# American Carbon Registry (ACR)
# Project Validation and Verification Report

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|---|---|
| **Offset Project Name:** Lower Green Swamp Preserve Improved Forest Management Project | |
| **ACR Project ID** | ACR483 |
| **American Carbon Registry Standard** | Version 5.1 |
| **Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands** | Version 1.3 |
| **Reporting Period:** | 01 January 2018 – 31 December 2018 |
| **Aster Global Project Number:** | VO19024.00 |
| **Report Date:** | 21 January 2020 |

| **Project Proponent:** | **Project Consultant:** |
|---|---|
| **Name:** Hillsborough County/CELMD<br>**Contact:** John Turbiville, Jr., Director<br>**Phone:** (813) 672-7876<br>**Email:** turbiville@hillsboroughcounty.org<br>**Mailing Address:** 10940 McMullen Road Riverview, FL 33569 | **Name:** The Climate Trust<br>**Contact:** Julius Pasay, Forest and Grassland Asset Manager<br>**Phone:** (503) 238-1915<br>**Email:** jpasay@climatetrust.org<br>**Mailing Address:** 80 SE Madison St., Suite 420 Portland, OR 97214 |
| **Technical Consultant:** | **Offset Verification Body:** |
| TerraCarbon LLC<br>David Shoch<br>+1 (434) 326-1144<br>david.shoch@terracarbon.com<br>707 E. Jefferson Street<br>Charlottesville, VA 22902 | Aster Global Environmental Solutions, Inc.<br>Shawn McMahon<br>3800 Clermont St. NE, North Lawrence, Ohio 44666<br>330-294-1243 ext. 103<br>smcmahon@asterglobal.com |

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# 1 Executive Summary

Aster Global Environmental Solutions, Inc. (Aster Global) prepared this validation /verification report in accordance with the outlined requirements of the American Carbon Registry's (ACR) Standard. Aster Global presents validation and verification findings of the *Lower Green Swamp Preserve Improved Forest Management Project* (hereafter, referred to as "*Project*") – prepared by Hillsborough County/CELMD (hereafter referred to as "*Project Proponent*"). The project validation and verification were conducted as part of ACR's program requirements for GHG offset projects.

By ACR definition, the project is considered an improved forest management project (IFM). Project lands are located within Hillsborough County, Florida. As stated in Section A5 of the GHG Plan, the project is "managed for the conservation, protection and enhancement of the local and regional natural resources, to extend the regional wildlife corridor, for public outdoor recreation that is compatible with the conservation, protection and enhancement of the site; and for continued cattle ranching and other revenue-producing activities compatible with science-based natural resource management."

The GHG Project Plan validation and implementation verification included carbon sequestered through IFM on one contiguous tract (5,242 acres). The project asserts net emissions removals (sequestration) of 34,662 MtCO2e for the reporting period (01 January 2018 – 31 December 2018) and 302,625 over the first crediting period from January 1, 2018 to December 31 2037.

The validation/verification objective included an assessment of the likelihood that implementation of the planned GHG project would result in the GHG emission removal/ enhancements as stated by the project developer (ISO 14064-3:2006). The objective was to ensure that the project was in compliance with the ACR Standard the ACR Validation and Verification Standard, and the selected methodology criteria. Aster Global assessed the GHG emission removals of the IFM project.

Aster Global confirms all validation and verification activities including objectives, scope and criteria, level of assurance and the GHG Project Plan's adherence to the ACR Standard (and validated GHG Project Plan as documented in this report, are complete and concludes without any qualifications or limiting conditions that the *Project* meets the requirements of ACR.

The GHG assertion provided by Hillsborough County/CELMS and verified by Aster Global has resulted in the net GHG emission removal of 34,662 MtCO2 equivalents by the project during the verification period/reporting period (01 January 2018 – 31 December 2018).

# 2 Introduction

This validation /verification report is prepared in accordance with the outlined requirements of the American Carbon Registry's (ACR) Standard. Aster Global presents validation and verification findings of the *Project* – prepared by the *Project Proponent*. The project validation and verification were conducted as part of ACR's program requirements for GHG offset projects (Improved Forest Management). Aster Global is accredited by the American National Standards Institute under ISO14065:2013 for greenhouse gas validation and verification bodies including ISO 14064-3:2006, ISO 14065:2013, and validation/verification of assertions at the project level for Land Use and Forestry (Group 3) and is approved to validate/verify for ACR. Please note that this project was originally contracted and started under Environmental Services, Inc., but was transferred to Aster Global when the ANSI accreditation and company was transferred on 24 May 2019.

The GHG Project Plan validation and implementation verification included carbon sequestered through IFM on one contiguous tract (5,242 acres). The project asserts net emissions removals (sequestration) of 34,662 MtCO2e for 2018.

## 2.1 Contact Information – Roles and Responsibilities

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|---|---|
| **Project Owner /Project Proponent:**<br>Hillsborough County/CELMD | John Turbiville, Jr., Director<br>Phone: (813) 672-7876<br>Email: turbiville@hillsboroughcounty.org |
| **Accredited V/V Body:**<br>Aster Global Environmental Solutions, Inc. | • Shawn McMahon – Lead Validator/Verifier (smcmahon@asterglobal.com / 330-294-1242)<br>• Caitlin Sellers – Validation/Verification Team Member (csellers@asterglobal.com / 330-294-1242)<br>• Eric Jaeschke – Validation/Verification Team Member (ejaeschke@asterglobal.com / 330-294-1242)<br>• Matthew Perkowski – Senior Internal Reviewer (mperkowski@asterglobal.com / 330-294-1242)<br>• Janice McMahon – QA/QC (jmcmahon@asterglobal.com / 330-294-1242)<br>• Aaron Holley – Validation/Verification Team Member (no longer with Aster Global) |

## 2.2 Project Description

By ACR definition, the *Project* is considered an improved forest management project (IFM). Project lands are located entirely within Hillsborough County, Florida. As stated in Section A5 of the GHG Plan, the project is "managed for the conservation, protection and enhancement of the local and regional natural resources, to extend the regional wildlife corridor, for public outdoor recreation that is compatible with the conservation, protection and enhancement of the site; and for continued cattle ranching and other revenue-producing activities compatible with science-based natural resource management."

## 2.3 Objective

The GHG Project Plan validation/verification objective included an assessment of the likelihood that implementation of the planned GHG project would result in the GHG emission removal/ enhancements as stated by the project developer (ISO 14064-3:2006). The objective was to ensure that the project was in compliance with the ACR Standard, and the ACR Verification Standard criteria. Aster Global assessed the GHG emission removals of the IFM project.

## 2.4 Criteria

The criteria followed by Aster Global included ISO 14064-3, ISO 14065, and the validation/verification guidance documents provided by ACR located at http://www.americancarbonregistry.org/carbon-accounting/standards. These documents included:

- *ACR Carbon Registry Standard (v5.1)*
- *ACR Validation and Verification Standard (v1.1)*
- *Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands version 1.3*
- *ACR Tool for Risk Analysis and Buffer Determination v1.0*

## 2.5 Scope

The scope of the validation/verification generally included the GHG Project Plan and eligibility requirements; GHG project and baseline scenarios; physical infrastructure, activities, technologies and processes of the GHG project; GHG sources, sinks and/or reservoirs; types of GHG's; and time periods covered. The geographic scope was defined by the project boundary, which included the carbon reservoir types, management activities, growth and yield models, inventory program, and contract periods. The scope of the *Project* is defined below.

| | |
|---|---|
| Baseline Scenario | The baseline scenario represents an aggressive harvest regime, targeted to maximize net present value at a 4% discount rate, typical of practices in the project region. Baseline practices involve clearcuts and conversion to slash pine plantations in hardwood and pine stands and thinnings in hardwood streamside management zones (SMZs). |
| Activities/ Technologies/ Processes | Improved Forest Management utilizing the ACR methodology for Non-Federal U.S. Forestlands. |
| Sources/sinks/ Reservoirs | Carbon Pools:<br>Above-ground biomass<br>Below-ground biomass<br>Standing dead wood<br>Harvested wood products<br><br>Sources:<br>Burning of biomass<br>Market leakage |
| GHG Type | $CO_2$ and $CH_4$ |
| Project Location | Project Start Date: 01 January 2018<br>Project Crediting Period: 01 January 2018 –31 December 2038<br>Verification Period: 01 January 2018 – 31 December 2018 |
| Project Boundary and Time Period | 5,242 acres of bottomland mixed hardwood forest, cypress domes, and pine flatwood in the Lower Green Swamp Preserve, Hillsborough County, Florida. |

## 2.6 Level of Assurance

The level of assurance was used to determine the depth of detail that the validator/verifier (Aster Global) placed in the validation and verification plan to determine if there are any errors, omissions, or misrepresentations (ISO 14064-3:2006). Aster Global selected samples of data and information to be verified to provide reasonable assurance and to meet the materiality requirements of the project (ACR Validation and Verification Standard). ACR considers verification to be a risk-based process where the verifier examines a sufficient amount of data and uses the verifier's professional judgment to provide a reasonable assurance.

## 2.7 Materiality

Materiality is a concept that the individual or aggregation of errors, omissions, and misstatements could affect the GHG assertion and the decisions of the intended users. Materiality was also used as part of the verification sampling plan design, to determine the type of verification processes used by Aster Global to minimize the risk of not detecting a material misstatement. ACR's materiality threshold is +/-5% of the GHG project's emission reductions or removal enhancements. In other words, ACR requires that any

differences between emission reductions/removals claimed by the project proponent and estimated by the verifier be immaterial (less than +/- 5%). Individual or aggregation of errors or omissions greater than the ACR materiality threshold of +/-5% require re-stating before verification statements can be accepted by ACR.

# 3 Validation Process and Findings

## 3.1 Validation Process

The validation process closely followed the guidance provided by The American Carbon Registry, Standard the ACR Validation and Verification Standard, ISO14064-3, ISO 14065, and the Aster Global Management System and Management System Manual, Section V.5.

As defined by ISO 14064-3:2006 (E), "validation is the systematic, independent and documented process for the evaluation of a greenhouse gas assertion in a GHG project plan against agreed validation criteria". Specifically, the project validation included the review of the requirements outlined in the ACR Standard. The assessment included the following items: eligibility criteria, baseline approach, additionality, project boundary, emissions, leakage, selected methodology, data and parameters, monitoring plan design, the process of uncertainty determination and environmental impacts.

## 3.2 GHG Project Plan

The *Project's* GHG Plan was found to be in compliance with ACR's Standard v5.1.

### 3.2.1 ACR Standard Requirements/Eligibility

The project was found to be in compliance with ACR's project eligibility requirements set forth in ACR's Standard. Specifically, the GHG Project Plan outlined and described the following aspects of the project:

- The project started 01 January 2018, which is after the earliest allowable start date of 01 November 1997
- The *Project Proponent* commits to a minimum project term of 40 years, meeting the ACR project term requirement.
- Only direct emission mitigation is counted.
- Ownership of offsets is clear.
- Ownership titling of land is clear.
- Project lands are eligible because they are eligible to be harvested by the *Project Proponent*
- Project lands meet the definition of "forestland"

### 3.2.2 Approved Methodology

The project utilized the following methodology and tools: Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands, version 1.3, and the ACR Tool for Risk Analysis and Buffer Determination, version 1.0.

Aster Global confirms that the project meets the applicability requirements of the methodology under which the project was validated and verified:

- The project occurs on non-federal U.S. forestlands
- There is clear title to land and timber rights

- There is clear title to offsets
- The project area is able to be harvested by the *Project Proponent*
- The project area meets the definition of Forestland

## 3.3 Validation Findings and Conclusions

The Aster Global validation team identified non-conformity reports (NCRs) and clarifications (CL). All were addressed satisfactorily by the *Project Proponent* during the project validation process. These NCR's and CL's provided needed clarity to ensure that the GHG Project Plan was in compliance with ACR's Standard. Methodological equations and computational approach for uncertainty were examined and confirmed to be consistent with the detailed requirements of the methodology for the baseline and project scenarios and overall project computations.

The complete list of validation findings and resolutions has been compiled and located in Appendix A.

