



Green Assets – DLT Avoided Conversion Project

U.S. Forest Offset Project Data Report

CAFR5751 / ACR751

Initial Reporting Period: September 8, 2021 – March 8, 2022

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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 – DLT Avoided Conversion Project (CAFR5751/ACR751)* avoids the conversion of the 14,589-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. During this conversion, forest carbon stocks would be entirely removed from the PA.

The project commenced on September 8, 2021, when a Qualified Conservation Easement (QCE) and Memorandum of Easement 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, 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 (three 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 Offset Project Operator'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.

- **Recreation conservation.** The PA creates many recreational opportunities, including hiking, fishing, boating, hunting, research, and general recreation. Although, agricultural/pastoral land can provide some recreation 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 participate safely and enjoyably across a given amount of acreage). Conversely, recreational experiences that groups/individuals attain from the PA (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. The project area adjoins important habitat for unique species of fish, reptiles, and mammals; which will be enhanced by the maintenance of forest cover.
- **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, etc.). 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 maintenance of the soil, planting, fertilizer production and application, and harvesting. 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.
- **Community & Social Enhancement.** The OPO provides opportunities for many individuals to recreate and enjoy the natural esthetic of the PA. Given the PA is in a rural area, these activities help support families and individuals who may not be able to participate in these types of activities on a normal basis in this region. The OPO occasionally hosts training exercises for law enforcement, military, and fire prevention personnel. Additionally, The OPO hosts multiple Universities for field-based research studies, helping students reach their educational goals.

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: 4

Date Report Completed: 11-22-2022

Date Report Submitted: 11-22-2022

Person Completing Report: Robert Bailey Evans, IV

Phone Number: 910-821-8165

Email Address: bailey@green-assets.com

PART II. OFFSET PROJECT INFORMATION

Offset Project Name: Green Assets – DLT Avoided Conversion Project

OPR Project ID #: ACR751

ARB Project ID #: CAFR5751

Offset Project Commencement Date: 9-8-2021

First Reporting Period Start Date: 9-8-2021

First Reporting Period End Date: 3-8-2022

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 3.6 of the Compliance Offset Protocol for U.S. Forest Projects, June 25, 2015, 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: Davis Land & Timber, LP
OPO's CITSS ID#: CA3281
Mailing Address: 1319 Highway 72/221 East, Greenwood, SC 29649
Contact Person: Stephen Davis
Phone Number: 864-229-5211
Email Address: sldavis@davisfloyd.com

B. APD

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

PART IV. LAND OWNERSHIP

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

- ☒ Yes
☐ No

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.).

Davis Land & Timber LP and Eden Hall LP own the forestland and resources for the real property in the project area.

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: 33°58'50.43" N
Longitude of Offset Project Location: 82°14'1.60" W
Project Area Total Acreage: 14,589.51

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 SE Middle Mixed Forest Piedmont Supersection. Assessment Areas (acreages shown in the table below) were determined based on stand type and dominant species information contained within a stand boundary shapefile encompassing the project area.

Assessment Area	Acres
SE Middle Mixed Forest Piedmont Cypress & Swamp Hardwood	59.45
SE Middle Mixed Forest Piedmont Loblolly-Shortleaf-Oak	13,224.99
SE Middle Mixed Forest Piedmont Riverine Hardwood	1,028.33
SE Middle Mixed Forest Piedmont Upland Hardwood	276.74
Total	14,589.51

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

The Project Area is located within the jurisdiction of Greenwood and McCormick Counties in South Carolina.

C. Describe how the Project Area was determined.

Davis Land & Timber LP and Eden Hall LP own 21,311.96 deeded acres in South Carolina. A Qualified Conservation Easement which avoids the conversion of forest land to agricultural land was recorded on 16,054.96 deeded acres of this ownership. Parcel shapefiles were obtained through each county tax assessor. Certain acres, including non-forested, roads, water bodies, and open fields were excluded from the easement area and mapped using ArcMap v.10.8.1, resulting in a 14,589.51-acre project area. This acreage was utilized for project carbon calculations. An appraisal was performed to define the project area in accordance with Section 2.3 of the Protocol.

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

The existing land cover is forest land including upland hardwoods, riverine and bottomland hardwoods, loblolly pine plantation, longleaf pine, mixed pine-hardwood, and quail habitat improvement areas. 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, bottomland, and upland hardwood, as well as planted southern pine, natural 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. 1989¹.

