

U.S. FOREST OFFSET PROJECT DATA REPORT
ANNUAL REPORTING PERIOD – ALL PROJECT TYPES

OPR Staff Use Only	Date Report Received:	OPR Tracking Number:	Date Report Reviewed:	OPR Staff Use Only
---------------------------	------------------------------	-----------------------------	------------------------------	---------------------------

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

PART I. ENTITY SUBMITTING REPORT

Is this form being submitted by the Offset Project Operator (OPO) or by the Authorized Project Designee (APD)? Note: The person completing this form should be an OPO/APD employee. ☐ OPO ☒ APD

Date Report Completed: 10-31-2016 12-19-2016 2-6-2017	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 - Lukens Avoided Conversion Project

OPR Project ID#: ACR265	ARB Project ID# (if known): CAFR5205	Offset Project Commencement Date: 4-29-2015
Date of Last Full (On-Site) Verification: 10-7-2016	Reporting Period Start Date: 10-30-2015	Reporting Period End Date: 10-29-2016

Is this report being submitted for a verification year? ☒ Yes ☐ No

Protocol Version for Project Listing: <input type="checkbox"/> October 20, 2011 <input checked="" type="checkbox"/> November 14, 2014	Protocol Version for Project Reporting: <input type="checkbox"/> October 20, 2011 <input checked="" type="checkbox"/> November 14, 2014
--	--

Is this Offset Project Data Report (OPDR) being submitted for the project's initial Reporting Period? If "yes", the entity submitting this report must also submit the information required in section 9.1.1 of the U.S. Forest protocol. To submit that information, an OPO/APD submitting an OPDR may use one of three **Initial Reporting Forms** identified in the question immediately below. ☐ Yes ☒ No

With this Annual OPDR, is any one of the following three U.S. Forest Offset Project Data Report Initial Reporting Period forms also being submitted? ☐ Reforestation ☐ Improved Forest Management ☐ Avoided Conversion

PART III. OPO/APD INFORMATION

A. OPO

OPO Name: Lukens Island Timber Enterprises, LLC		OPO's CITSS ID#: CA 1923	
Mailing Address: P.O. Box 190	City: Newport	State: NC	Zip: 28570
Contact Person: Patrick Joyce	Phone Number: 252-223-3171	Email Address: pat@joyceandassoc.com	

B. APD (if applicable) ☐ No APD/Not Applicable

APD Name: Green Assets, Inc.		APD's CITSS ID#: CA 1420	
Mailing Address: 7655 Market Street, Suite B	City: Wilmington	State: NC	Zip: 28411

Contact Person: Douglas Hunter Parks	Phone Number: 910-821-8165	Email Address: hunter@green-assets.com
--	--------------------------------------	--

