SUMMARY OF COMMENTS & RESPONSES
MATURE FOREST MANAGEMENT FORECAST METHODOLOGY VERSION 1.0

One set of comments was received during the public comment period for the draft Mature Forest Management Forecast Methodology version 1.0. Staff provides responses to the comments below. The public comment period for the draft methodology took place from November 20, 2019 to December 20, 2019.

The comment letter can be viewed on Climate Forward's website at https://climateforward.org/program/methodologies/mature-forest-management/.

COMMENTS RECEIVED BY:

1. North Coast Resource Management (NCRM)

Section 2.1 Project Definition

1. This section requires that the conservation easement (CE) include terms that require reforestation of the site in the event of a loss of forest cover on >10% of the total project area, "whether through active planting, site preparation to promote natural regeneration, or through passive management that otherwise allows the site to return to forest cover over time." We agree that passive management is a viable means of allowing forest cover to be restored over time, especially given the perpetual nature of the CE. We recommend clarifying that active planting or site preparation is required only following salvage harvesting performed by the forest owner, or in the event that negligence on the part of the forest owner was the cause of the loss of forest cover. We also recommend that the threshold for reforestation by active planting or site preparation be increased to at least 20%, to reflect that most smaller losses of forest cover will be restored through natural processes over time, regardless of cause. **(NCRM)**

   RESPONSE: The Reserve would like to thank North Coast Resource Management for the comments on the methodology and understand the desire to reduce obligations stemming from the use of this methodology. While your comment led us to revise the language in the provision cited to refer to instances where there is a loss of >50% canopy cover on >10% of the project area to clarify the conditions triggering reforestation, we have left the language around reforestation relatively open to provide the landowner and the easement holder the flexibility to craft the details of the terms of the easement in a way that matches their shared goals and objectives. Thus, there is no specific requirement that active reforestation take place under this methodology. Since the methodology simply requires an easement provision stipulating that a site with forest cover be returned to forest cover following a disturbance—whether through active or passive management—sufficient flexibility remains to allow the landowner to choose their preferred action, including after disturbances that affect 10-20% of the project area. We have adjusted the language in Section 2.1 to make sure active management is not necessarily emphasized over active management as an option and to add clarifying language indicating that passive management that allows the forest to recover on its own should be monitored for success, with active management if such monitoring indicates recovery is not occurring.

Section 2.2 Project Proponent

2. The methodology states that the project proponent must be one of the forest owners. We recommend clarifying that this need be true only as of the start date and through confirmation and FMU issuance. Once FMUs have been issued, the project area could be sold without the new forest owner becoming a project proponent. In that situation, the terms of the CE would bind any future forest owners and ensure the project area was managed in accordance with the assumptions of the MFM Methodology. **(NCRM)**

   RESPONSE: Thank you for the comment. We agree, as this is in line with the overall approach of Climate Forward, which does not require long-term obligations on the part of the project proponent. Section 2.2 has been modified to include clarity that the project proponent is the forest owner submitting the project and that the title of project proponent is not transferrable. Nevertheless, the requirements of this methodology include a conservation easement, with requisite provisions, which remains with the land as a deed restriction, regardless whether the project proponent maintains forest owner status after FMU issuance.

Section 3 Eligibility Rules

3. Eligibility rules VIII and IX do not establish criteria for any specific MFM project, but rather characterize the overall MFM Methodology. We recommend these two rules be deleted. The text in Section 3.8, Market Expansion Objective, which describes Rule VIII, could be moved to the Introduction, as it describes the rationale for the MFM Methodology. The text in Section 3.9, which describes Rule IX, is largely duplicative of Section 3.7, because it explains how a conservation easement ensures the permanent implementation of the GHG project. We recommend that the requirement that "The project proponent must demonstrate that the eligible land trust has been granted the legal authority to monitor compliance of management activities with the terms of the conservation easement and enforce the remedies outlined in the conservation easement when violations of such terms occur," be moved to Section 3.7, and the remainder of the text in Section 3.9 be deleted. **(NCRM)**

   RESPONSE: Thank you for your response. Section 3.8 has been modified to indicate that the project proponent must provide a qualitative description of how the project is not suitable for development under existing offset protocols. Language has also been added to Section 3.9 to indicate that all projects meeting the requirements of the methodology automatically satisfy the standard for demonstrating *ex ante* suitability.

