



January 16, 2009

California Climate Action Registry  
523 W. Sixth Street, Suite 428  
Los Angeles, CA 90014

**Re: Comments on the Draft CCAR Forest Project Protocol Version 3.0**

The Pacific Forest Trust (PFT) has a long history advocating the careful but comprehensive recognition by policy makers, greenhouse gas (GHG) emitters, the carbon market and the public of GHG emissions reductions from forest projects. We have and continue to advocate for projects that meet rigorous standards for additionality, permanence and verifiability, with the use transparent, consistent accounting methodologies. PFT is active in climate policy development efforts for the forest sector in California and other states around the country, within the Western Climate Initiative, and at the federal level. We served as a member of the work group that has developed the draft CCAR Forest Project Protocol Version 3.0, and previously served as the coordinator of and member in the work group that produced the original version. In addition, PFT, working on behalf of the Van Eck Forest Foundation, developed, registered and verified the first forest project with CCAR. PFT recently assisted three other private forest owners to list their projects, and has several other projects in development.

**I. General Comments**

In general, PFT believes that the draft Version 3.0 has many positive changes. We applaud the dedication of the work group and CCAR in crafting this draft in a very demanding process over a short period of time. This version builds logically on the successful first version and captures many lessons learned in project development and verifications to date. However, we believe there are important elements that need more work and clarification in drafting. Taking the time to carefully consider public comments in making needed revisions to this draft will ensure that Version 3.0 continues to set the high standard for forest project accounting established by the current version. The following elaborates on a variety of specific points, with the relevant section in the draft noted above each comment.

**II. Specific Comments**

**1.1 About Forests, Carbon Dioxide and Climate Change, p. 2**

We suggest changing the first sentence in the last paragraph to better encompass the range of ways forest projects can contribute climate benefits, as in: “However, through reforestation, sustainable management and protection, forests can . . . “

**2.1 Eligible Forest Project Types and Definitions, p. 2**

**Projects on public lands:** PFT supports the inclusion of projects on *state and municipal* lands to assess and increase their climate benefits. However, we do not support the inclusion of federal

lands. Management decisions for federal forests follow completely different legal processes than forests under state control (both public and private). Allowing projects on federal forests creates real confusion, as it *implies* eligibility for these projects to sell offsets or obligate emissions reductions to meet compliance goals. As USDA Forest Service personnel have stated they do not intend to register/market offsets through CCAR it seems appropriate to simply disallow such projects until such time as they are authorized at the federal level after the necessary federal policy development and public review process, consistent with federal laws and regulations. While the CCAR Forest Project Protocol can provide an example of accounting methods for federal managers and policy makers to consider, and may ultimately be adopted for use by the federal government, inclusion of federal forests is beyond the purview of CCAR.

### **3.2 Project Start Date, p. 4**

Each project developed under Version 3.0 will require a considerable investment of time and money by the forest entity in preparation for listing, often with the assistance of a limited pool of expert consultants. In addition, projects will often be sited in remote areas and/or areas that may not have access year round. Together, these create constraints on the time in which a project can be developed, even with the intent of doing so quickly. To facilitate participation, especially among family forest owners, PFT recommends a 12 month maximum period between the initiation of a project and its listing, instead of the proposed 6-month limit.

### **3.3 Project Implementation Agreement, p. 4 - 5**

The Project Implementation Agreement has not been provided for public comment and PFT has not yet had a chance to review it. It is therefore not possible for the public to assess the merits of this important proposed document or its relationship to the other provisions of the draft protocol. We urge CCAR to release it for public review. In general, absent actual review, we can only say we believe it is good for CCAR to enter into a formal, binding agreement with the forest entity as a required means to buttress the permanence of project reductions. The relationship of this agreement to ones referenced in *Section 7 Ensuring Permanence* is unclear. Further it is unclear how an agreement between CCAR and the forest entity will be automatically binding on successors to the landowner, ensuring continuity of the project activity.