PART IV. OFFSET PROJECT ELIGIBILITY REQUIREMENTS

A. Have the Forest Project and associated Project Lands met and been in compliance with all local, state, and federal regulatory requirements during the Reporting Period? If no, provide an explanation of the non-compliance.	<input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No
B. Indicate how the offset project meets the definition of Natural Forest Management per Table 3.2 in the U.S. Forest protocol by completing Questions B1-B4 below: <i>Note: Reforestation projects with deferred inventory and Project Boundaries are still required to complete Questions B1-B4.</i>	
1. Native species: a) Does the project consist of at least 95% native species based on the estimated sum of carbon in the standing live carbon pool? <i>If "no," proceed to question 1b. Otherwise, skip to question B2.</i>	<input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No
b) Describe how the project will result in achieving a 95% native species goal over the project life.	
2. Composition of native species: a) Does the Project Area naturally consist of a mixed species distribution such that no single species' prevalence exceeds the percentage value of standing live carbon shown under the heading 'Species Diversity Index' in the Assessment Area Data File? <i>If "no," proceed to questions 2b and 2c. Otherwise skip to question B3.</i>	<input type="checkbox"/> Yes <input checked="checked" type="checkbox"/> No
b) Explain how the project will demonstrate a trend toward achieving the Species Diversity Index of native species and meet this requirement within 25 years. The species composition requirement will be achieved in the first 25 years of the project by reducing basal area of loblolly pine via thinning. Management actions should reduce relative basal area of loblolly pine from 73% (currently, 2015) to 68% by year 2035. This involves: (1) thinning loblolly pine in the Mixed Forest with Pine stratum to maintain basal area at or below 38.8 ft ² /acre over years 11 to 25, and (2) thinning loblolly pine in the Mature Pine stratum to maintain basal area at or below 55.8 ft ² /acre over years 11 to 25. The analysis conservatively assumes that basal area of other species remains constant over the timeframe.	
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.	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Distribution of age classes/sustainable management: a) Indicate how the project meets the requirement for sustainable management if regeneration or commercial harvesting is either planned or initiated within the Project Area demonstrating sustainable long-term harvesting practices. This applies to all forest landholdings of the Forest Owner(s) (check one of the boxes). <i>The full text associated for the options below is found in section 3.8.1 of the U.S. Forest protocol.</i> <div style="margin-left: 20px;"> <input checked="checked" type="checkbox"/> Third party certification <input type="checkbox"/> Adhere to a renewable long-term management plan <input type="checkbox"/> Employs uneven-aged silvicultural practices & maintain canopy retention averaging 40% across forest <input type="checkbox"/> Not applicable, no commercial harvesting in planned within the project area </div>	
b) On a watershed scale up to 10,000 acres (or the Project Area, whichever is smaller), projects must maintain, or make progress toward maintaining, a maximum of 40% of the project's forest lands in ages that are less than 20 years old. (Areas impacted by Significant Disturbance are exempt from this test until 20 years after reforestation of such areas.) Does the acreage within this project meet this requirement? <i>If "no," proceed to question 3c. Otherwise, skip to question B4.</i>	<input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No
Explain how the project demonstrates continuous progress toward meeting this requirement within the next 25 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? As of the project start date, average stocks of standing dead wood are 0.27 t C/ac,	

equivalent to 1.6% of live stocks. As this is less than 1 t C/ac, the requirement then defaults to the higher 1 t C/ac in standing dead wood. Lying dead wood stocks were assessed qualitatively during the inventory, and were considered low and sparsely distributed (and potentially < 1 t C/ac). In large part this is a legacy of the catastrophic burn in the Mixed Forest with Pine stratum (currently with the lowest standing dead stocks in the project area) which occurred circa 20 years ago, which consumed historic accumulations of coarse woody debris. The project area is in the process of re-accumulating dead wood stocks. Both lying and standing dead wood stocks can be expected to steadily increase over time with the lack of salvage harvesting in the project area, in accordance with the third-party certified sustainable management plan.

C. Has there been a decrease in the standing live carbon stocks within the Project Area over any 10-year consecutive period?

For the Initial Reporting Period, check "No." If "No," skip to Part V. If yes, answer questions C1 and C2.

☐ Yes
☒ No

1. If yes, identify the appropriate option and provide additional documentation.

☐ Decrease is due to the necessity to substantially improve the Project Area's resistance to wildfire, insect, or disease risks. Actions that will be taken to reduce the risks must be documented and the techniques used to improve resistance must be supported by relevant published peer reviewed research.

☐ Decrease is associated with a planned balancing of age classes and is detailed in a long-term management plan that demonstrates harvest levels can be permanently sustained over time and that is sanctioned and monitored by a state or federal agency. This documentation must be submitted at the time of the Project's Listing.

☐ Decrease is part of normal silviculture cycles for forest ownerships less than 1,000 acres.

Note: Documentation is required to be submitted. See Section X for details.

2. Has the Project's inventory of standing live carbon stocks fallen below the Project's baseline standing live carbon stocks, or 20 percent less than the Project's standing live carbon stocks at the project's initiation (whichever is higher)?

☐ Yes
☒ No

PART V. PROJECT CHANGES

A. Is all the information in the offset project listing still accurate?

If "Yes," skip to question B.

