

METHODOLOGY FOR COASTAL WETLAND CREATION ASSESSMENT REPORT



Document Prepared By: Environmental Services, Inc.

Methodology Element Title	Methodology for Coastal Wetland Creation	
Version	1.182a	
Methodology Element Category	Methodology	X
	Methodology Revision	
	Module	
	Tool	
Sectoral Scope(s)	14, Wetlands Restoration and Conservation (WRC)	

Report Title	Methodology for Coastal Wetland Creation Assessment Report	
Report Version	1.0	
Assessment Criteria	Verified Carbon Standard (v3.3, 04 October 2012); VCS Program Guide (v3.4, 04 October 2012), AFOLU Requirements (v3.3, 04 October 2012), and VCS Methodology Approval Process (v3.4, 04 October 2012)	
Client	CH2M Hill	
Pages	71	

Date of Issue	16 December 2013
Prepared By	Environmental Services, Inc.
Contact	7220 Financial Way, Suite 100 Jacksonville, Florida 32256 Phone: 904-470-2200; jmcmahon@esinc.cc ; http://www.esicarbon.com
Approved By	Janice McMahon, VP and Regional Technical Manager
Work Carried Out By	Shawn McMahon -VCS Wetlands Expert /Lead Assessor; Richard Scharf and Caitlin Sellers -Assessment Team Members; Kevin Markham- ESI Wetlands Expert/ Assessment Team Member; Steve Emmet-Mattox- VCS Wetland Technical Working Group Lead/Assessment Team Member; Luis de la Torre, VCS Approved Standardized Methods Expert/Assessment Team Member; and Janice McMahon, QA/QC

Summary:

Environmental Services, Inc., (ESI) was selected on July 25, 2012 by CH2M Hill to perform the first methodology assessment of the Methodology for Coastal Wetland Creation in accordance with the VCS Methodology Approval Process, VCS Standard, VCS Program Guide, and the VCS AFOLU Requirements.

The methodology delineates how a project can quantify the greenhouse gas (GHG) benefits of creating wetlands in tidal or estuarine open water coastal ecosystems, through substrate establishment and vegetation establishment, in combination or individually.

The purpose and scope of the methodology element first assessment was to evaluate whether or not the methodology was prepared in line with VCS program requirements. ESI's assessment included a detailed review of eligibility criteria, baseline approach, additionality, project boundary, emissions, leakage, monitoring, data and parameters, and adherence to the project level principles of the VCS program (relevance, completeness, consistency, accuracy, transparency and conservativeness). ESI's assessment also included a detailed analysis of the methodology, literature reviews, technical reviews and CH2M Hill's responses to all non-conformity reports (NCR's), clarifications (CL's) and opportunities for improvement (OFI's).

The ESI assessment team identified 79 NCR's/CL's/OFI's. All were addressed satisfactorily by CH2M Hill during the methodology assessment process. These NCR's and CL's provided needed clarity to ensure that the methodology was in compliance with VCS rules and requirements.

ESI confirms all methodology assessment activities, including objectives, scope and criteria, level of assurance and the methodology adherence to the VCS Program and Standard Version 3, as documented in this report, are complete. ESI concludes without any qualifications or limiting conditions that the methodology element (Methodology for Coastal Wetland Creation v1.182a) meets the requirements of the VCS. ESI recommends that VCSA approve the methodology element.

TABLE OF CONTENTS

1	Introduction.....	4
1.1	Objective	4
1.2	Scope and Criteria	4
1.3	Summary Description of the Methodology Element.....	4
2	Assessment Approach	4
2.1	Method and Criteria.....	4
2.2	Document Review	5
2.3	Interviews	5
2.4	Use of VCS-Approved Expert	7
2.5	Resolution of Any Material Discrepancy	7
2.6	Internal Quality Control	8
3	Assessment Findings	8
3.1	Applicability Conditions	8
3.2	Project Boundary.....	9
3.3	Procedure for Determining the Baseline Scenario.....	13
3.4	Procedure for Demonstrating Additionality	14
3.5	Baseline Emissions	15
3.6	Project Emissions.....	15
3.7	Leakage.....	16
3.8	Quantification of Net GHG Emission Reductions and/or Removals	16
3.9	Monitoring.....	17
3.10	Data and Parameters	17
3.11	Use of Tools/Modules	17
3.12	Adherence to the Project Principles of the VCS Program	18
3.13	Relationship to Approved or Pending Methodologies	18
3.14	Stakeholder Comments.....	18
4	Resolution of Corrective Action Requests and Clarification Requests	18
5	Assessment Conclusion.....	18
6	Report Reconciliation	19
7	Evidence Of Fulfilment Of VVB Eligibility Requirements	19
8	Signature	20
	Appendix A – List of Documents Reviewed/Received.....	21
	Appendix B – Corrective Action and Clarification Requests	23
	Appendix C - Project Validation Evidence for ESI	71