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 Zone 8a according to the [USDA Plant Hardiness Zone Map](#).

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

The historical land uses of the Project Area have been forest and recreational land. The portions of the project area in Greenwood County are zoned as Rural Development District and Forest Agricultural District. The portions in McCormick County are zoned as Forest Agricultural District. The projected land use within the Project Area is wildlife habitat conservation and outdoor recreation. The 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, bottomland, and upland hardwood, as well as planted southern pine, natural southern pine, and natural mixed southern pine-hardwood stands. The tables below show the species composition of live trees in the project area by Species Diversity Index (SDI) based on the project's carbon stock inventory:

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.

70% SDI

Common Name	Species	Basal Area/Acre	% of Live Basal Area/Acre
loblolly pine	<i>Pinus taeda</i>	85.92	79.06%
sweetgum	<i>Liquidambar styraciflua</i>	6.04	5.56%
hickory spp.	<i>Carya spp.</i>	2.31	2.13%
white oak	<i>Quercus alba</i>	1.99	1.83%
eastern redcedar	<i>Juniperus virginiana</i>	1.31	1.21%
water oak	<i>Quercus nigra</i>	1.28	1.18%
winged elm	<i>Ulmus alata</i>	1.19	1.09%
southern red oak	<i>Quercus falcata</i>	1.13	1.04%
red maple	<i>Acer rubrum</i>	0.80	0.74%
slippery elm	<i>Ulmus rubra</i>	0.79	0.72%
green ash	<i>Fraxinus pennsylvanica</i>	0.68	0.62%
American elm	<i>Ulmus americana</i>	0.52	0.48%
black cherry	<i>Prunus serotina</i>	0.51	0.47%
scarlet oak	<i>Quercus coccinea</i>	0.49	0.45%
willow oak	<i>Quercus phellos</i>	0.37	0.34%
northern red oak	<i>Quercus rubra</i>	0.36	0.33%
flowering dogwood	<i>Cornus florida</i>	0.35	0.33%
cherrybark oak	<i>Quercus pagoda</i>	0.30	0.28%
black oak	<i>Quercus velutina</i>	0.29	0.27%
yellow-poplar	<i>Liriodendron tulipifera</i>	0.28	0.26%
post oak	<i>Quercus stellata</i>	0.24	0.23%
shortleaf pine	<i>Pinus echinata</i>	0.22	0.21%
laurel oak	<i>Quercus laurifolia</i>	0.21	0.19%
blackgum	<i>Nyssa sylvatica</i>	0.20	0.18%
sugarberry	<i>Celtis laevigata</i>	0.18	0.16%
eastern cottonwood	<i>Populus deltoides</i>	0.16	0.15%
American hornbeam, musclewood	<i>Carpinus caroliniana</i>	0.12	0.11%
common persimmon	<i>Diospyros virginiana</i>	0.08	0.07%
Eastern red bud	<i>Cercis canadensis</i>	0.06	0.06%
American sycamore	<i>Platanus occidentalis</i>	0.06	0.06%
Eastern hop hornbeam	<i>Ostrya virginiana</i>	0.05	0.05%
honey locust	<i>Gleditsia triacanthos</i>	0.04	0.04%
red mulberry	<i>Morus rubra</i>	0.04	0.04%
white ash	<i>Fraxinus americana</i>	0.04	0.04%
boxelder	<i>Acer negundo</i>	0.02	0.02%
longleaf pine	<i>Pinus palustris</i>	0.02	0.01%
American holly	<i>Ilex opaca</i>	0.02	0.01%
Total:		108.67	100.00%