4. Section 3.2 Project Start Date and Crediting Period – Following the statement, "The project proponent must also provide evidence that actions will be undertaken to maintain the project for the duration of the crediting period," we recommend adding the following text: "Under this methodology, the project proponent provides the required evidence by demonstrating that a perpetual conservation easement has been recorded over the project area as described in Section 2.1." **(NCRM)**

   RESPONSE: We thank you for the comment and agree that adding language in reference to the required conservation easement would improve clarity around the evidence required substantiating the continuation of the project activity throughout the crediting period. Section 3.2 has been modified accordingly.

5. Section 3.4 Environmental and Social Safeguards – We recommend the Reserve clarify, with examples, what it envisions will be provided with regard to "applicable authorizations, permits, and certifications from the appropriate authorities required for project operations to the confirmation body at the commencement of confirmation activities." **(NCRM)**

   RESPONSE: Thank you for your comment. Section 3.4 has been modified to include clarifying language around documentation of regulatory requirements associated with the project activity.

6. Section 3.5 Regulatory Compliance – The MFM Methodology states that harvesting encumbrances in the CE will be enforced in two ways: through review of timber harvest plans by the CE holder to ensure compliance with the CE, and through oversight of timber harvest plan implementation by state regulatory agencies. To ensure adequate oversight of timber harvest plan implementation for GHG projects in jurisdictions without state regulatory oversight of timber harvesting, we recommend that the MFM Methodology provide for the CE holder to provide that oversight in such cases. We recommend including language to the effect that where there is no state regulatory agency overseeing harvesting, the forest owner must submit a "timber harvest plan" to the CE holder prior to any proposed timber harvesting. For these GHG projects, the terms of the CE must include a list of the items that must be included in a "timber harvest plan." Where the harvest restrictions included in the CE include harvest limits based on inventory or growth calculations, the CE must include a description of minimum acceptable inventory confidence limits, and limits on the age of any

inventory data that shall not exceed 15 years, except that non-commercial stand treatments and stand improvement harvests that impact less than 20% of the project area should be allowed to rely on inventory data no older than 20 years. The CE should also require that the CE holder employ the services of a professional forester in determining if the harvest activities and harvest levels described in the "timber harvest plan" are in conformance with the terms of the CE. Ongoing annual monitoring of the project area by the CE holder will ensure that the harvesting was properly conducted per the terms of the CE.

We further request that the Reserve clarify what "remedies" the conservation easement is intended to include in order to "ensure the integrity of the project activities over time" in the event the project is found out of regulatory compliance during the crediting period. **(NCRM)**

RESPONSE: We thank you for your comment and have modified Section 3.5 and Section 3.1 (Location) of the methodology to remove the requirement for oversight by a state regulatory agency. Rather, emphasis has been placed on conformance to the requirements of the conservation easement, with review of harvest plans and activities in relation to easement terms by the easement holder as a part of normal easement monitoring and with the overall integrity of the climate benefits of the project supported by the remedies taken by the easement holder for non-compliance with the easement on the part of the landowner. A new provision has also been added to the required easement terms outlined in Section 2.1 to specifically require restoration of the site to the condition prior to an easement violation to be included as an option for remedies sought by the easement holder in the event of non-conformance with the easement by the landowner.

