Green Assets – HMWCF-I Avoided Conversion Project

U.S. Forest Offset Project Data Report

CAFR5208 / ACR268

Initial Reporting Period: July 14, 2016 – June 23, 2017

Contents

This Initial Offset Project Data Report (OPDR) is based on the template ARB Form ISD/CCPEB #16 (Rev 11/17). It includes all of the language from the ARB OPDR template, however parts that are not applicable to the Project are grey.

CO-BENEFITS OF THE AVOIDED CONVERSION FOREST PROJECT

The *Green Assets – HMWCF I Avoided Conversion Project (ARB# CAFR5208)* avoids the conversion of the 78,319-acre Project Area (PA) from forested land to non-forest land uses (commercial agriculture and pastureland). In the project's absence, the PA would undergo conversion to agriculture/pastureland, which is the highest value alternative land use for the property. This conversion would occur over a period of seven years, where forest carbon stocks would be entirely removed entirely by the end of the seventh year.

The Holland M. Ware Charitable Foundation (HMWCF) is a direct beneficiary of the abovementioned project. The HMWCF contributes all its revenues towards the prevention of animal cruelty. No one employed by the Foundation draws a salary; therefore, all revenues derived from the project will be put towards their charitable cause of preventing animal cruelty.

The project commenced on July 14, 2016, when a Qualified Conservation Easement (QCE), committing the PA to continued forest management and protection, was recorded. The California Air Resources Board (ARB) Cap-and-Trade and Compliance Offset Programs were instrumental in this environmentally-significant achievement. That is, expected revenues from ARB Offset Credit (ARBOC) sales provided the essential financial mechanisms for maintaining and conserving the forest cover and habitat across the PA (i.e. without revenues from ARBOCs, conversion to non-forest land uses is much more financially attractive).

In addition to avoiding emissions associated with the conversion activities, and sequestering additional carbon through forest growth, implementation of the project over the next 100+ years provides several other important environmental and economic benefits. These "co-benefits" are above and beyond what would have occurred without the implementation of an avoided conversion project, and include but are not limited to (in no particular order):

- **Water quality protection.** Conversion to commercial agriculture/pastureland would degrade the quality of the watercourses and waterbodies (and thus degrade aquatic habitat) within and around the PA due to increases in erosion, sedimentation, and pollutants associated with both land conversion activities and agricultural/pastoral land uses. Much of the PA is near or adjacent to rivers and streams. The loss of forest will also significantly reduce vital woody debris contributions to aquatic habitat, and natural stream corridors would likely be altered to allow for water availability for agricultural land uses. By maintaining forest cover and following the Best Management Practices for forestry, the project will continue to protect the physical, chemical, and biological integrity of the local waters, along with the associated riparian habitat for both aquatic and terrestrial species inhabiting the areas. The associated benefits of water resource protection also extend to local human populations who harvest fish for consumption from the local waters. The continued conservation of the forest habitat within the PA also contributes significantly to watershed provision and maintenance for human populations.

- **Higher quantity and quality wood products over time.** Without the project, complete removal of all wood products will occur over a short-time frame (seven years). Conversely, the project will implement sustainable forest management practices, which will yield higher amounts of harvestable volumes for public benefit (e.g. for building materials, paneling, pulp and paper products, etc.) over the life of the project due to sustainable growth of the timber resource. In addition, thinnings and Timber Stand Improvement (TSI) activities will, over time, enhance the overall forest health and timber quality as lower quality growing stock and/or disease/pest infested trees are removed.

- **Wildlife habitat conservation**. Without the project, the quality and structure of wildlife habitat would be changed significantly, as all the benefits of the forest would be lost. In turn, forest-dependent populations of wildlife would undoubtedly be altered. Similar to forest land, agricultural/pastoral land can provide a source of food for wildlife; however, many species depend on forest cover for protection, bedding, nesting, etc. Through forest conservation, the project will maintain the habitats necessary for healthy populations of species that inhabit the area. In addition, forest management activities will likely benefit the populations of the HMWCF's primary wildlife species of interest (i.e. whitetail deer, wild turkey, bobwhite quail, and songbirds) by providing early successional habitat, a greater amount of forest edge and interspersed forest habitat area, and the creation of open grassy corridors from seeded logging roads. Moreover, longleaf pine has been, and will continue to be, planted in many areas within the PA, which will likely provide habitat for the federally endangered Red-cockaded Woodpecker as these stands mature.

- **Recreation conservation**. Hunting is considered to be the primary source of recreation on the PA. Although, agricultural/pastoral land can provide some hunting opportunities, the number of individuals able to enjoy this experience would likely diminish without the project due to changes in wildlife populations, as well as the shift to open ground (allowing fewer individuals to hunt safely and enjoyably across a given amount of acreage). Conversely, hunting opportunities, as well as associated recreational experiences that groups/individuals attain from hunting (e.g. solitude, spiritual engagement, natural area enjoyment), will be maintained and/or enhanced as the execution of sound forest management activities will continue to conserve and improve wildlife habitat across the PA.

- **Aesthetic conservation.** Although commercial agriculture and pastureland may be aesthetically pleasing to some due to "green fields," etc., forests are perceived by most of the general public as more aesthetically pleasing as they exhibit more variation in patterns and colors (especially in the spring when trees are in bloom). Wildlife habitat benefits resulting from the project's continued forest conservation will also positively contribute to aesthetics as there will be more opportunities for beneficial experiences. Whether an individual is a bird watcher, hunter, or simply enjoys seeing forest game animals, implementation of the project will result in an increased probability of attaining restorative experiences.

- **Enhanced biodiversity.** Protecting biodiversity is inherent in the implementation of the project as many species of flora and fauna associated with the forest would be either removed or diminished as part of land conversion activities and agricultural/pastoral land uses. Additionally, project implementation will further enhance biodiversity as progress towards, and continual maintenance of, the Natural Forest Management requirements of ARB's Compliance Offset Protocol for US Forest Projects will result in higher diversity in species composition, age classes, and structural composition at multiple landscape levels across the forests of the PA.

- **Support of local economies over time.** The forest industry contributes greatly to the economy of the state Georgia, providing numerous employment, business, and cash flow opportunities while supplying wood product needs to the nation. Planned conversion activities would have a significant negative effect on local economies as many forest-industry related jobs would be lost. Implementation of the project, however, will continually support the local economies as a sustainable flow of high quality timber is produced. This will both directly benefit locals involved in

the forest industry through job and income security, and indirectly benefit those industries that rely on the purchasing of goods and services by local loggers, foresters, and mill personnel.