1 Introduction

1.1 Objective

This assessment was carried out to evaluate the likelihood that implementation of the AFOLU methodology element would result in accurate calculations of the increase in biomass, change in Soil Organic Carbon (SOC), change in GHG fluxes, and whether eligibility criteria for such coastal wetland creation projects are appropriate, as stated by the methodology developer.

1.2 Scope and Criteria

The scope of the methodology element assessment included reviewing the appropriateness of applicability conditions, project boundary, procedure for demonstrating additionality, procedure for determining baseline scenario, baseline emissions, leakage, quantification of net GHG emission reduction and/or removals, monitoring data and parameters, adherence to the principles of the VCS Program and relationship to approved or pending methodologies.

The criteria of the methodology element assessment followed the VCS Program Documents provided by VCS, located at <http://v-c-s.org/program-documents>. These documents include:

- VCS Program Guide (v3.4, 04 October 2012)
- VCS Methodology Approval Process (v3.4, 04 October 2012)
- VCS Standard (v3.3, 04 October 2012)
- Program Definitions (v3.4 04 October 2012)
- Agriculture, Forestry and Other Land Uses (AFOLU) Requirements (v3.3, 04 October 2012)
- AFOLU Non-Permanence Risk Tool (v3.1, 01 February 2012)

1.3 Summary Description of the Methodology Element

This methodology quantifies the GHG benefits of wetland creation through Restoring Wetland Ecosystems (RWE) and Afforestation, Reforestation and Revegetation (ARR) utilizing substrate establishment and/or vegetation establishment in tidal and non-tidal coastal wetlands.

Project activities may include transporting sediments from excavation or dredging activities to open water in order to form a substrate in which the wetland vegetation can be established. Temporary retention dikes may be designed and used to deal with the site's hydrology. The substrate is built up to a level determined by current and projected water levels.

Vegetation is established via natural colonization, seeding or transplantation, after the substrate has settled/dewatered or has otherwise been prepared. When woody vegetation is established, ARR requirements and methods apply to the project.

2 Assessment Approach

2.1 Method and Criteria

The methodology assessment approach closely followed the system outlined in the following documents: VCS Methodology Approval Process; VCS Program Guide; VCS Standard; Program Definitions; Agriculture, Forestry and Other Land Use (AFOLU) Requirements; ISO 14064-3; ISO 14065; and ESI's Management System and Management System Manual v13. 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.” In the case of a new methodology element assessment, the assessment is the systematic, independent, documented process for the evaluation of a methodology element against the VCS program criteria.

The versions of the criteria followed are outlined in Section 1.2 of this report.

ESI’s assessment included detailed analysis of the methodology, literature review, and technical reviews. Our assessment/analysis technique is generally broken down into five basic parts:

- Creation of Methodology Assessment Plan
- ESI review and assessment
- Utilization of independent technical experts, including VCS approved Standardized Methods Expert, VCS approved AFOLU Methodology WRC Expert and member of the VCS Wetland Technical Working Group
- Issuance of non-conformity reports (NCR’s), clarifications (CL’s) and opportunities for improvement (OFI’s)
- Review of methodology developer’s explanations, clarifications and insight.

2.2 Document Review

A detailed review of the methodology element documentation was conducted to ensure consistency with, and identify any deviations from, VCS program requirements. The methodology was reviewed by all team members. The approach allocated some members to focus on the methodology’s adherence to VCS program guide, the VCS Standard, VCS AFOLU Requirements and other guidance documents. Others members, including Steve Emmett-Mattox (Lead Coordinator VCS Wetlands Technical Working Group), Luis de la Torre (VCS Standardized Methods Expert), Shawn McMahon (VCS Wetlands Restoration and Conservation Expert), and Kevin Markham and Caitlin Sellers (ESI Wetland Scientists) focused on the technical aspects of the methodology and its adherence to currently accepted principles and methods of wetlands science. The final list of documents received and reviewed by ESI is provided in Appendix A.

