

U.S. FOREST OFFSET PROJECT DATA REPORT INITIAL REPORTING PERIOD - IMPROVED FOREST MANAGEMENT				
OPR Staff Use Only	Date Report Received:	OPR Tracking Number:	Date Report Reviewed:	OPR Staff Use Only
<i>Entities submitting the project's first Offset Project Data Report must submit the information requested in both Initial Reporting Period and the Annual Reporting forms to the appropriate Offset Project Registry. For every reporting year thereafter, submit only the information requested in the Annual Reporting form.</i>				
PART I. ENTITY SUBMITTING REPORT				
Is this form being submitted by the Offset Project Operator (OPO) or by the Authorized Project Designee (APD)? <i>Note: The person completing this form should be an OPO/APD employee.</i>				☐ OPO ☒ APD
Name of Person Completing Form: Sean Carney		Organization, if applicable: Finite Carbon		
Date Form Completed: 07/26/2016	Phone Number: 484-586-3092	Email Address: scarney@finitecarbon.com		
PART II. OFFSET PROJECT INFORMATION				
Offset Project Name: Finite Carbon - Lyme Grand Lake Stream IFM		OPR Project ID#: CAR1217	ARB Project ID# (if known): CAFR5317	
Offset Project Commencement Date: 09/30/2013	First Reporting Period Start Date: 09/30/2013	First Reporting Period End Date: 09/29/2015		
Provide an explanation and justification for the commencement date. Specify the action(s) that identify the offset project commencement date. The discrete, verifiable action identifying the project commencement date for this project was the start of the project inventory (i.e. "boots on the ground").				
Optional: Provide the nearest town/city to the Project Area: Grand Lake Stream Plantation, ME				
PART III. OPO/APD INFORMATION				
A. OPO				
OPO Name: GLS Woodlands LLC			OPO's CITSS ID#: CA 1584	
Mailing Address: 23 South Main St		City: Hanover	State: NH	Zip: 03755
Contact Person: Thomas Morrow	Phone Number: 603-643-3300	Email Address: tmorrow@lymetimber.com		
B. APD (if applicable)			☐ No APD/Not Applicable	
APD Name: Finite Carbon			APD's CITSS ID#: CA 1530	
Mailing Address: 435 Devon Park Drive		City: Wayne	State: PA	Zip: 19087
Contact Person: Sean Carney	Phone Number: 484-586-3092	Email Address: scarney@finitecarbon.com		
PART IV. LAND OWNERSHIP				
A. Is the Offset Project Operator (OPO) the owner in fee for the Project Area? <i>Further documentation is required for all projects. Submit as attachment labeled "Attachment A." See Part X of this OPDR document for more information.</i> If "no," explain how the entity identified as the OPO has the right to undertake and list the project.				☒ Yes ☐ No

B. Optional: List all Forest Owners. This includes owners in fee as well as third parties with existing property interests within the Project Area that affect the trees and standing timber located in the Project Area (e.g. mineral rights, timber rights, easements, rights of way, leases, etc.). GLS Woodlands, LLC (fee simple)		
C. Does the offset project occur on public or private lands? <i>If the project occurs on public lands, proceed to questions C1 and C2. Otherwise, skip to question D. Further documentation is required if project occurs on public lands. Submit copies of documentation demonstrating explicit approval of the project's management activities and baseline, as well as the public vetting process used; attachment should be labeled "Attachment B." See Part X of this document for more information.</i>		☒ Private ☐ Public
1. Describe the public process that was used to evaluate the forest management activities and policy decisions concerning the offset project. N/A		
2. Describe the explicit approval process used by the public entity to initiate and maintain this offset project, including the offset project's management activities and baseline. N/A		
D. Does the project employ a Qualified Conservation Easement (QCE)? <i>If employing a QCE, proceed to questions D1, D2, and D3. Otherwise, skip to question E. Supporting documentation for a QCE is required. Submit as attachment labeled "Attachment C." See Part X of this document for more information.</i>		☐ QCE ☐ Public Ownership
1. Date that the QCE was recorded.		
2. Optional: Is the project located in a state that requires third-party beneficiaries to sign the easement (i.e., to "accept and record that acceptance"), such as Arizona, Pennsylvania, or West Virginia?		☐ Yes ☐ No
3. Provide the terms within the easement that affect forest management.		
E. Does the offset project occur on any of the following categories of land? (check all that apply) ☐ Land that is owned by, or subject to, an ownership of possessory interest of a Tribe ☐ Land that is "Indian lands" of a Tribe as defined by 25 U.S.C. §81(a)(1) ☐ Land that is owned by any person, entity, or Tribe, within the external borders of such Indian lands ☒ None of the above <i>If "none of the above," skip to Part V. Otherwise, proceed to Optional questions E1 and E2. Further documentation is required for projects occurring on land listed in the first three categories. Submit supporting documents as attachments labeled "Attachment D." See Part X of this document for more information.</i>		
1. Optional: Does a limited waiver of sovereign immunity between ARB and the governing body of the Tribe exist?		☐ Yes ☐ No
2. Optional: Provide a description of land ownership within the Project Area.		
PART V. OFFSET PROJECT AREA		
Maps depicting specific elements of the Project Area are required for all projects. <i>Submit supporting documentation as attachments labeled "Attachment E." See Part X of this document for more information.</i>		
Latitude of Offset Project Location: 45.234	Longitude of Offset Project Location: -67.754	Project Area Total Acreage: 19,551.99
A. Identify the assessment area (or assessment areas, if project crosses more than one) that contain Project Area lands and list the acreage of project lands within each assessment area. Supersection: Maine - New Brunswick Foothills and Lowlands; Assessment Areas: Conifer Bog (676.86 acres), Northern Hardwoods (3,570.38 acres), Pine Forests (311.20 acres), Poplar/Birch (952.03 acres), Spruce-Fir (14,041.52 acres).		
B. Identify and describe the governing jurisdiction(s) applicable to the Project Area. Grand Lake Stream Plantation (a type of minor civil division) and T6 ND (an unorganized township), Washington County, Maine.		
C. Describe how the Project Area was determined. The project area was determined by identifying all the land classified as forests contained by the property boundary covered by the West Grand Lake Conservation Easement.		