60% SDI

Common Name	Species	Basal Area/Acre	% of Live Basal Area/Acre
loblolly pine	<i>Pinus taeda</i>	32.67	22.71%
sweetgum	<i>Liquidambar styraciflua</i>	13.50	9.39%
water oak	<i>Quercus nigra</i>	13.37	9.29%
white oak	<i>Quercus alba</i>	10.70	7.44%
scarlet oak	<i>Quercus coccinea</i>	9.81	6.82%
yellow-poplar	<i>Liriodendron tulipifera</i>	8.72	6.06%
cherrybark oak	<i>Quercus pagoda</i>	6.86	4.77%
American elm	<i>Ulmus americana</i>	6.75	4.69%
red maple	<i>Acer rubrum</i>	6.33	4.40%
laurel oak	<i>Quercus laurifolia</i>	5.69	3.95%
post oak	<i>Quercus stellata</i>	4.02	2.79%
black willow	<i>Salix nigra</i>	3.27	2.27%
southern red oak	<i>Quercus falcata</i>	2.88	2.00%
eastern redcedar	<i>Juniperus virginiana</i>	2.62	1.82%
green ash	<i>Fraxinus pennsylvanica</i>	2.48	1.73%
hickory spp.	<i>Carya spp.</i>	2.48	1.72%
winged elm	<i>Ulmus alata</i>	2.31	1.61%
black oak	<i>Quercus velutina</i>	1.78	1.23%
sugarberry	<i>Celtis laevigata</i>	1.42	0.98%
sugar maple	<i>Acer saccharum</i>	1.35	0.94%
American hornbeam, musclewood	<i>Carpinus caroliniana</i>	1.14	0.79%
willow oak	<i>Quercus phellos</i>	0.98	0.68%
flowering dogwood	<i>Cornus florida</i>	0.69	0.48%
blackgum	<i>Nyssa sylvatica</i>	0.69	0.48%
white ash	<i>Fraxinus americana</i>	0.60	0.42%
slippery elm	<i>Ulmus rubra</i>	0.54	0.37%
Eastern red bud	<i>Cercis canadensis</i>	0.14	0.10%
Eastern hop hornbeam	<i>Ostrya virginiana</i>	0.07	0.05%
black cherry	<i>Prunus serotina</i>	0.00	0.00%
Total:		143.86	100.00%

Native species dominate the forest and account for 100% of the sum of carbon in the standing live carbon pool. In accordance with Table 3.1 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.

Currently, approximately 40% 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 2/3rds 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 will be managed as forest and recreational land. Per the Protocol and Part VI.C.3.a of the OPDR, third-party certification has been obtained by 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 of the Protocol. The last Memorandum was recorded on September 8, 2021.

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.

2.5(c). 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-forest 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 reporting periods.

Loblolly pine, at 79% relative basal area, exceeds the 70% Species Diversity Index (SDI) associated with the SE Middle Mixed Forest Piedmont Loblolly-Shortleaf-Oak and SE Middle Mixed Forest Piedmont Cypress & Swamp Hardwood Assessment Areas (AAs) found on the Project Area. The species diversity requirement will be achieved within 25 reporting periods

through thinnings targeted at loblolly pine basal area reduction in the aforementioned AAs. The loblolly pine relative basal area will be reduced from approximately 79% to 70% across the 70% SDI areas within 25 reporting periods via targeted thinnings and natural stand dynamics.

- 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 reporting periods 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.

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 3.1 of the Protocol requires that standing dead wood stocks be maintained at, or demonstrate progress towards, an average of at least one 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 0.56 mtC/acre, equivalent to 2.2% 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 one 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 ranges from 0% to 39%.

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 the Protocol.**

Stratification

Strata were determined prior to the initial forest carbon inventory (conducted 08 November 2021 – 15 December 2021) utilizing information contained within the stand boundary shapefile encompassing the Project Area, carbon stocking and stand type information derived from a

preliminary cruise conducted in August – September of 2020 (131 temporary plots installed randomly across targeted stands), and Google Earth (GE) imagery. Other than ownership boundary revisions, stand boundaries remained unchanged throughout the stratification processes as they represent logical harvest/management units.

Stratum	Abbreviation	Description
Natural High	NH	Natural hardwoods, southern pine, and mixed southern pine-hardwood stands with > 125 MtCO ₂ e/acre stocking (Avg.)
Natural Low	NL	Natural hardwoods, southern pine, and mixed southern pine-hardwood stands with 20-125 MtCO ₂ e/acre stocking (Avg.)
Planted High	PH	Planted southern pine with > 115 MtCO ₂ e/acre stocking (Avg.)
Planted Low	PL	Planted southern pine with 20-115 MtCO ₂ e/acre stocking (Avg.)
Quail	Q	Quail habitat improvement areas
Regeneration	R	Planted southern pine with < 20 MtCO ₂ e/acre (Avg.)