Aster Global confirms all validation activities including objectives, scope and criteria, level of assurance and the GHG Project Plan's adherence to the ACR Standard as documented in this report, are complete and concludes without any qualifications or limiting conditions that the Project meets the requirements of ACR's Standard.

# 4 Verification Process, Findings, and Conclusions

The verification process closely followed the guidance provided by ACR Standard, the Validation and Verification Standard, ISO14064-3 and ISO 14065, and the Aster Global Management System and Management System Manual, Section V.5.

As defined by ISO 14064-3:2006 (E), "verification is the systematic, independent and documented process for the evaluation of a greenhouse gas assertion in a GHG project plan against agreed verification criteria". Specifically, the project verification included the review of the requirements outlined in the ACR Standard. The assessment included the following items: eligibility criteria, baseline approach, additionality, project boundary, emissions, leakage, quantification of GHG reductions/removals, monitoring, data and parameters, and adherence to the project-level principals (relevance, completeness, consistency, accuracy, transparency, conservativeness).

Aster Global's verification was generally broken down into four parts: desktop assessment, site visit, quantitative review, and meetings/interviews.

## 4.1 Desktop Assessment

Aster Global reviewed the Project Plan to assess conformance with the requirements of the ACR Standard Key factors that impacted the reported emissions reductions were identified and a Verification and Sampling Plan was created to focus on the critical elements presenting potential risk for errors in reported data. These elements included:

- Implementation of appropriate and adequate eligibility criteria, by reviewing documentation and field conditions indicative of the pre-project conditions of the project area, and compliance with all eligibility requirements of the Forest Carbon Project Standard.
- Implementation of appropriate and adequate baseline approach, by reviewing documentation and field conditions indicative of the most-likely without-project scenario.

- Implementation of appropriate and adequate approach/tools for additionality, by reviewing documentation and field conditions which reflect the most-likely without-project scenario, as it deviates from the with-project scenario.
- Implementation of appropriate and adequate approach to project boundary definitions, by reviewing documentation of project boundaries and ownership status, and field conditions relative to clearly delineated ownership extents and control over management activities within the project area.
- Implementation of appropriate and adequate approach to baseline emissions calculations, by reviewing documentation and field conditions which reflect the most-likely without-project scenario and the emissions resulting from that scenario.
- Implementation of appropriate and adequate approach to inventory calculations and modeling, by reviewing documentation, reviewing conversion factors, and re-running selected calculations and modeling
- Implementation of appropriate and adequate monitoring, by confirming the application of approved/acceptable monitoring practices in the field, and the appropriate handling and analysis of field data once collated.
- Implementation of appropriate and adequate approach to data and parameters, by reviewing data handling practices, and reviewing documentation at each step of the data analysis procedure.
- Implementation and adherence to project-level principles, by reviewing documentation and discussing the application of project-level principles with core staff.

A complete list of documents received and reviewed is located in Appendix B.

## 4.2 Site Visit

Following the initial desk review, Aster Global conducted an on-site assessment of the project lands on 20-24 May 2019. The site visit was used to review project records with representatives of the *Project Proponent*, discuss the calculation of carbon pools and sinks, visit random portions of the ownership for reconnaissance and ground-truth of the submitted data, and monitoring approach. The verification sample size of 14 plots included approximately 10% of the total inventoried plots.

During the site visit, the following plots were selected for remeasurement as part of field verification:

| Plot |
|---|
| 4 |
| 31 |
| 37 |
| 39 |
| 54 |
| 59 |
| 61 |
| 65 |
| 67 |
| 68 |
| 98 |
| 116 |
| 118 |
| BU2 (133) |

Field review included the following aspects:

- Accuracy of plot locations, including any plot relocation or dropping
- Adherence to stratification rules outlined by the project's documentation
- Adherence to plot measurements methods outlined by the project's documentation and alignment with common professional practice
- Boundary delineation
- Feasibility of the baseline scenario

The plot remeasurements made by Aster Global were utilized to calculate carbon on the applicable pools. This was compared to the project's carbon stocks in a paired two sample t-test for means. The t-test provided evidence that the mean carbon stocking value produced by the *Project Proponent* on the fourteen sample plots was not statistically dissimilar to the mean carbon stocking value produced by Aster Global on the same plots. The entirety of the site visit paired with the desk review provided reasonable assurance that the carbon inventory was implemented in an acceptable and accurate manner.

## 4.3 Quantitative Review

Aster Global focused on the quantitative analyses undertaken by the *Project Proponent* to assess the carbon pools accounted for by the project (above-ground biomass, below-ground biomass, standing dead wood, and harvested wood products). Aster Global's review included an assessment of the primary quantitative data supporting the GHG assertion including the direct sampling of biomass carbon and the use of modeling, as well as the project proponents use of allometric methods and equations for calculating tree biomass, and the calculation of ERTs.

## 4.4 Meetings/Interviews

During the course of the project verification, Aster Global and the *Project Proponent* held multiple meetings. All other correspondence occurred via email. The details of the meetings are briefly described in the table below.

| Date | Attendees | Topics Discussed |
|---|---|---|
| 09 May 2019 | Aaron Holley<br>Shawn McMahon<br>Julius Pasay<br>Ben Rifkin<br>David Shoch | Opening Meeting, preliminary review of verification and sampling plan, review of travel logistics, project timeframes and deadlines. |
| 20 May 2019 | Aaron Holley<br>Julius Pasay<br>Ben Rifkin | Field Verification Opening Meeting<br>- opening meeting for the site assessment including general introductions, review of verification and sampling plan if modifications are necessary, discussion of verification finding/resolutions to date. |
| 23 May 2019 | Aaron Holley<br>Julius Pasay<br>Ben Rifkin | Field Verification Closing Meeting<br>- closing meeting for the site assessment including general site visit findings, comments and questions on the validation/verification process, timing. |

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|---|---|---|
| 11 June 2019 | Aaron Holley<br>Ben Rifkin<br>David Shoch | Meeting to review calculations/modeling |
| 21 January 2020 | Eric Jaeschke<br>Ben Rifkin<br>Julius Pasay | Closing Meeting<br>- Review of draft validation/verification report<br>-Next steps<br>- Request feedback on process |

## 4.5 Verification Milestones

| Project/Verification Activity | Date |
|---|---|
| ACR approval of ACR-Specific COI Form | 22 April 2019 |
| Submission of Verification and Sampling Plan to *Project Proponent* and approval | 09 May 2019 |
| Opening meeting with *Project Proponent* | 09 May 2019 |
| Field Verification | 20-23 May 2019 |
| Corrective actions/clarification submitted | 05 August 2019 and 24 October 2019 |
| Aster Global completes Review | 16 January 2020 |
| Aster Global finalizes report and submits to ACR and *Project Proponent* | 21 January 2020 |

## 4.6 ACR Forest Carbon Project Standard Requirements

### 4.6.1 Eligibility Requirements

The *Project* is an IFM project that is intended to create additional carbon stocks in the project area through establishing tree cover on land that has been in agricultural for decades. The *Project* is in compliance with ACR's Standard. Specific details are located in the Validation portion of this report.

### 4.6.2 Additionality

Aster Global confirms that the *Project* conducted the proper additionality analysis and conforms to both the methodology additionality requirements and ACR's Three-Prong Additionality Test. The project proponent sufficiently demonstrated in the GHG Project Plan and through the verification process that as of the project start date that the project activities exceed enforced laws and regulations, exceed common practice in the geographic region and forest type and faced a financial implementation barrier.

### 4.6.3 Permanence and Risk Mitigation

The *Project Proponent* commits to a 20-year initial baseline period. Aster Global confirmed that the *Project Proponent* adequately addressed other potential causes of unintentional reversals including tree death from wildfire, disease, drought, or wind.

The *Project Proponent* utilized the ACR-approved risk assessment tool. Aster Global reviewed and assessed the implementation and outputs of the tool provided by the project proponent and agrees with the calculated buffer withholding of 24%.

### 4.6.4 Baseline and Leakage

Aster Global confirms the project baseline as an aggressive harvest regime, targeted to maximize net present value at a 4% discount rate, typical of practices in the project region. The baseline practice involves clearcuts, staged over 5 years, and conversion to slash pine plantations in hardwood and pine stands and thinning treatments in hardwood streamside management zones (SMZs. This common practice baseline scenario of loblolly plantation conversion was noted in the area by Aster Global while on the site visit. The final baseline scenario was calculated as the maximization of NPV of plausible harvest regimes.

The *Project Proponents* accounted for market leakage by applying a default market leakage discount factor of 40%, per the methodology requirements as project activities decrease total wood products produced by the project relative to the baseline by 25% or more over the Crediting Period. The calculation of this default market leakage discount factor of 40% was confirmed by Aster Global through independent data check. The methodology considers any decrease in production would be transferred to forests of a similar type.

### 4.6.5 Monitoring

Aster Global confirmed the appropriateness and implementation of the project monitoring plan, which details monitored data and parameters, measurements, timing, and data storage procedures.

### 4.6.6 Community and Environmental Impacts

Aster Global confirms the project's net positive community and environmental impacts and co-benefits including avoiding conversion of bottomland hardwood and pine forest to commercial slash pine plantations, thereby mitigating risks to habitats of threatened and endangered species within the Lower Green Swamp Preserve.

### 4.6.7 Stakeholders Comments

While the community around the Lower Green Swamp Preserve does not rely on the property for livelihood, the project addressed stakeholder comments sufficiently. The proponents illustrated that public input on management of the Lower Green Swamp Preserve is considered through public meetings. Stakeholder consultation was most recently considered during updates to the forest management plan for Lower Green Swamp.

### 4.6.8 GHG Emissions Reduction and Removal Enhancements (ERTs)

| GHG Reductions or Removals | Units |
|---|---|
| Baseline Emissions / Reductions | 389,200 MtCO2e |
| Project Emissions | (10,466) MtCO2e |
| Leakage | 23,109 MtCO2e |
| Uncertainty Deduction Rate | 0%[1] |
| Buffer Pool Contribution | 8,320 MtCO2e[2] |

[1] Please note that the uncertainty was calculated as 7.8% but was below the 10% ACR threshold.

[2] Please note that the risk buffer of 24% was not deducted, as project elected to source risk from external source.

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| 2018 GHG emission removals total ($tCO_2e$) | 34,662 MtCO2e |
| Total Emission Reduction Tonne(s) (ERTs) | 34,662 ERTs |

## 4.7 Verification Findings

The Aster Global verification team identified non-conformity reports (NCRs) and clarifications (CL). All were addressed satisfactorily by the *Project Proponent* during the project validation and verification process. These NCRs and CLs provided needed clarity to ensure that the project was implemented in accordance to the approved methodology and was in compliance with ACR's Standard.

The complete list of verification findings and resolutions has been compiled and located in Appendix A.

## 4.8 Verification Results/Conclusions

Aster Global confirms all validation and verification activities including objectives, scope and criteria, level of assurance and the GHG Project Plan's adherence to the ACR Standard (and validated GHG Project Plan as documented in this report, are complete and concludes without any qualifications or limiting conditions that the *Project* meets the requirements of ACR.

The GHG assertion provided by Hillsborough County/CELMS and verified by Aster Global has resulted in the net GHG emission removal of 34,662 MtCO2 equivalents by the project during the verification period/reporting period (01 January 2018 – 31 December 2018).