We believe public lands should not be exempt from recordation, given the long-term nature of the project and periodic interest in sales of public lands. Further, it serves as notice to public land stakeholders of the existence of the project and such transparency is good public policy.

### **3.4 Project Location, p. 5**

We support the expansion of geographic coverage of the Forest Protocols. However, at least as it pertains to Improved Forest Management projects, the first sentence in this section remains an aspired-to goal at this time. There will be considerable work required to develop the Assessment Areas used in baseline development for each new state. It took considerable effort just for California, and PFT still has concerns about the quality of the data and the analysis. The use of Assessment Areas for baseline development will pose significant challenges for widespread application of the CCAR Forest Project Protocols. Please see our further comments for Section 6.2 below.

#### **3.5.1 Promotion and Maintenance of Native Species, p. 5 - 8**

This is the first of several instances where the understanding and application of a new assessment tool would benefit from an example of its use to clarify how certain judgments

would be made and the possible results. As a project developer we have frequently had to interpret unclear protocol provisions, and sometimes reinterpret them with the verifier and again with CCAR. It will significantly reduce the cost and risk of project development, and therefore increase participation, to provide such guidance in the Protocol itself.

To facilitate understanding and implementation of this assessment, CCAR should provide guidance in the Protocol for acceptable methods to determine culmination of mean annual increment (CMAI). For instance, are field measurements of growth required or is reference to published yield tables acceptable? Further, CMAI is most readily ascertained under even-age management and may burden uneven-aged project types with added measurement costs. PFT is concerned this approach could be an expensive hurdle for forest entities, especially family forests.

We also suggest CCAR consider other measurement standards such as the Wildlife Habitat Relationship classification system for the structural assessment.

We endorse the inclusion of third party oversight of management activities (i.e. forest certification) in the matrix but believe it should yield a score of 2 rather than 1 as it provides important oversight, especially in states where there are not comprehensive forestry regulations.

### **3.5.2 Promotion of On-Site Forest Carbon Stocks, p. 9**

It is a key improvement to include this very important provision, which is vital for both forest ecosystem health and for assurance of real emissions reductions. Forests are where sequestration happens and off-site storage in wood products is a function of increased productivity and forest age. However, this section needs to be revised for greater clarity. What is lacking is a clear statement that projects must maintain and increase carbon stocks on average over the lifetime of the project and it is the project developer's responsibility to do that. Instead the draft references a "monitoring strategy" developed by CCAR that has not been thoroughly discussed in the work group and is not explained. Does this mean something other than the standard reporting and verification requirements?

After what should be a clear affirmation, then the exceptions can be enumerated. The first two exceptions will present challenges to maintaining a clear standard that promotes on-site stocks as the degree, extent and timing of removal will vary. Certainly within the project lifetime, forests can sustain temporary stock reductions to improve forest health, restore more climate resilient species composition and stand structures, and adjust age class distribution – all while enhancing long-term stores. What provisions are there to prevent gaming of the exceptions, especially in the absence of a clear affirmation that the live tree pool should increase to some degree over the 100 years of a project? The current language has the potential to be interpreted in a fashion that undermines its intent.

### **5.1 Accounting for Significant Secondary Effects, p. 10**

There appears to be a typo in the second sentence; it makes more sense if you remove the words "in sequestration."

### **6.1.2 Secondary Effects – Quantifying Net Changes at Other Affected GHG Sources, p. 11 - 12**

We note with appreciation the specific guidance provided in this section for what to measure, how and where to get help. More of this sort of explication is needed throughout the Protocol to make it more user friendly and expand participation.

In general, we like the overall risk assessment approach to Leakage proposed for Version 3.0. However, there are metrics used that seem arbitrary when not referenced to scientific literature or even explained in the assumptions section, for example, the relationship of canopy coverage increases to leakage risk. We don't disagree with the general premise, but the correlations between specific cover levels and leakage risk percentages seems more like a working guess.