D. Describe the existing land cover, and land use of the Project Area.

Grand Lake Stream Plantation and T6ND's history is linked to the village of Grand Lake Stream, once the site of the world's largest tannery. The abundant hemlock resource of the Downeast Lakes Region was essential to the prosperity of this once thriving community. Logging and bark collection were central to the economy of the area; linked closely to the health of the tanning facility.

The Downeast Lakes Region has been a mecca for the sport fishing and hunting crowd since the turn of the 20th century. A vibrant guiding industry developed to provide services to this clientele. The forestlands of the region served the local timber and pulp industry since the advent of the paper industry in the early 1900's. Grand Lake Stream and T6ND were part of the St. Croix Paper Company lands until they were purchased by the Webber Family (McCrill Timberlands, LLC et. al.). These towns were part of a nearly 1 million acre ownership that stretched across the U.S.-Canadian border. For years the mill required spruce and fir to run until the early 70's when the pulping process was converted to hardwood.

These towns continue to be within the wood procurement circle of the pulp facility in Woodland (formerly Domtar). The hardwood resource on Grand Lake Stream and T6ND has been significantly reduced because of management, although there are pockets of valuable hardwood remaining. Management in the past was market driven. Trees weren't harvested unless a market existed for them. This type of harvesting ensured the perpetual presence of a forest cover because market specifications demanded larger sized timber. The smaller (5" – 10" dbh) trees generally remained to grow.

As market conditions changed, so did harvest methods and the amount of timber harvested from each acre. In the early 1970's, Georgia-Pacific's whole tree chipping had a dramatic impact on harvesting. Using a new method of in-woods product transformation, whole trees were converted to usable chips, blown into vans and transported to the mill and clearcutting increased due to the fact that everything on the site was now merchantable.

This technology influenced Grand Lake Stream & T6ND. Hardwood areas were essentially commercially clearcut in the early 1980's. In the mid-1980's and early 1990's, markets for hemlock logs developed in Asia. Georgia-Pacific used the abundant and ever-increasing hemlock resource on their lands to supply this market out of Eastport, Maine. Much of the mature hemlock on these towns was harvested at that time.

GLS Woodlands, LLC purchased approximately 22,000 acres near Grand Lake Stream on December 17, 2008. This parcel of commercial forest land had previously been owned by the Webber Family and managed by Prentiss and Carlisle. The mission of GLS Woodlands is to own and manage the property for the purpose of generating a satisfactory return on investment. While doing so it is the policy of GLS Woodlands to practice high-quality stewardship with particular attention to conserving soil, water and wildlife resources and that production of forest products will occur while conserving the ecological health and biological diversity of the forest.

Currently, timber harvests and overall forest management activities are certified to the Forest Stewardship Council (FSC). The property is protected by a working forest conservation easement and future uses will consist of commercial forestry practices as well as recreation and wildlife habitat management.

E. Describe the forest vegetation types within the Project Area boundary.

The property is predominantly forested with softwood, mixedwood, and hardwood forest types. Softwoods and softwood-dominated mixed stands account for 69% of the property and 77% of the forest area. Hemlock and red spruce are the dominant softwood species, followed by balsam fir, white pine, and cedar. Red maple, yellow birch, American beech, and paper birch are the dominant hardwood species. Bogs and other wetlands account for 11% of the total property area.

Aspen-Birch Woodland:

Paper birch, big-toothed aspen, quaking aspen, and red maple are the most common trees. Shrub

layer is variable, but commonly includes shadbush and gray birch. Typical herbaceous species include bracken fern, Canada mayflower, and sheep fescue. This forest type typically develops in small to large patches (up to several hundred acres) after heavy disturbance (fire or clearcutting). Early successional, often followed by one of the other types listed below. Ruffed grouse and American woodcock commonly use young stands with dense sapling cover and little herbaceous cover. Snags remaining after wildfire in northern or eastern occurrences of this community type provide foraging strata for three-toed woodpeckers and perches for the rare olive-sided flycatcher.

Northern Hardwoods: Beech – Birch – Maple Forest

Various mixes of beech, yellow birch, red maple, and sugar maple are dominant; mixedwood stands may include up to 50% hemlock, red spruce, or balsam fir. The shrub layer is variable and dominated by regenerating overstory species. In northern New England this is typically a matrix-forming ecosystem that covers large areas of the landscape where better soils are found. This forest type provides nesting habitat for a large number of passerine bird species. Most notable are the black-throated blue warblers, but also includes black-throated green warblers, rose-breasted grosbeak, scarlet tanager, and ovenbird. They also provide important habitat for American marten and white-tailed deer.

Spruce-Fir:

Stands ranging from pure red spruce to pure balsam fir. On Grand Lake Stream these stands have a particularly high hemlock component. They also sometimes include a significant white pine or hardwood (red maple and yellow birch) component. A matrix-forming ecosystem in northern New England found on cool, moist, and/or lower-fertility sites. The areas provide essential winter cover required by white-tailed deer and other important game species. Dense regenerating conifers provide habitat for snowshoe hare.