**Submittal Information**:

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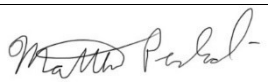
|---|---|
| Report Submitted to: | Hillsborough County/CELMD<br>The Climate Trust<br>American Carbon Registry |
| Report Submitted by: | Aster Global Environmental Solutions, Inc.<br>3800 Clermont St. NW<br>North Lawrence, Ohio 44666 |
| Aster Global Lead Validator/Verifier Name and Signature: |  <br>Shawn McMahon<br>Lead Verifier |
| Aster Global Internal Reviewer Name and Signature: |  <br>Matthew Perkowski<br>Internal Reviewer |
| Aster Global Sr. Vice President/Technical Director Name and Signature |  <br>Janice McMahon<br>President |
| Date: | 02 March 2020 |

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# Appendix A – Aster Global's Validation and Verification Findings

| Item Number | 1 |
|---|---|
| **American Carbon Registry Standard Version 5.1, July 2018** | The Project Proponent shall reduce, as far as is practical, uncertainties related to the quantification of GHG emission reductions or removal enhancements. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | Project Plan |
| **Aster Global Findings - Initial** | In the parameters section of the PP there are several parameters missing text for uncertainty (i.e. specified uncertainty or "none"). |
| **Round 1 NCR/CL/OFI** | NCR: Please provide guidance for uncertainty in all parameters in section D1, even if the appropriate response is "none" |
| **Round 1 Response from Project Proponent** | Uncertainty for parameters Cp,HWP,t and BSp,t were added to section D of the PP |
| **Aster Global Findings - Round 1** | Although it would be further helpful to have "Reporting Procedure" for Cp,HWP,t and BSp,t (documenting where Project Proponent will report these items for ease in future verifications), the "Data Uncertainty" fields have been included as "None." This item is addressed. |

| Item Number | 2 |
|---|---|
| **American Carbon Registry Standard Version 5.1, July 2018** | Any project that seeks to register non-carbon environmental attributes alongside offsets must disclose to ACR the intent and details of the program prior to validation, if known; |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan |
| **Aster Global Findings - Initial** | The VVB could find no statement regarding non-carbon environmental attribute registration. |
| **Round 1 NCR/CL/OFI** | CL: Please clarify in the GHG Plan if the project is seeking to register non-carbon environmental attributes. |
| **Round 1 Response from Project Proponent** | A statement has been added to Section A7 in the PD, specifying that no non-carbon environmental attributes are being registered as a part of this project. |
| **Aster Global Findings - Round 1** | The statement has been added to the PP in Section A7, as mentioned. This item is addressed. |

| Item Number | 3 |
|---|---|
| **American Carbon Registry Standard Version 5.1, July 2018** | REGULATORY SURPLUS - Is there an existing law, regulation, statute, legal ruling, or other regulatory framework in effect as of the project Start Date that mandates the Project Activity or effectively requires the GHG emissions reduc-tions? YES = FAIL NO = PASS |

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| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | Project Plan |
| **Aster Global Findings - Initial** | We confirmed that the harvest restrictions were applied as stated in section C1. The link in the footnotes on page 16 which supports that the project is not required by law appears to be broken (https://www.americanbar.org/groups/environment_energy_resources/publications/natural_resources_environm ent/2018-19/winter/forestry-best-management-practices-water-and-wildlife-florida-whats-it-me/) |
| **Round 1 NCR/CL/OFI** | NCR: Please correct the broken link on page 16 . |
| **Round 1 Response from Project Proponent** | The link is now accessible, and the content appears to be an editorial article unavailable to anyone who clicks without log-in access. The article was, however, provided separately to the Validation Team. Perusal of the article and additional risk-based internet searches showed newly enacted Wildlife management practices that are separate from the silvicultural BMPs (FLORIDA FORESTRY WILDLIFE BEST MANAGEMENT PRACTICES FOR STATE IMPERILED SPECIES). The wildlife BMPs state "the Wildlife BMPs are voluntary practices applied at the discretion of the landowner or other person or entity responsible for conducting silviculture activities on the property." However, it is unclear if and how these are included in the project. |
| **Aster Global Findings - Round 1** | The link is now accessible, and the content appears to be an editorial article unavailable to anyone who clicks without log-in access. The article was, however, provided separately to the Validation Team. Perusal of the article and additional risk-based internet searches showed newly enacted Wildlife management practices that are separate from the silvicultural BMPs (FLORIDA FORESTRY WILDLIFE BEST MANAGEMENT PRACTICES FOR STATE IMPERILED SPECIES). The wildlife BMPs state "the Wildlife BMPs are voluntary practices applied at the discretion of the landowner or other person or entity responsible for conducting silviculture activities on the property." However, it is unclear if and how these are included in the project. |
| **Round 2 NCR/CL/OFI** | CL: It is clear the project is aware of and has implemented silvicultural BMPs on the project area. However, it is unclear if and how the project has incorporated wildlife BMPs on the project area. Please provide additional information relevant to this Finding. |
| **Round 2 Response from Project Proponent** | The Wildlife BMPs are modeled on the Silviculture BMPs and have the same harvesting restrictions. The harvesting restriction within 200' Primary SMZ as specified in the Florida Silvicultural BMPs is already being met in the baseline harvest scenario and no further restrictions need be applied. A note about meeting wildlife BMPs has been added to the project document in section C1. |
| **Aster Global Findings - Round 2** | The audit team agrees that the wildlife considerations are inclusive as part of the FL BMPs. The 200-foot buffer and other BMPs related to wildlife are inherently captured as part of the silviculture BMPs. The item is addressed. |

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| **Item Number** | 4 |
| **American Carbon Registry Standard Version 5.1, July 2018** | Description of how the project will achieve GHG emission reductions and/or removal enhancements; |

| | |
|---|---|
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | Project Plan |
| **Aster Global Findings - Initial** | Section A states the common scenario for lands like the project but does not state what the baseline management regime was. |
| **Round 1 NCR/CL/OFI** | NCR: Please add language within the PP describing the current management regime. |
| **Round 1 Response from Project Proponent** | Added language to Section A6 to specify the baseline activity and the current management regime in the project area. |
| **Aster Global Findings - Round 1** | Section A6 specifically states the baseline activities to be "higher return, more aggressive management regimes, characterized by conversion of forest to slash pine plantation."<br><br>Further, it states the project management activities of "the County will not harvest in the bottomland hardwood and cypress strata of the Preserve and will implement prescribed burning in the pine flatwood stands of slash pine with the intent to increase carbon stocks and restore native species habitat." This item is addressed. |

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| **Item Number** | 5 |
| **American Carbon Registry Standard Version 5.1, July 2018** | Relevant outcomes from any stakeholder consultations and mechanisms for ongoing communication, as applicable; |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | Project Plan |
| **Aster Global Findings - Initial** | While it is clear that a stakeholder process is in place and stakeholder engagement has been conducted, it is not clear what the outcomes from those engagements has been. |
| **Round 1 NCR/CL/OFI** | CL: Please clarify what outcomes have been the result of stakeholder consultations. |
| **Round 1 Response from Project Proponent** | Results of stakeholder consultations are provided in the "Lower Green Swamp Public Meeting Minutes.doc." Stakeholder comments were taken into account in the creation of the forest management plan. |
| **Aster Global Findings - Round 1** | The Project Proponent previously provided stakeholder meeting attendees and minutes in its 22 April 2019 submittal. Item number 11 in the minutes mentions a public stakeholder comment period that presumably ended on 30 April 2019. These comments were not provided.<br><br>Further, the Project Proponent's reply states stakeholder comments were taken into account in the forest management plan. It is unclear how the comments were taken into account. Upon cursory review of the comments, many appear to not be relevant to the project. The only comment with a relevant actionable item that the project could complete appeared to be Item number 18, which would allow tours to stakeholders requesting access to project. It is unclear if this has occurred. |

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| **Round 2 NCR/CL/OFI** | CL: Please provide the stakeholder public comments, if any received by 30 April 2019. Please clarify how stakeholder comments were incorporated into the project. |
| **Round 2 Response from Project Proponent** | All relevant stakeholder comments have been provided. The stakeholder meeting as represented by the meeting minutes, were related to the forest management plan. Implementation of the management plan is directly related to the carbon project as implementation of the plan is the project activity. Therefore, discussion of the management plan during the stakeholder meeting directly addresses the requirement. |
| **Aster Global Findings - Round 2** | The audit team agrees that the stakeholder meeting minutes suffice to satisfy this requirement for stakeholder consultation. No further action is needed. The item is addressed. |

| **Item Number** | 6 |
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| **American Carbon Registry Standard Version 5.1, July 2018** | 2. Applicable laws, regulations, rules, and procedures and the associated oversight institutions. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; |
| **Aster Global Findings - Initial** | The GHG Plan Section F1.2 includes a reference to the Management Plan for applicable laws, regulations, rules, and procedures and the associated oversight institutions. The VVB requests that all of the Management Plan legal documents (Management Plan, Appendix A) be provided, as these documents may affect project eligibility. |
| **Round 1 NCR/CL/OFI** | CL: Please provide all of the Management Plan legal documents (Management Plan, Appendix A). |
| **Round 1 Response from Project Proponent** | All documents in Appendix A have been uploaded to the Dropbox folder. |
| **Aster Global Findings - Round 1** | The Project Proponent has provided several (13) documents, including legal agreements, contracts, utility and other easements. The Validation Team has reviewed many of these documents, which appear normal and standard in Hillsborough County business operations. Since this requirement is simply for the Project to provide this material, this item is addressed. |

| **Item Number** | 7 |
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| **American Carbon Registry Standard Version 5.1, July 2018** | ACR accepts projects on all land ownership types—private, public (municipal, county, state, federal, or other), and tribal—provided the Project Proponent demonstrates that the land is eligible, documents clear land title and offsets title, the offsets contract is enforceable, and the Project Activity is additional and meets all other requirements of the ACR Standard. Projects on public lands, like any other project, shall demonstrate that the activity is not required by regulations and meets other additionality criteria. Agriculture and land use projects that generate ERTs with no risk of reversal need not demonstrate land title. |

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| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | Lower Green Swamp-OR 5371-833.pdf; OR 7897-1940.pdf; OR 7897-1942 (HC to CF Industries, Inc.).pdf; |
| **Aster Global Findings - Initial** | The VVB reviewed ownership documentation (Lower Green Swamp-OR 5371-833.pdf; OR 7897-1940.pdf; OR 7897-1942 (HC to CF Industries, Inc.).pdf;). Through review of the aforementioned documents, the VVB noted that not all Section-Township-Range combinations in which the Project Area fall are included in the documents. Thus, the VVB cannot confirm that the Project Proponent retains title to the carbon sinks.<br><br>This requirement is pending the finding related to ownership in the Methodology section of this checklist. |
| **Round 1 NCR/CL/OFI** | CL: Please address the finding. While doing so, please clarify through verifiable documentation that the Project Proponent retains title to the land and offsets. |
| **Round 1 Response from Project Proponent** | All relevant STR combinations are reported in the deeds. There are discrepancies between the tax parcel shapefiles and the section grid shapefiles from the County Appraiser's Office. The project boundary was delineated using the tax parcel shapefile. However, when overlaying the section grid shapefile on the tax parcel shapefile to check the title of the land, it appears that slivers of the project boundary fall into a different section grids. According to the Hillsborough County Appraiser's Office, the publicly available GIS files are not official representations of property boundaries. A more detailed explanation is provided in "HillsboroughCountyTitleVerification.docx". |
| **Aster Global Findings - Round 1** | The Project has provided a document - HillsboroughCountyTitleVerification - that discusses the minor inaccuracies of using the property appraiser's data versus their own ownership deeds. The data from the County's website clearly has its own inconsistencies but is the best available information. Since the deeds are more legally binding than what is depicted on the County's webpage, the Validation team is assured the boundaries used are appropriate, and any minor discrepancies are not material to the project's assertions. This item is addressed. |

| **Item Number** | 8 |
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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | Baseline determination is project-specific and must describe the harvesting scenario that would maximize net present value (NPV) of perpetual wood products harvests per the assumptions as described in section C1, where various discount rates for different land ownership classes are used as proxies for the multiple forest management objectives typical of each owner class eligible under this methodology. |
| **Evidence Used to Assess (Location in PD,** | NPV spreadsheet; GHG Plan Section E1 |

