reduction principles (e.g., AB 32, Kyoto protocol, Regional Greenhouse Gas Initiative). We are generally supportive of the Registry's Protocols for use as a carbon accounting tool and we encourage the ARB to endorse them as a voluntary early action measure (we do not, however, support their use in a market based carbon credit system as currently written). However, we consider the Board's endorsement as an opportunity through implementation to improve on the Protocols and develop them into a highly effective GHG reduction mechanism.

Although we have taken a position in support of the ARB's endorsement of the CCAR Forest Protocols, we believe that certain aspects of the Protocol's reporting and certification criteria (i.e., additionality, permanence, leakage, carbon pool measurement, wood product reporting) should be modified to further enhance their effectiveness in removing greenhouse gases. Consequently, we offer the following set of recommendations to strengthen the Registry's Forest Protocols and ensure a more substantial and long-term reduction in greenhouse gas emissions.

<u>Additionality and Baselines</u>

To achieve the overarching goal of reducing GHG emissions, it is imperative that the methods used to establish additionality and baselines are rigorous. As currently written, the Protocols lack the necessary level of rigor in some cases. The baseline characterizations permitted in the Forest Project Protocol (FPP) risk furthering a "business as usual" standard, thereby weakening additionality and undermining projects that make real substantial improvements in reducing emissions. For example:

- Reforestation projects allow a baseline of the one-time carbon stock in a non-forested state. The Forest Certification Protocol (FCP) mentions that the baseline for reforestation projects should include natural growth of existing trees but does not mention natural regeneration. The FPP does not mention either of these baseline elements. We believe that to achieve true additionality the reforestation project baseline should include a projection of natural regeneration over time, since some areas will regenerate forest naturally.
- Allowing historical baselines as far back as 1990, for reforestation and conservation projects in particular, credits projects for carbon sequestration already-accomplished before any actual project was implemented. This undermines the concept of additionality. The Registry makes the historical date option available to participants only until 2008 and after that the initiation date of a forest project must follow entrance into the Registry. We support this requirement and encourage the ARB to maintain the 2008 cutoff date for historical baselines.

Permanence

If the emissions reductions from forest sequestration projects are to be considered fully equivalent to the reduced emissions from a power plant or vehicle, it must fix carbon just as permanently. The FPP requires a permanent easement guaranteeing maintenance of forest cover permanently, but is weak on the legal protection of existing or additional carbon stocks. Registry participants report changes in carbon stocks year-by-year, so any future losses of carbon will be reflected in annual reports. Carbon offset sales, however, will require permanent storage of the traded carbon. One means of guaranteeing permanence would be to include easement terms that require maintenance of a specific carbon store for perpetuity.

Leakage

Leakage has the potential to seriously undermine any emissions reduction gains made through a forest project. Consequently, it is imperative that all sources of leakage be accounted for, which is not guaranteed as the Protocols are currently written.

- The Forest Sector Protocols (FSP) considers all non-California biological inventories as optional, which means they will not be certified by the Registry. The Registry does not require an entity to account for an activity-shifting leakage occurring on the non-California portion of their entity. Consequently, any activity-shifting leakage that occurs on the non-California portion of an entity will not be quantified and deducted from any calculations of GHG reductions. Activity-shifting leakage on the non-California portion of an entity should be accounted for in the FSP.
- Because a forest project activity can cause an increase in emissions outside the project and entity boundaries through activity-shifting leakage, the FPP should also require the quantification of off-site activity-shifting leakage as is required for on-site leakage.
- The quantification of market leakage is not currently required by the FPP. Market leakage has the potential for significant emissions that can undermine the GHG reductions from the forest project. Therefore, the quantification of market leakage should be a required component of the FPP.
- Non-biological emissions resulting from downstream and upstream activities related to a forest project can have a significant impact on the overall reduction of GHG gases associated with the forest project. Although the emissions from on-site downstream and upstream effects will be accounted for in entity reporting, the quantification of off-site non-biological emissions is not required by the FPP.

Measurement of Carbon Pools

An accurate measurement of all the carbon in a forest ecosystem is essential for the development of a credible accounting of the carbon stocks and CO2 emissions for a forest

project. Under the FPP and FSP only tree biomass, standing dead biomass, and lying dead biomass, are included in the measurement of carbon stocks and emissions/reductions. The forest understory biomass, litter, duff, and soil organic carbon are considered optional, thus ignoring a significant pool of carbon in the forest ecosystem. These pools in total are larger than the forest biomass pool and in some ecosystems the understory actually has higher annual production than the forest stand itself. To gain a true measure of the carbon stocks and CO2 emissions/reductions in a forest project, the Forest Protocols should measure all carbon pools.

Wood Products

Carbon harvested and stored off-site in long-lived wood products presents several unresolved problems including how to account for emissions related to harvest, processing and transportation, and the uncertainty of permanent stores not controlled by the landowner. Before wood product pools are certified by the Registry several important issues must be resolved including the following:

- *Forest Project Protocol:* Project boundaries should essentially extend to the final resting place of the carbon stored in wood products and "downstream effects" must be quantified (Currently “downstream effects” must be identified but quantification is not required.). The FPP does require a "good faith estimate" of manufacturing emissions if the entity does not own manufacturing facilities, but it should also require quantification of non-biological emissions from harvesting (e.g., the harvesting may be done by contractors and not entity employees and therefore be considered as indirect emissions by the reporting entity) and emissions associated with transport to the final storage site.
- *Forest Sector Protocol:* Claiming credit for wood products essentially extends the boundaries of the entity to the final resting place of the wood products carbon, so any emissions required to store that carbon should be reported. The Registry only requires forest entities to report direct emissions. Since emissions for harvest and processing operations conducted by the entity itself are considered "direct", the FSP does require reporting of non-biological emissions associated with harvest and processing for manufacturing facilities owned by the reporting entity. The FSP should also require reporting of emissions associated with transport of products. If the entity claims credit for wood products harvested, processed or transported by other parties, it should also report the emissions associated with those activities, even though they are considered "indirect".

In addition to greenhouse gas emissions reduction benefits, the CCAR Forest Protocols promote other valuable public benefits for California (e.g., protection and enhancement of water quality, wildlife habitat, biodiversity). These benefits are provided through

criteria established by the California legislature: perpetual easement, native forests, and natural forest management. These provisions are an essential component of the Protocols because they will help preserve the biodiversity and ecosystem integrity necessary for forests to adapt to changing climatic conditions. We encourage the ARB to maintain the intent of these provisions to maximize the environmental benefits resulting from the establishment of forest projects.

We appreciate the opportunity to provide comments on the ARB's review of the CCAR Forest Protocols for endorsement as a voluntary early action measure under the California Global Warming Solutions Act of 2006. We support your endorsement of the Forest Protocols and look forward to working closely with you to build on the Protocol's strengths as an effective carbon accounting mechanism.

Sincerely,

Sara Barth
Regional Director
California/Nevada Region