



May 11, 2009

Submitted electronically to [policy@climateactionreserve.org](mailto:policy@climateactionreserve.org).

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

**Re: Climate Action Reserve, Updated Forest Project Protocol, Public Draft**

To the Board of the Climate Action Reserve,

These comments are submitted on behalf of the Center for Biological Diversity in response to the Public Draft of the Updated Forest Project Protocol by the California Climate Action Registry. The Center for Biological Diversity is a non-profit, public-interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center for Biological Diversity is greatly interested in efforts to reduce greenhouse gas emissions and increase carbon sequestration in California's forests while improving forest ecosystem health and resilience to withstand the impacts of climate change. Although the Center for Biological Diversity is not a member of the CCAR Forest Project Protocol work group, we have followed the development of the draft protocol revisions, attended work group meetings, and are familiar with much of the scientific literature referenced in the protocols and associated documents.

The Center for Biological Diversity acknowledges the great amount of thought and effort that went into developing the draft forest project protocol revisions, and we acknowledge that the draft revision includes potential improvements over the current forest project protocol. However, we have concerns about components of the draft forest project protocol revisions. For example, the most recent draft—revised subsequent to the public comments received in February—includes significant changes that appear to greatly reduce the ability to ensure the ecological value of forest projects. In particular, the definition of natural forest management has been weakened in a way that greatly increases the likelihood that the updated protocols will encourage business as usual with respect to destructive forest practices. These late changes appear to have come from timber industry comments to the December draft, reversing direction from previous protocols and the stated intention of ensuring that forest projects promote ecological values. In addition, the current draft continues to raise concerns about the permanence of carbon stores, wood discarded in landfills, and reporting soil carbon emissions.

We strongly recommend to the Board, in your review of the draft revisions, that you review a version that clearly identifies the modifications from the current protocols, and the specific justifications and rationales for those changes. In particular, we recommend that the Board specifically review the modifications made in the most recent draft. In addition, it is

important that the Board understand that the current draft includes many items that failed to achieve consensus. These issues were decided by majority vote, to the distinct advantage of timber industry interests who outnumbered representatives of forest conservation concerns on the working group. Although the conservation representatives were invited to submit “minority reports,” it is unclear exactly which sections of the current draft achieved consensus and which did not. Furthermore, considering that the CCAR forest project protocol work group is comprised of neither elected representatives nor proportional representation of stakeholder and public interests, the value and justification of a straight majority vote on policy decisions is unclear. It would greatly improve the clarity of the draft and the process to identify those changes that did not achieve complete consensus, and to provide justification for including them without consensus.

**The definition of natural forest management has been broadened to the point of eliminating its value for ensuring the ecological value of forest projects.**

Section 3 describes the criteria that must be met for a forest project to be eligible for reporting and verification in the Reserve. The most recent draft dramatically includes new definitions that would expand the definition of *natural forest management* to include a broad range of management activities and harvest scenarios, potentially including clearcut logging. Also, this draft eliminated criteria previously intended to ensure the ecological value of the forest projects.

Section 3 includes the following new definition of natural forest management: “*Forest projects, and their associated forest entity, must demonstrate environmentally responsible long-term forest management under one of the following options: 1. If and when commercial harvesting occurs in the project area, certification under a nationally-recognized third-party forest management certification program in which the certification standards require adherence to and verification of harvest levels which can be permanently sustained over time. If and when commercial harvesting occurs, operating under a renewable long-term management plan that demonstrates harvest levels which can be permanently sustained over time and that is sanctioned and monitored by a state or federal agency. 2. For entities of 1000 acres or less, operating with uneven aged silvicultural practices and canopy retention averaging  $\geq 40\%$  across the forest.*”

This definition can apply to almost any method of harvest under almost any management scenario. Any timber operator with a long-term management plan and operating under a certification system would therefore qualify as natural forest management. This potentially includes clearcut logging, the application of chemical herbicides, conversion of forests to plantations, and harvest rotations as short as 50 years. Presumably, the additional requirements elsewhere in the protocols provide additional safeguards for ecological values, but this definition of natural forest management accomplishes very little, if anything.

Section 3.5.1 includes the new requirement: “*Conformance with this [natural forest management] requirement can be evaluated on as small a project as a harvest unit, of less than 40 acres, or a project encompassing a watershed spatial scale up to a maximum of 10,000 acres.*”

***If a project encompasses several or many watersheds, then the natural forest management requirement must be met for every 10,000 acres.*** (bold added)” It is not clear from this new definition whether conformance with the natural forest management requirement at the watershed (10,000 acre) scale allows a project to not conform with the natural forest management standards at the site level. Such an interpretation would potentially allow rotational clearcut logging management at the landscape scale to qualify as natural forest management.

Section 3.5.1 excludes the requirement, present in the previous draft: “*Maintain hydrologic patterns and functions to support functional habitat for endemic plant and wildlife species.*”

Section 3.5.1 removes the requirement that “*Projects that do not initially meet the natural forest management requirement **must do so prior to being able to verify reductions**,* (bold added)” and replaces it with “*Projects that do not meet the natural forest management criteria but demonstrate that management **will make progress towards** and meet these criteria during the project’s life **are eligible** to register credits on the Reserve.* (bold added)”

Section 3.5.1 eliminates the requirement, present in the previous draft: “*All projects must use the evaluation criteria for Improved Forest Management whenever commercial harvested is incorporated into the project management. Projects that do not promote and maintain native trees or do not practice Natural Forest Management are not eligible for registration with the Reserve.*”

Table 3.1 eliminates evaluation criteria for “*functional habitat elements for endemic plants and wildlife,*” and “*sensitive areas on forests,*” present in the previous draft. In addition, specific requirements for maintaining snags and large woody debris were replaced with the much weaker requirement that “*Project carbon in standing dead wood will not be actively reduced.*”

### **All forest projects should account for emissions from machinery and vehicles used in the harvest and transportation of wood products.**

The greenhouse emissions associated with the fuel combustion of machinery and vehicles used in maintenance activities and the transportation of wood products are optional for forest management projects. The exclusion of these combustion emissions fails to encourage less fuel-intensive forest management. This is especially important because the emissions from maintenance activities and transportation of wood products may be concentrated at the front end of a project, long before the greenhouse gas benefits of a project will be realized.