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| **MR or Supporting Documents** | |
| **Aster Global Findings - Initial** | The VVB could find no supporting documentation (copy of email, etc.) to support the herbicide and planting costs utilized in the NPV analysis.<br><br>The VVB could find no supporting documentation (copy of email, etc.) to support the palmetto price per tree utilized in the NPV analysis. |
| **Round 1 NCR/CL/OFI** | CL: Please provide supporting documentation (copy of email, etc.) to support the herbicide and planting costs utilized in the NPV analysis.<br><br>CL: Please provide supporting documentation (copy of email, etc.) to support the palmetto price per tree utilized in the NPV analysis. |
| **Round 1 Response from Project Proponent** | Copies of emails have been provided on Dropbox for palmetto prices (see, "cabbage palm harvesting.txt" and "cabbage palm.txt") |
| **Aster Global Findings - Round 1** | The Project Proponent has provided two emails from a certified arborist/forester that states prices per tree for cabbage palm have been $12 and up to $20 for various clients across Florida. Though it is unclear if the same prices would be applicable in a different part of the state, the Project's use of $10/tree to calculate the baseline determination is conservative.<br><br>It does not appear the Project Proponent provided documentation to support the herbicide and planting costs. |
| **Round 2 NCR/CL/OFI** | CL: Though these costs seem reasonable, please provide documentation to support the herbicide and planting costs utilized in the NPV analysis. |
| **Round 2 Response from Project Proponent** | The file "Re RE Cost of herbicide and planting pine.txt" was provided to the VVB. This email confirms the prices as documented during a December 2018 meeting in which the NRPS forester provided estimated costs for site prep for pine planting in Central Florida. |
| **Aster Global Findings - Round 2** | The audit team reviewed the email provided in response to the finding and confirmed that the values chosen for herbicide and planting assumptions are reasonable. The item is addressed. |

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| **Item Number** | 9 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | This methodology is applicable only on non-federally owned forestland within the United States |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | ftp://ftp.hcpafl.org/shapefiles/; Project Shapefiles; |

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| **Aster Global Findings - Initial** | The VVB reviewed Hillsborough County Assessor's website data (https://gis.hcpafl.org/gissearch/) and determined that the project is non-federally owned.<br><br>However, when conducting an intersection with the Hillsborough County assessor data retrieved from ftp://ftp.hcpafl.org/shapefiles/, it was noted that some of the project area overlaps property that is not under the ownership of Hillsborough County.<br><br>While reviewing the deeds provided, it was noted that not all section-township-range combinations in which the project area falls were reported in the documents provided. |
| **Round 1 NCR/CL/OFI** | CL: Please clarify why not all of the Project Area is under the ownership of Hillsborough County.<br><br>CL: Please clarify why not all section-township-range combinations in which the project area falls were reported in the ownership documents provided. |
| **Round 1 Response from Project Proponent** | A. Using the "parcel_08_08_2019.shp" layer from the County Tax Appraiser's office, we clipped the Project Boundary to include only parcels under Hillsborough County Ownership. The new project boundary shapefile is "LGSP_Strata_Rev080819.shp". This reduced the overall project area by roughly 0.5 acres. It should be noted that the GIS data on the Hillsborough County Appraiser's website is not a reliable source of official data but is the best available.<br><br>B. See response to finding #8 |
| **Aster Global Findings - Round 1** | Validation team confirmed area using Google Earth Pro. The difference of 0.5 acre is minor, but all calculations have been adjusted. Validation Team agrees that the property appraiser's website may not be the most accurate, and since the Project has conservatively updated their files to reduce the overall project acreage, this item is addressed.<br><br>The STR Finding has also been separately addressed. |

| **Item Number** | 10 |
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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | In developing the baseline scenario, exceptions to the requirement that the baseline management scenario shall perpetuate existing onsite timber-producing species may be made where it can be demonstrated that a baseline management scenario involving replacement of existing onsite timber producing species (e.g. where forest is converted to plantations, replacing existing onsite timber producing species) is feasible and has been implemented in the region within 10 years of the project start date. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; |

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| **Aster Global Findings - Initial** | As part of the baseline scenario, hardwoods are converted to slash pine plantations. Per the methodology, a demonstration must be provided showing that " a baseline management scenario involving replacement of existing onsite timber producing species (e.g. where forest is converted to plantations, replacing existing onsite timber producing species) is feasible and has been implemented in the region within 10 years of the project start date." |
| **Round 1 NCR/CL/OFI** | NCR: Please provide a demonstration showing that " a baseline management scenario involving replacement of existing onsite timber producing species (e.g. where forest is converted to plantations, replacing existing onsite timber producing species) is feasible and has been implemented in the region within 10 years of the project start date." |
| **Round 1 Response from Project Proponent** | Option 2 of the methodology requirement for conversion to a new species states, " providing dated (from previous 10 years) aerial imagery that identifies at least two properties (of similar site conditions and forest type) in the state showing, first, the initial or existing onsite timber, and second, the replacement use (e.g. commercial plantation). The areas of forest conversion identified must have combined acreage equal to or greater than the annual acreage converted in the project baseline scenario."<br><br>The annual acreage of bottomland hardwood clear cut is 624 acres. Between 2009 and 2016 about 865 acres of hardwood forest were converted to tree plantation based on the 2009 and 2016 FLUCCS layers. The 865 acres converted to tree plantation in west-central Florida is greater than the annual acreage converted from hardwood to pine plantation in the baseline scenario. See "2016_HWD_Conversion.shp". See also, "SFRA chapter_14e.pdf". A more detailed explanation of the process to determine land conversion has been added to section A6. |
| **Aster Global Findings - Round 1** | Section A6 of the Project Plan now includes additional detail of aggressive baseline conversion from hardwood forests to slash pine plantations.<br><br>Further, the file "SFRA chapter_14e.pdf" was reviewed and demonstrated high levels of forest conversion are feasible.<br><br>However, the shapefile "2016_HWD_Conversion.shp" was reviewed, and it is unclear what is contained in this shapefile. The polygons featured were overlaid onto high resolution aerial imagery from between 2015 and 2019, and no changes in forest type or conversion activities were observed. It is unclear how Option 2 of the methodology is met. |
| **Round 2 NCR/CL/OFI** | CL: Please address the Finding and demonstrate the purpose of the "2016_HWD_Conversion.shp" file and how it meets the requirement of Option 2 of the Methodology. |

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| **Round 2 Response from Project Proponent** | The "2016_HWD_Conversion.shp" file used land cover designations from the FLUCCS data set to identify change in land use by identifying areas where "Hardwood Forest" changed to "Pine Plantation" throughout the state. However, it is apparent based on subsequent review that the land cover designations in this dataset are not reliable enough to meet the methodology standards. Therefore, we chose to use Chen et al. 2017, as evidence of hardwood forest conversion to pine plantation during the 10 years previous to the project start data at a rate higher than the annual area converted to pine plantation in the baseline scenario. The study uses spatially explicit FIA plot data along with county and state forest inventory data to estimate area converted to pine plantation between 2007 and 2012. A more detailed explanation is provided in the project document in Section B5. Examples of aerial imagery from Google Earth Pro showing sites that were converted from hardwood forest to pine plantation during the relevant time period are also provided in the project document. |
| **Aster Global Findings - Round 2** | The audit team reviewed the newer approach to demonstrate an aggressive harvesting regime. The Option 2 requirement is met where Chen et al. 2017 was used to satisfy all requirements. The study used dated imagery, within similar site conditions in FL, of conversion to commercial plantation. The study also helped to substantiate pine conversion is common practice in the region. The item is addressed. |

| **Item Number** | 11 |
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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | Proponents must demonstrate that the project area, in aggregate, meets the definition of Forestland provided in Section A1 above. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; |
| **Aster Global Findings - Initial** | The GHG Plan states: "All areas qualify as “forestland” per the methodology (Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands v1.3) definition of >10% stocking, or roughly around >8ft^2/acre basal area in trees >5” dbh."<br><br>It is unclear to the VVB what constitutes fully-stocked in the Project Area. |
| **Round 1 NCR/CL/OFI** | CL: Please provide clarifying documentation supporting the statement that 8ft2 of basal area is greater than 10% of full stocking. Please provide documentation demonstrating full stocking in the area. |

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| **Round 1 Response from Project Proponent** | Added language to Section A3, "where 100% stocking of bottomland hardwood forest is about 60 ft2/acre and cypress is about 80 ft2/acre . The area-weighted mean basal area of the Lower Green Swamp Preserve is 106 ft2/acre, well above 10% stocking." |
| **Aster Global Findings - Round 1** | The additional language added to the forest definition in Section A.3 is sufficient to demonstrate the project area, in aggregate, meets the definition of Forestland (at 106 ft2/acre). This item is addressed. |

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| **Item Number** | 12 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | Note that the project activity may contain more than one discrete area of land, that each area must have a unique geographical identification, and that each area must meet the eligibility requirements. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; Shapefiles; |
| **Aster Global Findings - Initial** | The VVB could not locate unique identifiers for all discrete areas of land in the project area. |
| **Round 1 NCR/CL/OFI** | NCR: Please assign unique identifiers to each discrete area of land, per the requirement. |
| **Round 1 Response from Project Proponent** | All land on the preserve is contiguous and exists under the same ownership and property boundary. Areas appear isolated because they are stratified into forest and non-forest within the property boundaries but are not technically discrete areas of land. |
| **Aster Global Findings - Round 1** | The Validation Team agrees that the project exists on one discreet area of land, which was also confirmed during an August phone call between the Team and the Project Proponent. This item is addressed. |

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| **Item Number** | 13 |

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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | Project area delineated on USGS topographic map |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; |
| **Aster Global Findings - Initial** | The VVB could not locate a map in the GHG Plan documentation displaying the Project Area delineated on a USGS topographic map. |
| **Round 1 NCR/CL/OFI** | NCR: Please include a map in the GHG Plan documentation displaying the Project Area delineated on a USGS topographic map. |
| **Round 1 Response from Project Proponent** | The basemap used for Figure A1 is a topographical map derived using data from USGS as is stated in the description of the layer in ArcMap, "This basemap was compiled from a variety of best available sources from several data providers, including the U.S. Geological Survey (USGS), U.S. Environmental Protection Agency (EPA), U.S. National Park Service (NPS), Food and Agriculture Organization of the United Nations (FAO), Department of Natural Resources Canada (NRCAN), GeoBase, Agriculture and Agri-Food Canada, Garmin, HERE, Esri, OpenStreetMap contributors, and the GIS User Community." A citation is included in the lower right-hand corner of the map. |
| **Aster Global Findings - Round 1** | The basemap for Figure A1 in the Project Plan includes the USGS topographic map. This item is addressed. |

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| **Item Number** | 14 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | Property parcel map |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; |

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| **Aster Global Findings - Initial** | The VVB could not locate a property parcel map in the GHG Plan documentation. |
| **Round 1 NCR/CL/OFI** | NCR: Please include a property parcel map in the GHG Plan documentation. |
| **Round 1 Response from Project Proponent** | New parcel map added to the GHG Plan in section A1. |
| **Aster Global Findings - Round 1** | The map is included in Section A4 as Figure A2. The parcels also appear to match the project boundary shapefiles previously provided and reviewed in Google Earth Pro. This item is addressed. |

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| **Item Number** | 15 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | The Start Date is when the Project Proponent began to apply the land management regime to increase carbon stocks and/or reduce emissions. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; |
| **Aster Global Findings - Initial** | The VVB could find no documentation that substantiates the start date. |
| **Round 1 NCR/CL/OFI** | CL: Please provide documentation that supports the start date of 01 January 2018. This documentation should include documents that demonstrate the change of management with a verifiable date of 01 January 2018. |
| **Round 1 Response from Project Proponent** | The LGSP Management Plan (see "Lower Green Swamp Mgmt Plan - 2019 update-MZ-Accepted.doc") states on p. 59, "On January 1, 2018, Hillsborough County commenced land management enhancement practices within the Lower Green Swamp Preserve property to increase and maintain carbon stocks with the purpose of generating and maintaining carbon offsets in compliance with the terms outlined by the American Carbon Registry for offsets issued". This backdating language was amended to the management plan during the 2019 update, which included updates to the carbon bank section. |

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| **Aster Global Findings - Round 1** | The 2019 update to the Lower Green Swamp Management Plan includes language demonstrating 01 January 2018 as the date at which "Hillsborough County commenced land management enhancement practices within the Lower Green Swamp Preserve property to increase and maintain carbon stocks with the purpose of generating and maintaining carbon offsets in compliance with the terms outlined by the American Carbon Registry for offsets issued." However, it is still unclear what management practices were undertaken to sufficiently justify a change of activities on the project lands on that date. |
| **Round 2 NCR/CL/OFI** | CL: Please clarify what management enhancement practices were commenced on 01 January 2018 and provide documentation supporting these activities. |
| **Round 2 Response from Project Proponent** | Finding will be closed, per conversation with VVB. |
| **Aster Global Findings - Round 2** | The audit team recognizes that the Lower Green Swamp Management Plan includes language that allows for reasonable assurance that the start date is in compliance. The item is addressed. |