Section 4 Project Area

7. Section 4.1 Project Configuration and Limitations – The requirement that an MFM project must include all of the Forest Owner's lands in a watershed is challenging, especially where the Forest Owner's lands are not contiguous, and are managed separately. We do not see a compelling reason for this requirement that relates to the goals and technical requirements of the MFM Methodology. In addition, the requirement may discourage forest owners from entering into a GHG reduction project, and could be especially problematic where multiple forest owners are involved in a single project. It also may require the forest owner(s) to record more than one CE, increasing the expense and complexity of the GHG reduction project, because land trusts (the entities expected to hold the CEs) typically do not allow multiple, noncontiguous holdings to be included in a single CE. If this requirement is retained as a default rule, we recommend that, at minimum, the MFM Methodology identify non-exclusive examples of exceptions, including but not limited to: (i) where a forest owner owns additional property within the watershed that is unavailable or inappropriate for inclusion in the GHG reduction project because it is already subject to legal encumbrances or restrictions that are either incompatible with, or duplicative of, the requirements of the MFM Methodology; (ii) where the portions of the forest owner's landholdings within the watershed that are excluded from the GHG reduction project are non-contiguous with the land that is part of the GHG reduction project; (iii) where the excluded landholdings are so small, remote, subject to access restrictions, or otherwise situated such that including them in the GHG reduction project would result in implementation and/or administrative costs to the forest owner or the CE holder that are disproportionate to the benefits of inclusion; or (iv) where the forest owner demonstrates that the project area is representative of the forest owner's general forest management despite the exclusion of a portion of the forest owner's landholdings within the watershed. **(NCRM)**

RESPONSE: We thank you for your comment and understand the concerns expressed. The underlying purpose for the requirement to include all of a forest owner's lands within a given watershed in the MFM project area is related to the establishment of the project baseline and the common practice value(s) that may be used as a governor(s) to the minimum baseline level. That purpose is to prevent project configurations that intentionally leave out portions of a property with lower stocking, thereby creating more favorable crediting outcomes resulting from greater differences between the baseline and initial stocking. However, we recognize that the requisite mechanism—a conservation easement—by which MFM projects, and associated forecasted credits, are established presents particular challenges for landowners who may wish to undertake meaningful climate actions but not necessarily encumber all of their land with a conservation easement, whether due to differing management goals, logistical difficulties, or other reasons, as cited in your comment. While the draft methodology already indicated that exceptions could be approved by the Reserve, we have modified Section 4.1 to provide better clarity around such exceptions. A simple test has also been included as a basic though not necessarily exclusive screen to safeguard against situations that suggest a project has been configured to exclude sites that lead to less favorable crediting outcomes.

8. Section 4.2 Project Area Acreage – The final paragraph is redundant, as it duplicates requirements found in the second paragraph, and should be deleted. **(NCRM)**

   RESPONSE: Thank you for your comment. We agree and have removed the final paragraph in Section 4.2 in its entirety.

Section 6.5 Ensuring Conservativeness of Quantification

9. Section 6.5.1 Modeling Parameters – The notion that site indexes specified in past harvest plans is the most reliable source for site index seems troubling, especially with regard to Timber Harvest Plans that are not on the Project Area. This could create a conflict if measured site index values on the Project Area differ from those presented in past harvest plans. We recommend, instead, that the MFM Methodology rely on the professional judgement of the forester developing the MFM project to select site index values based on publicly available site index data, or upon measurements of site index as a part of the carbon stock inventory. Existing language in Appendix A to the MFM Methodology allows for the source of site index values to be described by the forester. Confirmation activities will assess the reasonableness of the site index values applied to the modeling of forecasted project stocks. **(NCRM)**

   RESPONSE: Thank you for your comment. Site index values are an area of primary concern in regard to the conservativeness of modeling results, especially given the 100-year crediting period of MFM projects. Nevertheless, we understand the concern indicated by the comment, especially with respect to harvest plans from outside of the project area. Section 6.5.1 has been modified to indicate that a professional forester must provide oversight of modeling, including the selection of parameters employed and the sources of information used to determine each parameter. Values chosen for site index are to be justified and reviewed by confirmation bodies for reasonableness.