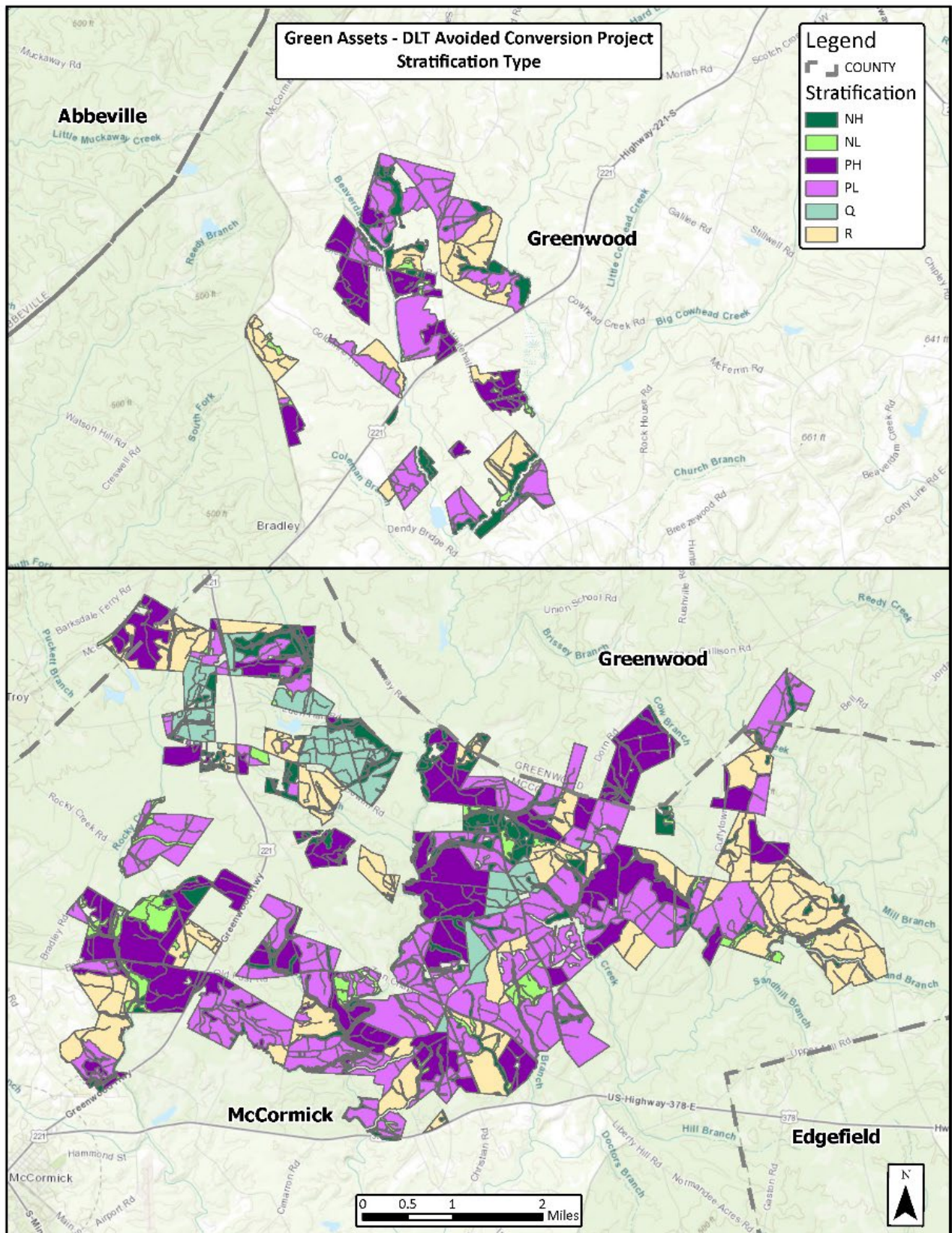
Following the completion of the project’s initial forest carbon inventory, average carbon stocking was recomputed for all stands utilizing the collected inventory plot data (245 plots). If necessary, discrepant stands were corrected to their appropriate strata based on each’s updated average carbon stocking and observed stratum type where applicable.

The resulting final stratification information is presented in the table below:

Stratum	Acres	Plots
NH	1,524.86	39
NL	658.75	23
PH	3,489.91	68
PL	4,902.11	71
Q	838.66	25
R	3,175.23	19
Total	14,589.51*	245

*Note strata do not sum to total due to rounding.