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| **Item Number** | 16 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | If the project Start Date is more than one year before submission of the GHG plan, the Project Proponent shall provide evidence that GHG mitigation was seriously considered in the decision to proceed with the project activity. Evidence shall be based on official and/or legal documentation. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; |
| **Aster Global Findings - Initial** | The project start date is more than one year prior to the submittal of the GHG Plan. The VVB could find no evidence that GHG mitigation was seriously considered in the decision to proceed with the project activity. |
| **Round 1 NCR/CL/OFI** | NCR: Please provide official and/or legal documentation that serves as evidence that GHG mitigation was seriously considered in the decision to proceed with the project activity, per the requirement. |
| **Round 1 Response from Project Proponent** | Page 58 and 59 of the Lower Green Swamp Preserve Management Plan (Lower Green Swamp Mgmt Plan - 2019 update-MZ-Accepted.doc) describe a years-long process of considering forest management to mitigating GHG emissions by increasing forest carbon stocks and producing carbon offsets |
| **Aster Global Findings - Round 1** | The language on Page 59 of the management plan states the serious consideration of GHG mitigation starting in 2016. The completion of the "2017 Carbon Credit Feasibility Study" further demonstrates the Project Proponent's consideration of the carbon project. This item is addressed. |

| Item Number | 17 |
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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | The baseline determination is project-specific and must describe the harvesting scenario that would maximize NPV of perpetual wood products harvests over a 100-year modeling period. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; Baseline Files; |
| **Aster Global Findings - Initial** | It was noted that not all bottomland Hardwood scenarios had cabbage palm carbon added in the 'PIVOT LIVE" tab of LGSP bsl live tree proj.xlsx.<br><br>It was noted that palm TPAs were grown forward, while palms were not grown forward in the baseline scenario.<br><br>It was noted that the "SnagDet" tab of LGSP bsl snag proj.xlsx does not fully match the "SnagDet" tab of LGSPbsl2_FVSOUT.xls provided on 26 June 2019. It was noted that perhaps at least one baseline prescription was missing from this workbook.<br><br>It was noted that the "FVS_Cutlist" tab of LGSP bsl hwp proj.xlsx does not fully match the "FVS_Cutlist" tab of LGSPbsl2_FVSOUT.xls provided on 26 June 2019. It was noted that perhaps at least one baseline prescription was missing from this workbook.<br><br>The GHG Plan states that cabbage palm will be considered as remaining standing in the baseline scenario. However, it was noted that cabbage palm was harvested in the baseline FVS runs and entered into the HWP calculations in LGSP bsl hwp proj.xlsx.<br><br>Florida BMPs state that cypress may be harvested to 50% of full stocking. The project utilized a paper written by Goelz to determine 50% stocking in cypress stands as 80ft2. It is unclear how this value was determined.<br><br>It is unclear how SMZs were determined. It was noted that Blackwater Creek is a Florida Outstanding Waters, per the BMP manual.<br><br>It was noted that slash pine was planted at 700 TPA with 90% survival. The VVB could not locate substantiation for this assumption. |

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| **Round 1 NCR/CL/OFI** | CL: Please clarify why not all bottomland Hardwood scenarios had cabbage palm carbon added in the 'PIVOT LIVE" tab of LGSP bsl live tree proj.xlsx.<br><br>CL: Please clarify why palm TPAs were grown forward, while palms were not grown forward in the baseline scenario.<br><br>CL: Please clarify why the "SnagDet" tab of LGSP bsl snag proj.xlsx does not fully match the "SnagDet" tab of LGSPbsl2_FVSOUT.xls provided on 26 June 2019.<br><br>CL: Please clarify why the "FVS_Cutlist" tab of LGSP bsl hwp proj.xlsx does not fully match the "FVS_Cutlist" tab of LGSPbsl2_FVSOUT.xls provided on 26 June 2019.<br><br>CL: Please clarify why cabbage palm was harvested in the baseline FVS runs and entered into the HWP calculations in LGSP bsl hwp proj.xlsx.<br><br>CL: Please demonstrate how the value of 80ft2 BAAC was determined using the Goelz paper.<br><br>CL: Please clarify how SMZs were determined, including how SMZs were determined using the Florida BMP manual.<br><br>CL: Please provide substantiation for the assumptions regarding planting slash pine at 700 TPA with 90% survival. |

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| **Round 1 Response from Project Proponent** | A. It appears that a cell reference error was preventing cabbage palm from being counted in the PIVOT LIVE tab. The reference has been updated and cabbage palm is being counted in the carbon estimates in "LGSP bsl live tree proj_rev08122019.xlsx".<br><br>B. TPAs of palms ("DW") were modeled forward in both the baseline and ex ante with-project scenario FVS runs. Diameters were kept constant in both (to reflect that palms do not grow continuously in diameter like dicot trees. Note that no palm regeneration was modeled in any scenario (for lack of information), and thus projected TPAs represent the influence of mortality. Acknowledging that FVS-SN is not parameterized to model palms, the main purpose of including them in the FVS runs (using "DW" as a stand-in) was to simulate their structural influence on the growth and dynamics of other tree species in the bottomland hardwood stratum.<br><br>C. The inventory database and FVS simulations have been updated and re-run, and the "SnagDet" tab of LGSP bsl snag proj_rev08122019.xlsx now matches the "SnagDet" tab of LGSPbsl2_FVSOUT_rev1.xls<br><br>D. The inventory database and FVS simulations have been updated and re-run, and the "FVS_Cutlist" tab of LGSP bsl hwp proj_rev08122019.xlsx now matches the " FVS_Cutlist " tab of LGSPbsl2_FVSOUT_rev1.xls<br><br>E. This was an error. Cabbage palm has been removed from HWP calculations.<br><br>F. Stocking Table B on page 107 of the Goelz et al paper details the stocking values for Bald cypress. (see image pasted in this document). A cypress stand with QMD = 9 in (as determined in the 'CypressGrow' worksheet in the "LGSP_NPVanalysisApr16.xlsx" from the FVS output in the first year) has a 50% stocking basal area of 80sqft/ac.<br><br>G. After speaking with a forester for state of Florida, it was determined that the SMZ for Black Water Creek should be 200'. This buffer was conservatively applied to all perennial streams/rivers on the property. The new acreage for the SMZ is 450 acres.<br><br>H. According to Forest Management Best Practices of Private Timberland Owners and Managers in the US South 2016. 700 TPA with a 90% survival rate is typical in the Southeast. The citation has been added to the GHG Plan. https://forestresources.org/pdf/Summer2016/16-R-17%20FOREST%20MANAGEMENT%20PRACTICES%20OF.pdf |

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| **Aster Global Findings - Round 1** | A. Cabbage palm was found to be missing from the year 2023 and SMZ in the bottomland hardwood stratum within "PIVOT_Live" tab. Cabbage palm is also missing from other years within the bottomland hardwood SMZ.<br>B. "DW" was noted in FVS-SN as flowering dogwood, clarification requested as cabbage palm is not a FVS species. Palm does not tend to grow like a hardwood or a softwood. This element covered in other findings.<br>C. Audit team was unable to confirm whether "SnagDet" tab of LGSP bsl snag proj_rev08122019.xlsx consistently matches the "SnagDet" tab of LGSPbsl2_FVSOUT_rev1.xls, additional records were found in the FVC out file.<br>D. "LGSP bsl hwp proj_Rev080719.xlsx" was provided but not the version stated in the reply "LGSP bsl hwp proj_rev08122019.xlsx." Please clarify<br>E. Cabbage palm or 912/DW confirmed removed from HWP cutlist<br>F. Stocking Table B on page 107 of the Goelz et al paper was confirmed to indicate 50% stocking for bald cypress equals 80 ft^2/ac BA<br>G. The 200-foot revised SMS was deemed appropriate by the audit team, acreage confirmed allocated correctly<br>H. Planting slash pine at 700 TPA with 90% survival has been confirmed. |
| **Round 2 NCR/CL/OFI** | CL: Please clarify the outstanding findings in A., C. and D. |
| **Round 2 Response from Project Proponent** | A. The table in the 'PIVOT_Live' tab of the 'LGSP_bsl live tree proj_rev11112019.xlsx" adds cabbage palm back in to the total stocks after the clear cutting events occur to account for the cabbage palms that are moved offsite because that carbon is retained in the baseline scenario even after the land has been cleared. The clearcut does not occur in one of the bottomland hwd stratum until 2023 in 'Bottomland_Hardwood_2023' group, so cabbage palm biomass does not need to be added back into the accounting until 2023. No clearcutting occurs in the SMZ and therefore cabbage palm biomass is already accounted for in this table as it was never removed, which means that it does not need to be added back in.<br><br>C. "LGSP bsl snag proj_rev08122019.xlsx" that was provided with round 1 responses seems to have been an out of date file. The correct file has been shared, see "LGSP bsl snag proj_rev11082019.xslx". The SnagDet tab now matches with "LGSPbsl2_FVSOUT_rev2.xlsx".<br><br>D. "LGSP basl hwp proj_Rev11082019.xlsx" has been provided and updated with the relevant changes. |
| **Aster Global Findings - Round 2** | The audit team confirmed that outstanding finding A,C and D are addressed. No further action is needed. The item is addressed. |

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| **Item Number** | 18 |

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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | Required inputs for the project NPV calculation include the results of a recent timber inventory of the project lands, prices for wood products of grades that the project would produce, costs of logging, reforestation and related costs, silvicultural treatment costs, and carrying costs. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | NPV files; FVS files; |
| **Aster Global Findings - Initial** | The inputs for NPV calculations are results of a degrown inventory.<br><br>It was noted within the "Tree Data" tab of LGS InventoryCalcs Degrown.xlsx that one tree degrew to below 5", which is the limit of the inventory. Carbon was calculated on this tree, even though the tree is below the DBH lower limit of the inventory.<br><br>It was noted that TPAs were not adjusted for the degrown diameters. The VVB requests support for the assumption that TPA should remain constant as trees are degrown on a variable radius plot. |
| **Round 1 NCR/CL/OFI** | CL: Please clarify the appropriateness of including trees less than 5" in the degrown inventory carbon calculations.<br><br>CL: Please clarify the appropriateness of calculating TPAs from non-degrown data on a variable radius plot. |
| **Round 1 Response from Project Proponent** | A. The 4.9" tree has been removed from the degrown inventory data in both "LGS InventoryCalcs Degrown_Rev080719.xlsx" and "LGSP_Inventory_GROWNBACK_Rev080719.accdb" . The stock estimates have been updated to reflect the updated inventory values.<br><br>B. Our objective is to, to the extent possible, accurately reconstruct biomass estimates and a source database for modeling. Our objective was not to reconstruct inventory plots, which would not be possible with VRPs without measurement of distance from plot center to each tree. The area expansion factor references the original diameter in the inventory deliberately to keep TPA constant, as the VVB noted. Otherwise, TPA would be altered as a function of tree diameter, not accurately reflecting any stand dynamics occurring during the degrow interval. We are assuming no significant mortality during the one-year degrow interval. |
| **Aster Global Findings - Round 1** | The audit team confirmed that no trees <5" are included in the degrown treelist. Keeping TPA constant for a one-year degrow was deemed reasonable by the audit team. The effect of this adjustment was quantified by the audit team and noted to be below a 5% threshold set forth by the ACR program. The item is addressed. |

| Item Number | 19 |
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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | Project Proponents shall include roading and harvesting costs as appropriate to the terrain and unit size. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | NPV Files; |
| **Aster Global Findings - Initial** | The VVB could not find supporting documentation to support the timber prices (stumpage) utilized by the NPV projections. |
| **Round 1 NCR/CL/OFI** | CL: Please provide supporting documentation to support the timber prices (stumpage) utilized by the NPV projections. |
| **Round 1 Response from Project Proponent** | Stumpage prices are supported by Timber Mart South 2018 South-wideQ4 2018 numbers as referenced in "LGSP_NPVanalysis13Aug.xlsx" and interviews with state forester, Eric Hoyer. See email, "StumpagePriceEmail.txt" |
| **Aster Global Findings - Round 1** | The audit team reviewed the email from Eric Hoyer and the Timber Mart South reports. These are sufficient to justify the cost and stumpage assumptions for the NPV analysis. The item is addressed. |

| Item Number | 20 |
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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | A sampling plan must be developed that describes the inventory process including<br>sample size, determination of plot numbers, plot layout and locations, and data collected. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | Inventory SOPs; |
| **Aster Global Findings - Initial** | While on site, the VVB noted a few clarifications to be clarified in the inventory SOP document. |