10. Section 6.5.2 Deduction to Allow for Resilience-Related Management – The proposed 15% standard deduction for management actions that ensure forest resilience appears to be unnecessarily high, particularly given that the terms of any CE will likely not allow project stocks to be reduced over time regardless of the stand treatments described in this section of the MFM Methodology. We recommend the Reserve consider applying the deduction only to modeled sequestration above the Project's initial carbon stocks – essentially, the modeled

increase in carbon stocks over the crediting period. Avoided emissions related to initial carbon stocks that are above common practice, should not be subject to any such deduction. As the deduction is included in equation 6.1 now, the deduction applies to the total carbon stocks at the end of the crediting period, even those stocks that have already been removed from the calculation of additionality due to the calculated baseline stocks. In some cases, the net impact of this deduction as currently calculated could be over 30% of the project's carbon stocks as of the end of the crediting period that are above the project's baseline stocks. **(NCRM)**

RESPONSE: We thank you for your comment. The standard deduction of 15% was included not as a safeguard against potentially declining stocks in the future—the conservation easement is designed to prevent intentional actions leading to decreasing stocks. However, the overall increase in forecasted actual carbon stocks can be reasonably expected to be tempered by resilience-related treatments that are not explicitly included in modeling scenarios. After further consideration, we believe a deduction of 15% to be unnecessarily high, especially given the likelihood that resilience-related management actions may, despite removing some carbon stocks from the project area over the short term, result in greater security to the remaining stocks as well as potentially enhanced productivity on portions of the project area over the long term. The standard deduction has been reduced in the final methodology to 10%, whereas the deduction applied to projects employing conservation easements that prohibit commercial harvesting of live trees has been adjusted to 15%.

Furthermore, we agree that the deduction should be applied only to carbon enhancements (i.e., increases above the project's initial carbon stocking) since future resilience-related treatments would only affect how carbon stocks increase over the crediting period and should have no effect on the avoided emissions benefit produced by the project. Equation 6.1 has been adjusted to reflect this change.

Section 8 Reporting and Record Keeping

11. Section 8.1 Project Submittal and Confirmation Documentation – This section includes a list of items that the project proponent is required to submit after project listing, in order to obtain project confirmation. The last three items on the list (Confirmation Report, Confirmation Statement and Confirmation List of Findings) presumably would be prepared by the confirmation body and could not possibly be submitted by the project proponent prior to confirmation. We recommend creating a separate list of items that the confirmation body would create as part of the confirmation process, and moving these three items to that list. **(NCRM)**

    RESPONSE: Thank you for your comment. Section 8.1 has been modified to clarify that the confirmation documents identified are to be provided by the confirmation body as a part of the confirmation process rather than by the project proponent.

12. Section 8.2 Record Keeping – There are two references to records being kept in "Hard Copy" format. We recommend clarifying that hard copies must be retained only for documents that were originally created in hard copy form and for which the original hard copy is significant because it bears original signatures or other evidence of authenticity – e.g., an executed attestation of title. We recommend clarifying that there is otherwise no requirement to retain hard copies of other documents that exist in electronic form, or to print and store documents that originated in electronic form.

    The methodology requires "Copies of all permits, formal notices of regulatory violations, and

any relevant administrative or legal consent orders dating back at least 3 years prior to the implementation of the project" be retained. We suggest that this retention requirement should be limited to the period for which the project proponent has owned the property in question, as the proponent is unlikely to have such documents for the period preceding its ownership. **(NCRM)**

RESPONSE: We thank you for your request for clarification around these record keeping provisions. Section 8.2 has been modified to indicate hard copies are required only for those documents for which original hard copies are the basis for authenticity. It has also been revised to indicate that project proponents owning the project area less than three years must only provide permits, notices and consent orders issued since they acquired the property, unless a permit, notice or consent order issued prior to their ownership is still applicable.

13. Section 8.3 Reporting and Confirmation Period – The last paragraph states that confirmation activities cannot start until at least one year following the beginning of the project's implementation. This is inconsistent with the prior paragraph, which states that the confirmation period begins with the project start date, and appears to be inapplicable to the MFM Methodology. We recommend deleting the text, "and at least one year following the beginning of project implementation." **(NCRM)**

    RESPONSE: We thank you for your comment. As stated in the methodology, the confirmation period begins with the project start date and continues until submission of the final confirmation report to the Reserve. Within that period of time, confirmation activities are not to begin, as a programmatic standard, until one year after the start of the project. However, we have included language allowing for exceptions to that standard to be made at the sole discretion of the Reserve and subject to the terms and conditions stipulated by the Reserve to ensure the integrity of the FMUs issued are maintained.