The methodology for assessing off-site leakage seems a bit gross scale to us and not only germane to reforestation projects. In consideration of the Table 6.1, we note that loss of forest cover can be due to various reasons, not only conversion to grazing use. It would make more sense to track material changes in broad vegetation types/developed uses generally and, based on the new use, assess the leakage risk within the context of the project type. For instance, if there is forest loss of 6% on the entity, but it is to development or crops and not grazing, why assess a grazing related leakage risk discount? Refinement of this assessment and more careful consideration of its application for all projects types would be beneficial.

## **6.2 Improved Forest Management Projects**

### **6.2.1.1 Private Forest Lands, p. 13-15**

In general, PFT supports this baseline approach as a reasonable refinement to that used in the current Protocol for conservation-based forest management. This approach appropriately recognizes the benefits to the atmosphere from both the conservation of existing carbon stocks and increases to stocking and productivity. For clarity of understanding, we urge CCAR to add of examples of the application of this methodology under different circumstances, with a narrative description, sample calculations and charts.

**However, we recommend leaving out the FIA mean as a reference point. Its role in the proposed baseline methodology is fairly limited, yet its inclusion poses a significant hurdle for application of the Protocol outside California.** Application of the proposed methodology relies on FIA data that, among other issues of statistical consistency, vary greatly in meeting accuracy standards for private lands from state to state. Application outside California will require that the FIA dataset be extensively manipulated to create "assessment areas" of similar forests across the country.

Instead, the Protocol should focus on improving the guidance for modeling baseline carbon stocks, i.e., modeling consistent with all legal, physical, financial constraints, as described in the draft. The modeling necessary for this approach is widely understood, utilized and relied upon for management decisions, appraisals and investments by foresters and forest owners across the country. Absent the inclusion of the FIA mean as a governor, the other standards will still produce a conservative and realistic baseline determination, and deter gaming from the overstatement of avoided depletion.

### **6.2.1.2 Public Lands Improved Forest Management Baseline, p. 15**

**We urge CCAR to clarify the baseline characterization to ensure that if the change in management direction is significant and mandatory that change be used as the baseline.**

For instance, if the policies, regulations, budgets, etc., caused the forest management during the 10-year "look back" period to change significantly, it appears that the project developer would

be required to use whichever baseline would produce the most conservative calculation of reductions. If that change were made from a more extensive form of forest management to a more intensive one, public entities would be required to utilize an out-dated and inapplicable but “conservative” baseline. This would create a significant disincentive for participation by public entities seeking to conserve on-site stocks while meeting the revenue generation mandate that is often the reason for the change in management regime. This would be a perverse result.

### 6.2.2 Secondary Effects – Quantifying Net Changes at Other Affected GHG Sources, p. 16 - 18

In general, we are comfortable with this leakage risk assessment methodology. As with various provisions in this draft Version 3.0, it will probably be refined in practice. We do have some specific concerns. **Overall, it would be beneficial to provide more detailed guidance to aid interpretation by forest entities and verifiers, thereby reducing expense and risk and increasing participation.** For instance, this is another case where CMAI is used as a metric, yet its application may be problematic. More explicit guidance will help participants apply this standard efficiently.

In the list of assumptions, #3 should be revised to say, “An annual harvest level of 2% of inventory, considered on average over a decade, is used as a standard . . .”

**We also have concerns with the application of this methodology to carbon projects where the avoided depletion of old growth is central.** As the world turns its attention to the critical task of Reducing Emissions from Degradation and Deforestation (REDD), we don’t want to overlook the need to ensure this Protocol does not create a disincentive to old growth conservation. While old growth conservation projects will be rare in the U.S., given the modest amounts of existing old growth forest that is available for timber harvest, we must be careful not to penalize these conservation oriented projects that are so valuable to climate health and biodiversity.