2.3 Interviews

After the official Opening Meeting on 08 November 2012, a face-to-face meeting was conducted at ESI’s Raleigh office. In attendance were Caitlin Sellers (ESI), Kevin Markham (ESI), Doug Huxley (CH2M Hill), Guerry Holm (CH2M Hill), and Ryan Anderson (Bear Tooth Carbon), with Janice McMahon (ESI), Steve Emmett-Mattox, and Luis de la Torre in attendance via phone. The in-person meeting lasted 2 days and was critical in the initial review of the methodology.

After ESI team members reviewed/assessed the methodology element and compiled a list of NCR’s/CL’s, the first round of NCR’s/CL’s/OFI’s were presented to the CH2M Hill methodology authors. Conference calls were scheduled after each Round of NCR’s/CL’s was issued. During the conference calls, the methodology authors were interviewed by the ESI team to reconcile understanding of the NCR’s/CL’s. The methodology authors were then able to ask questions of the ESI team if they were unclear about a reviewer’s comments regarding particular NCR’s/CL’s. Individual reviewers took part when an NCR/CL/OFI established by the reviewer was being discussed or at any point where the reviewers had questions on the element under review.

Additional interviews were arranged, as needed, after the authors addressed NCR’s/CL’s in subsequent versions of the methodology and reviewers required additional clarification on changes in the new version. The table below lists the major meetings with the methodology developer and/or VCS, which took place during the course of the first assessment.

Date	Attendees	Subject
2012-11-07	Sam Hoffer, Luis de la Torre, Caitlin Sellers, Shawn McMahon	Standardized Methods Approach
2012-11-8	Doug Huxley, Ryan Anderson, Guerry Holm, Paul Spraycar, Caitlin Sellers, Shawn McMahon	Opening Meeting
2012-11-13	Caitlin Sellers, Kevin Markham, Doug Huxley, Ryan Anderson, Guerry Holm, Janice McMahon, Steve Emmett-Mattox, Luis de la Torre	General Discussion
2012-11-14	Caitlin Sellers, Kevin Markham, Doug Huxley, Ryan Anderson, Guerry Holm	General Discussion
2012-12-07	Kyle Holland, Ryan Anderson, Guerry Holm, Brian Perez, Luis de la Torre, Shawn McMahon	NCR Specific Discussion
2013-2-12	Doug Huxley, Ryan Anderson, Guerry Holm, Brian Perez, Paul Spraycar, Kyle Holland, Shawn McMahon	NCR Specific Discussion
2013-4-9	Doug Huxley, Shawn McMahon	NCR Specific Discussion
2013-6-12	Doug Huxley, Guerry Holm, Kevin Markham, Shawn McMahon	NCR Specific Discussion
2013-6-12	Sam Hoffer, Shawn McMahon	Timelines and Process
2013-7-1	Doug Huxley, Shawn McMahon	NCR Specific Discussion
2013-7-2	Sam Hoffer, Shawn McMahon	VCS Requirement Clarification
2013-7-29	Doug Huxley, Shawn McMahon	NCR Specific Discussion
2013-7-30	Doug Huxley, Shawn McMahon	NCR Specific Discussion
2013-8-1	Guerry Holm, Shawn McMahon	NCR Specific Discussion
2013-11-12	Doug Huxley, Shawn McMahon	ARR Discussion
2013-11-18	Doug Huxley	Closing Meeting

2.4 Use of VCS-Approved Expert

VCS Standardized Methods Expert, Luis de la Torre and VCS WRC Expert, Shawn McMahon served on the ESI team during the methodology assessment.

2.5 Resolution of Any Material Discrepancy

When a potential material discrepancy was identified during the assessment process, an NCR/CL/OFI was issued. After review and issuance of each round of the 4 Rounds of NCR's/CLs/OFIs, the methodology authors were allowed sufficient time to correct or address non-conformities and make clarifications. Changes were reviewed by the ESI team, who either accepted the corrected non-conformities and clarifications, or rejected them with explanation and issuance of another round of NCRs/CLs/OFIs. The methodology authors were then able to confer again with the ESI team to discuss and clarify their findings. Once the ESI team was satisfied that corrections and clarifications to the methodology brought it into compliance with VCS program and methodological requirements, the NCR/CL/OFI was considered resolved. Please see Appendix B for a complete list of NCRs/CLs/OFIs and their resolutions.