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| **Round 1 NCR/CL/OFI** | CL: Please clarify within the field inventory SOP document how diameter was measured on trees that were buttressed higher than reachable.<br><br>CL: Please clarify in the field inventory SOP document how diameter was measured on a tree that is leaning on a hammock. |
| **Round 1 Response from Project Proponent** | Clarifications have been added to the SOP. See "LGS SOPs 8-15-19 EDIT.docx" |
| **Aster Global Findings - Round 1** | The edited SOPs now state [on Page 8] "If measuring DBH at the height where the buttress ends is unreachable due to height, ocular estimation will be used to determine the diameter. When a tree is a on a hummock, DBH should be measured at 4.5 feet from the highest point on the hummock." This item is addressed. |

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| **Item Number** | 21 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | Step 2: Determine aboveground biomass by choosing a combination of the following components: stump, bark, tops and branches, and/or foliage, in addition to below-ground biomass, by applying component ratios from Jenkins et al (2003) Table 619, where biomass of each component is calculated as its component ratio * merchantable stem biomass from Step 1 * (1 / stem wood component ratio). |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | Inventory Spreadsheets; |
| **Aster Global Findings - Initial** | The project developer elected to utilize Equation (1) from the Jenkins et al. (2003) paper that predicts total aboveground biomass. This was approved by ACR in an email received on 30 November 2018. Belowground biomass is calculated utilizing the Jenkins component ratio method.<br><br>It was noted in the "Tree Data" tab of LGS InventoryCalcs Original.xlsx that no defect was applied to palmettos. It is unclear to the VVB why no defect was applied to palmettos, when defect was measured in the field. |
| **Round 1 NCR/CL/OFI** | CL: Please clarify why defect was not applied to palmettos. |
| **Round 1 Response from Project Proponent** | Defect has been added to palmettos in "LGS InventoryCalcs Original_Rev08082019.xlsx" and LGS InventoryCalcs DEGROWN_Rev08082109.xlsx" |
| **Aster Global Findings - Round 1** | Defect was confirmed applied to palmetto for 4 trees in the original and degrown datasets. The item is addressed. |

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| **Item Number** | 22 |

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| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | There may be no leakage beyond de minimis levels through activity shifting to other lands owned, or under management control, by the timber rights owner. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; Project files; |
| **Aster Global Findings - Initial** | The VVB could find no demonstration that no activity shifting leakage occurred on other lands owned, or under management control, by the timber rights owner. |
| **Round 1 NCR/CL/OFI** | CL: Please provide a demonstration that no activity shifting leakage occurred above de minimis levels. This demonstration may include a statement from the timber rights owner. |
| **Round 1 Response from Project Proponent** | An attestation has been added to the monitoring report from Hillsborough County CELMD that there has been no increase in harvesting on other Hillsborough County properties during the monitoring period. See "CELMD-ACR Letter.pdf" |
| **Aster Global Findings - Round 1** | A letter from Forest Turbiville, the Director of Hillsborough County Conservation and Environmental Lands Management Department, states he oversees all lands owned by CELMD and that no increases in harvesting have occurred outside the project boundary as a result of the project. This item is addressed. |

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| **Item Number** | 23 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | If the project decreases wood product production by >5% relative to the baseline then the Project Proponent and all associated landowners must demonstrate that there is no leakage within their operations – i.e., on other lands they manage/operate outside the bounds of the ACR carbon project. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | GHG Plan; Project files; |

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| **Aster Global Findings - Initial** | As the project scenario decreases wood products production by 100% when compared to the baseline, a demonstration must be provided that demonstrates that there is no leakage within their operations – i.e., on other lands they manage/operate outside the bounds of the ACR carbon project. |
| **Round 1 NCR/CL/OFI** | NCR: Please provide a demonstration that demonstrates that there is no leakage within their operations – i.e., on other lands they manage/operate outside the bounds of the ACR carbon project. |
| **Round 1 Response from Project Proponent** | An attestation has been added to the monitoring report from Hillsborough County CELMD that there has been no increase in harvesting on other Hillsborough County properties during the monitoring period. See "CELMD-ACR Letter.pdf" |
| **Aster Global Findings - Round 1** | A letter from Forest Turbiville, the Director of Hillsborough County Conservation and Environmental Lands Management Department, states he oversees all lands owned by CELMD and that no increases in harvesting have occurred outside the project boundary as a result of the project.<br><br>It is unclear how the requirement of monitoring activity-shifting leakage from D6 of the methodology has been met by demonstration of one of the three options presented. |
| **Round 2 NCR/CL/OFI** | CL: Please clarify how the requirement of monitoring activity-shifting leakage has been met by demonstration of one of the three options presented. |
| **Round 2 Response from Project Proponent** | This finding has been addressed, per conversation with VVB. |
| **Aster Global Findings - Round 2** | As the project has demonstrated that the project is not decreasing harvesting relative to the baseline, no further action is needed. The item is addressed. |

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| **Item Number** | 24 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version 1.3 April 2018** | The Project Proponent must make an ex ante calculation of all net anthropogenic GHG removals and emissions for all included sinks and sources for the entire Crediting Period. |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | WP Files; |
| **Aster Global Findings - Initial** | It was noted that palm TPAs were grown forward, while palms were not grown forward in the WP scenario.<br><br>It is unclear why standing dead is held constant in the WP case, but not in the baseline scenario. |

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| **Round 1 NCR/CL/OFI** | CL: Please clarify why palm TPAs were grown forward, while palms were not grown forward in the WP scenario.<br><br>CL: Please clarify why standing dead is held constant in the WP case, but not in the baseline scenario. |
| **Round 1 Response from Project Proponent** | A. TPAs of palms ("DW") were modeled forward in both the baseline and ex ante with-project scenario FVS runs. Diameters were kept constant in both (to reflect that palms do not grow continuously in diameter like dicot trees. Note that no palm regeneration was modeled in any scenario (for lack of information), and thus projected TPAs represent the influence of mortality. Acknowledging that FVS-SN is not parameterized to model palms, the main purpose of including them in the FVS runs (using "DW" as a stand-in) was to simulate their structural influence on the growth and dynamics of other tree species in the bottomland hardwood stratum.<br><br>B. Standing dead wood was modeled in the baseline scenario using FVS FFE, as the harvests and plantation conversions in the baseline can be expected to have a significant impact on pre-existing standing dead wood stocks. In contrast, in the with-project case, where no significant harvests take place and in the absence of any reliable information on natural disturbance, no major impacts on standing dead wood are anticipated and standing dead wood is simplistically assumed to be steady state (inputs = outputs) over the projection period. This same approach has been applied on several validated and verified ACR IFM projects (e.g. Chestnut Mountain, Wabassus). |
| **Aster Global Findings - Round 1** | A. A concern of the audit team for the palm approach for baseline and with project scenarios is that while mortality is included, the real-world growth of palms is non-conservatively not considered. Further clarification is also requested on steps to update the inventory for palms.<br>B. The audit team finds the rationale for keeping standing dead wood static over the project case reasonable. |
| **Round 2 NCR/CL/OFI** | CL: Please clarify the findings to part A. |
| **Round 2 Response from Project Proponent** | A. Growth was not applied to palms in either the baseline scenario or the with-project scenario, which is a neutral approach that does not affect overall carbon accounting in the project. Palm biomass is essentially canceled out between the two scenarios. |
| **Aster Global Findings - Round 2** | This element was discussed between the audit team and proponent. Palms are not considered for year over year accounting. The assumptions were deemed reasonable after evaluation. The item is addressed. |

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| **Item Number** | 25 |
| **ACR - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands - Version** | |

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| **1.3<br>April 2018** | |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | ACR Calcs workbook; |
| **Aster Global Findings - Initial** | Within the "bsl proj" tab of ACR_Calcs LGSP.xlsx, the HWP values do not match those as calculated in LGSP bsl hwp proj.xlsx.<br><br>It does not appear that net ER calculations are including deductions for the permanence risk buffer. |
| **Round 1 NCR/CL/OFI** | CL: Please clarify why, within the "bsl proj" tab of ACR_Calcs LGSP.xlsx, the HWP values do not match those as calculated in LGSP bsl hwp proj.xlsx.<br><br>CL: Please clarify if net ER calculations include deductions for the permanence risk buffer. |
| **Round 1 Response from Project Proponent** | A. An old version of the LGSP bsl hwp proj.xlsx was provided. The most recent, updated version has been uploaded to Dropbox. See "LGSP bsl hwp proj_Rev080719.xlsx"<br><br>B. ER calculations do not include deductions for the permanence risk buffer. The required buffer pool contribution has been calculated and will be transferred to ACR from another project. |
| **Aster Global Findings - Round 1** | A. The ACR calcs worksheet was found to contain updated values per the response from the proponent.<br>B. It is acceptable for the project to elect to source the Buffer Pool Contribution from another project. This will be stated in the conclusions of the verification report.<br><br>Both items addressed. |

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| **Item Number** | 26 |
| **FVS Modeling** | Overarching FVS Modeling Finding - Inventory Update |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | FVS Files for inventory update; |

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| **Aster Global Findings - Initial** | The VVB reviewed the inputs for FVS modeling for the no management grow in the "LGSP_Inventory_Original.accdb" file. A few clarifications are requested:<br>1. In the "FVS_TreeInit" table, the assignment of "History" codes are unclear to the VVB, when referencing the Essential FVS document.<br>2. In the "Species" field of the "FVS_TreeInit" table, the VVB noted that palmettos are assigned a species code for dogwood. Within the GHG Plan, it is stated that no growth is applied to palmettos. It is unclear to the VVB why palms are not grown, and how this is conservative overall.<br>3. The damage code fields of the "FVS_TreeInit" table do not appear to follow conventional methods for assigning damage. Further, the methods applied do not appear to match previous methods from this project developer.<br><br>The calibration in the FVS input database was confirmed for the no management grow, except for the noted clarification below regarding site index:<br><br>The VVB noted that site index was sourced from an adjacent county (Pasco). It is unclear to the VVB why county/MU-specific data was not utilized to calculate site index for FVS modeling. The VVB was able to access SSURGO data from the WSS to calculate site index within the Project Area. Further, it is unclear why the site index as presented in the GHG Plan Table E3 is not the site index as applied for the Cypress stratum. |
| **Round 1 NCR/CL/OFI** | CL: Please clarify the assignment of "History" codes in the "FVS_TreeInit" table of "LGSP_Inventory_Original.accdb".<br><br>CL: Please clarify why palms are not grown, why they are assigned the dogwood species code, and how this is conservative overall.<br><br>CL: Please clarify the appropriateness of the damage and severity code determination.<br><br>CL: Please clarify why the site index utilized for FVS modeling is sourced from Pasco County, and not site-specific data.<br><br>CL: Please clarify why the site index as presented in the GHG Plan Table E3 is not the site index as applied for the Cypress stratum. |