☐ Yes
☒ No

1. Does Part II above report an updated Offset Project Commencement Date, Reporting Period Start Date, and/or Reporting Period End Date?

☒ Yes
☐ No

2. Does Part III above report updated OPO/APD Information?

☐ Yes
☒ No

3. Are there updates to the Land Ownership listing information?

If "Yes," provide updates below (and/or provide as separate attachment):

☐ Yes
☒ No

4. Are there updates to the Offset Project Area listing information?

If "Yes," provide updates below (and/or provide as separate attachment):

Part V.A - The Supersection was added and Assessment Areas updated at the direction of the verifier.

Part V.F - Specified site index for each stratum based on NRCS data.

Part V.I - Species composition and age class were updated based on current forest inventory data.

Part VI.C.2 - Updated to demonstrate how the species diversity requirement is being met.

Part VI.C.4 - Updated to demonstrate how the structural elements requirement is being met and to confirm that a third-party sustainable management plan is in place.

Part VI.G - Clarified a third-party certified sustainable management plan is in place.

☒ Yes
☐ No

5. Are there updates to the Carbon Stock Inventory listing information?

If "Yes," provide updates below (and/or provide as separate attachment):

Part VII.A - Inventory methodology was clarified per the verifier's request and is located in "Lukens_OPDR_Attachment_X_10052016.pdf".

Part VII.B - Calculation methodology was clarified per the verifier's request and

☒ Yes
☐ No

<p>is located in "Lukens_OPDR_Attachment_X_10052016.pdf".</p> <p>Part VII.C - Carbon stocks were updated to reflect recent forest inventory data and de-grown to the project commencement date at the direction of the verifier. Calculations can be found in "Lukens eq 6.1 calcs 06Feb2017.xls".</p> <p>Part VII.D - Confidence statistics were updated to reflect recent forest inventory data and are located in "Lukens 2015 inventory stats REV MAY2016.xls".</p> <p>Part VII.E - Reversal risk rating was updated to reflect reduced wildfire risk.</p>		
<p>6. Are there updates to the Offset Project Baseline listing information? <i>If "Yes," provide updates below (and/or provide as separate attachment):</i></p> <p>Part VIII.B - Rate of conversion was updated based on "Lukens_Conversion_Planning_Documentation.pdf".</p> <p>Part VIII.E - The modeling plan was updated to clarify that the Forest Vegetation Simulator (FVS) Southern Variant growth and yield model is used and calibrated using regional options available.</p> <p>Part VIII.F - Baseline carbon stocks were updated based on recent inventory data and the updated conversion timeframe.</p> <p>Part VIII.I - Carbon stocks stored in harvested wood products in the baseline were updated to reflect recent inventory data.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>7. Are there any other updates to the listing information? <i>If "Yes," provide updates below (and/or provide as separate attachment):</i></p> <p>Attachment G has been updated to clarify the property appraisal.</p> <p>Attachment H has been updated to reflect recent inventory data and modeling.</p> <p>Attachment I has been updated to reflect recent inventory data and modeling.</p>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>B. Have there been any changes in the status of the Forest Owner including, if applicable per Section 3.8.1 of the U.S. Forest protocol, the acquisition of new forest landholdings?</p>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>If yes, describe the changes. Include the sale or transfer of any portion of land within Project Area.</p>		
<p>C. Optional: Has a Qualified Conservation Easement (QCE) been recorded since the previous Reporting Period? <i>If this is for the Initial Reporting Period, check "Yes" if a QCE has been recorded since Listing, check "No" otherwise. If "No," skip to Question D.</i></p>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Optional: If yes, provide the date the QCE was recorded. Also provide a copy of the QCE to ARB.</p>		
<p>D. Optional: Have there been any modifications to the inventory methodology of any carbon pools included in the project's boundary since the last Reporting Period? <i>All projects are required to document any modifications to inventory methodologies in a change log and obtain approval in advance. Qualifying Reforestation Projects may defer answering this question until the second full verification. If this is for the Initial Reporting Period, check "No," unless there have been modifications since project listing, in which case, check "Yes."</i></p>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Defer
<p>Optional: If yes, describe the modifications.</p>		
<p>PART VI. REVERSALS</p>		
<p><i>Note: Qualifying Reforestation Projects may defer items marked with an asterisk until the second verification.</i></p>		
<p>A. Has a reversal occurred during the Reporting Period covered by this report? <i>If this is for the Initial Reporting Period, check "No."</i> <i>If "No," skip to question B.</i></p>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Has the reversal been classified as intentional or unintentional?</p>		<input type="checkbox"/> Intentional <input type="checkbox"/> Unintentional
<p>Optional: Date(s) Reversal Occurred:</p>	<p>Optional: Estimated Quantity of Reversal in Units of MtCO₂e:</p>	
<p>Describe and explain the reversal.</p>		
<p>What is the status of the compensation for the reversal?</p>		