2.6 Internal Quality Control

The Regional Technical Manager is responsible for the overall performance of the methodology assessment process, and is the main authority for quality assurance and quality control of the validation/verification policy and procedures of the ESI Management System. The methodology element assessment was conducted according to ESI’s policies and procedures, their accreditation under ISO 14065:2007, and VCS program requirements.

3 Assessment Findings

3.1 Applicability Conditions

The methodology includes the following applicability conditions to ensure adherence to VCS rules and requirements, and to address specific issues that arose in the methodology assessment process. The first assessment determined that the methodology’s eight applicability conditions are appropriate, adequate and in compliance with the VCS rules. The following table summarizes the results of the assessment:

Applicability Conditions (Section 4 of Methodology)	First Assessors Findings
Project activities shall include activities intended to create new wetlands in coastal ecosystems through substrate establishment, vegetation establishment, or both	Project activities are consistent with section 4.2.19.1 of the AFOLU Requirements and are consistent with the scope of the methodology.
Project activities must not actively lower the water table depth	This condition is consistent with the requirement in section 4.2.19 of the AFOLU Requirements that “Activities that actively lower the later table depth in wetlands are not eligible”.
None of the project activities are mandated by law	This condition is consistent with the requirement in section 4.6.3 (sub to 4.6.6) of the VCS Standard that “The project shall not be mandated by any law”.
Project area must meet the definitions of tidal or estuarine open water and degraded wetland before project activities are implemented and would have remained open water in the absence of the project activities	This condition is consistent with and ensures that the project area satisfies all the requirements in section 4.2.16 of the AFOLU Requirements by requiring that the project area is degraded wetland prior to implementation of the project.
The project area is entirely within the geographic scope(s) specified in section 7.2.	This condition is consistent with and ensures that section 4.3.9 of the AFOLU Requirements are met, specifically that the geographic scope is limited to the areas under which the

	methodology was intended for use.
The project area is not located in the Great Lakes (as described in section 7.2).	This condition is consistent with and ensures that section 4.3.9 of the AFOLU Requirements is met, specifically that the geographic scope is limited to the areas under which the methodology was intended for use. The Great Lakes were excluded as the methodology developer provided the majority of demonstrations, literature and support for areas of coastal (saline) systems. If these demonstrations could be provided for the Great Lakes it is entirely possible this meth could be assessed to be valid for the Great Lakes in the future under a methodology revision.
When project activities include the establishment of woody vegetation, there are no commercial harvest activities (see section 2.1.2).	This condition was included to reduce the complexity of including ARR activities.
The project proponent has obtained the necessary permits to demonstrate that the project will not have a significant negative impact on hydrologically connected areas (see section 8.3.3).	This condition is consistent with and ensures that section 4.6.1.3 of the AFOLU Requirements are met. Specifically, it is to ensure that an assessment has been conducted to demonstrate that offsite leakage through hydrologic effects of the project activity will not occur.

3.2 Project Boundary

The methodology addresses the establishment of spatial and temporal project boundaries for WRC projects, including the selection of mandatory carbon pools, i.e., the sources, sinks and reservoirs relevant to the baseline and project scenarios. In accordance with AFOLU Requirements v3.3, when WRC projects using this methodology have an ARR component (i.e. planting trees), the methodology dictates that the ARR components will consider above-ground woody biomass, soil and, optionally, below-ground biomass pools. Litter and dead wood are conservatively excluded. Sources of GHG emissions are also in compliance with AFOLU Requirements v3.3, and include GHG emissions from dredging and transport of substrate and GHGs emitted due to wetland creation. For greater detail Section 5.1 Table 7 and 8 have been reproduced here with the first assessor’s findings:

	Source	Gas	Included	Justification/Explanation	First Assessors Findings
Baseline	Dredging, Transport, and Re-handling for Navigability or Maintenance	CO ₂	Yes	Emitted by fuel combustion regardless of fuel type	This confirms consistency with section 4.3.3.3 of the AFOLU Requirements by ensuring that all fuel combustion from transport and machinery use is accounted for in the baseline. This enables comparison with project scenario.
		CH ₄	Yes		
		N ₂ O	Yes		
		Other	None		
Baseline	Methane Ebullition	CO ₂	No	Methane bubbling may occur in open water; the quantity thereof may be included and monitored if desired.	In the baseline it is conservative to exclude methane so the optional status is appropriate.
		CH ₄	Optional		
		N ₂ O	No		
		Other	None		
Project	Dredging, Transport, and Placement for Project Activities	CO ₂	Yes	Emitted by fuel combustion regardless of fuel type	This confirms consistency with section 4.3.3.3 of the AFOLU Requirements by ensuring that all fuel