For instance, let’s say the project activity consists of fuels management and habitat maintenance oriented activities where harvest is limited to removal of smaller understory trees. Even relatively active management will yield less than 2% of inventory removed on average per year. First, guidance is needed to specify acceptable methodology to determine how many years beyond CMAI the forest is. For discussion’s sake, let’s say the forest would have culminated theoretically at 100 years and is on average 200 years old today. That would suggest a leakage value of 200% multiplied by the whole project area or 100% for a total of 200%. With reference to *Section 6.4 Quantifying Total Net GHG Reductions*, it appears that any calculated emissions reductions would not only be wiped out, but that there would be an assumed emission of the same magnitude. (Please see below on Section 6.4 as the calculation of the leakage adjustment is actually unclear as written.) We hope this consequence is unintended as old growth forests are not generally emissions sources and have been demonstrated to still be net sinks.<sup>1</sup> We strongly urge that this methodology be revised with respect to old forests where growth is less than 2% at project initiation. While the acres of these forests are relatively small, their climate benefits are vast and the Protocol should ensure proper accounting recognition of this.

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<sup>1</sup> Luyssaert, S. et al. 2008. Old-growth forests as global carbon sinks. *Nature* 455: 213-215.

**Activity-shifting leakage within the forest entity** (p. 17): This sentence needs to be re-written for greater clarity. On the one hand, it suggests a 0.5% increase in the volume of timber harvested on average over a ten-year period is the threshold for assessing leakage risk. If that is the meaning, we object to this threshold as being too low. If, on the other hand the sentence means there is a 0.5% increase in the harvest as a percent of inventory (i.e., harvest has increased from 2% on average annually to 2.5%, therefore from 20% to 25%), then we would agree this is an appropriate threshold. Regardless, we feel the sentence should be rewritten to be clearer.

### **6.3.1.1, Avoided Conversion – Baseline Characterization for Immediate Site-Specific Threat of Conversion p. 19**

While in general we are in support this baseline methodology, we believe that the criteria identified in the first bullet point should be amended to say, “Documentation that the proposed rate and quantity . . . in the local region that have occurred within the last ten years and could be begun on the site within five years.” In many forested counties there may not be a high volume of developments on former forestland, with each development actually taking years to occur; but, nonetheless, each development can have substantial impact on carbon stocks. A five year look back period is too short, especially when you consider, for instance, that in real estate boom times such as 2005 more forests were threatened than today, but in 2012 they could again face an immediate, site-specific threat.

### **6.3.1.2 Baseline Characterization for Avoided Conversion Baseline, Based on Risk of Conversion, p. 20**

**In general we are strongly support this baseline methodology as it represents an attempt to look at conversion risk in a practical assessment that any developer would also use. However, it would benefit from refinement as some of the criteria used in this table lack definition and are not well grounded in conversion trends.** To build support for and implementation of this approach, we urge CCAR to review the criteria and improve these metrics with definitions and, at a minimum, explanations of why these metrics were selected. For instance:

- “Population centers” is not defined. Does this mean a city, unincorporated area, or metropolitan area? What are the boundaries? It would be more clear and simple if CCAR were to use the definition and datasets for Statistical Metropolitan Areas as defined by the U.S. Census Bureau and updated regularly. These are used by most agencies and others as the standard reference.
- Three hours driving time seems arbitrarily high as a driver for direct development pressure. Two hours is generally considered the maximum commute time.
- Why is population growth within 5 hours included? Is this included as a metric to capture indirect or regional development pressure? Or recreational development factors? If so, we believe, again, this is arbitrarily high. Weekenders are unlikely to drive more than 3.5 hours to their retreats. We suggest this metric is so uncertain that it should be eliminated.

Similar to our comment on 6.3.1.1 above, we believe that ten years is a more reasonable time period in which to search for a conversion “comparable” within a given county. We suggest, further, that the phrase “of similar physical characteristics” be eliminated or modified to

identify what are the key characteristics for comparison so as to minimize risk of misinterpretations by project developers.

### **6.3.2 Avoided Conversion - Secondary Effects – Quantifying Net Changes at Other Affected GHG Sources, p. 23**

We have the same comment on Table 6.5 as we did for Table 6.1, above in reference to Section 6.1.2.

### **6.4 Quantifying Total Net GHG Reductions, p. 24**

This is a much-needed section that provides clarity to the complex calculations required under the revised Protocol. Thank you for including it.

