



December 14, 2018

Climate Action Reserve  
818 W. 7th Street, Suite 710  
Los Angeles, CA 90017

Via Electronic Submittal to [policy@climateactionreserve.org](mailto:policy@climateactionreserve.org)

**RE: New Forests' Comments on the Draft Forest Project Protocol Version 5.0**

Thank you for the opportunity to provide comments on the Draft Forest Project Protocol Version 5.0. New Forests is a timberland investment firm that manages over \$3.5 billion in capital and forestry assets globally, including almost 200,000 acres of California timberlands and over 500,000 acres of forest carbon offset projects under the California compliance offset protocol, which was based on the Climate Action Reserve Forest Project Protocol. New Forests was among the earliest investors in California's compliance offset program, developing the 8,000-acre Yurok CKGG IFM project with the Yurok Tribe in northern California. Since then, New Forests has generated over 6.5 million ARB offset credits, almost half of which are from projects located within the state.

New Forests appreciates the Climate Action Reserve's ongoing leadership to develop robust standards for GHG accounting that support voluntary, pre-compliance and compliance-level carbon offset markets. We commend the Reserve for seeking to improve upon the existing Forest Project Protocol, particularly to reduce cost and increase efficiency without sacrificing offset quality or integrity. New Forests would like to provide the following recommendations regarding the version 5.0 draft protocol.

*New Forests views the following revisions in version 5.0 to be significant improvements to the prior Forest Project Protocol version 4.0:*

- Supporting "enhancement payments" or other programs that provide financial assistance to landowners to improve environmental outcomes on their land that complement the GHG reduction benefits provided by a carbon offset project.
- Allowing use of a standardized baseline methodology for private land IFM projects, which is a lower-cost, conservative alternative for determining a project's baseline and will likely encourage more projects from smaller ownerships where the upfront cost associated with project development, modeling and verification can be a barrier to entry.

- Updating the verification schedule for projects with low or no credit issuances. This is an important change because many IFM projects receive the bulk of their carbon offset credits in the first reporting period yet have a long trail of monitoring and verification costs over 100+ years. A “site visit” verification including sequential sampling is expensive, especially for projects that have moved into a “monitoring” phase and are no longer generating additional carbon offset credits. For projects that must merely maintain the carbon they have committed to sequester in their forest, many lower-cost monitoring methods are available, such as the use of aerial imagery and remotely sensed data to demonstrate that the forest is being maintained and that no reversals have occurred.

*New Forests urges the Reserve to continue working to improve the following elements of the draft Protocol version 5.0:*

- While we believe that the proposed approach to IFM leakage in version 5.0, particularly the sliding scale based on project-specific harvesting conditions, is an improvement over version 4.0, we believe it should be further improved with additional research. The study cited in the Protocol to support the proposed leakage factor is a broad literature review that includes studies outside the U.S. and covering non-forest activities such as agriculture, bringing their relevance to a U.S. based forest protocol into question. From the studies that did take place in the U.S. and covered forestry activities, the leakage factors vary dramatically, ranging in one study from 16-68% as described below in Galik (2018):

*One seminal study, Murray et al. (2004), uses the Forest and Agricultural Sector Optimization Model (FASOM) to estimate leakage rates of forest set-aside, avoided agricultural conversion, afforestation, and joint afforestation-avoided conversion programs in the U.S. They find that leakage magnitude differs both by activity and across regions. For instance, forest set-aside programs in the Pacific Northwest were associated with less leakage (16.2%) than programs in the South Central region (68.3%) owing to the higher carbon density in the former. Allowing harvest from acres enrolled in avoided conversion programs reduced leakage but also necessarily reduced carbon storage on harvested areas.<sup>1</sup>*

This literature review illustrates that leakage is a highly complex issue that is influenced by a host of economic factors and forest-specific characteristics. Many of the studies cited in the review are based on models; therefore, the assumptions used in the models need to be carefully reviewed for relevance and applicability. There is a marked difference, for instance, between a project that results in the conversion of forest to a non-forest use outside of the project area and one where project harvest shifts to another sustainably managed forest where growth exceeds harvest. It is also important to define the level at which leakage is a concern for a project-level Protocol—should an individual project be responsible for macroeconomic dynamics at a national or international scale, or should it

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<sup>1</sup> An Overview of Leakage Risk and Mitigation Approaches for Land Management Activities in Merced County, California, Christopher Galik, 2018.



be responsible for what might occur within its local watershed or assessment area? At a minimum, there appears to be a wide range of leakage factors in the available literature, and revising the Protocol reflect this range by applying maximum default leakage factors ranging from the original 20% from version 3.3 to the 80% in version 4.0 would seem appropriate in the short term to better reflect the range of leakage factors presented in the literature. However, in the long term we believe this subject warrants additional research, especially because leakage factors can have a significant impact on small projects and forests with slow growth rates, where it is possible for the secondary effects calculation to result in a reversal merely due to the assumption of a high leakage factor. We would strongly support undertaking a new study with the aim to develop leakage rates that are tailored to project-level GHG accounting of IFM and avoided conversion activities across the U.S. and thus appropriate for the Reserve's Forest Project Protocol.

- We appreciate the spirit of previous changes to the sequential sampling test specifying that stopping rules are met when the first plot passes after a minimum of 12 plots are sampled per stratum (for a stratified inventory) or when the first plot passes after a minimum of 30 plots are sampled (for a non-stratified inventory). This is instead of requiring six or more passing plots in a row after the minimum number have been sampled and is therefore more consistent with the statistical references on sequential sampling, which do not require a minimum number of passing plots in a row after a single plot meeting the specified tests has "passed". However, we recommend that the minimum number of sample plots be further reviewed to ensure that there isn't an undue burden of proof that results in significant additional cost without additional benefit. The current version of the Protocol already requires additional sequential sampling tests for tree diameter and tree height in addition to CO<sub>2</sub>e/acre. We recommend that the Reserve consider a lower minimum number of sample plots to verify the accuracy of the inventory, which would result in significantly lower cost to landowners.
- As stated above, we support the proposed changes to the verification schedule for projects with low or no credit issuances and agree that tracking a metric such as canopy cover is a helpful way to monitor changes that could potentially indicate a reversal. However, we believe that additional guidance on how to quantify canopy cover should be provided to ensure consistency and reduce verification cost. We also recommend that the threshold of a 5% decline in canopy cover automatically triggering a site visit verification should be revisited, as it could unnecessarily lead to more costly verifications that do not provide greater assurance of forest maintenance. If a project is not actively seeking offset credits, then the focus of the verification should be on the risk of a reversal to previously issued offset credits. The amount of canopy cover decline resulting in a reversal will depend on how canopy cover is quantified as well as project-specific factors such as project size, carbon density and growth rate. If a reversal has occurred, then a site visit verification is already required within one year of an avoidable reversal and within two years of an unavoidable reversal. It may therefore be more appropriate for the desk review of a forest project that is not receiving additional credits to determine via the monitoring reports and



canopy cover data whether or not a potential reversal has occurred, which would then trigger a site visit verification to confirm the nature and extent of the reversal if necessary.

We would like to thank the Climate Action Reserve for considering these comments and for its continued efforts to improve the Forest Project Protocol. We look forward to working with the Reserve on these important changes going forward.

Sincerely,

Emily Warms

Manager, Investments and Operations

New Forests, Inc.