B. For verification years <u>ONLY</u>: Has a reversal occurred during the previous six years? <i>If this is for the Initial Reporting Period, check "No."</i>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has the reversal been classified as intentional or unintentional?		<input type="checkbox"/> Intentional <input type="checkbox"/> Unintentional
Optional: Date(s) Reversal Occurred:	Optional: Estimated Quantity of Reversal in Units of MtCO₂e:	
Describe and explain the reversal.		
What is the status of the compensation for the reversal?		
C. What is the Project's reversal risk rating?		Risk Rating: 11.1% <input type="checkbox"/> Defer
What is the Project's fire risk based on level of fuel treatments?		<input type="checkbox"/> High (2%) <input checked="" type="checkbox"/> Medium (2.652%) <input type="checkbox"/> Low (3.304%) <input type="checkbox"/> None (4 %)

PART VII. HARVEST VOLUMES AND CARBON IN WOOD PRODUCTS

Note: Qualifying Reforestation Projects may defer items marked with an asterisk until the second verification.

A. *Provide an estimate of the harvest volume for this Reporting Period. This estimate refers to the volume of trees harvested for wood products only.	Harvest Volume (lbs): 0	<input type="checkbox"/> Defer
B. *Indicate the estimated mill efficiency for wood products produced from the Project Area following requirements in Appendix C, Section C.2.	Mill Efficiency (percent): N/A	<input type="checkbox"/> Defer
C. *Provide an estimate of carbon in harvested wood products associated with the harvest volumes reported for this Reporting Period.	Carbon estimate (MtCO₂e): N/A	<input type="checkbox"/> Defer

PART VIII. CARBON STOCKS

In the appropriate columns below, enter the name/identification of all required carbon pools and its estimated carbon stock (MtCO₂e) for the current Reporting Period.

For verification years ONLY: Report the estimated carbon stock for every year since the Project's last verification.

☐ Defer

Reforestation Projects may defer full inventory of carbon stocks not affected by site preparation until second verification. If deferring, carbon stocks affected by site preparation must still be reported below.

Carbon Pool <i>Identify the pool by the SSR code (e.g., AC-1) and description (Standing live carbon) in Tables 5.1-5.3.</i>	Current Reporting Period	Current Reporting Period minus 1 year	Current Reporting Period minus 2 years	Current Reporting Period minus 3 years	Current Reporting Period minus 4 years	Current Reporting Period minus 5 years
	10/30/2015 to 10/29/2016	4/29/2015 to 10/29/2015	/ to /	/ to /	/ to /	/ to /
AC-1 Standing Live	283,421	259,718				
AC-3 Standing Dead	4,059	4,059				
AC-6 Soil	NA	NA				
AC-7 Carbon in in-use forest products	0	0				
AC-8 Forest product carbon in landfills	0	0				
AC-13 Biological emissions from clearing of forestland outside the Project Area	0	0				
	Addressed in	Addressed in				

AC-17 Biological emissions from decomposition of forest products	AC-7 & AC-8	AC-7 & AC-8				
--	----------------	----------------	--	--	--	--

PART IX. BASELINE CARBON STOCKS

In the appropriate columns below, enter the name/identification of all required carbon pools and its estimated baseline carbon stock (MtCO₂e) for the current Reporting Period.