Northern White Cedar:

These conifer bogs include both northern white cedar swamps found in level basins and cedar spruce seepage forests on gentle slopes. In addition to cedar these areas include a mix of red and black spruce, red maple, balsam fir, eastern hemlock and eastern white pine. The shrub and ground layers are variable, forming a lush mosaic of vegetated hillocks interspersed with moist hollows. The understory is largely northern white cedar and balsam fir.

White Pine Forest:

A closed canopy forest type in which white pine is dominant. Includes a significant northern white cedar, red spruce, and balsam fir component. In many of these forests the dense and strongly coniferous canopy limits understory growth. The herbaceous layer commonly includes lowbush blueberry, forbs, and ferns. This forest community is used as nesting habitat by coniferous or mixed forest specialist bird species such as the sharp-shinned hawk, pine warbler, black-throated green warbler, blackburnian warbler, and red crossbill.

F. Describe the site classes within the Project Area boundary.

No portion of the property averages more than 120 cubic feet of growth annually (based on NRCS soils site productivity data), and therefore the entire property is classified as "low" site class (see 'CAR1217 OPDR Worksheet Calculations.xlsx').

G. Describe the land pressures and climate zone/classification applicable to the Project Area.

The Project Area is protected by a perpetual working forest conservation easement held by the State of Maine. Land development pressure is limited around the project area as well, in part because of its rural locality. The Project Area lies entirely in the 4b and 5a climate zones as mapped by the USDA.

H. Describe the historical land uses, current zoning, and projected land use within the Project Area and surrounding areas.

The historical land uses in the past have been timber production for bark, pulp and sawlogs (linked in large part to the nearby tanning facility and later to the paper mill), as well as outdoor recreation

such as hunting, fishing, and snowmobiling. The property is almost entirely unzoned, with the exception of a small amount of shoreline that is zoned as residential. Based on the terms of the conservation easement and the multi-resource management plan the projected land use within the Project Area and surrounding areas continues to be timber production and outdoor recreation.

- I. Describe the forest conditions within the Project Area, including species composition, age class distribution, and management history.**
Initial observation and inspection of the forest condition indicates that the forest is growing vigorously and is in generally good condition. Natural mortality appears to be at normal levels and consistent with the spruce/hemlock/pine forest of the region. Damage from insect and pathogens also appears to be very limited; beech-bark nectaria being the most visible exception. Infected beech continues to provide beechnut and show evidence of bear feeding. Whole tree chipping in the 1980's resulted in extensive clearcutting of hardwood areas during that decade. Much of the mature hemlock was harvested from the mid-1980's through the early 1990's. These harvested areas are well regenerated. The species composition is primarily spruce, hemlock, cedar, maple, and pine. To a lesser extent poplar, beech, birch, and fir are also present. No more than 40% of the Project Area is in age classes younger than 20 years old: 0-20 years (9%, 1,689 acres); 20+ years (91%, 17,863 acres).

PART VI. OFFSET PROJECT ELIGIBILITY

- A. Does the Project Area have a canopy cover that is greater than 10 percent?**
Supporting documentation is required. Submit as attachment labeled "Attachment F." See Part X of this document for more information.
- ☒ Yes
☐ No

- B. Optional: Are the associated project lands currently in compliance with all local, state, and federal regulatory requirements?**
- ☒ Yes
☐ No

Optional: If no, provide an explanation of the non-compliance.

- C. Does the entity submitting this report declare that the offset project has not and does not employ broadcast fertilization?**
- ☒ Yes
☐ No

- D. Indicate how the offset project meets the definition of Natural Forest Management per Table 3.2 in the U.S. Forest protocol:**

1. Native species:

- a) Does the project consist of at least 95% native species based on the estimated sum of carbon in the standing live carbon pool? Improved Forest Management Projects are assessed using estimates of basal area per acre.**

If "no," proceed to question 1b. Otherwise, skip to question D2.

**See 'CAR1217 OPDR Worksheet Calculations Proprietary.xlsx'*

☒ Yes
☐ No

- b) Describe how the project will meet this requirement.**

2. Composition of native species:

- a) Does the Project Area naturally consist of a mixed species distribution where no single species' prevalence, measured as the percent of basal area of all live trees in the Project Area, exceeds the percentage value of standing live carbon shown under the heading 'Species Diversity Index' in the Assessment Area Data File?**

If "no," proceed to questions 2b and 2c. Otherwise skip to question D3.

**See 'CAR1217 OPDR Worksheet Calculations Proprietary.xlsx'*

☒ Yes
☐ No

- b) Explain how the project will demonstrate a trend toward achieving the Species Diversity Index of native species and meet this requirement within 25 years.**

- c) If the Project Area does not naturally consist of a mixed species distribution: Will or have you provided a written statement from the government agency in charge of forestry regulation in the state where the project is located stipulating that the Project site is not capable of meeting the requirement of mixed species distribution?**

☐ Yes
☐ No

3. Distribution of age classes/sustainable management:

- a) Indicate how the project will meet the requirement for sustainable management if regeneration or commercial harvesting is either planned or initiated within the Project Area demonstrating sustainable long-term harvesting practices. This applies to all forest landholdings of the Forest Owner(s) (check one of the boxes).

☐ Not applicable; no commercial harvesting is occurring within the Project Area.

☒ Third party certification under the Forest Stewardship Council, Sustainable Forestry Initiative, or Tree Farm System, whose certification standards require adherence to and verification of harvest levels which can be permanently sustained over time.

FSC Certification

Certificate Code: RA-FM/COC-004261

License Code: FSC-C003016

☐ Adherence to 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.

☐ Employ uneven-aged silvicultural practices and maintain canopy retention averaging at least 40% across the forest, as measured on any 20 acres within the entire forestland owned by the Forest Owner, including land within and outside of the Project Area (areas impacted by Significant Disturbance may be excluded from this test).