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| **Round 1 Response from Project Proponent** | A. The assignment of history codes corresponds to the FVS codes structure. Live trees = 5, and dead trees = 6,7,8, ot 9. Dead tree values are determined based on decay class as determined in the SOP. Decay class 1 =6, 2=7, 3=8, 4=9. Per FVS Variant SN, there is no substantial difference between codes 6,7,8, or 9 in FVS and is purely descriptive.<br><br>B. Cabbage palms were given the arbitrary designation of dogwood species in FVS because that species was not present in the inventory, as explained in the GHG Plan. Diameters and heights were held constant when modeling in FVS. The dogwood species merely represents the present structure of the palm that could influence stand dynamics. In the baseline scenario palms are removed from the forest, sold, and planted. Therefore, they do not contribute any emissions. In the with-project scenario, they are kept in the forest and the biomass is conservatively kept constant over time. Palms do not add or remove emissions in the project accounting overall.<br><br>C. Incorrect cell references in the assignment of damage codes were identified. Damage1 has been changed to assign code 96 to trees with top defect >50% Damage 2 is assigned to trees with any defect in the middle or bottom. And Severity 2 has been changed to reflect the 72.2% contribution of bottom defect. These changes have been updated in "LGSP_InventoryCalcs Degrown_Rev080719.xlsx", "LGSP_Inventory_GROWNBACK_Rev080719.accdb", LGSP_InventoryCalcs Original_Rev080719.xlsx", and "LGSP_Inventory_Original_Rev080719.xlsx"<br><br>D. Site index was re-evaluated using SSURGO data within Hillsborough County. Updated values and a detailed explanation of process was added to Section E1 of the GHG Plan. Calculation of the new site indexes is included in "LGSP Forestland Productivity.xlsx". Site index was updated in "LGSP_Inventory_GROWNBACK_Rev080719.accdb" and "LGSP_Inventory_Original_Rev080719.accdb"<br><br>E. The site index has been updated in Table E3 to reflect the changes in the preceding clarification. |
| **Aster Global Findings - Round 1** | A. The audit team finds the FVS SN history codes to be reasonable in application.<br>B. We understand that palms were grown using an alternate species code as flowering dogwood so that fixed diameters and heights could be assigned. It was noted from examination of the project key files that palm measurements were only fixed for the first year, but subsequent years have growth applied, it was also noted that carbon was computed for these palms but not the grown forward measurements. The IFM methodology Section 3.1 states that parameters CBSL,TREE,t and CBSL,DEAD,it must be modeled. As palms are not modeled over the 20-year period it is not clear how the requirement is met.<br>C. The "LGSP_Inventory_Original_Rev080719.xlsx" could not be found in response materials. The audit team attempted to confirm damage codes across tree list files but noted that the access databases provided for this round (original and grownback) have different numbers of total trees from the treelist worksheets (~800 vs. ~900) in the next step of the calculation workflow.<br>D. Revised methods for site index determination were reviewed and found to be reasonable. No further action is needed on this element<br>E. Table E3 of the GHG Plan was confirmed updated. |
| **Round 2 NCR/CL/OFI** | CL: Please consider the findings for items B. and C. |

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| **Round 2 Response from Project Proponent** | B. The FVS key file for the baseline scenario was updated to include fixed diameter and height growth for cabbage palm for all years. The updated key file has been provided as "LGSP_bsl2_rev2.key". All relevant calculation worksheets have been updated and included with this round of response documents. The PD has been updated accordingly. Cabbage palms were not grown in either scenario and follows a neutral approach where palms are not grown in either the baseline or with-project scenarios and contribute no emission reductions in either scenario.<br><br>C. The "LGSP_Inventory_Original_Rev080719.xlsx" and "LGSP_Inventory_Degrown_Rev080719.xlsx" were added to the Dropbox folder for this round of responses. The difference in tree counts between the two files is due to the excel file containing trees that were ultimately removed from the inventory. These are trees that were measured but were outside of the variable radius plot boundary based on measured distance from plot center and DBH. For calculation purposes these trees were filtered out. These 100 trees are excluded from all calculations and were removed when the tree list was input to the access database. |
| **Aster Global Findings - Round 2** | The audit team reviewed the new key file "LGSP_bsl2_rev2.key" which indicated that cabbage palms are held constant, for the baseline case. Other assertions by the proponent were deemed reasonable. All items are addressed. |

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| **Item Number** | 27 |
| **FVS Modeling** | Overarching FVS Modeling Finding - NPV |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | FVS Files for NPV Projection; |
| **Aster Global Findings - Initial** | The VVB attempted to run FVS runs provided by the project developers to ensure correct NPV analysis. Through discussions with the project developers, it was discovered that some data management confusion existed as to which FVS runs fed into the NPV spreadsheet (LGSP_NPVanalysis16Apr.xlsx). The VVB attempted multiple times to determine which FVS runs fed which tabs of the aforementioned spreadsheet but was unsuccessful. Thus, the VVB was unable to confirm the NPV determination from the FVS runs through the NPV spreadsheet.<br><br>The VVB reviewed the inputs for FVS modeling for the baseline run in the "LGSP_Inventory_GROWNBACK.accdb" file. The same findings and requests apply to the "LGSP_Inventory_GROWNBACK.accdb" file as apply to the "LGSP_Inventory_Original.accdb" file. |
| **Round 1 NCR/CL/OFI** | CL: Please provide a written "crosswalk" document that details the source (FVS run, FVS output file, etc.) that feeds into each tab of the NPV determination spreadsheet (LGSP_NPVanalysis16Apr.xlsx).<br><br>CL: Please see the finding and requests for the "LGSP_Inventory_Original.accdb" file and ensure that they are applied to the "LGSP_Inventory_GROWNBACK.accdb" file |

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| **Round 1 Response from Project Proponent** | A. A flowchart has been added as a worksheet to the "LGSP_NPVanalysis13Aug.xlsx" spreadsheet that illustrates the flow of files and tabs that generates the data for NPV analysis. The NPV spreadsheet has incorporated new runs of the FVS models that account for updates to the inventory data.<br><br>B. All changes have been applied to both Access databases. See response C for finding 26. |
| **Aster Global Findings - Round 1** | A helpful crosswalk was provided to the audit team to satisfy this finding. The inventory and degrow worksheets were confirmed via independent data check. The item is addressed. |

| **Item Number** | 28 |
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| **FVS Modeling** | Overarching FVS Modeling Finding - Baseline |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | Baseline FVS files; |
| **Aster Global Findings - Initial** | The VVB reviewed the inputs for FVS modeling for the baseline run in the "LGSP_Inventory_GROWNBACK.accdb" file. The same findings and requests apply to the "LGSP_Inventory_GROWNBACK.accdb" file as apply to the "LGSP_Inventory_Original.accdb" file.<br><br>The .key file and outputs were confirmed, pending precedents. |
| **Round 1 NCR/CL/OFI** | CL: Please see the finding and requests for the "LGSP_Inventory_Original.accdb" file and ensure that they are applied to the "LGSP_Inventory_GROWNBACK.accdb" file |
| **Round 1 Response from Project Proponent** | All changes have been applied to both Access databases. See response C for finding 26. |
| **Aster Global Findings - Round 1** | The inventory and degrow worksheets were confirmed via independent data check. The item is addressed. |

| **Item Number** | 29 |
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| **FVS Modeling** | Overarching FVS Modeling Finding - WP |
| **Evidence Used to Assess (Location in PD, MR or Supporting Documents** | WP FVS Files; |
| **Aster Global Findings - Initial** | The VVB reviewed the inputs for FVS modeling for the WP run in the "LGSP_Inventory_GROWNBACK.accdb" file. The same findings and requests apply to the "LGSP_Inventory_GROWNBACK.accdb" file as apply to the "LGSP_Inventory_Original.accdb" file. The .key file and outputs were confirmed, pending precedents. |
| **Round 1 NCR/CL/OFI** | CL: Please see the finding and requests for the "LGSP_Inventory_Original.accdb" file and ensure that they are applied to the "LGSP_Inventory_GROWNBACK.accdb" file |
| **Round 1 Response from Project Proponent** | All changes have been applied to both Access databases. See response C for finding 26. |
| **Aster Global Findings - Round 1** | The inventory and degrow worksheets were confirmed via independent data check. The item is addressed. |

# Appendix B – List of Documents Received and Reviewed by Aster Global

Documents received 22 April 2019

- Lower Green Swamp
  - Calculations
    - ACR_Calcs LGSP.xlsx
    - ACRRiskTool_LGSP.xlsx
    - LGS InventoryCalcs Degrown.xlsx
    - LGS InventoryCalcs Original.xlsx
    - LGSP bsl hwp proj.xlsx
    - LGSP bsl live tree proj.xlsx
    - LGSP bsl snag proj.xlsx
    - LGSP wp live tree proj.xlsx
    - LGSP_CommonPractice.xlsx
    - LGSP_NPVanalysis16Apr.xlsx
  - FieldMaps
    - LGSP_SamplingMaps
      - LGSP_AccessMapKey12-3-18.pdf
      - LGSP_AccessMaps12-3-18.pdf
      - LGSP_Close-Up_PlotMapALL11-29-18.pdf
      - LGSP_OverviewMap12-3-18.pdf
      - LGSP_PlotMapsKey12-3-18.pdf
    - LGSP quick cruise - plot points.pdf
    - LGSP_AccesMapKey10-19-18.pdf
    - LGSP_Close-Up_PlotMapALL10-19-18.pdf
    - LSGP_AccessMaps10-19-18.pdf
    - LSGP_OverviewMap10-19-18.pdf
    - LSGP_PlotMapsKey10-19-18.pdf
  - FVS
    - LGSP_bsl2.key
    - LGSP_bsl2.out
    - LGSP_Inventory_GROWNBACK.accdb
    - LGSP_Inventory_Original.accdb
    - LGSP_wp.key
    - LGSP_wp.out
    - LGSPbsl2_FVSOUT.xls
    - LGSPwp_FVSOUT.xls
  - GIS
    - BottomlandHardwoodSMZ
      - BottomlandHardwoodSMZ.cpg
      - BottomlandHardwoodSMZ.dbf
      - BottomlandHardwoodSMZ.prj
      - BottomlandHardwoodSMZ.sbn
      - BottomlandHardwoodSMZ.sbx
      - BottomlandHardwoodSMZ.shp
      - BottomlandHardwoodSMZ.shp.xml
      - BottomlandHardwoodSMZ.shx
    - LGSP_Final_strata
      - LGSP_Final_strata.cpg
      - LGSP_Final_strata.dbf
      - LGSP_Final_strata.prj

    - LGSP_Final_strata.sbn
    - LGSP_Final_strata.sbx
    - LGSP_Final_strata.shp
    - LGSP_Final_strata.shx
- LGSP_PlotPoints
    - LGSP_PlotPoints.cpg
    - LGSP_PlotPoints.dbf
    - LGSP_PlotPoints.prj
    - LGSP_PlotPoints.sbn
    - LGSP_PlotPoints.sbx
    - LGSP_PlotPoints.shp
    - LGSP_PlotPoints.shx
- LGSP_Shapefiles
    - LGSP_5ft contours.cpg
    - LGSP_5ft contours.dbf
    - LGSP_5ft contours.prj
    - LGSP_5ft contours.sbn
    - LGSP_5ft contours.sbx
    - LGSP_5ft contours.shp
    - LGSP_5ft contours.shp.xml
    - LGSP_5ft contours.shx
    - LGSP_Boundary_(including_approved and Other Cons).CPG
    - LGSP_Boundary_(including_approved and Other Cons).dbf
    - LGSP_Boundary_(including_approved and Other Cons).prj
    - LGSP_Boundary_(including_approved and Other Cons).sbn
    - LGSP_Boundary_(including_approved and Other Cons).sbx
    - LGSP_Boundary_(including_approved and Other Cons).shp
    - LGSP_Boundary_(including_approved and Other Cons).shp.xml
    - LGSP_Boundary_(including_approved and Other Cons).shx
    - LGSP_FLUCCS_2011.cpg
    - LGSP_FLUCCS_2011.dbf
    - LGSP_FLUCCS_2011.prj
    - LGSP_FLUCCS_2011.sbn
    - LGSP_FLUCCS_2011.sbx
    - LGSP_FLUCCS_2011.shp
    - LGSP_FLUCCS_2011.shp.xml
    - LGSP_FLUCCS_2011.shx
    - LGSP_NWI.cpg
    - LGSP_NWI.dbf
    - LGSP_NWI.prj
    - LGSP_NWI.sbn
    - LGSP_NWI.sbx
    - LGSP_NWI.shp
    - LGSP_NWI.shp.xml
    - LGSP_NWI.shx
    - LGSP_Soils.cpg
    - LGSP_Soils.dbf
    - LGSP_Soils.prj
    - LGSP_Soils.sbn