- **Soil conservation and flood control.** Conversion to commercial agriculture/pastureland would alter soils due to surface disturbance associated with land clearing activities (i.e. erosion). In addition, once converted, commercial agriculture areas would undoubtedly be subject to fertilization to enhance crop production; over time this would both degrade soil functionality and add pollutants to local waters through runoff and infiltration. Carbon emissions would also be associated with the soil disturbance. By maintaining forest cover and avoiding soil disturbance, the project will protect soil quality and functionality, as well as soil carbon storage. The maintained soil composition, and associated root structures, also aid in flood control/mitigation. In addition, the PA forest will continue to enhance soil health over time through the creation of new soil as leaves and other vegetation decompose, also reducing the risk of erosion.

- **Maintenance of wind breaks.** Loss of forest associated with conversion activities also equates to a loss of windbreaks and the accompanying benefits they provide. In an area of the country prone to heavy winds due to inland tropical storm activity, windbreaks created by forest cover play an important role in reducing soil erosion, preventing both soil and plant moisture loss, protecting dwellings and other high value personal properties, and increasing the heating and cooling efficiency of homes. Project implementation will protect these valuable benefits for years to come.

- **Pollination**. The PA provides essential habitat for pollinators, and various flora species which pollinators use for residence/shelter and food sources. With the conversion of the PA, pollinators would lose critical habitat used for nesting and food production, therefore reducing the potential for enhanced pollination of surrounding agricultural lands. Other fauna species which rely on pollinators as a food source would also see diminished honey stocks.

U.S. FOREST OFFSET PROJECT DATA REPORT INITIAL REPORTING PERIOD – AVOIDED CONVERSION

(ARB Section)

Date Report Received:

OPR Tracking Number:

Date Report Reviewed:

Entities submitting the project's first Offset Project Data Report must submit the information requested in both Initial Reporting Period and Annual Reporting forms to the appropriate Offset Project Registry. For every reporting year, thereafter, submit only the information requested in the Annual reporting form.

PART I. ENTITY SUBMITTING REPORT

Is this form being submitted by the Offset Project Operator (OPO) or the Authorized Project Designee (APD)? ☐OPO ☒APD

Report Version Number: 5

Date Report Completed: 9-19-2018

Date Report Submitted: 9-19-2018

Person Completing Report: Douglas Hunter Parks

Phone Number: 910-821-8165

Email Address: hunter@green-assets.com

PART II. OFFSET PROJECT INFORMATION

Offset Project Name: Green Assets – HMWCF-I Avoided Conversion

OPR Project ID #: ACR268

ARB Project ID #: CAFR5208

Offset Project Commencement Date: 7/14/2016

First Reporting Period Start Date: 7/14/2016

First Reporting Period End Date: 6/23/2017

Provide an explanation and justification for the commencement date. Specify the action(s) that identify the offset project commencement date.

The commencement date coincides with the recordation of Memorandum of Easement, monumenting the execution of a Qualified Conservation Easement, in accordance with ARB QCE requirements (section 3.5 of the Compliance Offset Protocol for U.S. Forest Projects, Nov. 14, 2014, hereafter referred to as the "Protocol").

Optional: Provide the name of the nearest city/town to the Project Area: N/A

PART III. OPO/APD INFORMATION

A. OPO

OPO Name: Holland M. Ware Charitable Foundation

OPO's CITSS ID#: CA1941

Mailing Address: 1415 N. Promontory Road, Boise Idaho, 83202

Contact Person: Brenda Thueson

Phone Number: 208-484-0454

Email Address: bthueson@msn.com

B. APD

APD Name:	Green Assets, Inc.
APD's CITSS ID#:	CA1420
Mailing Address:	7655 Market Street, Ste. B, Market Street, Wilmington, NC 28411
Contact Person:	Douglas Hunter Parks
Phone Number:	910-821-8165
Email address:	hunter@green-assets.com

PART IV. LAND OWNERSHIP

A. Is the Offset Project Operator (OPO) the owner in fee for the Project Area?

☒ Yes

☐ No

HMWCF is the owner in fee of the Project Area.

Further documentation is required for all projects. Submit as attachment labeled "Attachment A". See Part X of this listing document for more information.

If "No," explain how the entity identified as the OPO has the right to undertake and list this project.

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 locate in the Project Area (e.g., mineral rights, timber rights, easements, rights of way, leases, etc.).

C. Does the offset project occur on public or private lands?

☐ Public

☒ Private

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 listing document for more information.

1. Describe the public process used to evaluate the forest management activities and policy decisions concerning the offset project. NA

2. Describe the explicit approval process conducted by the public entity to initiate and maintain this offset project, including the offset project's management activities and baseline. NA

D. 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. Section 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**

If "none of the above," skip to Part V. Otherwise, proceed to Optional questions D1 and D2. Further documentation is required for projects occurring on land listed in the first three categories. Submit supporting documents as attachments labeled "Attachment C.". See Part X of this listing document for more information.

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. Submit supporting documents as attachments labeled "Attachment D." See Part X of this listing document for more information.

Latitude of Offset Project Location: 32.714077 N
Longitude of Offset Project Location: 84.122463 W
Project Area Total Acreage: 78,319.26

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.

The Project Area is located in the Atlantic Coastal Plain & Flatwoods and the SE Middle Mixed Forest Piedmont Supersections.

Assessment Areas were determined based on aerial imagery, topography, and inventory data.

Assessment Area	Acres
Atlantic Coastal Plain Loblolly-Shortleaf-Oak	8,927.13
Atlantic Coastal Plain Longleaf-Slash Pine	8,419.50
Atlantic Coastal Plain Riverine Hardwood	1,830.13
Atlantic Coastal Plain Swamp Hardwood & Cypress	4,170.67
SE Middle Mixed Forest Piedmont Loblolly-Shortleaf-Oak	43,506.35
SE Middle Mixed Forest Piedmont Riverine Hardwood	11,465.49
Total	78,319.26

B. Identify the governing jurisdiction(s) applicable to the Project Area.

The Project Area is located in multiple counties within Georgia with relative jurisdictions within Brantley, Charlton, Clinch, Coweta, Crawford, Elbert, Harris, Heard, Macon, Marion, Meriwether, Sumter, Taylor, Troup, Upson, Ware and Webster Counties.

C. Describe how the Project Area was determined.

The Holland M. Ware Charitable Foundation owns 97,619 deeded acres in Georgia. A Qualified Conservation Easement, which avoids the conversion of forest land to agricultural land was recorded on 81,696 deeded acres of this ownership. Shapefiles obtained through each county tax assessor website conservatively indicate 81,101 acres are under this easement. Additional non-forested acres, including roads, water bodies, and open fields were excluded from the easement area and mapped using ArcMap v.10.3, resulting in a 78,319 acre project area. This acreage was utilized for project carbon calculations. An appraisal was performed to define the Project Area in accordance with Section 4 and Table 4.1 of the Protocol.