### **Forestland registered as part of a forestry project should be dedicated permanently to forest use through the use of a perpetual conservation easement.**

In contrast to earlier versions of the forest project protocol and the previous adherence to SB 812, the draft revision fails to require that forestland registered as part of a forestry project must be dedicated permanently to forest use through the use of a perpetual conservation

easement. Instead, the draft revision requires a project implementation agreement to be filed with the Climate Action Reserve. The previous draft (on page 4) required that implementation agreements extend to 100 years: “*the landowner's obligation (and the obligation of its successors and assigns) to comply with the forest project protocol established by the Reserve for a term of 100 years.*” However, the current draft appears to have eliminated even this requirement.

In addition, the current draft appears to undermine the requirement that the implementation agreement will extend 100 years past the date of the last reduction verified for the project area. Instead, the draft states, “*The Reserve requires all forest projects to ensure the project’s CRTs are sustained for 100 years from the year in which the reduction is **first measured and reported.*** (bold added)” Page 37. The carbon should be sequestered at least for 100 years beyond the year in which the reduction is last (not first) claimed or credited.

Of course, even a term of 100 years falls far short of permanence. Forests could be cleared at the end of 100 years—well within the range of harvest rotation age for many forest types—which would provide little, if any, permanent greenhouse gas reductions. The draft should adhere to the intention of the earlier protocols and continue to require perpetual conservation easements.

### **The protocol should not include forest projects on Federal lands.**

The draft revision proposes to expand the protocols to include forest projects on Federal lands. However, the draft fails to address the many serious legal and political issues that this would raise, as well as serious concerns regarding the permanence and enforceability of the emissions reductions. In addition, the inclusion of federal lands carries an implication of tradable carbon offsets, which could be greatly undermined or complicated by changes in federal regulation and management.

### **The protocol should include mandatory accounting for soil carbon stocks.**

For four of the carbon pools at a project site—shrubs and herbaceous understory, lying dead wood, litter, and soil—reporting is optional for some projects. Table 5.1 at page 12 states that “*Soil carbon is not anticipated to change significantly due to forestry activities, however, exceptions may exist including deep ripping or significant soil erosion.*” It is important to note that soil carbon in this case includes an organic carbon pool of microbiotic components, separate from tree, shrub, and herbaceous belowground pools. The carbon contained in soil organic matter changes in response to management activities, and substantial losses from soil carbon stocks may continue for decades after harvesting.<sup>1</sup> By making the soil (and other) carbon pools voluntary,

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<sup>1</sup> Jandl et al. 2007. How strongly can forest management influence soil carbon sequestration? *Geoderma* 137 (3-4):253-268; Birdsey and Heath. 1995. Carbon changes in U. S. forests. In *Productivity of America’s Forests and Climate Change GTR-RM-271*, USDA Forest Service, Rocky Mountain Research Station.; Harmon et al. 1990. Effects on Carbon Storage of Conversion of Old-Growth Forests to Young Forests. *Science* 247:699-702. Olsson et al., 1996; Schulze et al., 2000, Climate change: Managing forests after Kyoto. *Science* 289:2058-2059; Yanai et al., 2003; Pennock and van Kessel, 1997.

the draft revision underestimates the carbon emissions and lower sequestration rates associated with soils in intensely harvested forests, and obscures the potentially significant differences between forest management scenarios. This is especially important because the soil carbon impacts are likely to be concentrated at the front end of a project, long before the greenhouse gas benefits of the project may be realized.

**The draft revision does not credit wood products discarded in landfills.**

We commend the Registry and the working group for deciding against providing credits for wood products discarded in landfills. “While recognized herein as a potential storage pool, landfill stores of wood products are not accounted for in calculations of emissions reductions at this time due to the potential of change in wood flows to landfills over the lifetime of projects. Further, accounting for wood products in landfills presents significant challenges to accuracy and verification of emissions reductions at the project level.” Page 59. As we noted previously, there is a high potential for perverse incentives associated with credits for wood sent to landfills, and it is completely inappropriate to provide credits for converting California’s forests into landfill waste. Perhaps more important, such a credit threatens to complicate and obstruct the development of policies in the waste and recycling sectors to divert wood and biomass from being discarded in landfills. This standard should also be applied to waste wood materials from wood processing, if those materials are discarded into landfills.

The most recent draft states that the calculations of carbon discarded in landfills will be reported separately, but does not explain how those calculations will be used or credited. “*Due to uncertainty as to the volume and duration of landfill storage over 100 years, the figures derived from the DOE 1605(b) Table 1.9 (landfill) will not be included in the verifiable calculations of project emissions reductions but will be reported separately.*” Page 61.

Thank you very much for your consideration of these comments. Please contact me if you have any questions.

Sincerely,



Brian Nowicki  
California Climate Policy Director  
Center for Biological Diversity  
(916) 201-6938  
[bnowicki@biologicaldiversity.org](mailto:bnowicki@biologicaldiversity.org)