



CLIMATE
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Forest Project Protocol Version 3.2 ERRATA AND CLARIFICATIONS

The Climate Action Reserve (Reserve) published its Forest Project Protocol Version 3.2 (FPP V3.2) in August 2010. While the Reserve intends for the FPP V3.2 to be a complete, transparent document, it recognizes that correction of errors and clarifications will be necessary as the protocol is implemented and issues are identified. This document is an official record of all errata and clarifications applicable to the FPP V3.2.¹

Per the Reserve's Program Manual, both errata and clarifications are considered effective on the date they are first posted on the Reserve website. The effective date of each erratum or clarification is clearly designated below. All listed and registered forest projects must incorporate and adhere to these errata and clarifications when they undergo verification. The Reserve will incorporate both errata and clarifications into future versions of the protocol.

All project developers and verification bodies must refer to this document to ensure that the most current guidance is adhered to in project design and verification. Verification bodies shall refer to this document immediately prior to uploading any Verification Statement to assure all issues are properly addressed and incorporated into verification activities.

If you have any questions about the updates or clarifications in this document, please contact Policy at: policy@climateactionreserve.org or (213) 891-1444 x3.

¹ See Section 4.3.4 of the Climate Action Reserve Program Manual for an explanation of the Reserve's policies on protocol errata and clarifications. "Errata" are issued to correct typographical errors. "Clarifications" are issued to ensure consistent interpretation and application of the protocol. For document management and program implementation purposes, both errata and clarifications to the FPP are contained in this single document.

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Section 3

1. Slope of Project Area Land in Avoided Conversion Projects (CLARIFICATION – October 29, 2014)

Section: 3.1.2.3

Context: Section 3.1.2.3 of the FPP states that the appraisal for an Avoided Conversion Project must indicate that the slope of Project Area land does not exceed 40 percent. It is not clear whether the slope cannot exceed 40% on any portion of the Project Area or as an average.

Clarification: The 40% slope requirement should be calculated as an average slope across the entire Project Area.

2. Project Submission Deadline (ERRATUM – October 29, 2014)

Section: 3.2

Context: Section 3.2 of the Forest Project Protocol states that Projects must be listed on the Reserve within 6 months of their Project Start Date.

Correction: Projects must be submitted within 6 months of their Project Start Date. This is a Program-wide policy established in Section 2.4.3 of the Reserve's Program Manual.

3. Definition of Qualified Conservation Easements and Qualified Deed Restrictions (CLARIFICATION – October 29, 2014)

Section: 3.6

Context: Section 3.6 of the FPP states the Projects which employ a Qualified Conservation Easement or Qualified Deed Restriction have reduced obligations to the Reserve's Buffer Pool. It is not clear what distinction allows a Conservation Easement or Deed Restriction to be considered "qualified".

Clarification: A "Qualified Conservation Easement" is a conservation easement that explicitly (1) refers to, and incorporates by reference, the terms and conditions of the PIA agreed to by the Project Operator, thereby binding both the grantor and grantee – as well as their subsequent assignees – to the terms of the PIA for the full duration of the Forest Project's minimum time commitment, as defined in Section 3.4 of this protocol; (2) makes all future encumbrances and deeds subject to the PIA; and (3) makes the Reserve a third party beneficiary of the conservation easement.

Section 11 of the FPP defines a "Qualified Deed Restriction" as follows:

A qualified deed restriction shall ensure that the Project Implementation Agreement runs with the land and applies to all current and subsequent Forest Owners for the full duration of the Forest Project's minimum time commitment, as defined in Section 3.4 of this protocol, to be determined in the Reserve's reasonable discretion. A deed restriction is not "qualified" if it merely consists of a recording of the Project Implementation Agreement or a notice of the Project Implementation Agreement, as such a recording is already required by the Project Implementation Agreement.

The intention behind the deed restriction / qualified deed restriction language in the FPP is that where a forest project property has on title a binding document relating to the timber/forest carbon other than a conservation easement, such as certain types of timber management easements that are on title *in lieu of a conservation easement*, and that have been (1) proven to run with the land, (2) relate to the forest carbon, and (3) are already being enforced by a third party (i.e., the easement grantee) – those documents (that we refer to in the FPP as “deed restrictions”) could be amended to become qualified deed restrictions. The Reserve will determine in its sole discretion whether such proposed amended documents constitute a “qualified deed restriction” on a case-by-case basis, after receiving evidence from the forest owner that they satisfy the provisions set forth herein and in the Forest Project Protocol.