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

The existing land cover is forest land including a diverse range of native upland species including loblolly and longleaf pine as well as assorted bottomland species such as maples and various oaks. The land is primarily used as forest and recreational land.

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

The forest cover across the Project Area is composed of natural mixed riverine and bottomland hardwood, planted southern pine, and natural mixed southern pine-hardwood stands. See Part V.I below for further details related to species composition.

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

Site classes/site indices vary across the Project Area due to variability in microsite factors (e.g. soils, topography, slope aspect, etc.). Site Indices (SIs) were determined for each plot in the Project Area based on age (from increment cores) and total height data collected during the field inventory using the equations provided in Carmean et. al. 1989[1].

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

Prior to the execution of the Qualified Conservation Easement, the Project Area's foremost land pressure was conversion to agriculture. The Project Area is located in Climate Zones 8a and 8b according to the USDA Plant Hardiness Zone Map found at:
http://planthardiness.ars.usda.gov/PHZMWeb/InteractiveMap.aspx

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

[1] Carmean, Willard H.; Hahn, Jerold T.; Jacobs, Rodney D. 1989. Site Index Curves for Forest Tree Species in the Eastern United States. Gen. Tech. Rep. NC-128. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 144 pp.

The historical land uses of the Project Area have been forest and recreational land. The portions of the Project Area that are in Coweta, Crawford, Elbert, Harris, Heard, Macon, Marion, Meriwether, Sumter, Taylor, Troup, and Webster Counties are zoned as Agricultural. The portions of the Project Area that are in Brantley, Charlton, Clinch, Ware, and Upson Counties are unzoned. The projected "without-project" land use within the Project Area is farmlands/tillable acreage/pastureland. Forested tracts in surrounding areas have been converted for agricultural production by other landowners.

I. Describe generally the forest conditions within the Project Area, including species composition, age class distribution, and management history.

The forest cover across the Project Area is composed of natural mixed riverine and bottomland hardwood, planted southern pine, and natural mixed southern pine-hardwood stands. The table below shows the species composition of live trees in the Project Area based on the project's carbon stock inventory grown to the end of the Reporting Period:

Common Name	Species	Basal Area/Acre	% of Live Basal Area/Acre
Loblolly Pine	*Pinus taeda*	55.48	77.05%
Slash Pine	*Pinus elliottii*	3.06	4.24%
Yellow Poplar	*Liriodendron tulipifera*	2.46	3.41%
Sweetgum	*Liquidambar styraciflua*	2.12	2.95%
White Oak	*Quercus alba*	1.51	2.10%
Red Oak	*Quercus rubra*	1.20	1.66%
Red Maple	*Acer rubrum*	0.82	1.14%
Water Oak	*Quercus nigra*	0.63	0.88%
American Elm	*Ulmus americana*	0.57	0.79%
Hickory	*Carya spp.*	0.41	0.57%
American Sycamore	*Platanus occidentalis*	0.40	0.56%
American beech	*Fagus grandifolia*	0.38	0.53%
Baldcypress	*Taxodium distichum*	0.36	0.50%
Sweetbay	*Magnolia virginiana*	0.36	0.50%
River birch	*Betula nigra*	0.33	0.45%
Eastern redcedar	*Juniperus virginiana*	0.32	0.44%
Black Gum	*Nyssa sylvatica*	0.27	0.38%
Green Ash	*Fraxinus pennsylvanica*	0.25	0.34%
shortleaf pine	*Pinus echinata*	0.20	0.28%
Southern Red Oak	*Quercus falcata*	0.17	0.23%
Black Cherry	*Prunus serotina*	0.16	0.23%
Boxelder	*Acer negundo*	0.10	0.14%
Flowing Dogwood	*Cornus florida*	0.09	0.13%

Sourwood	*Oxydendrum arboreum*	0.08	0.11%
Laurel Oak	*Quercus laurifolia*	0.07	0.10%
Longleaf Pine	*Pinus palustris*	0.06	0.08%
Musclewood	*Carpinus caroliniana*	0.04	0.06%
Mimosa tree	*Albizia julibrissin*	0.03	0.04%
Common persimmon	*Diospyros virginiana*	0.03	0.04%
American Holly	*Ilex opaca*	0.02	0.03%
sugarberry	*Celtis laevigata*	0.01	0.02%
Total		72.00	100.00%

Native species dominate the forest and account for approximately 99.96% of the sum of carbon in the standing live carbon pool, with the mimosa tree being the only non-native species. In accordance with Table 3.2 of the Protocol and Section VI.C.1.a of the OPDR, native species will continue to account for at least 95% of the Project Area's standing live carbon pool.

At this time, approximately 43% of the Project Area is in ages less than 20 years. Because the Project Area is >10,000 acres, the age class requirement of the Protocol was assessed at the watershed level. The watershed level age class assessment indicates that approximately 40% of the watersheds that comprise the Project Area have more than 40% of their forested acres in ages less than 20 years.

The Project Area has been managed as forest and recreational land. Per the Protocol and Part VI.C.3.a of the OPDR, third-party certification has been obtained from the American Tree Farm System to ensure sustainable management practices.

PART VI. OFFSET PROJECT ELIGIBILITY

A. **Is the land in the Project Area dedicated to continuous forest cover through a Qualified Conservation Easement (QCE) or transfer to public ownership?**

☒ QCE

☐ Public Ownership

If employing a QCE, proceed to questions A1, A2, and A3. Otherwise, skip to question B. Supporting documentation for a QCE is required. Submit as attachment labeled "Attachment E." See Part X of this listing document for more information.

1. Date that the QCE was recorded.

A Memorandum of Easement was recorded in each county, monumenting the execution of a QCE in accordance with ARB QCE requirements in Section 3.5 of the Protocol. The last Memorandum was recorded on July 14, 2016.

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.**

   Terms within the easement that affect forest management include:

   1. Purposes – "The exclusive conservation purposes (collectively, the "Purposes") of this Easement are to (i) prevent any use of the Property that will significantly impair or interfere with the Conservation Values of the Property described above, (ii) maintain continuous forest coverage consistent with the ARB Protocol and ARB regulations and (iii) prevent the conversion of all or a portion of the Property to tillable, or pastoral, acres, while allowing for traditional uses on the Property in compliance with the ARB Protocol and regulations promulgated thereunder, as applicable."

   2.4(b) – "Notwithstanding the hereinabove reserved rights of Grantor to engage in existing agricultural uses or activities, Grantor is prohibited from converting any existing forestland to tillable acres or pastureland subsequent to the date hereof."

B. **Indicate the type of documentation being submitted to demonstrate that the anticipated land use conversion is legally permissible.** (check all that apply).