- b) On a watershed scale up to 10,000 acres (or the Project Area, whichever is smaller), projects must maintain, or make progress toward maintaining, a maximum of 40% of the project's forest lands in ages that are less than 20 years old. (Areas impacted by Significant Disturbance are exempt from this test until 20 years after reforestation of such areas.) Does the acreage within this project meet this requirement?

If "no," proceed to question 3c. Otherwise, skip to question D4.

*See 'CAR1217 OPDR Worksheet Calculations.xlsx'

☒ Yes
☐ No

- c) If the project does not meet the age class requirement at this time, explain how the project intends to demonstrate progress to meet this requirement over time; such that forest lands in ages less than 20 years old are reduced and make up no more than 40% of the Project Area.

4. Structural elements (standing and lying dead wood):

How does the project ensure that structural elements are retained in sufficient quantities throughout the project life?

As of the initial project inventory in 2013-2014, the actual onsite carbon for standing dead wood is 0.84 metric tons of carbon per acre (equivalent to 3.52% of standing live carbon). While the Forest Owner maintains more than 1% of standing live carbon stocks in standing dead wood, at present it is less than one (1) metric ton of carbon (C) per acre. However, this does not render the Project ineligible. The Project has an Ecological Forestry Plan, which is a component of the Multi-Resource Management Plan, whose principles are outlined in the West Grand Lake Conservation Easement, which includes guidelines and operational objectives to demonstrate progress towards maintaining and increasing structural elements in standing dead wood. FSC also requires the forest owner to provide adequate habitat for species associated with large and/or decaying trees and dead wood. In accordance with the Ecological Forestry Plan, during all operations all dead snags >12" dbh shall be considered for retention, and those that must be felled for safety reasons will be left in place on the ground. These operations will also avoid damaging existing downed woody material during harvesting, especially large (16"+) logs and stumps. Furthermore they will attempt to leave large (>12" dbh and >6' long) cull logs on site. Culls bucked at the landing will be hauled back to the woods. During uneven-aged harvests all live cavity trees with evidence of advanced decay and signs of use by wildlife shall be considered for retention. The general guideline is four trees per acre >12" DBH, including one >18" DBH. The plan also provides guidance for the consideration of recruitment trees (live pulpwood quality trees of large diameter (>14" DBH) with evidence of interior defect and decay) to further meet these goals.

E. Describe the management activities that will result in increased carbon stocks in the Project Area, compared to the baseline.

This difference between the baseline carbon stocks and the actual carbon stocks is a result of the project's management plan and activities. The management activities that lead to increased carbon stocks are not necessarily characterized as different types of silviculture systems than what were

Submit the information in this form to
the appropriate Offset Project Registry

used in the baseline (see Baseline Characterization). Rather, the project uses the emissions trading market incentives to implement a reduced management intensity that supports longer rotations and increased habitat protection measures.	
F. Is this project being implemented and conducted as the result of any law, statute, regulation, court order, or other legally binding mandate? If "yes," explain:	☐ Yes ☒ No
G. Does the offset project take place on land that was part of a previously listed and registered Forest Offset Project? <i>This question is applicable to both voluntary and compliance markets. If "yes" proceed to questions G1 and G2. Otherwise, skip to Part VII.</i>	☐ Yes ☒ No
1. Optional: Was the previous Forest Offset Project terminated due to an Unintentional Reversal?	☐ Yes ☐ No
2. Optional: Has this project transitioned to the Compliance Offset Protocol U.S. Forest Projects after previously being listed as an early action offset project?	☐ Yes ☐ No
PART VII. CARBON STOCK INVENTORY	
A. Provide a description of the inventory methodology used to quantify carbon stocks for each required carbon pool in the forest project's offset boundary. The inventory methodology must describe the information required in Appendix A.3 of either the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 or the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014. IFM-1 Standing Live: 1/10th acre fixed radius plots. For more information see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary' IFM-3 Standing Dead: 1/10th acre fixed radius plots. For more information see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary' IFM-6 Soil (if applicable): Excluded because the conditions in Table 5.2 that would require inclusion of this pool (deep ripping, furrowing, or plowing where soil disturbance exceeds 25% of the Project Area, or mechanical site preparation that is not conducted on contours) are not planned. IFM-7 Carbon in in-use forest products: For the Project IFM-7 was calculated based on mill receipts in accordance with Appendix C of the FOP, for the Baseline IFM-7 was modeled in accordance with Appendix B and calculated in accordance with Appendix C of the FOP. For more information see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary' IFM-8 Forest product carbon in landfills (if applicable): For the Project IFM-7 was calculated based on mill receipts in accordance with Appendix C of the FOP, for the Baseline IFM-7 was modeled in accordance with Appendix B and calculated in accordance with Appendix C of the FOP. For more information see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary' IFM- 9 Biological emissions from site preparation: Site preparation is not expected to occur on more than 25% of the project area over the project life, nor is mechanical site preparation expected to be conducted on contours. IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area: Estimated in the project using protocol default (i.e. 20%) IFM-17 Biological emissions from decomposition of forest products: Quantified as a component of calculating carbon stored for 100 years in wood products (SSR #IFM-7) and landfills (SSR #IFM-8)	
B. Describe the calculation methodologies used to determine metric tons per acre for each of the carbon pools included in the Offset Project Data Report. IFM-1 Standing Live: Standardized FIA cubic foot volume and biomass equations following the Component Ratio Method. Carbon was estimated as 50% of the dry biomass. Carbon was converted to CO₂e using 3.664. For more detail see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'	

IFM-3 Standing Dead:

Standardized FIA cubic foot volume and biomass equations following the Component Ratio Method. Carbon was estimated as 50% of the dry biomass. Carbon was converted to CO₂e using 3.664. For more detail see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'

IFM-6 Soil (if applicable):

N/A, see part A.