Where there is a conservation easement on a property, the conservation easement itself must be qualified – another deed restriction cannot become a “qualified deed restriction” where a conservation easement is on title.

4. Requirement for Avoided Conversion Projects to Record a Qualified Conservation Easement (CLARIFICATION – October 29, 2014)

Section: 3.6

Context: Section 3.6 requires Avoided Conversion Projects to record a Qualified Conservation Easement in order to be eligible for registration. Because the clarification on defining a “Qualified Conservation Easement” was not available, it was not clear what this requirement entailed.

Clarification: Avoided Conversion Projects do not require a Qualified Conservation Easement in order to be eligible for registration.

5. Sustainable Harvesting Practices Requirement (CLARIFICATION – October 29, 2014)

Section: 3.10.1

Context: Section 3.10.1 requires Forest Projects to employ and demonstrate sustainable long-term harvesting practices “at the time commercial harvesting is either planned or initiated”. It is not clear what constitutes commercial harvest having been “planned”.

Clarification: The requirement for meeting one of the Sustainable Harvesting Practices options is to be assessed at the time that a harvest plan is submitted to a state or federal agency or when commercial harvesting is initiated. The requirement is not applied when commercial harvesting is merely “planned”.

6. Scope of Applicability for Sustainable Harvesting Practices Requirement (ERRATUM – October 29, 2014)

Section: 3.10.1

Context: Section 3.10.1 states that the Sustainable Harvesting Practices requirement must be met “at the time commercial harvesting is either planned or initiated within the Project Area, the

Forest Owner must employ and demonstrate sustainable long-term harvesting practices on all of its forest landholdings, including the Project Area.”

Correction: The assessment of sustainable harvesting should be limited to the forest landholdings controlled by the Forest Owner within the project’s Assessment Area, including the Project Area.

Section 4

7. Identifying Project Area for Reforestation Projects (CLARIFICATION – October 29, 2014)

Section: 4

Context: Section 4 of the FPP describes the requirements for identifying the Project Area. It is not clear when the Project Area must be finalized for a Reforestation Project.

Clarification: The final identification of the Project Area boundaries for a Reforestation Project may be deferred until the second site visit verification. The boundary that is set at the second site visit verification shall be the Project Area boundary for the duration of the project.

Section 6

8. Calculating WCS Using Stratified Vegetation-Type Analysis (ERRATUM – October 29, 2014)

Section: Equation 6.8

Context: Equation 6.8 is meant for use when there is no carbon inventory data for the area of the Logical Management Unit excluding the Project Area (EA). However, it references a value, “ECS”, which is the above-ground standing live carbon stocks per acre within the LMU but excluding the Project Area, as determined from existing inventory data. As Equation 6.8 is meant for use when this inventory data is not available, using ECS in the equation is not possible.

Correction: The following text should replace Equation 6.8 on page 52.

Equation 6.8. Formula for WCS Using Stratified Vegetation-Type Analysis

$\text{If } (1 - SWF) \leq 0.2, \text{ then } WCS = ICS$	
$\text{If } (1 - SWF) > 0.2, \text{ then } WCS = \frac{ICS \cdot PA + SWF \cdot ICS \cdot EA}{PA + EA}$	
Where,	
WCS	= Weighted average above-ground standing live carbon stocks per acre within the LMU containing the Project Area
ICS	= Initial above-ground standing live carbon stocks per acre within the Project Area
PA	= Size of the Project Area in acres

SWF	=	Stratified carbon weighting factor for the LMU (see Erratum 3 from this section of this Errata and Clarification document)
EA	=	Size of the LMU in acres, excluding the Project Area

9. LMU Stratified Carbon Weighting Factor (ERRATUM – October 29, 2014)

Section: Equation 6.9

Context: The formula for the stratified carbon weighting factor is intended to create a ratio mirroring the ratio of above-ground standing live carbon stocks per acre within the LMU but excluding the Project Area (ECS) divided by the initial above-ground standing live carbon stocks per acre within the Project Area (ICS) (see Equation 6.7). Equation 6.9 incorrectly inverts the ratio.

Correction: The following text should replace Equation 6.9 on page 52.

