

American Carbon Registry Monitoring Report

Section I: Report Completed By		
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Section II: Offset Project Information		
1	Project name	TNC - Chestnut Mountain Improved Forest Management Project
2	ACR Project ID#	441
3	ACR account holder	The Nature Conservancy
4	Reporting period (MM/DD/YYYY–MM/DD/YYYY)	December 6, 2018 to December 5, 2019
5	Project start date (MM/DD/YYYY)	June 5, 2018
6	Current project crediting period (MM/DD/YYYY–MM/DD/YYYY)	June 5, 2018 to June 4, 2038
7	ACR Standard Version at time of listing/initial submittal	ACR Standard version 5.1
8	Relevant ACR Sector Standard(s) and Version(s)	
10	ACR-Approved Methodology Title and Version	Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands version 1.3
Section III: Project Details		
1	Project Description The project property is located in the state of Tennessee, entirely in White County. The project area covers a total of 5,556 acres. The project activity is improved forest management, with TNC’s conservation-forestry practices representing an improvement in carbon storage over higher return, more aggressive management regimes. The Chestnut Mountain Improved Forest Management Project will provide critical finance for the oversight and management of the property. The total GHG reductions or removals during the reporting period covered by this monitoring report is 76,574 t CO ₂ e.	
2	Program of Activities Project Implementation Not applicable.	
3	Project Deviations None	



4	<p>Regulatory Compliance</p> <p>The project has submitted a signed annual ACR Voluntary Offset Project Attestation, affirming no violations of laws or regulations during the monitoring period, to the best of TNC’s knowledge. As added evidence, a copy of the most recent FSC certification, covering legal and regulatory compliance, has been submitted.</p>																		
Section IV: AFOLU Projects																			
1	<p>Reversals (Please note that reversals must be reported to ACR as soon as they are discovered per the ACR Risk Mitigation Agreement)</p> <p>There have been no intentional or unintentional reversals during the reporting period.</p>																		
2	<p>Carbon Pools</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Carbon Pool</th> <th style="text-align: left;">Previous (total tCO₂e)</th> <th style="text-align: left;">Current (total tCO₂e)</th> </tr> </thead> <tbody> <tr> <td>Standing Live</td> <td>943,779.0</td> <td>982,573.8</td> </tr> <tr> <td>Standing Dead</td> <td>34,822.1</td> <td>34,822.1</td> </tr> <tr> <td>Soil</td> <td>Excluded</td> <td>Excluded</td> </tr> <tr> <td>Below Ground Live</td> <td>(included in standing live estimate above)</td> <td>(included in standing live estimate above)</td> </tr> <tr> <td>Harvested Wood Products</td> <td>0.0</td> <td>0.0</td> </tr> </tbody> </table>	Carbon Pool	Previous (total tCO ₂ e)	Current (total tCO ₂ e)	Standing Live	943,779.0	982,573.8	Standing Dead	34,822.1	34,822.1	Soil	Excluded	Excluded	Below Ground Live	(included in standing live estimate above)	(included in standing live estimate above)	Harvested Wood Products	0.0	0.0
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3	<p>Inventory</p> <p>Above- and belowground biomass stocks reference inventory data collected from 2015-2018 and projected to the end of the reporting period using FVS-SN.</p>																		
Section V: Project Monitoring																			
1	<p>Parameters Monitored/Modeled</p>																		

Parameter	$C_{P,TREE,t}$
Units	metric tons CO ₂
Description	Carbon stored in above and below ground live trees at the beginning of the year t
Methodology Section	D
Equation #(s)	11, 18
Source of Data	<p>Forest inventory and/or FVS-SN growth and yield model.</p> <p>To be consistent with field measurement protocols specified in “Final Carbon Cruise Specs Chestnut Mountain Dec 2015- Jan 2017 rev1”. The inventory will use a stratified systematic sample design and re-measure the same permanent plots established in 2015-2016, which targeted a precision level of +/- 10% of the mean live tree biomass with 90% confidence.</p>
Measurement Frequency	Every 5 years or less, or at request for ERT issuance