IFM-7 Carbon in in-use forest products:

Regional mill efficiencies and 100-year default storage factors. For more detail see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'

IFM-8 Forest product carbon in landfills (if applicable):

Regional mill efficiencies and 100-year default storage factors. For more detail see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'

IFM- 9 Biological emissions from site preparation:

N/A, see part A.

IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area:

Estimated in the project using protocol default (i.e. 20%).

IFM-17 Biological emissions from decomposition of forest products:

Quantified as a component of calculating carbon stored for 100 years in wood products (SSR #IFM-7) and landfills (SSR #IFM-8)

C. Provide a summary of the inventory of carbon stocks for each carbon pool (or approach used, if inventory is not applicable).

*Values listed below refer to the initial carbon stocks at the project start date

IFM-1 Standing Live:

1,706,322.62 tCO₂e

IFM-3 Standing Dead:

60,066.31 tCO₂e

IFM-6 Soil (if applicable):

N/A, see part A.

IFM-7 Carbon in in-use forest products:

5,538.74 tCO₂e

IFM-8 Forest product carbon in landfills (if applicable):

5,779.56 tCO₂e (N/A)

IFM- 9 Biological emissions from site preparation:

N/A, see part A.

IFM-14 Biological emissions/removals from change in harvesting on forestland outside project area:

1,004.01 tCO₂e

IFM-17 Biological emissions from decomposition of forest products:

Quantified as a part of IFM-7 and 8

D. Provide a summary of inventory confidence statistics.

The percent error for tCO₂e per acre for all actual onsite carbon stocks combined was calculated by strata at a 90 percent confidence level. The total project uncertainty (sampling error) is 3.91 percent.

Summary of Percent Error by Strata and Project Total (tCO₂ e/acre)

Strata	IFM1 & IFM3 per Acre	Percent Error (PE)
CB	67.7	22.29%
IH	84.08	18.34%
PN	60.29	24.14%
SF	96.47	4.59%
TH	78.18	8.94%
Project Total	89.98	3.91%

- E. Provide the calculation of the offset project's reversal risk rating and contribution to the Forest Buffer Account.**
The total buffer pool contribution for the current reporting period is 19.2%.

Risk Category	Source	Score	(1-Score)
Financial	Default	5.0%	95.0%
Management			
Illegal Forest Biomass Removal	Default	0.0%	100.0%
Conversion	Default	2.0%	98.0%
Over-harvesting	Default	2.0%	98.0%
Social	Default	2.0%	98.0%
Natural Disturbance			
Wildfire (Y%=)	Calculated Risk	4.0%	96.00%
Disease or Insect Outbreak	Default	3.0%	97.0%
Other Catastrophic Events		3.0%	97.0%
Risk Rating Analysis: $100\% - ((1-5\%) \times (1-0\%) \times (1-2\%) \times (1-2\%) \times (1-2\%) \times (1-4\%) \times (1-3\%) \times (1-3\%))$			19.2%
Total Risk Score			19.2%

PART VIII. OFFSET PROJECT BASELINE

A. Required for ALL Improved Forest Management Projects

- 1. Describe the project's modeling plan, following the requirements and methods in Appendix B, Section B.3 of the U.S. Forest protocol.**

The project was modeled using the FVS (Forest Vegetation Simulator) Northeast Variant growth and yield model, calibrated using the regional and site specific options available (i.e. project location, FIA site index values, and increment core data). Treatment types in the baseline model include thinnings, single and small group selection harvests, and overstory removals. Regeneration consists of hardwood sprouts and advanced regeneration from established seedlings and saplings. The treatments retain trees of similar species composition as were present at the time of harvest. The harvest frequency is a function of the minimum feasible harvest volume among other factors. This results in an average return interval for treated stands of no less than 10 years. Regeneration assumptions rely on variant and species-specific sprouting reproduction. Legal constraints are described in Attachment K. For more information, including site index values used, see 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'

- 2. Describe and estimate the project's baseline onsite carbon stocks. Explain any annual changes in baseline carbon stocks over time.**

A graph of the baseline onsite carbon stocks, labeled "Attachment G," must be portrayed depicting time on the x-axis and metric tons CO₂-e on the y-axis. Include a written characterization describing any annual change in baseline carbon stocks over time. See Part X of this document for more information. A diagram of the baseline incorporating all required carbon stocks, labeled "Attachment H," is also required.

For more information see Attachments G and H and 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'

- 3. Optional:** Identify the approved growth model that will be used for the project.
FVS (Northeast Variant)

4. Harvest Planning

- a. Is harvesting planned in the Project Area?**

If "yes," proceed to question 4b. Otherwise, skip to question A5.