   ☒ **Documentation indicating that the current land use policies, including zoning and general plan ordinances, and other local and state statutes and regulations, permit the anticipated type of conversion**

   ☐ **Documentation indicating that the Forest Owner(s) obtained all necessary approvals from the governing county to convert the Project Area to the proposed type of non-forest land use**

   ☐ **Documentation indicating that similarly situated forest lands within the project's assessment area were recently able to obtain all necessary approvals from the governing county, state, or other governing agency to convert to a non-first land use.**

   Supporting documentation is required. Submit as attachment labeled "Attachment F." See Part X of this document for more information.

C. Indicate how the offset project meets (or will meet) the definition of Natural Forest Management per Table 3.2 in the Protocol.

1. **Native Species:**
   a. **Will the project consist of at least 95% native species based on the estimated sum of carbon in the standing live carbon pool? Avoided Conversion Projects are assessed using estimate of basal area per acre.**

      ☒ **Yes**

☐ **No**

If "no" proceed to question 1b. Otherwise, skip to question C2.

b. **If no, 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 the 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?**

      ☐ **Yes**

      ☒ **No**

      If "no", proceed to questions 2b and 2c. Otherwise, skip to question C3.

   b. **Explain how the project will demonstrate a trend not to exceed the percentage identified in the Species Diversity Index of native species and meet this requirement within 25 years.**

      Loblolly pine (*Pinus taeda*), at 77.05% relative basal area, exceeds the lowest Species Diversity Index found within the Project Area (60%). The species diversity requirement will be achieved within the first 25 years of the project through thinnings targeted at loblolly pine basal area reduction. The loblolly pine relative basal area will be reduced from approximately 77% to 60% across the Project Area within the first 25 years of the project. In addition to the targeted thinnings, a reduction in loblolly pine's composition percentage will be further supported over time through regrowth of the numerous young hardwood stands across the Project Area. Furthermore, longleaf pine (*Pinus palustris*) has been, and will continue to be, planted in many regenerating stands, which will contribute to the species diversity in the Project Area.

   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?**

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 of the forest landholdings of the Forest Owners(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**

      ☐ **Employ uneven-aged silvicultural practices and maintain canopy retention average 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), project 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?

☐ **Yes**

☒ **No**

If "no," proceed to question 3c. Otherwise, skip to question C4.

c. If the project does not meet the age class requirements 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 not more than 40% of the Project Area.

Continual progress will be made towards meeting the age class requirement within 25 years through considerations of age class distributions across the watersheds within the Project Area in harvest/management planning by property management personnel. Age classes will be carefully considered in the scheduling of all final/regeneration harvests in an effort to shift all watersheds in the Project Area to having no more than 40 percent of their forested acres in ages less than 20 years.

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?

There is no active removal of lying dead wood in the Project Area. As such, Table 3.2 of the Protocol requires that standing dead wood stocks be maintained at, or demonstrate progress towards, an average of at least 1 mtC/acre, or 1% of standing live stocks in standing dead wood, whichever is higher.

As of the end of the Reporting Period, average stocks of standing dead wood are 0.22 mtC/acre, equivalent to 1.1% of standing live carbon stocks. Although the 1% of standing live stocks in standing dead wood requirement of the Protocol is currently being met, the Project Area does not currently contain an average of at least 1 mtC/acre in standing dead stocks. However, in accordance with the third-party certified sustainable management plan, Project Area managers will ensure retention of standing and lying dead wood as part of forest management activities and salvage harvesting will be minimized. This will allow for continual progression towards meeting the Protocol requirement.

D. Is the anticipated alternative land use commercial, residential, or agricultural?

☒ **Yes**

☐ **No**

If "yes," indicate the maximum slope of the Project Area.

The slope of this site ranges from 0% to 39%, with 99% of the tracts being less than 20%.

E. Is the anticipated alternative land use commercial, residential, or recreational?

☐ Yes

☒ No

If "yes," proceed to questions E1, E2, and E3. Otherwise, skip to question F.

1. **Indicate the proximity of the Project Area to metropolitan areas.**

2. **Indicate the proximity of the Project Area to grocery, and fuel services and accessibility of those services.**

3. **Indicate the population growth (people per year) within 180 miles of the Project Area.**

F. Is mining the anticipated alternative land use?

☐ Yes

☒ No

If "yes," describe the extent of mineral resources existing in the Project Area.

G. Describe the management activities that will lead to increased carbon stocks in the Project Area compared to the baseline.

Carbon stocks are increased in the Project Area compared to the baseline by avoiding the conversion of the property and maintaining it in a forested state. Additionally, a third-party certified sustainable management plan has been implemented to ensure forest health and increased carbon stocks over the life of the project.

H. Is the project being implemented and conducted as the result of any law, statute, regulation, court order, or other legally binding mandate?

☐ Yes

☒ No

If "yes," explain.

I. Does the entity submitting this report declare that the offset project does not employ broadcast fertilization?

☒ Yes

☐ No

J. Does the offset project take place on land that was part of a previously listed and registered Forest Offset Project?

☒ Yes

☐ No

This question is applicable to both the voluntary and compliance markets. If "yes," proceed to Optional questions J1 and J2. Otherwise, skip to Part VII.

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 to be used to quantify carbon stocks for each required carbon pool in the forest projects 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.