Below is a map of the six strata comprising the Project Area:



Inventory Equipment

Each field crew will carry the following equipment at all times:

- Inventory Methodology Booklet
- Cellphone and emergency contacts list
- First aid kit
- Field Map
- GPS
- Compass
- Flagging
- Rebar
- Hammer
- PVC pipe and caps
- Aluminum tags and wire
- Tree paint (fluorescent orange and blue)
- 4.5 ft. PVC pole (for DBH)
- 100 ft. measurement tape or Spencer logger's tape 75 ft. (feet 10ths, dia. 10ths in.)
- Diameter tape (English units) or Spencer logger's tape 75 ft. (feet 10ths, dia. 10ths in.)
- Height and slope measuring equipment (hypsonometer and/or clinometer)
- Distance measuring equipment (DME)
- Increment borer
- Backpack
- Machete
- Digital camera (may use mobile phone camera)
- Field notebook/paper
- Pencil
- Permanent marker
- Datalogger/Tablet
- Replacement batteries

Locating Plots

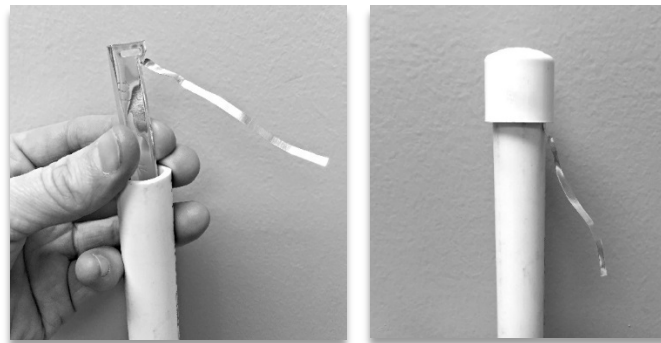
Use a Global Positioning System (GPS) to locate the plot center following these protocols:

1. Plot locations/GPS coordinates will be provided by Green Assets in advance of inventory.
2. GPS Unit should be set up as follows:
 - a. Position Format: UTM zone 17N
 - b. Map Datum: NAD83
3. When navigating, the instant the distance to the targeted plot center waypoint reads within a few feet (must be <7 ft.), the plot center is marked by planting rebar directly in front of the crew member.
4. Confirm that the plot is placed in the proper location prior to fully hammering in the rebar.
5. Record a GPS waypoint at plot center and the GPS accuracy in ft. (it is generally displayed as location +/- feet).

6. Should a plot be un-measurable for safety reasons, or fall outside of the project boundary, the plot will be dropped with justification noted, and a replacement plot selected from a list of pre-selected back-up plots by the inventory manager. Denote this circumstance as a comment in the datalogger/tablet for that plot.
7. In cases where digital/mapped property boundaries do not match on the ground conditions, the actual marked property boundary will be GPSd. Such circumstances will be reported to Green Assets as soon as possible.

Plot Center Staking

Once a plot center location is reached, the plot will be marked by hammering a 3.4-ft. section of $> 1/4$ -inch (in.) diameter metal rebar approximately 10 in. into the ground. A 4-ft. length of PVC pipe (with internal diameter $\sim 1/2$ in.) will be placed over the rebar and hammered into the ground ensuring that at least 3 ft. of the PVC pipe is above ground, where reasonably possible. Effort shall be taken to ensure PVC pipe is perpendicular to the ground. An aluminum tag, labeled with a unique monitoring plot identification name, will be placed inside the top of the PVC pipe for all permanent sampling plots. A PVC end cap will be placed on the top end of the PVC pipe (see below).



Tree Marking

When standing at the plot center, the first measure tree (see detailed procedures below for determining measure trees) for collecting the required tree level data, will be the first “in” tree that is closest to plot center, and is either directly north, or just east of north. It is recommended to tie flagging tape around the first measure tree at eye level and proceed with tree level measurements and data collection in a consistent clockwise fashion. To avoid either missed trees or double recording, all measure trees will be marked with a horizontal line at the point of diameter at breast height (dbh) measurement with fluorescent paint. To aid in the determination of breast height, use of measuring poles (4.5 ft. in height) is required. Trees will be numbered with paint to ensure measurements are accurately assigned for the corresponding tree. Numbering should be marked on the bole to face the relevant plot center (see example below).