Source	Gas	Included	Justification/Explanation	First Assessors Findings
Habitat Regeneration	CH ₄	Yes		Inclusion of CO ₂ is appropriate. Inclusion of CH ₄ ensures consistency with section 4.3.23 of the AFOLU Requirements. Inclusion of N ₂ O also ensures consistency with section 4.3.23 of the AFOLU Requirements, though appropriately allows for its exclusion if it can be demonstrated to be de minimis.
	N ₂ O	Yes		
	Other	None		
	CO ₂	Yes	Major pool considered	
	CH ₄	Yes	Wetland creation may result in an increase in CH ₄ emissions in comparison to the open water baseline scenario.	
	N ₂ O	Yes, if significant	Wetland creation may result in an increase in N ₂ O emissions in comparison to the open water baseline scenario.	
	Other	None		

Table 7 Included GHG Sources

Pool	Included	Justification/Comments	First Assessors Findings
Above-ground Tree Biomass	Included	Major carbon pool required by VCS AFOLU Requirements.	This ensures consistency with table 2 of section 4.3.1 of the AFOLU Requirements.
Above-ground Non Tree Biomass	Optional	May be conservatively excluded.	This is consistent with table 2 of section 4.3.1 of the AFOLU Requirements.
Below-ground Biomass	Optional	May be conservatively excluded, but recommended when applicable root-shoot ratios are available. Only applicable in forested or woody habitats, not herbaceous ones.	This is consistent with table 2 of section 4.3.1 of the AFOLU Requirements.
Litter	Excluded	Conservatively excluded.	This is consistent with table 2 of section 4.3.1 of the AFOLU Requirements. It is conservative to exclude this carbon pool as the baseline scenario is open water (i.e. no litter possible).
Dead Wood	Excluded	Conservatively excluded.	This is consistent with table 2 of section 4.3.1 of the AFOLU Requirements. It is conservative to exclude this carbon pool as the baseline scenario is open water (i.e. no deadwood possible).
Soil Organic Carbon	Included	Major carbon pool expected to increase due to project activities.	This ensures consistency with table 2 of section 4.3.1 of the AFOLU Requirements.
Wood Products	Excluded	Conservatively excluded. Not expected to be a significant pool.	This is consistent with table 2 of section 4.3.1 of the AFOLU Requirements. It is conservative to exclude this carbon pool as the baseline scenario is open water (i.e. no wood products possible). Additionally no commercial harvest is permitted in the project scenario.

Table 8 Carbon Pools

Section 5.3 of the methodology which describes the process for defining the project's physical boundary was assessed for conformance to the VCS rules and was found to be sufficiently detailed, appropriate and adequate for the activities covered by the methodology and is in compliance with the methodology and VCS requirements. Additionally AFOLU Requirement 4.3.25 has been addressed by requiring the proponent to demonstrate that the project's spatial boundaries and wetland establishment activities have taken into account projections of future sea level rise.

Section 5.4 of the methodology describes how temporal boundaries are defined, such as the project start date, the length of the crediting period, and the dates for re-evaluation of the baseline period. These were reviewed within the context of the VCS rules and were found to be sufficient and consistent. Further, the methodology provides details regarding the timeline for various

monitoring activities, such as the timing for installation of chambers for monitoring the GHG emission fluxes.

3.3 Procedure for Determining the Baseline Scenario

The most plausible baseline scenario for RWE and ARR is determined through demonstrating that the project area meets the definition of open water and degraded wetland before project activities are implemented and would have remained open water in the absence of the project activities. This is demonstrated through USGS data sets and/or Fish and Wildlife National Wetlands Inventory, demonstrating the hydrology and climate of the area for at least the last 20 years and further land use change information demonstrating a long-term pattern of wetland loss. It must also be demonstrated that wetland creation is unlikely to occur in the project area.

Detailed guidance regarding the implementation of spatial analysis using satellite or aerial imagery to determine changes in landscape and land use is provided. The guidance does not have to be used; however, a series of requirements are provided that must be met.

The project proponent must demonstrate land loss rates in the hydrologic basin through published information and show how any existing or future water management activities might influence the project area.