$SWF = \frac{\sum_i (EA_i \cdot CR_i)}{\sum_i EA_i} \div \frac{\sum_i (PA_i \cdot CR_i)}{\sum_i PA_i}$
Where,
PA _i = Acres of the Project Area in forest vegetation type <i>i</i> (from Table 6.2)
EA _i = Acres of the LMU <i>excluding the Project Area</i> , in forest vegetation type <i>i</i> , (from Table 6.2)
CR _i = Carbon rating for forest vegetation type <i>i</i> (from Table 6.2)

10. Estimating Baseline Onsite Carbon Stocks for Public Lands (CLARIFICATION – October 29, 2014)

Section: 6.2.2

Context: This section of the protocol currently states “For Project Areas that demonstrate an increasing inventory of carbon stocks over the past ten years, the growth trajectory of the baseline shall continue until the forest (under the baseline stocks) achieves a stand composition consistent with comparable forested areas that have been relatively free of harvest over the past 60 years.”

It is unclear from this wording what “comparable forested areas” and “relatively free of harvest” mean. Finding a truly comparable landscape would be difficult for many public entities, whose lands span multiple ecosystems and employ a variety of different management practices. Determining what constitutes “relatively free of harvest” on a case-by-case basis could introduce subjectivity and result in variable applications across projects.

Clarification: In order to produce a consistent and standardized approach to baseline for public lands that demonstrate an increasing inventory of carbon stocks over the past ten years, a comparable forest shall be modeled from initiation out to 60 years using an approved growth model as described in Appendix B. The modeled forest shall be comparable to the project area in terms of acreage, site class and species composition. Throughout the 60-year modeling period, only commercial and noncommercial thinning for the purposes of controlling stocking

levels will be allowed. The carbon stocks of the modeled forest at 60 years shall be the project baseline, and shall be considered static throughout the project life.

Section 9

11. Monitoring Report Requirements (CLARIFICATION – October 29, 2014)

Section: 9.3

Context: The protocol states “Upon completion of a reporting period, if the Forest Owner chooses to defer verification, the Forest Owner must provide the monitoring report for the reporting period to the Reserve. A Forest Project is considered automatically terminated (see Section 3.4) if the Forest Owner chooses not to report data and undergo verification at required intervals.” It is not clear from reading the protocol when the monitoring report for a specific reporting period must be submitted to the Reserve by.

Clarification: The monitoring report for any given reporting period must be submitted to the Reserve within 12 months of the end of the reporting period.

Section 10

12. Use of Unpaired T-Test in Inventory Verification (ERRATUM – October 29, 2014)

Section: 10.3.5

Context: Section 10.3.5 states that verification body must use “a paired t-test at the 80% confidence interval to determine if the [site visit] inventory is within the same population as the inventory submitted by the Forest Owner.” In order for the verification body to do so, the locations of the Forest Owner’s inventory plots must be available. If some or all of the original plots were not monumented, the verification body would be unable to locate those plots and conduct the paired t-test.

Correction: A paired t-test may be used in cases where every plot used to develop the project’s inventory estimate is monumented and can be relocated. In any other case, the verification body must use an unpaired t-test at the 80% confidence interval to verify the Forest Owner’s inventory estimates.

13. Representative Sample Plot for Verification of Forest Carbon (CLARIFICATION – October 29, 2014)

Section: 10.3.5

Context: Table 10.9 in Section 10.3.5 states that the carbon tonnes per acre for a representative sample plot, computed using the Forest Owner’s calculation tools, must replicate output computed by the verification body. It is unclear how the verification body should compute carbon tonnes for a representative sample plot and what they should verify in the Forest Owner’s calculations.

Clarification: The verification body must compute carbon tonnes for a representative sample plot, using their own calculation tools, in order to independently compare their output against the output of the Forest Owner's calculation tools. The verification body's calculation tools must adhere to the biomass calculation guidance published on the Forest Project Protocol webpage. In addition, the verification body must review and confirm that the Forest Owner's calculation tools adhere to the biomass calculation guidance published on the Forest Project Protocol webpage.

Appendices

14. Allometric Equations and Biomass/Carbon Mass Estimates (CLARIFICATION – October 29, 2014)

Section: Appendix A, Section A.3

Context: Appendix A, Section A.3 states that the equations in this appendix should be used for biomass and carbon mass estimations. It also states that the references in Section 12 contain a comprehensive list of biomass equations. It is not clear from the current language which biomass equations should be used.