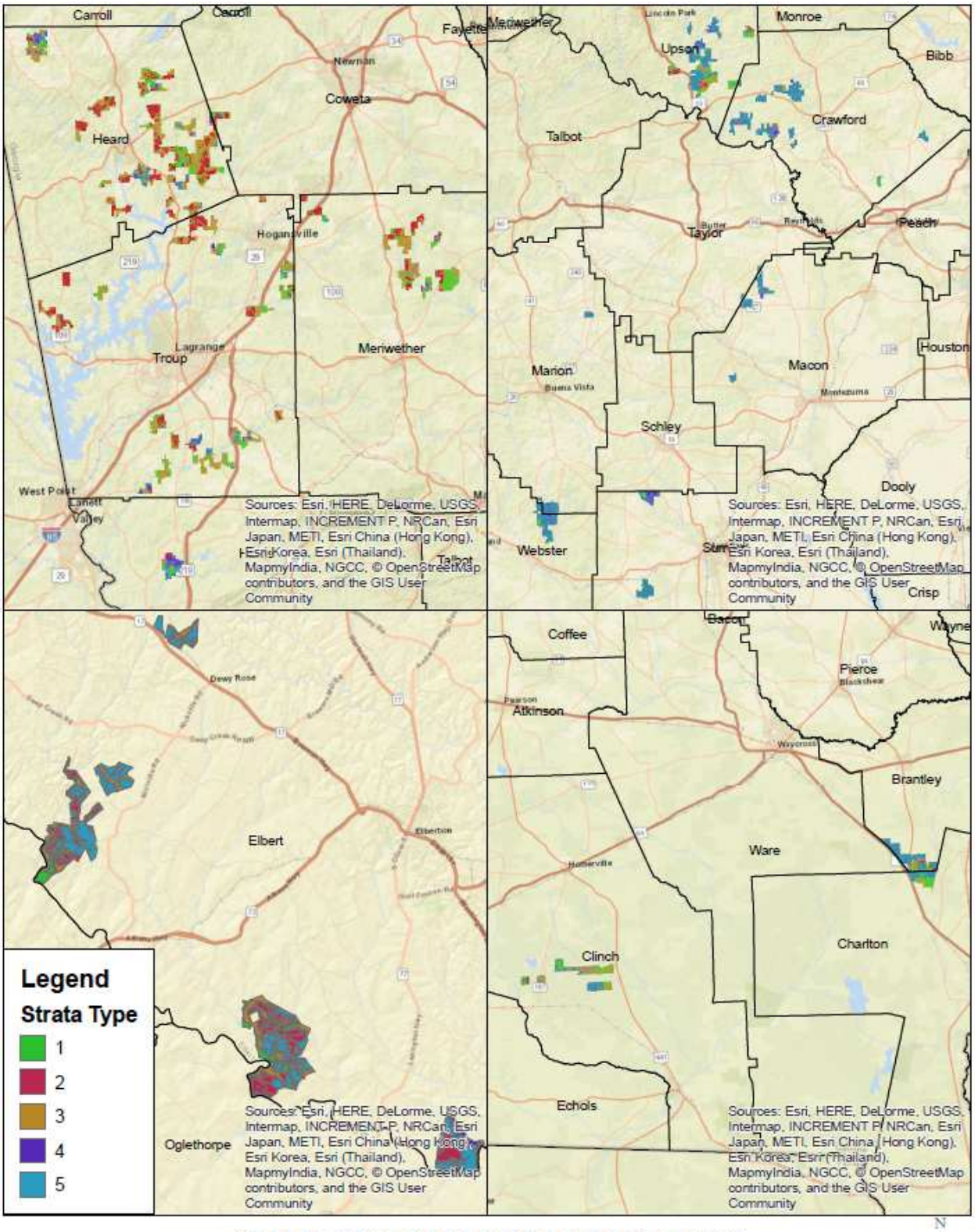
Stratification

Strata were determined prior to the initial forest carbon inventory utilizing information contained within a GIS stand boundary shapefile encompassing the Project Area, basal area per acre information derived from a preliminary cruise, and aerial imagery. All stands were assigned to one of five strata based on average basal area per acre estimates, as defined below.

Stratum	BA/acre (ft^2) Range
1	0 – 27.19
2	>104.26
3	57.00 – 82.18
4	27.20 – 56.99
5	82.19 – 104.25

Stratification results are presented in the following table and map.

Stratum	Acres
1	25,771.61
2	14,834.72
3	13,275.30
4	4,454.36
5	19,983.27
Total	78,319.26



Green Assets- HMWCF 1 Avoided Conversion Project
Stratification Type

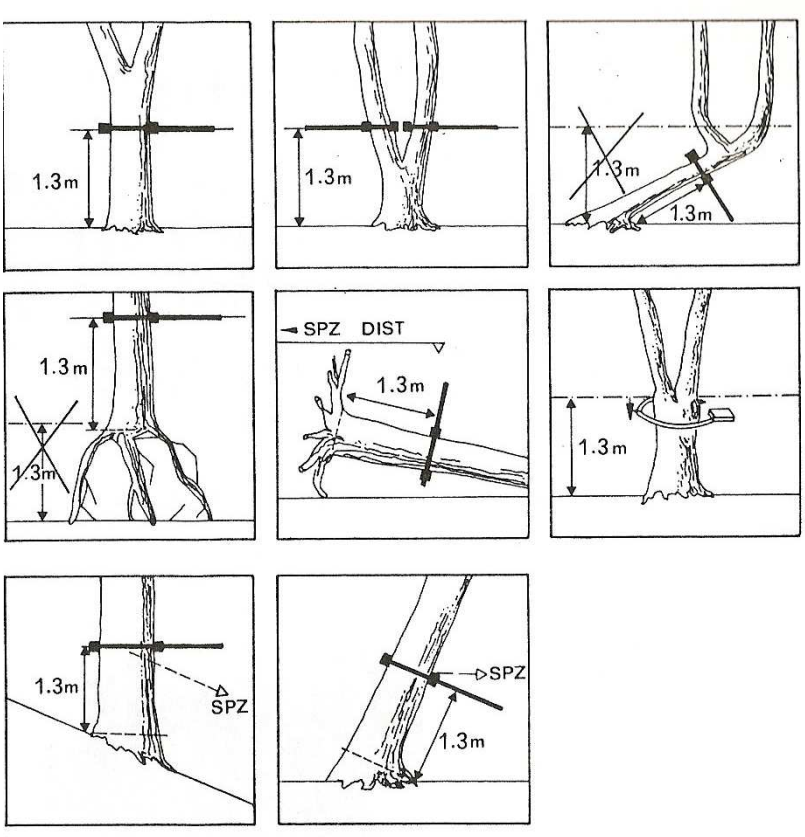
Data Collection

For Standing Live carbon, for each live tree ≥ 5 in. dbh and ≥ 15 ft. height, the following will be recorded:

- Azimuth from plot center to tree
- Species (or identification to genus if species cannot be identified), preferentially using a four-letter code with first two letters of the genus and first two letters of the species (e.g. PITA = *Pinus taeda,* Loblolly Pine)
- Diameter at breast height (dbh) in inches entered to the nearest 0.1 in., rounding up if the measure is exactly equidistant between 0.1 in. increments. No rounding will be applied where the measurement is less than 5.0 in. (i.e. 4.9 will not be rounded to 5.0 in. and therefore is too small to be included).
- Visual appraisal of percent defect in each of three aboveground sections (top, middle and bottom thirds). Note that the assessment references total aboveground biomass (not just the merchantable stem).
- Total height in feet (to nearest 1 ft.)

Diameter of all trees will be measured at breast height (4.5 ft. above ground level, see figure below from Pancel[2], 1993 illustrating point of measurement for dbh). Diameter of trees with buttresses (e.g. baldcypress, water tupelo) will be measured 1.5 ft. above the point of termination of the buttress when the tree is buttressed at breast height.

[2] Pancel, L., ed. 1993. Tropical forestry handbook. Berlin, Germany, Springer-Verlag. Volume 1, 738 pp.