- LGSP_Soils.sbx
- LGSP_Soils.shp
- LGSP_Soils.shx
- LGSP_Streams_(coarse).cpg
- LGSP_Streams_(coarse).dbf
- LGSP_Streams_(coarse).prj
- LGSP_Streams_(coarse).sbn
- LGSP_Streams_(coarse).sbx
- LGSP_Streams_(coarse).shp
- LGSP_Streams_(coarse).shp.xml
- LGSP_Streams_(coarse).shx

  - LGSP title
    - Cone Ranch funding.Additional ELAPP Bonds.B-1.pdf
    - Cone Ranch Report.G-3.pdf
    - Lower Green Swamp-OR 5371-833.pdf
    - OR 7897-1940.pdf
    - OR 7897-1942 (HC to CF Industries, Inc.).pdf
  - Stakeholder consultations
    - April 7th, 2012 public meeting page 1 001.jpg
    - April 7th Public Meeting page 2 001.jpg
    - Lower Green Swamp Public Meeting Minutes.doc
  - Supporting Documents and Papers
    - ELAPP Ordinances.pdf
    - Florida-Silviculture-BMPs.pdf
    - FOX_DISSERTATION_2015_Ch 4_Palm Biomass.pdf
    - Legal-Precedence-Harvest-Adjacent-Property.pdf
    - LGS SOPs Dec2018 CLEAN.docx
    - Lower Green Swamp Mgmt Plan - 2019 update-MZ-Accepted.doc
    - Lower Green Swamp Preserve Final Assessment - 170428 - CAM - fnl.pdf
    - quickcruisedata.xlsx
    - Site-Area-Breakdown.xlsx
    - sjaf0105.pdf
    - WetlandsAssess01042017@60708@Gardner@Jimmy@MAIW final.pdf
  - LGSP GHG Plan 2019 4-22-19.docx

Documents received 25 April 2019

- Monitoring Report 2018
  - ACR_Calcs LGSP Dec2018 MonitoringReport4-25-19.xlsx
  - LGSP_ACR Monitoring Report4-25-19.docx
  - LGSP_MonitoringReport_2019 APPENDIX4-25-19.docx

Documents received 09 May 2019

- LGSP_PlotPoints_All
  - LGSP_PlotPoints_All.cpg
  - LGSP_PlotPoints_All.dbf
  - LGSP_PlotPoints_All.prj
  - LGSP_PlotPoints_All.sbn
  - LGSP_PlotPoints_All.sbx
  - LGSP_PlotPoints_All.shp
  - LGSP_PlotPoints_All.shp.xml
  - LGSP_PlotPoints_All.shx

- LGSPSamplingPlanSigned.pdf

Documents received 10 May 2019
- LGSP Verification Data Check 20190510.xlsx
- LGSP Verification Data Check 20190510 (2).xlsx

Documents received 15 May 2019
- VO19024-LowerGreenSwamp-ACR-ValidVerifSampPlan_V2_Signed.pdf

Documents received 23 May 2019
- NoMgmt3.key
- NoMgmt3.out
- SiteIndexEmail_NRPS.JPG
- SoilSurveyofHillsboroughCounty.pdf

Documents received 26 June 2019
- LGSP_bsl2.key
- LGSP_NPV.key
- LGSP_NPV.out
- LGSP_NPV.xls
- LGSPbsl2_FVSOUT.xls

Documents received 28 June 2019
- LGSP_SlashPine.key
- LGSP_SlashPine.out
- LGSP_SlashPine.xls

Documents received 21 August 2019
- LGSP_Round1Responses
    - Calcs and Stats
        - ACR_Calcs LGSP_rev08152019.xlsx
        - LGS InventoryCalcs Degrown_Rev080719.xlsx
        - LGS InventoryCalcs Original_Rev080719.xlsx
        - LGSP bsl hwp proj_Rev080719.xlsx
        - LGSP bsl live tree proj_Rev08122019.xlsx
        - LGSP bsl snag proj_Rev08122019.xlsx
        - LGSP wp live tree proj_rev08152019.xlsx
        - LGSP_CommonPractice_rev08152019.xlsx
        - LGSP_NPVanalysis13Aug.xlsx
    - FVS
        - LGSP_bsl2_rev1
            - LGSP_bsl2_rev1.key
        - LGSP_BottomlandHWThin.key
        - LGSP_BottomlandHWThin.out
        - LGSP_bsl2_rev1.out
        - LGSP_ClearCut.xls
        - LGSP_ClearCut.xls
        - LGSP_Cypress.out
        - LGSP_Inventory_GROWNBACK_Rev080719.accdb
        - LGSP_Inventory_Original_Rev080719.accdb

- LGSP_NoMgmt.key
- LGSP_NoMgmt.out
- LGSP_SlashPine.key
- LGSP_SlashPine.out
- LGSP_wp_rev1.key
- LGSP_wp_rev1.out
- LGSPbsl2_FVSOUT_rev1.xls
- LGSPcypress_rev1.xls
- LGSPnomgmt_rev1.xls
- LGSPwp_FVSOUT_rev1.xls

- GIS
  - 2009_Land_Use_Land_Cover
    - 2009_Land_Use_Land_Cover.cpg
    - 2009_Land_Use_Land_Cover.dbf
    - 2009_Land_Use_Land_Cover.prj
    - 2009_Land_Use_Land_Cover.shp
    - 2009_Land_Use_Land_Cover.shx
    - 2009_Land_Use_Land_Cover.xml
  - 2016_HWD_Conversion
    - 2016_HWD_Conversion.cpg
    - 2016_HWD_Conversion.dbf
    - 2016_HWD_Conversion.prj
    - 2016_HWD_Conversion.sbn
    - 2016_HWD_Conversion.sbx
    - 2016_HWD_Conversion.shp
    - 2016_HWD_Conversion.shp.xml
    - 2016_HWD_Conversion.shx
  - LGSP_Strata_Rev080819
    - LGSP_Strata_Rev080819.cpg
    - LGSP_Strata_Rev080819.dbf
    - LGSP_Strata_Rev080819.prj
    - LGSP_Strata_Rev080819.sbn
    - LGSP_Strata_Rev080819.sbx
    - LGSP_Strata_Rev080819.shp
    - LGSP_Strata_Rev080819.shp.xml
    - LGSP_Strata_Rev080819.shx
  - SMZ_200ft
    - SMZ_200ft.cpg
    - SMZ_200ft.dbf
    - SMZ_200ft.prj
    - SMZ_200ft.sbn
    - SMZ_200ft.sbx
    - SMZ_200ft.shp
    - SMZ_200ft.shp.xml
    - SMZ_200ft.shx
  - Statewide_Land_Use_Land_Cover
    - Statewide_Land_Use_Land_Cover.cpg
    - Statewide_Land_Use_Land_Cover.dbf
    - Statewide_Land_Use_Land_Cover.prj

        - Statewide_Land_Use_Land_Cover.shp
        - Statewide_Land_Use_Land_Cover.shx
        - Statewide_Land_Use_Land_Cover.xml
    - Monitoring Report
        - ACR_Calcs LGSP Dec2018 MonitoringReport_Rev08192019.xlsx
        - LGSP_ACR Monitoring Report_rev08192019.docx
        - LGSP_MonitoringReport_2019 APPENDIX_rev08192019.docx
    - Supporting Docs
        - Hillsborough-County-CT-Info-Request
            - LGSP UMP Appendix A_all
            - LGSP UMP Appendix A-1_Emcumbrances.pdf
            - LGSP UMP Appendix A-2_1988 Exhibit A-Interlocal agreement HC & WCWSA.pdf
            - LGSP UMP Appendix A-3_Exhibit B-K Interlocal agreement HC & WCWSA_deed.pdf
            - LGSP UMP Appendix A-4_1995 Cattle Lease Agreement.pdf
            - LGSP UMP Appendix A-5_1995 Cattle Lease Agreement_1st Amend.pdf
            - LGSP UMP Appendix A-6_1991 Rotary Club Agreement_slash pines.pdf
            - LGSP UMP Appendix A-7_1995 Gopher Totoise relocation HC-HCSB.pdf
            - LGSP UMP Appendix A-8_1999 HC-SWFWMD agree_Cone Ranch Resto.pdf
            - LGSP UMP Appendix A-9_1999 HC-SWFWMD agree_1st Amend.pdf
            - LGSP UMP Appendix A-10_1999 Florida Con and Env Group.pdf
            - LGSP UMP Appendix A-11_2009 HCEPC Memo.pdf
            - LGSP UMP Appendix A-12_2009 Cone Ranch Env Advisory Panel Repor.pdf
            - LGSP UMP Appendix A-13_2010 WRX asset trans plan.pdf
        - ABA_FloridaForestMgmt.pdf
        - cabbage palm harvesting.txt
        - cabbage palms.txt
        - CELMD-ACR Letter.pdf
        - HillsboroughCountyTitleVerification.docx
        - SFRA chapter_14e.pdf
    - HillsboroughCountyTitleVerification.docx
    - LGS SOPs 8-5-19 EDIT.docx
    - LGSP Forestland Productivity.xls
    - LGSP GHG Plan 2019_FindingsRound1_BR.docx
    - LGSP Strata Map_Rev08122019.png
    - LGSP_ParcelMap_Rev08122019.png
    - LGSP_Round1FindingsResponses.xlsx
- LGSP_Round1FindingsResponses.xlsx

Documents received 13 November 2019

- Calcs and Stats
    - ACR_Calcs LGSP_rev11112019.xlsx
    - LGS InventoryCalcs Degrown_Rev080719.xlsx
    - LGS InventoryCalcs Original_Rev080719.xlsx

    - LGSP bsl hwp proj_Rev110822019.xlsx
    - LGSP bsl live tree proj_Rev11112019.xlsx
    - LGSP bsl snag proj_Rev011082019.xlsx
    - LGSP_NPVanalysis_rev11132019.xlsx
- FVS
    - LGSP_bsl2_rev2.key
    - LGSP_bsl2_rev2.out
    - LGSP_Inventory_GROWNBACK_Rev080719.accdb
    - LGSP_Inventory_Original_Rev080719.accdb
    - LGSPbsl2_FVSOUT_rev2.xls
- Monitoring Report
    - ACR_Calcs LGSP Dec2018 MonitoringReport_Rev11112019.xlsx
    - LGSP_ACR Monitoring Report_rev11112019.docx
    - LGSP_MonitoringReport_2019 APPENDIX_rev11112019.docx
- Chen et al 2017.pdf
- CypressStumpagePrices.txt
- LGSP GHG Plan_rev11-13-2019.docx
- LGSP_Round2FindingsResponses11122019.xlsx
- Plantation_area_state.xlsx
- RE Cost of herbicide and planting pine.txt
- StumpageValueEmail.txt
- TimberMart-South Prices.png

Documents received 06 January 2020

- ACR Methodology Deviation Request_LowerGreenSwamp Aug2019.pdf

Documents received 07 January 2020

- ACR_Calcs LGSP Dec2018 MonitoringReport_Rev01072020.xlsx
- ACR_Calcs LGSP_rev010720.xlsx
- LGSP GHG Plan_rev01-07-2020.docx
- LGSP_ACR Monitoring Report_rev01072020.docx
- LGSP_MonitoringReport_2019 APPENDIX_rev01072020.docx

Documents received 14 January 2020

- ACR_Calcs LGSP Dec2018 MonitoringReport_Rev01142020.xlsx
- LGSP_ACR Monitoring Report_rev01142020.docx
- LGSP_MonitoringReport_2019 APPENDIX_rev01142020.docx

Documents received 14 January 2020pm

- ACR_Calcs LGSP Dec2018 MonitoringReport_Rev01142020.xlsx
- LGSP GHG Plan_rev01-14-2020.docx
- LGSP_ACR Monitoring Report_rev01142020.docx
- LGSP_MonitoringReport_2019 APPENDIX_rev01142020.docx

Documents received 15 January 2020

- LGSP_ACR Monitoring Report_rev01142020.docx

Documents received 21 January 2020

- LGSP GHG Plan_rev01-21-2020.docx

- LGSP_ACR Monitoring Report_rev01212020.docx
- LGSP_MonitoringReport_2019 APPENDIX_rev01212020.docx
- ACR_Calcs LGSP_rev010720.xlsx