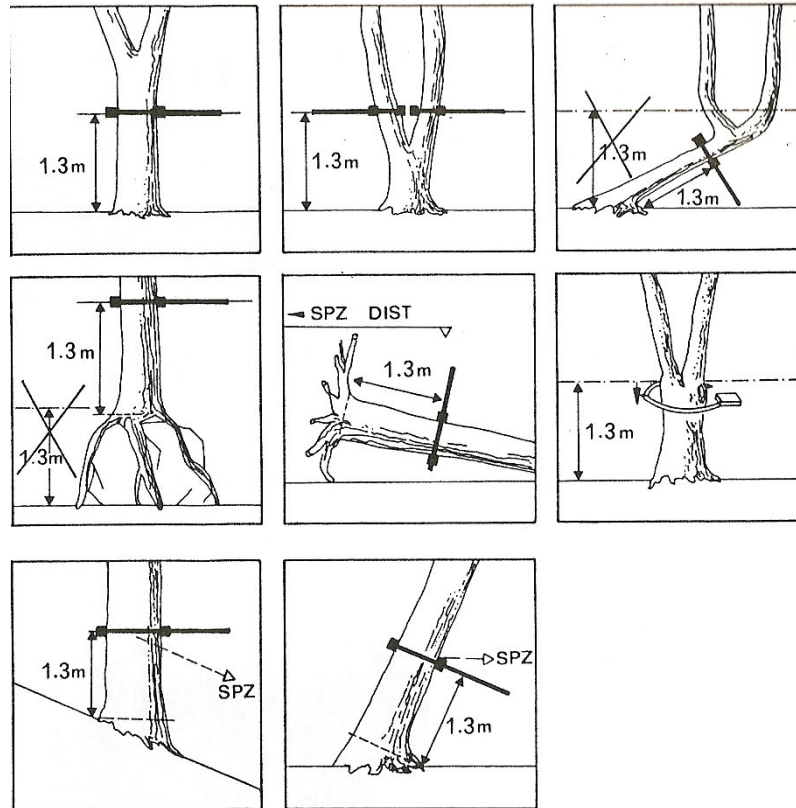


Data Collection

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

1. Azimuth from plot center to tree
2. 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)
3. 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).
4. 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).
5. 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 Pancel², 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.



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).

For each live tree ≥ 1.0 in. to < 5.0 in. dbh, and at least 4.5' tall, the following will be measured and recorded:

1. Azimuth from plot center to tree to the nearest one degrees.
2. 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).
3. 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 3.0 in.

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 ≥ 5 in. dbh and ≥ 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):

1. Azimuth from plot center to tree
2. Species (or hardwood/softwood if species/genus cannot be identified)

3. 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.
4. Total height in feet (to nearest 1 ft.)
5. 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).
6. 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 2015³)

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

If a plot falls in an area where there are no measurable trees, it will be identified as a no-tally plot with notes describing the existing conditions. The plot will not be replaced and will still be included in the sampling statistics and carbon calculations.

Quality Control

Field crews were fully trained in all aspects of the field data collection and adhered to all required procedures specified in this document. If at any time during inventory there was evidence of nonadherence to any of the required procedures, team members returned to plots and corrected any errors. Each crew was led by a

³ U.S. Department of Agriculture, Forest Service. 2015. Forest Inventory and Analysis National Core Field Guide – Volume I: Field Data Collection Procedures for Phase 2 Plots. Version 7. Available at <https://www.fia.fs.fed.us/library/field-guides-methods-proc/>. 431 pp.

qualified professional, and these leaders were responsible for ensuring that all required measurement and data collection procedures were followed.

Training Plots

The forest inventory began by conducting training plots with Green Assets and the inventory crews. Green Assets representatives reviewed the inventory sampling methodology with the inventory crews to provide training on the correct implementation of the methodology. After receiving this training, inventory crews gathered plot data including tree species, diameter at breast height (dbh), total height, potential defect percentage, and other required data. After the inventory crews concluded their sampling, Green Assets analyzed the results and provided guidance where necessary to ensure that data measurements remain consistent with the inventory methodology.

Field Data Collection Hot Checks

After the training of field crews was completed, observations of each field crew and each crew member were made. A lead coordinator observed each field crew member during data collection of a field plot to verify measurement processes and correct any errors in techniques prior to leaving the plot.

Data Collection in the Field

During all data collection in the field, the crew member responsible for recording audibly repeated all measurements called by the crew member conducting the measurement. This was to ensure the measurement call was acknowledged and that the proper number was recorded.

After data was collected at each plot, and before the crew left the plot, the crew leader double checked to make sure that all data were correctly and completely collected and recorded. The crew leader ensured that the data recorded matched with field conditions, for instance, by verifying the number and species of trees recorded.