☒ Yes
☐ No

b. Optional: Does the project use a harvest schedule model? If "yes," proceed to question 4c. Otherwise, skip to question A5.		☒ Yes ☐ No
c. Optional: Explain how you are addressing age class and stratification as part of your harvest scheduling? See 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'		
5. Provide an estimate of carbon that will be stored long-term in harvested wood products in the baseline. 4,283.74 mt CO ₂ e annually		
6. Provide a projection of baseline and actual harvesting volumes from the Project Area over 100 years. A projection may be provided in an attachment, labeled "Attachment I". Include a narrative with a clear explanation of how the OPO/APD arrived at the baseline and actual harvest volumes is determined		
B. Required for Improved Forest Management Projects on Private Lands ONLY		
1. Provide the initial above ground standing live carbon stock (per acre) for the project. 71.59		
2. Provide the Common Practice statistic (per acre) associated with the Project Area. 49.11		
3. Summarize how the Project's initial above-ground standing live carbon stock compares to Common Practice. The Project's initial above-ground standing live carbon stock is 22.48 tons above Common Practice Are the initial above-ground standing live carbon stocks above or below Common Practice? If below Common Practice, what is the High Stocking Reference for the Project Area? Describe the Project Area's live tree carbon stocks over the previous 10 years. Further documentation is required if project is below Common Practice. Submit supporting documents as attachments labeled "Attachment J." See Part X of this document for more information. An affidavit must be submitted testifying that the inventory depicted over the past 10 years is reasonably accurate.		☒ Above ☐ Below
4. Optional: Does the Forest Owner(s) and its affiliate(s) own land in fee or hold timber rights on land outside the Project Area? If "no," skip to question B.5.		☒ Yes ☐ No
Optional: If "yes" does the Protocol require the use of a weighted average carbon stock on lands in the same Logical Management Unit (LMU, as defined in Section 6.2.1.1)? If "no," skip to question B.5.		☐ Yes ☒ No
Optional: If "yes," is inventory data available for the LMU or will the OPO use a stratified vegetation analysis? If "no," skip to question B.5.	☐ Data available for LMU ☐ Stratified Vegetation Analysis	
Optional: Identify the Minimum Baseline Level for above-ground standing live carbon stocks for the Project Area: 49.11		
5. Provide a description of any and all legal constraints affecting forest management activities in the Project Area. Include documentation of legal constraints and a description of each constraint (referring to Section 6.2.1.2); for each constraint provide a narrative that constraint has on forest management. Submit supporting documents as attachment labeled "Attachment K". See Part X of this reporting document for more information. See Attachment K and 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'		
6. Provide a description of the modeling techniques used to simulate the effect of any constraints on carbon stocks. See 'Appendix A. CAR1217 Project Inventory Methodology Proprietary' Optional: Provide a description of the modeling techniques used to simulate forest management activities that may affect carbon stocks. See 'Appendix A. CAR1217 Project Inventory Methodology Proprietary'		
7. How does the OPO demonstrate financial feasibility of the growth and harvesting regime assumed for the baseline? (check one of the boxes) ☒ Conducting a financial analysis of the anticipated growth and harvesting regime that captures all relevant costs and returns, taking into consideration all legal, physical, and biological constraints, using regional norms or documented costs and returns for the project area or other properties in the Forest Project's Assessment Area ☐ Providing evidence that activities similar to the proposed baseline growth and harvesting regime have taken place on other properties within the Forest Project's Assessment Area within the past 15 years Supporting documentation is required. Submit as attachment labeled "Attachment L." See Part X of this listing document for more information.		
C. Required for Improved Forest Management Projects on Public Lands ONLY		
1. Provide a projection of future changes to Project Area forest carbon stocks extrapolating from historical trends.		

2. Explain how current public policy affects onsite carbon stocks and how the baseline modeling incorporates constraints imposed by all applicable statutes, regulations, policies, plans, and activity-based funding.	
3. Have carbon stocks in the Project Area been increasing or declining over the preceding ten-year period?	☐ Increasing ☐ Declining

PART IX. OTHER OFFSET PROGRAMS

A. Have any GHG reductions or GHG removal enhancements associated with the Project Lands ever been listed or registered with, or otherwise claimed by, another registry or program, or sold to a third party prior to listing? <i>If "yes," identify the registry or program and provide details on the issued credits below.</i> *GHG reductions or removal enhancements associated with the Project Lands were listed for the ARB Compliance Offset Program with the Climate Action Reserve. The project was never registered and no credits were issued.		☒ Yes ☐ No
B. Have any lands within the Project Area ever been listed or registered with an offset project registry or program in the past? <i>If "yes," identify the registry or program and provide details on the issued credits below.</i> *Lands within the Project Area were listed for the ARB Compliance Offset Program with the Climate Action Reserve. The project was never registered and no credits were issued.		☒ Yes ☐ No
C. Have greenhouse gas emission reductions or removal enhancements associated with lands within the Project Area been credited or claimed for the purpose of greenhouse gas mitigation or reduction goals, whether in a voluntary or regulatory context? <i>If "yes," identify the goal(s) and provide details on the reductions and removal enhancements (under "Number of Credits Issued") below.</i> *Greenhouse gas emission reductions or removal enhancements associated with lands within the Project Area were claimed for the purpose of greenhouse gas mitigation or reduction goals under the ARB Compliance Program. However, verification was not completed and no reductions or removals were credited. The current project contains the same lands with a different reporting period.		☒ Yes ☐ No
Registry/Program/Goal(s): Climate Action Reserve/ARB Compliance Offset Program	Reporting Period(s): N/A	Vintage(s): N/A Number of Credits Issued: None