Instructions for determining the dredging baseline scenario include ways to determine whether dredging would occur in the absence of the project, what the fate of that dredged material would be, and the energy consumption during dredging operations. In addition, the methane emitted via ebullition in the baseline scenario may be determined through monitoring of a reference area. This option may be conservatively ignored. The baseline scenario is re-evaluated every ten years.

Procedures for determining the baseline scenario are appropriate, adequate, and in compliance with VCS rules (VCS Standard and AFOLU Requirements). Specifically:

- As per section 4.5.1(1) of the VCS Standard the methodology appropriately takes into account the identified relevant GHG sources, sinks and reservoirs.
- As per section 4.5.1(2) the methodology considers the alternative project types by requiring project proponents to describe the likely fate of dredged sediments in the baseline, indicating that the sediments would not be used for wetland creation activities in the baseline scenario, and thus there are no alternative activities that use the local sediment supply to create wetlands.
- As per the VCS Standard sections 4.5.1(3) and 4.5.1(4), during the methodology assessment ESI reviewed all aspects of the baseline scenario, and the project as a whole, within the context of data availability, reliability and limitations and other relevant information (including future conditions, technical, legal, environmental, temporal and site-specific) and found it to be sufficient.
- As per the AFOLU Requirements section 4.4.10(1) the methodology requires that the hydrologic characteristics of the watershed and the drainage system in which the project occurs are considered. Specifically it requires that the baseline scenario of open water is

demonstrated through documentation regarding land loss rates in the hydrologic basin in which the project area is located, or alternatively it may be shown using high-resolution satellite or aerial imagery that demonstrates that the area of open water (*i.e.*, non-wetland) has not decreased over time in the region surrounding the project area.

- As per the AFOLU Requirements section 4.4.10(2) the methodology requires that the long-term average climate variables influencing water table depths and the timing and quantity of water flow are demonstrated, requiring 20 years of hydrologic data to support the long-term nature of the documented pattern of wetland loss.
- As per the AFOLU Requirements section 4.4.10(3) the methodology requires that the project proponent shows the project boundary and the proximity to any existing and/or future water management activities (e.g., river diversions) which could influence the project area.
- Due to the baseline scenario of open water, the requirements of AFOLU Requirements section 4.4.11(1 & 2) were determined not to be relevant for the scope of this methodology.
- As per AFOLU Requirements section 4.4.11(3) the methodology section 6.1.1 (using published regional land change analysis) or section 6.1.2 (using spatial analysis) both require that a trend of continued land loss or static condition in the basin be demonstrated for a period of at least 10 years prior to the project start date or the date of baseline reevaluation.
- As per AFOLU Requirements section 4.4.15 the methodology requires that the project proponent shows the project boundary and the proximity to any existing and/or future water management activities (e.g., river diversions) which could influence the project area. Given the baseline scenario of open water, this appears to be the only relevant impact.
- As per AFOLU Requirements section 4.4.16 the methodology requires that the project proponent shows the project boundary and the proximity to any existing and/or future water management activities (e.g., river diversions) which could influence the project area. Given the baseline scenario of open water, this appears to be the only relevant impact.
- As per AFOLU Requirements section 4.4.17 the methodology requires the project proponent to demonstrate that the project's engineering and design takes into account future sea level rise projections. For the baseline scenario of open water it is anticipated that the impact of sea level rise would only further substantiate the open water baseline case.
- As per AFOLU Requirements section 4.4.18 the methodology requires that the project proponent shows the project boundary and the proximity to any existing and/or future water management activities (e.g., river diversions) which could influence the project area.

3.4 Procedure for Demonstrating Additionality

The methodology uses an activity method for demonstrating additionality for RWE and ARR.

As per section 4.6.8 of the VCS Standard (which requires compliance with section 4.6.3), regulatory surplus is demonstrated with an analysis of all laws, regulations and legal requirements for the project area. The methodology provides an adequate process to be carried out by project proponents which appropriately ensures that all relevant laws are identified and considered. Examples of regulations that may apply are included. Regulatory surplus is also an applicability condition.

As per section 4.6.9, the methodology develops a positive list based on “Option A” activity penetration in specific geographic scopes. Appendix H of the methodology provides a detailed analysis of the adoption potential and summaries of national and region-specific wetland changes and creation efforts. This analysis was reviewed at length by ESI and was found to sufficiently support the arguments for low rates of adoption. The developers have appropriately stated activity penetration must be less than 5% relative to its maximum adoption potential.