Section 9 Confirmation Guidance

14. Section 9.2 Confirming the Project Implementation Report – The MFM Methodology requires the confirmation body to assess a proposed sampling plan based on the requirements in Section 4.3.3 of ISO 14064-3. Because this proprietary standard must be purchased, and may change or be replaced over the life of a project, we recommend the intended requirements be incorporated as plain text in the MFM Methodology without the reference to an ISO standard. **(NCRM)**

    RESPONSE: Thank you for your comment. The section of the ISO standard indicated is simply for reference for confirmation bodies, who must be accredited to that standard. The methodology has been updated to reflect a recent update to the ISO standard, including a new section reference. Nevertheless, the referenced ISO section has no direct bearing on how project proponents would develop their sampling plans. Rather it provides general guidance for confirmation bodies regarding the overall intent of the review of such sampling plans, including reviewing the appropriateness of the plan, the applicability of any assumptions, and the quality of any resulting data. No additional information about the standard has been added to the methodology

15. Section 9.4.3 Confirming Carbon Inventories – This section lacks specifics on the number of passing plots needed to satisfy the sequential sampling test. **(NCRM)**

    RESPONSE: We thank you for your comment. Table 9.4 has been added in Section 9.4.3.6 to indicate the number of passing plots required to satisfy the sequential sampling test.

16. Section 9.4.3.1 Sequential Sampling for Confirmation – We recommend that "Soil" be removed from the sequential sampling test, as carbon stocks in soil are not counted as part of the MFM Methodology.

    The methodology states that the diameter and height sequential sampling tests may be employed for the unpaired test. We request clarification as to how these tests are utilized for an unpaired test where the Confirmation Body (CB) is collecting their own data. In that case there is no project data to use in place of the CB's DBH and Height measurements. **(NCRM)**

    RESPONSE: Thank you for your suggestions. We agree that soil should not be considered from the sequential sampling test. The reference to the soil carbon pool has been removed from Section 9.4.3.1. Additionally, sequential sampling for DBH and height cannot be performed in cases where unpaired plots are employed by the confirmation body. Therefore, Section 9.4.3.1 has been revised to clarify that DBH and height comparisons can only be made when paired plots are being tested.

Section 10 Glossary of Terms

17. The term "Activity proponents" is included in the definition and nowhere else in the methodology. We believe this is a holdover from some previous version and should be changed to "project proponents." **(NCRM)**

    RESPONSE: We thank you for your comment and have modified the reference within the definition of "project proponents" to refer to "project proponents" rather than "activity proponents."

Appendix A Quantification Guidance for MFM Projects

18. Table A2.1 – Item #3 under the Height category, "Inventory methodology must describe site tree selection requirements and measurement procedures," implies that site index must be sampled as a part of the inventory. We recommend clarifying whether this is the intent.

    Under the Weight (Plot Area and Forest Strata) category, given that this is an ex-ante methodology, we recommend that Appendix A be revised such that the process for updating forest strata need not be included. **(NCRM)**

    RESPONSE: Thank you for your comment. Since site index is a critical component of model parameterization to project changes in live tree carbon stocks, determining site index based on inventory sampling is recommended though not required. As such, item #3 under the Height category in Table A2.1 has been modified to clarify that site index measurements are not required. Nevertheless, in the absence of site index measurements, the project proponent must be able to describe how the use of other sources of information for site index determination is reasonable and conservative, as outlined in Section 6.5.1.

    Additionally, item #3 under the Weight (Plot Area and Forest Strata) category has been modified to remove the reference to the process for updating forest strata.

19. A2.5 Quantification of Carbon in Live Trees from Project Data – We request clarification of whether the Cairns equation is intended to be used at the plot level or at the tree level. **(NCRM)**

    RESPONSE: Thank you for your comment. The Cairns equation is intended to be applied at the plot level. Action A2.5 of the methodology has been updated to clarify this.