PART X. ATTACHMENTS

A. If the answer to Part IV.A is "yes," provide documentation (e.g., deed of trust, title report, etc.) showing the OPO's ownership interest in the property and its interest in the trees and standing timber on the property. If the answer to Part IV.A is "no," provide documentation supporting the explanation of the OPO's right to undertake and list the project.	
B. If the answer to Part IV.C is "public," provide documentation demonstrating explicit approval of the offset project's management activities and baseline including any public vetting processes necessary to evaluate management and policy decisions concerning the offset project. If the project is a private lands project, mark "N/A" in the box below. The OPO may provide an "Attachment B" page with a "This Page Left Intentionally Blank - Private Lands Project" notation on the page.	
☒ N/A	
C. If a Qualified Conservation Easement (QCE) has been recorded, provide a copy. The information contained in this form and the documents attached to it will be submitted to ARB so submitting a copy of the QCE as an attachment to this document fulfills the requirement in 9.1.1.1(18)(a) of the U.S. Forest protocol to provide ARB with a copy.	
☒ N/A	
D. If the project is located on one of the categories of Tribal land listed in Part IV.E, provide documentation demonstrating that the land within the Project Area is owned by a tribe or private entity. Also provide documentation that demonstrates the existence of a limited waiver of sovereign immunity between ARB and the governing body of the Tribe entered into pursuant to section 95975(I) of the Cap-and-Trade Regulation.	
☒ N/A	
E. Attach map(s) of the Project Area including:	
1. Public and private roads 2. Towns 3. Major watercourses (4 th order or greater), water bodies, and watersheds 4. Topography 5. Townships, ranges, and sections or latitude and longitude 6. Existing land cover and land use (optional) 7. Forest vegetation types (optional) 8. Site classes (optional) 9. Land pressures and climate zone/classification (optional) 10. Historical land uses, current zoning, and projected land use within the Project Area (optional) 11. A georeferenced shape file (or other electronic file that can be read in a geographic information system) that clearly identifies the Project Area and boundaries. <i>Note that the georeferenced shape file may constitute the required</i>	

map if it includes the required map information listed above.

- F. Provide supporting documentation demonstrating that the offset project takes places on land that has greater than 10 percent tree canopy cover.
- G. Attach a graph portraying the baseline onsite carbon stocks with time depicted on the x-axis and metric tons CO₂e depicted on the y-axis.
- H. Attach a diagram of the final baseline incorporating all required carbon stocks.
- I. Provide a projection of baseline and actual harvesting volumes from the Project Area over 100 years.
- J. For IFM projects on private lands ONLY: If the Project Area's initial above-ground standing live carbon stocks are below Common Practice, submit an affidavit testifying that the inventory depicted over the past 10 years (used to determine the High Stocking Reference for the Project Area) is reasonably accurate. Also include a summary of volume harvested over the past 10 years. ☒ N/A
- K. For IFM projects on private lands ONLY: Attach supporting documentation identifying the legal constraints within the Project Area. A 'constraints' table with the following categories may be provided for simplicity with the following information: narrative of legal constraint, identification of specific governing law guiding the constraint, acreage, silviculture method, retention strategy. ☐ N/A
- L. For projects on private lands ONLY: Provide a description and supporting evidence, if applicable, that the growth and harvesting regime assumed for the baseline is financially feasible based on the qualifications in Section 6.2.1.3 of the Protocol. ☐ N/A

PART XI. OPO/APD SIGNATURE

Note: The person signing this Initial Reporting Period report should be the same person signing the accompanying U.S. Forest Offset Project Data Report Annual Reporting Period – All Project Types report.

In signing this form, I certify under penalty of perjury of the laws of California that the information contained in this form is true, accurate, and complete. I further certify that I am an Account Representative of the Offset Project Operator (OPO).

SIGNATURE:



PRINTED NAME:

Sean Carney

TITLE:

President

DATE:

7-26-2016

Background for U.S. Forest Offset Project Data Report Initial Reporting Period – Improved Forest Management

Section 95976(d) of the Cap-and-Trade Regulation specifies reporting requirements for offset projects participating in the Compliance Offset Program. Offset Project Operators (OPO) or Authorized Project Designees (APD) are required to submit an Offset Project Data Report (OPDR) within four months of the end of each (annual) Reporting Period. The Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 and Compliance Offset Protocol U.S. Forest Projects, November 14, 2014 both require additional information to be included with the initial OPDR. This form is designed to help OPOs and APDs provide the extra information required for an initial OPDR by U.S. Forest offset projects. The information in this form is submitted to the approved Offset Project Registry that is listing the offset project and should also be provided to the ARB-accredited verification body that will be verifying the Offset Project Data Report.

The information to be provided in this form closely mirrors information provided in the application for listing a U.S. Forest offset project. OPOs and APDs may wish to copy the information in their project's application for listing to the extent that the information provided at the time of that application has not changed.

Where to Submit Information Contained in This Form

Please complete the information on the form using your computer. Then print, sign, and scan the form. The completed and signed information and all supporting documentation should be submitted to the appropriate Offset Project Registry.

Copies of this form can be downloaded from the ARB website at:
<http://www.arb.ca.gov/cc/capandtrade/offsets/forms/forms.htm>

Detailed Instructions for U.S. Forest Offset Project Data Report Initial Reporting Period – Improved Forest Management

This form is protected with restricted editing to facilitate completing the form. If the applicant wishes to unprotect the form, the password is "form".

Part I. Entity Submitting Report:

- Indicate whether the Offset Project Operator (OPO) or Authorized Project Designee (APD) is submitting the Offset Project Data Report.
- List the name, organization, phone number, and email address of the person submitting the information. This person should be an employee of the OPO or APD, whichever entity is making the submission. The person submitting the information need not be the same person as the contact person listed for the OPO or APD in Part III and also need not be the person signing the form in Part XI.
- The person submitting the information should indicate the date the form is completed.

Part II. Offset Project Information:

- Provide the name for the offset project. Also provide the project's identification number from the approved Offset Project Registry listing the project. The ARB project identification number may also be provided if known.
- Indicate the offset project commencement date and the start and end dates of the first reporting period. Unlike with the listing form, approximations are no longer acceptable for these dates since precise dates should be known.
- Project commencement for an Improved Forest Management Project must be linked to a discrete, verifiable action that delineates a change in practice that increases sequestration and/or decreases emissions relative to the forest project's baseline. This date could be triggered by the transfer of property ownership, recordation of a conservation easement on the Project Area, or when submitting the offset project listing information.