### **7. Assuring Permanence of Credited Emissions Reductions, p. 27**

**In general, we support this more comprehensive and robust approach to assessing and mitigating risk to the permanence of GHG reductions, subject to the following comments.**

We believe that the formal risk assessment methodology will potentially add a greater degree of transparency to project risks and verifiable risk mitigation strategies that will build greater confidence in the climate contributions of forest projects with policy-makers, the carbon market and the public. While setting aside loss reserves to help insure against losses of ERs has been considered a “best practice” in forest GHG reduction projects for a while, the requirement of a buffer of emissions reductions (ERs) is an excellent and needed addition. This requirement provides a public record of the margin of safety available to ensure registered projects are capable of delivering real, durable reductions.

We note that to fully evaluate this section CCAR should distribute its draft Project Implementation Agreement for public comment as well.

### **7.2.2 Use of the Buffer to Compensate for Reversals, p. 28**

**This section references Section 8.1, yet is not written consistent with that section.** We assume this is a copy-editing error. To correct it, we propose the following changes (underlined): “As described in Section 8.1, the required project life is 100 years, and a project may be terminated if a significant disturbance occurs leading to a reversal that reduces the standing live carbon stocks below the standing live stocks established for the baseline.”

In addition, the next sentence says, “If the project is not terminated, the project can begin creating reductions immediately.” This suggests an adjustment to the baseline, as the live stocks have been acknowledged to be below the baseline. We cannot determine our position in reference to this statement without further information. **CCAR should clarify this point and provide some justification for why restoration of stocks from a depleted baseline should qualify as reductions.**

### **7.3 Risk Assessment for Reversals, p. 28**

Please see our comments on Appendix C below.

### **8.1 Crediting Period and Required Duration of Monitoring Activities**

The first sentence should more clearly assert that it is a requirement for a project to have a lifetime of 100 years, and then explain the exceptions to this rule. “Expect” is less definitive than “require”.

**8.2 Annual Monitoring Requirements, p. 30**

Harvested Wood Products may or may not be required, depending on the final resolution of the accounting methodology for this transfer pool.

**8.3 Rationale for Verification, p. 30**

We note that CCAR appears to intend to produce a new version of the Forest Verification Protocol. We have a suite of concerns about verification requirements, including the periods, the relationship with annual monitoring, the relative roles of the old and new verifiers, etc. PFT looks forward to participating in discussions with CCAR as it revisits the Verification Protocol. In general we find verification under CCAR's current protocols to be unnecessarily expensive and risky. With the added complexity and often qualitative nature of the new assessments for some project baselines, for leakage and for permanence risk, we foresee an even more expensive, drawn out and risky verification process. **This situation can be prevented in part by ensuring that the new Version 3.0 project protocol avoids qualitative assessments and "explain and justify" standards as much as possible in favor of clear, quantitative and/or well-defined guidance for both project developers and verifiers.**

**9.3 Transparency, p. 31**

**While it is hard to argue against transparency, and we support the principle, this paragraph represents a sweeping disclosure requirement for forest entities that would benefit from more justification as well as detail.** Fulfillment of this requirement could be quite burdensome, may violate confidentiality provisions, and present a variety of risks to the business of the forest entity. In addition, the disclosure language references "activities" but then refers to agreements, which is confusing. We believe this section needs to go back to the drawing board where we hope transparency needs can be balanced with some sidebars reflecting how material the activity or agreement is to compliance with the project protocols, as well as protection of confidential information.

**10. Glossary of Terms, p. 32**

The definition of **Best Management Practices** is arbitrarily limited to those associated with the Clean Water Act. While that is the original use of BMPs for forestry, their use by state and other governmental agencies for quasi-regulatory compliance guidance has been expanded well beyond this original application. A broader, more "modern" definition would be more meaningful within the context of how BMPs are used in the proposed Version 3.0.

**Appendix A.2 Measure Carbon Pools in the Project Area, p. 39**

We commented on this section and associated Table A.1 in PFT's Minority Report to the draft Version 3.0 and note that since the draft was released the work group has reconsidered the question of how to determine which stocks to measure. We support the result of that discussion, which was for CCAR to specify required and optional pools for each project type.