Data Quality Checks

Data collectors 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 appeared some information was missing, or if outliers were noted, corrections were made the following day by revisiting the plot. Once this information was validated and checked, final corrected data was shared with Green Assets who provided a final review before approving the data.

Field Measurement Quality Control Check (Check Cruising)

A second type of field check was 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 was performed. This auditing crew was experienced in forest measurement and highly attentive to detail. Up to 10% of plots were re-measured. All trees were re-measured in each plot. Field crews taking measurements were not made aware of which plots were to be re-measured 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:

1. Convert relevant excel data into FVS format
2. Develop Tree Init and Stand Init tables for use in FVS
3. Load MS access database
4. Develop model using FVS Suppose interface
5. Run models producing tree list and cut list output tables
6. Perform CRM and harvested wood product calculations in excel workbooks
7. Estimate total emissions and reductions in excel workbooks

Finalized original electronic data spreadsheets will be saved and stored within the Green Assets offices and backed up continuously on a server. 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.

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 the Forest Carbon Inventory

Harvest

In the event of a harvest, Green Assets obtains details on the management activities such as location, harvest type, associated volumes and their fate, via communication with the landowner. Green Assets develops a Forest Activity Log summarizing this information. Assessment of forest carbon stocks in harvested areas will utilize either timber mill tickets, appropriate FVS modeling results, or other industry standard methodology, and will occur within one year after harvest.

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

In the event of a natural disturbance, Green Assets obtains details relative to the potential impact on the carbon project via communication with the landowner. If the disturbance affects more than 365 acres (2.5% of the Project Area), Green Assets will assess the potential impacts on Project Area carbon stock estimates in order to determine an appropriate method for carbon accounting. Stands are to be considered affected if they are 10 acres or greater in size and more than 50% of the standing live carbon stocks within the stand are lost. Green Assets will analyze the information provided by the landowner (for the reporting period in which the natural disturbance occurred) to determine if the natural disturbance could possibly result in actual carbon stock losses of either greater than 5% of total Project Area carbon stocks, or more than expected annual forest growth if the project is being verified annually.

If the results of Green Assets' analysis indicate that the natural disturbance could not possibly result in actual carbon stock losses of either greater than 5% of total Project Area carbon stocks, or more than expected annual forest growth for the reporting period in which the natural disturbance occurred if the project is being verified annually, the disturbance will be deemed minor and any minute losses of carbon stocks across affected areas will be accounted for at the next full verification where the on-site inventory will be fully updated via re-measurement.

If the results of Green Assets' analysis indicate that the natural disturbance could possibly result in actual carbon stock losses of either greater than 5% of total Project Area carbon stocks, or more than expected annual forest growth for the reporting period in which the natural disturbance occurred if the project is being verified annually, losses of carbon stocks across affected areas will be accounted for following industry standard procedures.

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(k) of the COP.

Forest Health

The most common forest health concerns to monitor for in the Project Area region are Fusiform rust (*Cronartium fusiforme*), Sirex wood wasp (*Sirex noctilio*), 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 five 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 (*Quercus spp.*) is the alternate host of Fusiform rust.

Sirex woodwasp is an invasive species from Europe, Asia, and North Africa. The female injects a toxic mucus and fungus while laying eggs 10-30 feet up on pole and sawtimber size susceptible pine species. The mucus kills cells from the laying site upward. The fungus feeds on this dead wood and the woodwasp larva feed on the fungus. The larva bore galleries deep into the wood as they grow which makes detection and control more difficult. All native pine species are believed to be at risk while Scots (*Pinus sylvestris*), red (*Pinus resinosa*), and eastern white pine (*Pinus strobus*) are most susceptible.

The southern pine beetle is a native insect found across the southern United States, Mexico, and Central America. It attacks and can kill all species of pines, but prefers loblolly, shortleaf, Virginia (*Pinus virginiana*), pond (*Pinus serotina*), and pitch pines (*Pinus rigida*). Southern pine beetle is the most destructive insect pest of pine in the southern United States. Widespread and severe mortality can occur during epidemics. Adult females bore into the cambium of host trees and begin feeding while releasing a pheromone to attract more beetles. Beetles feed and produce galleries within the cambium girdling and killing host trees. Larvae also feed on cambial tissue after adults lay eggs within feeding galleries. This biology leads to rapid tree mortality and spread of insects during breakouts.