Part III. OPO/APD Information:

- Enter contact information for the OPO and APD submitting the report. Every offset project will have an OPO. If an offset project does not have an APD, please mark the box indicating the Offset Project does not have an APD and leave the remaining fields blank.

Submit the information in this form to
the appropriate Offset Project Registry

- For both the OPO and, if applicable, the APD, enter the entity's name, its mailing address, and the name, phone number, and email address of a contact person for the entity. Also include its CITSS ID number. The CITSS ID is six characters in length, with two letters followed by four numbers (e.g., "CA1234"). **DO NOT PROVIDE THE CONFIDENTIAL CITSS ACCOUNT NUMBER**, which begins with the CITSS ID number followed by a hyphen and more numbers.

Part IV. Land Ownership:

- This part includes questions regarding land ownership and property interests.
- Further documentation is required based on the responses to some questions. See Part X of this report for more information on the precise requirements.

Part V. Offset Project Area:

- This part asks for qualitative descriptions of the offset Project Area.
- Maps are required to complement the descriptions provided in this part. See Part X of this report for more information on the precise requirements.
- The Project Area should be determined following the requirements of Section 4 of the U.S. Forest protocol.
- Assessment areas shall be determined by referencing the Assessment Area Data File available at: <http://www.arb.ca.gov/cc/capandtrade/protocols/usforestprojects.htm>

Part VI. Offset Project Eligibility:

- The questions in this part are designed to facilitate the determination of project eligibility for Improved Forest Management Projects.
- Further documentation is required based on the responses to some questions. See Part X of this report for more information on the precise requirements.
- Details on the eligibility requirements for Improved Forest Management Projects can be found in Sections 2.1.2, 3.1, and 3.8 of the U.S. Forest protocol.
- Details on the Natural Forest Management criteria can be found in Table 3.2 in the U.S. Forest protocol.

Part VII. Carbon Stock Inventory:

- Projects are required to have completed a full carbon stock inventory for the initial Offset Project Data Report. Unlike the inventory provided at the time of listing, a general description of the project's inventory methods with preliminary best estimates is no longer sufficient to meet the regulatory requirements. If the project's inventory methodology changed between the time of listing and submission of the initial OPDR, this change should be reported as a change to the information submitted at project listing when submitting the first OPDR.
- Section 6.2 of either the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 or the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014 outlines the approved quantification methodologies for Improved Forest Management Projects. Further details on completing a forest project carbon inventory can be found in Appendix A of the Protocol. (There are some differences in section 6.2 and Appendix A between the two versions.)
- Follow the steps in Appendix D of the U.S. Forest protocol to quantify the project's reversal risk rating.
- The project's expected contribution to the Forest Buffer Account is determined annually based upon the project's risk of reversal and is calculated by multiplying the project specific reversal risk rating by the total net GHG reductions/removals achieved by the project. Unlike the listing application, for this OPDR an approximation of the contribution to the Forest Buffer Account is not acceptable.

Part VIII. Offset Project Baseline:

- For this OPDR, unlike the project listing application, projects are required to have a finalized baseline. A modeling plan with preliminary best estimates is no longer sufficient to meet the regulatory requirements. If the project's modeling plan or baseline estimates changed between the time of listing and submission of the initial OPDR, this change should be reported as a change to the information submitted at project listing when submitting the first OPDR.
- Note that IFM projects located on public land must present documentation demonstrating explicit approval of the offset project's management activities and baseline. These projects may report changes to the baseline within the initial OPDR if the changes have gone through a public review process and meet the Protocol requirements regarding explicit approval of the project's baseline.
- This part is divided into three sections: questions required for all Improved Forest Management Projects; questions for Improved Forest Management Projects on private lands; and questions for Improved Forest Management Projects on public lands. Answer the questions applicable to the project.

Submit the information in this form to
the appropriate Offset Project Registry

- A diagram and graph are required to complement the descriptions provided in this part. See Part X of this report for more information on the precise requirements.
- Section 6.2 of either the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 or the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014 outlines the approved quantification methodologies for Improved Forest Management Projects. Instructions for considering legal and financial constraints can be found in Sections 6.2.1.2 and 6.2.1.3, respectively. Further details on modeling carbon stocks can be found in Appendix B. (There are some differences in section 6.2 and Appendix B between the two versions.)
- ARB approved growth models can be found in Appendix B, Section B.1 of either the Compliance Offset Protocol U.S. Forest Projects, October 20, 2011 or the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014. (There are some differences in Appendix B between the two versions.)

Part IX. Other Offset Programs:

- Answer all questions. If the answer to any question is "yes," identify the registry or program and provide details on the issued credits in the space provided.

Part X. Attachments:

- Provide each attachment on a separate sheet of paper and submit along with the completed Initial Reporting Period-Offset Project Data Reporting Form.
- To aid with tracking each attachment, it is recommended that the attachments are labeled to correspond with the letter in Part X that they refer to (e.g. "Attachment B").
- When an attachment is not applicable to the project being listed, please select the "N/A" (Not Applicable) checkbox next to the requirement so that it is clear that the attachment was not inadvertently left off.

Part XI. OPO/APD Signature:

- The individual signing the document must be registered in CITSS as the OPO's Primary Account Representative or Alternate Account Representative for the entity submitting the information. The individual signing the document may be an APD employee and/or representative; but to sign the document, the individual must be an Account Representative on the OPO's CITSS account.
- Please provide the individual's signature, printed name, corporate title, and date signed.
- There are no attestations for this report. The attestations required for the Offset Project Data Report are included in the form U.S. Forest Offset Project Data Report Annual Reporting Period – All Project Types.

Please contact your Offset Project Registry with any questions regarding the OPDR.