Parameter	$C_{P,DEAD,t}$
Units	metric tons CO ₂
Description	Carbon stock stored in dead wood at the beginning of the year t
Methodology Section	D
Equation #(s)	12, 18
Source of Data	<p>Forest inventory. Standing dead wood only (lying dead wood excluded from project accounting boundary).</p> <p>To be consistent with field measurement protocols specified in “Final Carbon Cruise Specs Chestnut Mountain Dec 2015- Jan 2017 rev1”. The inventory will use a stratified systematic sample design and re-measure the same permanent plots established in 2015-2016, which targeted a precision level of +/- 10% of the mean live tree biomass with 90% confidence.</p>
Measurement Frequency	Every 5 years or less, or at request for ERT issuance

Parameter	$BS_{p,t}$
Units	in metric tons CO ₂
Description	Carbon stock in logging slash burned in the project in year t
Methodology	D
Equation #(s)	13
Source of Data	Burning of any kind is not performed as part of management practices. Surveillance of slash management on harvests is performed on FSC audits via visual census.
Measurement Frequency	Annual

Parameter	$C_{p,HWP,t}$
Units	metric tons CO ₂
Description	Carbon remaining stored in wood products 100 years after harvest for the project in year t .
Methodology Section	D
Equation #(s)	14, 18
Source of Data	Monitored from recorded harvest volumes.
Measurement Frequency	Annual data summed for the monitoring period, applied as average annual for the monitoring period.

Parameter	Project area
Units	Acres
Description	Area of IFM project
Methodology	Not re-measured – area remains fixed through crediting period.
Equation #(s)	
Source of Data	Validated project GHG Plan. Not re-measured – area remains fixed through crediting period.
Measurement	Not monitored.

Parameter	Sample plot area
Units	Acres (variable, nested)
Description	Area (variable, nested) of forest inventory sample unit
Methodology	
Equation #(s)	
Source of Data	Standard Operating Procedures document “Final Carbon Cruise Specs Chestnut Mountain Dec 2015- Jan 2017”.
Measurement Frequency	Sample plot area is not monitored. Sample plots are to be re-measured every 5 years or less.

Parameter	Tree species
Units	Taxon (to species level)
Description	Species of tree measured in forest inventory sample unit
Methodology Section	As per standard operating procedures detailed in “Final Carbon Cruise Specs Chestnut Mountain Dec 2015- Jan 2017”.
Equation #(s)	
Source of Data	Forest inventory.
Measurement Frequency	Sample plots are to be re-measured every 5 years or less.

Parameter	$GHG_{p,t}$
Units	metric tons CO ₂ e
Description	Greenhouse gas emission (in metric tons CO ₂ e) resulting from the implementation of the project in year (t).
Methodology	D
Equation #(s)	13, 14 and 18
Source of Data	Calculated using equation 13 of the methodology. Not measured (calculated from monitored parameter $BS_{p,t}$)
Measurement	Calculated at each monitoring event every 5 years or less

2	<p>Monitoring Plan</p> <p>Live tree stocks are monitored via forest inventory and growth and yield modeling, with field measurement and estimation procedures consistent with those outlined in Section E1 of the GHG Plan.</p> <p>The parameters in Section V 1 above, specified in the Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands v1.3, are monitored and reported.</p> <p>See also Monitoring Plan, Section D of the validated Project GHG Plan.</p>
Section VI: GHG Emission Reductions and Removals	
1	<p>Baseline Emissions</p> <p>101,552 t CO₂</p> <p>Summary of calculations attached as appendix “ChestnutMtn_MonitoringReport_2019 APPENDIX.docx”</p>
2	<p>Project Emissions</p> <p>(26,071) t CO₂</p> <p>Summary of calculations attached as appendix “ChestnutMtn_MonitoringReport_2019 APPENDIX.docx”</p>
3	<p>Leakage Emissions</p> <p>51,049 t CO₂</p>



	Summary of calculations attached as appendix “ChestnutMtn_MonitoringReport_2019 APPENDIX.docx”
4	<p>Buffer Pool Contribution (For AFOLU and other sequestration projects only) 13,784 t CO2</p> <p>The buffer pool contribution will be transferred from another project. Summary of calculations attached as appendix “ChestnutMtn_MonitoringReport_2019 APPENDIX.docx”</p>
5	<p>Net GHG Emission Reductions/Removals 76,574 t CO2</p> <p>Summary of calculations attached as appendix “ChestnutMtn_MonitoringReport_2019 APPENDIX.docx”</p>
Section VII: Verification	
1	<p>Verification The project was verified by ESI in 2018. It is now undergoing its second verification. The verification is a desk review. The current verification body is Aster Global Environmental Solutions, Inc” (formerly ESI) which has verified the project for two years.</p>