For verification years ONLY: Report the estimated baseline carbon stock for every year since the Project's last verification.

☐ Defer

Reforestation Projects may defer estimating baseline carbon stocks not affected by site preparation until a full inventory is obtained. If deferring, baseline estimates of carbon stock affected by site preparation must still be reported below.

Carbon Pool Identify the pool by the SSR code (e.g., AC-1) and description (Standing live carbon) in Tables 5.1-5.3.	Current Reporting Period 10/30/2015 to 10/29/2016	Current Reporting Period minus 1 year 4/29/2015 to 10/29/2015	Current Reporting Period minus 2 years / to /	Current Reporting Period minus 3 years / to /	Current Reporting Period minus 4 years / to /	Current Reporting Period minus 5 years / to /
AC-1 Standing Live	0	168,442				
AC-3 Standing Dead	0	2,706				
AC-6 Soil	NA	NA				
AC-7 Carbon in in-use forest products	13,370	6,685				
AC-8 Forest product carbon in landfills	11,860	5,930				
AC-13 Biological emissions from clearing of forestland outside the Project Area	0	0				
AC-17 Biological emissions from decomposition of forest products	Addressed in AC-7 & AC-8	Addressed in AC-7 & AC-8				

PART X. QUANTIFICATION FACTORS

In the appropriate column below, enter the value for the current Reporting Period.

For verification years ONLY: Report the estimated values for every year since the Project's last verification.

Note: Qualifying Reforestation Projects may defer items marked with an asterisk until the second verification.


	Current Reporting Period 10/30/2015 to 10/29/2016	Current Reporting Period minus 1 year 4/29/2015 to 10/29/2015	Current Reporting Period minus 2 years / to /	Current Reporting Period minus 3 years / to /	Current Reporting Period minus 4 years / to /	Current Reporting Period minus 5 years / to /
A. Secondary Effects (MtCO ₂ e)	-6,950	-2,613				
B. *Confidence Deduction (%) <input type="checkbox"/> Defer	7.6%	7.6%				
C. *Forest Buffer Account Contribution (MtCO ₂ e) <input type="checkbox"/> Defer	-18,474	-7,731				
D. For Avoided Conversion Projects <u>ONLY</u> : What is the Project's uncertainty discount factor?					0%	<input type="checkbox"/> N/A

PART XI. TOTAL NET GHG REDUCTIONS AND GHG REMOVAL ENHANCEMENTS (QR_y)

In the appropriate column below, enter the total net GHG Reductions and GHG Removal Enhancements (MtCO₂e) for the current Reporting Period and all Reporting Periods since the Project's last full verification.
For verification years ONLY: Report the total net GHG Reductions and GHG Removal Enhancements for every year since the Project's last verification.

Current Reporting Period	Current Reporting Period minus 1 year	Current Reporting Period minus 2 years	Current Reporting Period minus 3 years	Current Reporting Period minus 4 years	Current Reporting Period minus 5 years
	4/29/2015 to 10/29/2015	/ to /	/ to /	/ to /	/ to /
165,916	59,877				

PART XII. ATTESTATION AND OPO/APD SIGNATURE

DHP Initial	I certify under penalty of perjury under the laws of the State of California the GHG reductions and/or GHG removal enhancements for	
	Project Name: Green Assets - Lukens Avoided Conversion Project	
	from	Reporting Period Start Date: 10/30/2015 to Reporting Period End Date: 10/29/2016
	are measured in accordance with the Compliance Offset Protocol	
	Check the appropriate Compliance Offset Protocol: <input type="checkbox"/> U.S. Forest Projects, October 20, 2011, <input checked="" type="checkbox"/> U.S. Forest Projects, November 14, 2014, and all information required to be submitted to ARB is true, accurate, and complete.	
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 duly authorized to represent and legally bind the Offset Project Operator (OPO) on all matters related to this form.		
SIGNATURE: 		PRINTED NAME: Douglas Hunter Parks
TITLE: Founder, Green Assets, Inc.		DATE: 2-6-2017