**Appendix A.5 Estimate Carbon in Wood Products**

We look forward to commenting on the final proposed Wood Products methodology when it is released.

**Appendix C Determination of the Risk Rating for Forest Projects**

**The Protocol should require a minimum 5% buffer, or the assessed amount, whichever is higher for each project.** While thorough in scope, the proposed risk assessment tool leaves too

much room for subjective judgment, potentially frustrating the goal of transparency and ultimately not appropriately estimating risk. Overall, we urge CCAR to revisit the existing language in the various worksheets to improve metrics and provide more definitions. The very qualitative nature of the assessment also creates a substantial verification challenge for projects, adding much time and expense to an already challenging verification process. Further, project developers have an incentive to minimize the total amount of the required buffer. For all of these reasons, a minimum buffer would be a fair and logical addition.

We note that the first paragraph says the risk assessment is updated on the same schedule as project verification, yet in Section 8.2, on page 30, the second bullet suggests that this is updated as part of annual monitoring. Please clarify this.

### **C.1 Financial Risk, p. 53**

It would help understanding and improve internal consistency of this section within the Protocol if the term “forest entity” were used instead of “organization” as it is the entity that is the responsible party.

### **C.2.2 Management Risk II – Conversion of forestland, p. 55**

In the second paragraph, the third sentence, we suggest adding “legally” to “logically” as a qualifier for this stratification.

Pertaining to mitigating risk of conversion on private lands, the first numbered item in the 3<sup>rd</sup> paragraph of this section begins a series of poorly drafted sections that conflate and confuse the enforceability of permanent statutorily enable conservation easements (CEs) with deed restrictions and contracts. This reflects on the lack of legal guidance for the workgroup and the complexity of this area of the law. Of the listed tools, only CEs clearly and permanently mitigate conversion risk, as is also indicated in Table C.5 – MR15 where CEs are acknowledged as such.

**While legal instruments other than permanent conservation easements can help mitigate risk from changes in management and ownership, CCAR should provide further guidance on acceptable alternatives. CCAR should ensure that legal instruments used to mitigate management risk truly do “travel with the land,” encumber the land and future owners in a meaningfully enforceable fashion and otherwise meet the intent of this section.** Different members of the work group and public can and will draw different inferences from the language used in this section and in Section C.2.3 which addresses risks from over-harvesting. As it stands, the draft revised Protocol is unclear on which specific instruments fall into the different levels of risk mitigation for assessment purposes. **To avoid unnecessary investments of time, money and confusion, CCAR should consult with expert attorneys and, after further public review, provide more guidance to project developers.**

**Further, conservation easements should be more explicitly acknowledged as the benchmark against which other mechanisms are rated.** Conservation easements themselves should be rated with a strong differential vs. other instruments due to their statute-enabled and robust enforcement mechanisms, provisions for annual 3<sup>rd</sup> party monitoring, and perpetual duration. Other instruments should be assessed against this standard.

### **C.2.3 Management Risk III – Reducing obligated reductions through over-harvesting, p. 57 - 59**

Please see comments above.

In addition, the multiplier in MR29 should be consistent with the one in MR14, as the nature of the risks and the ability of the different legal instruments to mitigate them is so similar in both instances.

#### **C. 4 Natural Disturbance Risk, p. 63 - 66**

As noted in the introductory paragraph, there is a whole lot of learning going on in this arena. Plus there is a whole lot of variability in the forest and in the impact of natural disturbances. Mitigation activities that make sense in one forest type or circumstance may not in another. Unfortunately, the language of the assessment tables C.13, C.14 and C.15 seems to assume that replanting and salvage logging are the best mitigation actions in all situations. Natural regeneration as well as retention of down and standing dead wood may in fact be preferable in certain situations, both from a climate and biodiversity perspective. We urge CCAR to rethink and redraft these tables to take a broader, more flexible perspective than they appear to have.