Note, in the center right box, the tree forks at exactly breast height, in which case diameter is measured just below the swell associated with the fork. Otherwise, diameter at breast height is always measured just above any irregularity causing swelling around the stem cross section. In the diagram above, the reference to 1.3 meters is equivalent to 4.5 ft.

To avoid either missed trees or double recording, the point of initiation of measurement will be marked. The first tree should be flagged and measurement should proceed in a consistent clockwise fashion. It is recommended that when standing at the plot center, that the first "measure" tree, (either directly north or just to the right of north) will be identified as the first tree assessed and will be marked accordingly, where reasonably possible.

Percent defect is assessed visually, identifying any areas of breakage or cavities, by assigning the percentage missing (from a complete, un-damaged, state, specified in 10% increments) in each of three aboveground sections of total biomass: top 1/3, middle 1/3 and bottom 1/3. Where broken top trees have a new leader that is 1/3 the diameter of the original leader or greater, it is assumed that the leader has recovered and no defect is applied and no adjustments are made to the total height (see below).

Height is measured using a hypsometer. If readings cannot be acquired with the hypsometer, a clinometer will be used. The hypsometer will be calibrated at the beginning of each day of field work, and re-calibrated during the day after significant changes in temperature and humidity or when odd readings are obtained. Field crews will not carry the hypsometer inside their jackets to avoid changes in temperature (outside pocket of vest is okay).

The maximum slope angle from which height is estimated will not exceed 120% to avoid measuring height while standing too close to the tree which could affect accuracy. Total height is measured as the distance from ground level to the highest visible point on the crown (or apical meristem). Total height requires sighting the level point on the trunk, the top, and the base of the tree at ground level. The data recorder will confirm for each tree that the full height is accounted for in the measurement. Care will be taken to be certain that the correct top is being sighted, being aware that part of the crown leaning toward the observer may give the false appearance of being the highest points of the tree. A minimum of two height measurements will be obtained, from different vantage points preferably, and the recorded height taken as the average of the two measurements.

When measuring heights on leaning trees, the leaning tree will be visually stood back up to 90-degrees to the ground and total height measured from the ground to the highest point as if the tree were upright.

Note that total height must represent the original without-defect height of the sound tree, and where part of the crown is missing total height must be reconstructed by either (1) referencing heights of comparable sound trees nearby (giving careful consideration as to whether the dead tree was suppressed, and consequently would have had a lower height than its neighbors), or (2) measuring the length of fallen parts of the crown to add to snag height. Where total height is estimated in this way, a comment will be recorded in the data collector device for that tree record to describe how height was estimated (e.g. whether phantom heights were used or whether reconstruction from a fallen top was used to determine total height).

Standing dead wood is defined as all dead trees (confirmed by absence of any green limbs or epicormic branches) emanating from the original stump which are standing at an angle of greater than 45-degrees relative to the ground. In the same plot used to sample standing live trees, for each standing dead tree $\geq$ 5 in. dbh and $\geq$ 15 ft. height, the following will be recorded (note that these are the same measurements as for live trees, with the addition of assessment of decay class):

- Azimuth from plot center to tree
- Species (or hardwood/softwood if species/genus cannot be identified)
- Diameter at breast height (dbh) in inches entered to the nearest 0.1 in., rounding up if the measure is exactly equidistant between 0.1 in. increments. No rounding will be applied where the measurement is less than 5.0 in.
- Total height in feet (to nearest 1 ft.)
- Visual appraisal of percent defect in each of three aboveground sections (top, middle and bottom thirds). Note that the assessment references total aboveground biomass (not just the merchantable stem).
- Qualitative assessment of decay class

All guidance above for live trees applies to snags. For assignment of decay class, the following five categories are used (USDA Forest Service[3]):

[3] USDA Forest Service: Forest Inventory and Analysis national core field guide Volume 1: field data collection procedures for phase 2 plots, version 5.0. [http://www.fia.fs.fed.us/library/field-guides-methods-proc/docs/

Decay class stage (code)	Limbs and branches	Top	% Bark Remaining	Sapwood presence and condition*	Heartwood condition*
1	All present	Pointed	100	Intact; sound, incipient decay, hard, original color	Sound, hard, original color
2	Few limbs, no fine branches	May be broken	Variable	Sloughing; advanced decay, fibrous, firm to soft, light brown	Sound at base, incipient decay in outer edge of upper bole, hard, light to reddish brown
3	Limb stubs only	Broken	Variable	Sloughing; fibrous, soft, light to reddish brown	Incipient decay at base, advanced decay throughout upper bole, fibrous, hard to firm, reddish brown
4	Few or no stubs	Broken	Variable	Sloughing; cubical, soft, reddish to dark brown	Advanced decay at base, sloughing from upper bole, fibrous to cubical, soft, dark reddish brown
5	None	Broken	Less than 20	Gone	Sloughing, cubical, soft, dark brown, OR fibrous, very soft, dark reddish brown, encased in hardened shell

*

Quality Control

Field crews will be fully trained in all aspects of the field data collection and adhere to field measurement protocol. If at any time during inventory there is evidence of nonadherence to the field measurement protocol, team members will be asked to return to plots and correct any errors. Each crew will be led by a qualified professional, and these leaders will be responsible for ensuring that all field protocols are followed.

Data Collection in the Field

During all data collection in the field, the crew member responsible for recording must audibly repeat all measurements called by the crew member conducting the measurement. This is to ensure the measurement call was acknowledged and that proper number is recorded. In addition, 'Data recorded by' must be filled with the name of the crew member responsible for recording data. After data is collected at each plot and before the crew leaves the plot, the crew leader shall double check to make sure that all data are correctly and completely filled. The crew leader must ensure the data recorded matches with field conditions, for instance, by verifying the number of trees recorded.

Data Quality Checks

Complete%20FG%20Document/NRS%20FG%205.0-Oct%202010-Complete%20Document.pdf]

Data recorders were used in the field, and at the end of each day field technicians used industry standard software to share data with the team leader for consolidation and to ensure that all relevant information was collected. If it appears some information is missing or if outliers are noted, corrections will be made the following day. Once this information is validated and checked, final corrected data will be shared with Green Assets.

Field Data Collection Hot Checks

After the training of field crews has been completed, observations of each field crew and each crew member should be made. A lead coordinator shall observe each field crew member during data collection of a field plot to verify measurement processes and correct any errors in techniques. Where necessary, crews will return to sample points to correct any errors identified.

Field Measurement Quality Control Check

A second type of field check is used to quantify the amount of error due to field measurement techniques. To implement this type of check, a complete re-measurement of a number of plots by people other than the original field crews is performed. This auditing crew should be experienced in forest measurement and highly attentive to detail. Up to 10% of plots will be randomly or systematically chosen to be remeasured. All trees shall be remeasured in each plot. Field crews taking measurements should not be aware of which plots will be remeasured whenever possible.