Clarification: The Reserve has published guidance on how to perform biomass calculations, including which biomass equations to use, on the Forest Project Protocol webpage under Protocol Companion Documents and Tools. Separate guidance is provided for projects located in California, Oregon, Washington, Alaska and Hawaii versus projects located outside of these states. The Reserve will continue to make improvements to the guidance documents over time.

15. Calculation of Belowground Biomass (CLARIFICATION – October 29, 2014)

Section: Appendix A, Section A.3

Context: Appendix A, Section A.3 states that the Reserve allows the belowground component of trees to be estimated using a regression equation (Cairns, Brown, Helmer, & Baumgardner, 1997).

Clarification: The use of this regression equation is only allowed for projects located in California, Oregon, Washington, Alaska and Hawaii. Projects located outside of these states must calculate the belowground component of trees according to the guidance provided on the Forest Project Protocol webpage.

16. Definition of Standing Live Biomass (ERRATUM – October 29, 2014)

Section: Appendix A, Section A.3

Context: Appendix A, Section A.3 states that the standing live tree estimate includes carbon in all portions of the tree, including the bole, stump, bark, branches, leaves and roots.

Correction: Standing live tree estimates should be based upon the tree components provided in the biomass equations and calculation methodologies provided for the appropriate region, which may or may not include foliage.

17. Applying a Confidence Deduction (ERRATUM – October 29, 2014)

Section: Appendix A, Section A.4

Context: Appendix A, Section A.4 states that step 3 in applying a confidence deduction is to, “Divide the total inventory estimate by the result in (2) and multiply by 100. This establishes the sampling error (expressed as a percentage of the mean inventory estimate from field sampling) for a 90 percent confidence interval.”

Correction: This statement incorrectly inverts the order of operations required to calculate sampling error. Instead, step 3 should read, “Divide the result in (2) by the total inventory estimate and multiply by 100. This establishes the sampling error (expressed as a percentage of the mean inventory estimate from field sampling) for a 90 percent confidence interval.”

18. Reduced Reversal Risk Rating for Wildfire (CLARIFICATION – October 29, 2014)

Section: Appendix D

Context: Appendix D states that project proponents may use property-specific fire data of at least 30 years in duration in lieu of regional Assessment Area values. It is not clear what types of data the Reserve will accept.

Clarification: The Reserve will accept numerical data dating back 30 years. Additionally, a report stating that the reduced wildfire risk rating being claimed is appropriate and signed by a state forest commission official will be accepted. With all reduced wildfire risk ratings, a methodology for how the project-specific risk assessment was performed must be submitted.

19. Calculating a Project’s Reversal Risk Rating (CLARIFICATION – October 29, 2014)

Section: Appendix D

Context: The formula for completing the Risk Rating Analysis does not include the additional contribution to the buffer pool from the Project Implementation Agreement (PIA) Subordination Type. This additional contribution is assessed once the project chooses which Subordination Clause to use in the PIA.

Clarification: The formula which appears in Section D.5 of Appendix D for calculating the project’s reversal risk rating should read as follows:

$$100\% - \left((1 - \text{FinancialFailure}\%) \times (1 - \text{IllegalForestBiomassRemoval}\%) \right. \\ \times (1 - \text{Conversion}\%) \times (1 - \text{OverHarvesting}\%) \times (1 - \text{SocialRisk}\%) \\ \times (1 - \text{Wildfire}\%) \times (1 - \text{Disease/InsectOutbreak}\%) \\ \left. \times (1 - \text{OtherCatastrophicEvents}\%) \times (1 - \text{PIASubordination}\%) \right)$$

20. Percentage of Project Area within a Single Assessment Area (ERRATUM – October 29, 2014)

Section: Appendix F

Context: Appendix F states that at least 90 percent of the Project Area must consist of land within a single Assessment Area. This is an artifact of previous versions of the Protocol and should not have been included in Version 3.2.

Correction: Projects should follow the guidelines for establishing a Project Area as described in Section 4 of the FPP. It states, “The Project Area may also extend across multiple Assessment Areas within an Ecosection or Supersection, and across no more than two adjacent Ecosections or Supersections.”