

Peer Review Summary for Carbon Accounting Methodology: Southwestern Forest Restoration

In 2015, the author team of Drs. Spencer Plumb and Katharine Woods (Sagebrush and Pine Consulting, Lab, LLC, and funded by the National Forest Foundation and its partners) submitted to ACR for consideration the carbon accounting methodology, “*Southwestern Forest Restoration: Reduced Emissions from Decreased Wildfire Severity and Forest Conversion*”. ACR followed the process for development, review and adoption of new carbon offset accounting methodologies defined in the ACR Standard v.4.0 (Chapter 7).

ACR completed internal review of the draft methodology in early 2016 and public comment was initiated during summer/autumn 2016. The complete public comment log, author team responses and the methodology draft resulting from public comment are available on ACR’s website.

A panel of experts in the fields of forest fire science, forest management, forest carbon offset project development and verification, forestry carbon modeling and remote sensing was assembled with members from academia, government, NGO and private entities. The peer review panel began its initial review of the draft methodology in mid-2017. In 2018, the peer review panel requested a test-case (e.g. example project) and market analysis to help clarify discussion points raised by the panel. The full peer review comment log and test-case are available on ACR’s website.

Peer reviewers are anonymous to the author team and the public. Due to the protracted time frame and high level of engagement needed for review of this methodology, seven reviewers initially provided comments but were not able to maintain the commitment needed for the role of peer reviewer over the full 2-year period. Four reviewers (of 7) remained engaged during the full peer review and provided a final recommendation to ACR in May 2019.

The author team and the peer review panel worked hard to resolve numerous and complex issues and sought to produce a workable carbon accounting methodology that would generate fungible carbon offsets, meeting the standards of the carbon market i.e. real, additional, permanent, verifiable, quantifiable and free of leakage with the principles of conservativeness, accuracy, completeness and transparency maintained. The review team also sought to understand the economics of projects for all likely participating parties. **Ultimately, the review panel did not recommend adoption of the methodology by ACR.**

A summary of the review follows below, and the individual summaries of peer reviewers are available on ACR’s website.

Three of four peer reviewers recommended that the methodology not be adopted at this time. Of primary concern are the issues listed below. Specific comments by peer reviewers can be found in the comment log and individual peer review letters.

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- Insufficient parameter information to model fire and carbon stock
- Lack of accurate and conservative assessment of uncertainty
- Economic feasibility of projects and length of time before credits issued
- Frequency and magnitude of reversals and the impact to the buffer pool
- Additionality
- Consistency with ACR Standard 5.1 (now 6.0), ACR Improved Forest Management Methodology 1.3 and current Risk Mitigation Agreement and Buffer Pool Terms and Conditions

One reviewer recommended continuation of the peer review process although the reviewer cited major, unresolved concerns that are in many cases, the same issues cited by the other three as cause for not recommending approval. After 2 years of peer review, many significant issues were, in ACR's opinion, unlikely to be resolved in a manner that could generate high integrity carbon offsets and usability of the methodology in the market for its intended purpose.

ACR and the peer review panel do not dispute the author team's assertion of the massive environmental benefit of the project activity, the urgency to conduct these activities nor the scientific literature demonstrating that without treatment, major losses of living trees and carbon sequestration in SW ponderosa pine ecosystems will occur. The author team is to be commended for leveraging the best available science, modeling and technological tools for quantification and estimation of stock change in the treated and untreated fire regimes of the southwest; a capability that was not possible only a short time ago. Although first of its kind and with many technical merits, the adoption of the methodology was not recommended by the peer review panel for the reasons cited herein.