Data Management Systems

Data management begins in the field as data are being collected. Procedures listed above in the Quality Assurance / Quality Control section above documents the handling of data collected in the field, data entry and data entry checks. The process of transforming field data through the process of modelling and then yielding the final estimation of carbon stocks is an involved process. These steps include:

- Convert relevant excel data into FVS format
- Develop Tree Init and Stand Init tables for use in FVS
- Load MS access database
- Develop model using FVS Suppose interface
- Run models producing tree list as output tables
- Perform CRM and harvested wood product calculations in excel workbooks
- Estimate total emissions and reductions in excel workbook.

Finalized original electronic data spreadsheets will be saved and stored within the Green Assets office and backed up off-site weekly. Availability of original data spreadsheets will be limited to Green Assets' technical staff. When these data are required by the ARB or verification bodies, copies will be provided and the original version preserved. All records sufficient to allow for a verification will be retained for a minimum of 15 years. All data inputs used for reporting will be double checked after completion of the report to ensure values stated in the report agree with values in calculation workbooks and other supporting files.

Forest Health

The most common forest health concerns to monitor for in this region are Fusiform Rust (*Cronartium fusiforme*) and Southern Pine Beetle (*Dendroctonus frontalis*). Based on current monitoring, there are currently no significant forest health issues present on the property.

Fusiform Rust is a fungus that produces orange spores on the surface of fusiform-shaped pine galls in the spring. Fusiform rust infections that occur on the main stem within the first 5 years of a tree's life normally cause tree death. Infections that occur later in the life cycle of the tree weaken the stem, resulting in wind breakage at the canker or quality loss at rotation. Loblolly (*Pinus taeda*) and Slash pine (*Pinus elliotii*) are the most susceptible species. Longleaf (*Pinus Palustris*) is fairly resistant, while shortleaf pine (*Pinus echinata*) is highly resistant. Oak is the alternate host of Fusiform Rust.

The southern pine beetle is one of the most destructive pests in pines of the southern United States, Mexico, and Central America. The beetle occurs Pennsylvania to Texas and from New Mexico and Arizona to Honduras. It attacks and can kill all species of pines, but prefers loblolly, shortleaf, Virginia (*Pinus virginiana*), pond (*Pinus serotina*), and pitch pines (*Pinus rigida*).

Change Log

A project-specific "Change Log" will be established to document any changes in the inventory methods or equations used to calculate carbon stocks and will be maintained in a similar format to the original project field data spreadsheet.

Updating Forest Carbon Inventory

Harvest

The landowner will be provided with a "Forest Activity" log to document any harvests which may occur. This log will specify the location, stratum, area within stratum harvested, as well as a description of the harvest type and associated documented volumes removed and their fate. Assessment of forest carbon stocks in harvested areas will utilize either timber mill tickets, appropriate FVS modeling results, or other industry standard methodology.

Growth

Growth will be documented upon required inventory updates, minimally on a 12-year interval. The inventory will be updated either via periodic re-measurement (no less frequently than every 12 years, but more often, as needed) or via growth and yield model projections of plot data. Re-measurements will follow all procedures outlined in this document and will require the re-measuring all sample plots. In the interim, and where no significant disturbance or harvest has taken place (confirmed via qualitative field assessments by the responsible forester) plot data may be updated through model projections using an ARB approved growth and yield model. Where growth and yield model projections of plot data are used to update the inventory, and where the FVS-SN model is used, all procedures for data entry and analysis as herein outlined will be adhered to.

Disturbance

Disturbances will likewise be documented on the "Forest Activity" log. Notes relative to the anticipated or actual effect said disturbances will have on the carbon project will be maintained as well as any follow up procedures actually executed. Assessment of forest carbon stocks in disturbed areas will utilize either timber mill tickets, appropriate FVS modeling results, or other industry standard methodology, and will occur within one year after disturbance.

Incorporating New Inventory/Plot Data

It is anticipated that the original plot points will be maintained and periodically sampled at no less frequently than every 12 years as required, and more frequently as needed to ensure accurate estimates are provided for monitoring reports and required verifications.

Modeling

Modeling forest growth will be performed as allowed under Appendix B of the Protocol by utilizing the Forest Vegetation Simulator, Southern Variant and applying local calibration as described below in Part VIII.E.d.

Confidence Deduction

Application of a confidence deduction will be performed, as specified in Appendix A.4 of the COP.

For additional details refer to HMWCF-I Inventory-Calculation-Modeling Methodology.

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.

Standing live carbon was calculated using the Component Ratio Method (CRM) utilizing either inventoried/measured [species, Diameter at Breast Height (DBH), total height (THT), and missing biomass percentage] or modeled [commencement date and Reporting Period (RP) end date adjusted DBHs and THTs.

Standing dead carbon was calculated using the CRM utilizing inventoried/measured individual standing dead tree parameters (species, DBH, THT, missing biomass percentage, and decay class).

Carbon in in-use forest products were calculated in accordance with Appendix C.3 of the Protocol and are a function of inventoried standing live carbon stocks for baseline estimates.

Carbon in landfills forest products were calculated in accordance with Appendix C.4 of the Protocol and are a function of inventoried standing live carbon stocks for baseline estimates.

Site preparation biological emissions are only quantified based on measured carbon stock changes in included reservoirs (SSR #AC-6, where applicable), per Table 5.3 of the Protocol. Since site preparation activities are not actively being implemented, the inclusion of this pool has no net effect.

Biological emissions from clearing of forestland outside project area are not an inventoried carbon pool. Rather, these are estimated using a default conversion displacement risk value (3.6%) and Secondary Effects emissions quantification (Protocol Equation 6.12).

Biological emissions from decomposition of forest products are quantified as a component of calculating carbon stored for 100 years in wood products (SSR #AC-7) and landfills (SSR #AC-8).

For additional details, refer to HMWCF-I Inventory-Calculation-Modeling Methodology.

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

AC-1 Standing Live: 73.3 tCO2e/acre (stocks as of the end of the RP)

AC-3 Standing Dead: 0.8 tCO2e/acre (stocks as of the end of the RP)

AC-6 Soil (if applicable): N/A

AC-7 Carbon in in-use forest products: 0 tCO2e/acre

AC-8 Forest product carbon in landfills (if applicable): 0 tCO2e/acre

AC-9 Biological emissions from site preparation: N/A

AC-13 Biological emissions from clearing of forestland outside of the Project Area: Addressed in Secondary Effects

AC-17 Biological emissions from decomposition of forest products: 0 tCO2e/acre

D. Provide a summary of inventory confidence statistics.

Inventory confidence statistics were calculated as required by section A.4 of the Protocol. Strata level standard errors, as determined from the field collected inventory data, were multiplied by the t-value of 1.645 to determine the Margin of Error, and the results were combined to produce the weighted mean project level sampling error at a 90% Confidence Interval (±5.8%). As the sampling error equals ±5.8%, the associated confidence deduction is equal to 0.8% according to Table A.4 of the Protocol.