For additional details refer to DLT 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] individual tree parameters.

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 (baseline estimates) or scaling reports/tickets (actual 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 (baseline estimates) or scaling reports/tickets (actual 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 DLT 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: 99.5 MtCO₂e/acre

AC-3 Standing Dead: 2.0 MtCO₂e/acre

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

AC-7 Carbon in in-use forest products: 0 MtCO₂e/acre

AC-8 Forest product carbon in landfills (if applicable): 0 MtCO₂e/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: Addressed in AC-7 and AC-8

D. Provide a summary of inventory confidence statistics.

Inventory confidence statistics were calculated as required by Appendix A, section (k) 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 ($\pm 4.6\%$). As the sampling error equals $\pm 4.6\%$, the associated confidence deduction is equal to 0.0% 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 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 0%
- Wildfire Risk 2%*
- Disease or Insect Outbreak Risk 3%
- Other Catastrophic Event Risk 3%

$$100\% - [(1-1\%) \times (1-0\%) \times (1-0\%) \times (1-0\%) \times (1-0\%) \times (1-2\%) \times (1-3\%) \times (1-3\%)] = 8.71\%$$

*The Offset Project Operator conducts fire risk reduction work on the project area contributing to a lowered fire risk for the entire project area as confirmed in written communication from the fire protection agency who has direct responsibility, in conjunction with the landowner, for fire protection and risk mitigation efforts over the project area. The wildfire risk reduction methodology includes prescribed burning, maintenance of fire breaks, management activities to reduce stand density, and selective herbicide application to limit the buildup of wildfire fuels.

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 5.3.1 of the Protocol, the rate of conversion was estimated based on planning documentation that specifies the timeframe of the conversion at 3 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 anticipated alternative land use for the Project Area was appraised to be \$41,240,000. The fair market value of the current forested land use was appraised to be \$19,450,000. The appraised value of the alternative land use is 112% higher than the appraised value of the current forested land use.

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

Protocol Equation 5.11: If $((VA/VP - 1) > 0.8$, then $ACD = 0$

$((41,240,000/19,450,000)-1) = 1.12$, 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, of the Protocol.

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

For additional details refer to DLT 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.

Attachment H portrays baseline onsite carbon stocks (consolidated) with time depicted on the x-axis and MtCO₂e depicted on the y-axis. Attachment I portrays a diagram of the baseline incorporating all required carbon stocks (separated by pool).

The projected changes in onsite carbon stocks over one hundred years in the baseline scenario are based on the amortization rate specified in conversion planning documentation (complete removal over three years). The initial RP is equal to 182 days, or approximately one-sixth of the timeframe of conversion.

Total baseline stocks (including all pools) as of the end of the first RP equals 1,225,929.6 MtCO₂e. This was computed as the removal of approximately 1/6 (244,380.3 MtCO₂e) of the Project Area's initial onsite carbon stocks at the time of offset project commencement (1,470,309.9 MtCO₂e). The remaining carbon stocks will be harvested during the second through fourth RPs, in accordance with the three-year conversion timeframe and in compliance with Section 5.3.1 of the Protocol (see Attachments H & I for further details).

Actual harvest volumes are expected to range from approximately 0 - 50,000 MtCO₂e annually. All actual harvests will be conducted in accordance with the third-party certified sustainable management plan.

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: 0 MtCO₂e (current RP – BCWPin-use, y)
154,339.3 MtCO₂e (entire baseline period – BCWPin-use, n)

AC-8 Forest Product Carbon in Landfills: 0 MtCO₂e (current RP – BCWPlandfill, y)
122,060.1 MtCO₂e (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:

Reporting Period(s):

Vintage(s):

Number of Credits Issued:

PART X. ATTACHMENTS

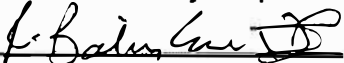
- A. If the answer to Part IV.A is “yes,” provide documentation (e.g., deed of trust, title report, etc.) showing the OPO’s ownership interest in the property and its interest in the trees and standing timber on the property.
If the answer to Part IV.A is “no,” provide documentation supporting the explanation 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 the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015.
- 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 the Compliance Offset Protocol U.S. Forest Projects, June 25, 2015.
- 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: 

PRINTED NAME: Robert Bailey Evans, IV

TITLE: CEO, Green Assets, Inc.

DATE: 11-22-2022