E. Provide the calculation of the offset project's reversal risk rating and contribution to the Forest Buffer Account.

In accordance with section D.5 of Appendix D of the Protocol:

- Financial Risk 1%
- Risk of Illegal Harvesting 0%
- Risk of Conversion to Non-Forest Land Use 0%
- Risk of Over-Harvesting 0%

- Social Risk 2%
- Wildfire Risk 2.652%
- Disease or Insect Outbreak Risk 3%
- Other Catastrophic Event Risk 3%

100% - [(1-1%) x (1-0%) x (1-0%) x (1-0%) x (1-2%) x (1-2.652%) x (1-3%) x (1-3%)] = 11.13%

To reduce the risk of wildfire, prescribed burns are implemented to achieve a medium level of fuel treatment. Prescribed burns have occurred historically, and the Forest Management Plan includes an aggressive prescribed burn plan to ensure that fuel treatment is maintained in the future.

PART VIII. OFFSET PROJECT BASELINE

A. Describe the highest value alternative land use identified in the appraisal. Supporting documentation is required. Submit a full copy of the appraisal as attachment labeled "Attachment G." See Part X of this document for more information.

The highest value alternative land use is "Farmlands/Tillable Acreage/Pastureland" in accordance with the appraisal.

B. Provide an estimate of the rate of conversion and removal of onsite carbon stocks.

As specified in Section 6.3 of the Compliance Offset Protocol, the rate of conversion was estimated based on planning documentation that specifies the timeframe of the conversion at 7 years.

C. Compare the fair market value of the anticipated alternative land used for the Project Area with the value of the current forested land use.

The fair market value of the highest value alternative land use for the Projects Area was appraised to be $209,115,000. The fair market value of the existing "As-Is" forested land use for the Project Area was appraised to be $85,495,000. Therefore, the appraised value under the highest value alternative land use for the Project Area is 145% higher than the appraised value of the current forest land use of the Project Area.

D. Provide the calculation for the Discount for Uncertainty of Conversion Probability (e.g. Uncertainty Discount).

Protocol Equation 6.11: If ((VA/VP - 1) > 0.8, then ACD = 0

((209,115,000/85,495,000)-1) = 1.45, which is > 0.8 and therefore no Avoided Conversion Discount is applied.

E. Describe the project's modeling plan, following the requirement and methods in Appendix B, Section B.3 of the U.S. Forest protocol.

Modeling of the project area's carbon stocks utilizes FVS-SN, eligible per Appendix B of the Protocol.

For additional details, refer to HMWCF-I Inventory-Calculation-Modeling Methodology.

F. 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 I" must be portrayed depicting time on the x-axis and metric tons CO2e on the y-axis, labeled "Attachment H," and a diagram of the baseline incorporating all required carbon stocks, labeled "Attachment I," are required. See Part X of this listing document for more information.

The projected changes in onsite carbon stocks over 100 years in the baseline scenario are based on the amortization rate specified in conversion planning documentation (complete removal over seven years). The initial RP is equal to 345 days, or just under 1/7 of the timeframe of conversion.

Total baseline stocks (including all pools) as of the end of the first RP equals 4,838,308.4 MtCO2e. This was computed as the removal of just under 1/7 (755,301.5 MtCO2e) of the Project Area's initial onsite carbon stocks at the time of offset project commencement (5,593,609.9 MtCO2e). The remaining carbon stocks will be harvested during the second through eighth RPs, in accordance with the seven-year conversion timeframe and in compliance with Section 6.3.1 of the Protocol (see Attachments H & I for further details).

G. Optional: Identify the approved growth model that will be used for the project.

FVS-SN

H. Optional: If harvesting is planned in the Project Area will the project use a harvest schedule model?

☐ **Yes**
☒ **No**
☐ **N/A**

If "yes," how do you plan to address age class and stratification as part of your harvest scheduling?

I. Provide an estimate of carbon that will be stored long-term in harvested wood products in the baseline.

AC-7 Carbon in In-Use Forest Products: 25,312.1 tCO2e (current RP – BCWPin-use, y)
187,456.4 tCO2e (entire baseline period – BCWPin-use, n)

AC-8 Forest Product Carbon in Landfills: 54,788.2 tCO2e (current RP – BCWPlandfill, y)
405,750.6 tCO2e (entire baseline period – BCWPlandfill, n)

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?

☒ Yes

☐ No

If "yes," identify the registry or program and provide details on the issued credits below.

B. Have any lands within the Project Area ever been listed or registered with an offset project registry or program in the past?

☒ Yes

☐ No

If "yes," identify the registry or program and provide details on the issued credits below.

C. Have greenhouse gas emission reductions or removal enhancements associated with the 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?

☒ Yes

☐ No

If "yes," identify the goal(s) and provide details on the reductions and removal enhancements (under "Number of Credits Issued") below.

Registry/Program/Goals: Chicago Climate Exchange

Reporting Period(s): 4

Vintage(s): 2005-2008

Number of Credits Issued: 414,100

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 the project is located in one of the categories of Tribal land listed in Part IV(D), 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(l) of the Cap-and-Trade Regulation.**

D. **Attach a map(s) of the Project Area including:**

1. **Public and private roads**
2. **Towns**
3. **Major watercourses (4th 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.** Note that the georeferenced shapefile may constitute the required map if it includes the required map information listed above.

E. **If a Qualified Conservation Easement (QCE) has been recorded, provide a copy. The listing 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 listing document fulfills the requirement in Section 9.1.1.1(18)(a) of the U.S. Forest protocol to provide ARB with a copy. If no QCE has been recorded, provide supporting documentation demonstrating the planned or completed dedication of the land in the Project Area to continuous forest cover through a Qualified Conservation Easement or transfer to public ownership.**

F. **Provide documentation demonstrating that the type of anticipated land used conversion is legally permissible per the requirements of Section 3.1.1.3 and Section 6.3 of either the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014.**

G. **Provide a full copy of the appraisal that was prepared for the Project Area per the requirements in Section 3.1.2.3 of either the Compliance Offset Protocol U.S. Forest Projects, November 14, 2014.**

H. **Attach a graph portraying baseline onsite carbon stocks with time depicted on the x-axis and metric tons CO2e depicted on the y-axis.**

I. **Attach a diagram of the baseline incorporating all required carbon stocks.**

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: D. Hunter Parks

PRINTED NAME: Douglas Hunter Parks

TITLE: Founder, Green Assets, Inc.

DATE: 9-19-2018