The procedures for demonstrating additionality are appropriate, adequate, and in compliance with the VCS rules.

3.5 Baseline Emissions

Many of the baseline emissions mentioned in section 4.5.25 of the VCS AFOLU Requirements (Baseline and Project Removals for Wetland Restoration and Creation Methodologies) are not applicable to projects under this methodology because the baseline condition is open water. Emissions from biomass loss and fires were considered de minimis based on the open water baseline condition. Baseline emissions calculations only include emissions from energy consumption from dredging operations and emissions from CH₄ ebullition. Energy emissions coefficients are from the EPA Final Mandatory Reporting of Greenhouse Gases Rule.

As soil carbon is a required pool, the methodology addresses AFOLU Requirement 4.5.28 that transported organic matter is conservatively assessed, the methodology developers have proposed three different approaches based on geographic location and available evidence. For projects within Louisiana and not within the direct influence of a river diversion or river mouth, the methodology developer has sufficiently demonstrated that import of organic matter will not cause accretion estimates to be overestimated through a literature review and expert opinion. Accordingly projects meeting this stipulation are not required to monitor allochthonous carbon. For projects outside of Louisiana, project proponents can conservatively exclude allochthonous carbon through justification that the import of organic matter will not cause carbon accretion estimates to be significantly overestimated. This demonstration shall be done with regional case studies, regional models and peer-reviewed literature. If this demonstration cannot be met, the methodology requires allochthonous carbon to be monitored using marker horizons.

Methods for calculation of baseline emissions are appropriate, adequate and in compliance with VCS rules.

3.6 Project Emissions

Project emissions/removals are calculated by adding the change in carbon stocks to the changes in the emission of methane, nitrous oxide and those due to energy consumption. IPCC Guidelines are

used as guidance. Losses due to disturbances are dealt with according to VCS AFOLU Requirements. The procedures for calculating project emissions were reviewed at length by ESI and found to be appropriate, adequate and in compliance with VCS rules.

3.7 Leakage

Activity-shifting leakage is considered zero because the project area continues to be open water in the baseline scenario, and wetland creation does not materially change the land use activities outside of the project area. Since the baseline condition is open water, agricultural activities cannot occur. Since dredging emissions can occur in both the baseline and project scenarios, there are no leakage emissions from machinery.

The methodology further purports there is no commercial value to the baseline condition, so no change in supply and demand can exist. This assertion was considered at length by ESI and alternative commercial uses of the baseline condition; however, no valid commercial use could be identified aside from navigation. Federal laws are in place to prevent the interruption of navigation, so the argument was considered valid.

At project validation, expected hydrological impacts are described by the project proponent. At project verification, the project proponent must document that the project does not significantly affect hydrologically connected areas (increase flooding or reduce water availability) through modelling (such as with Clean Water Act or National Environmental Policy Act (NEPA) analyses). Compliance with Section 404 of the CWA and Section 10 of the CWA, if applicable, must be demonstrated.

The methodology is in compliance with the VCS Standard and AFOLU Requirements, including but not limited to AFOLU Requirement 4.6.1, parts 1 – 3 and requirement 4.6.20; therefore the procedures for calculating leakage are appropriate, adequate, and in compliance with the VCS rules.

3.8 Quantification of Net GHG Emission Reductions and/or Removals

The methodology calls for quantifying gross emissions reductions and removals in each monitoring period by subtracting project emissions/removals from baseline emissions. Net emissions reductions and/or removals are calculated by taking into account the confidence deduction and buffer pool allocation.

The methodology provides detail on calculation of emissions from energy consumption, methane, nitrous oxide, carbon dioxide, disturbances from storms and fire.

Methods for calculation of emission reductions and removals are appropriate, adequate and in compliance with the VCS Standard, sections 4.7.1 and 4.7.2, as well as AFOLU Requirements 4.7.1 through 4.7.3.

The methodology outlines the fact that the VCS ARR requirements and methods apply to a project when the activity includes establishment of woody vegetation. As stated in Section 2.2 of the methodology, "ARR establishment activities shall not include nitrogen fertilization, active peatland drainage, or lowering of the water table depth (e.g., draining or construction of channels in order to

harvest). Projects with an ARR component shall not include commercial harvest of woody biomass”.

Methods for the quantification of net GHG emission reductions and/or removals are appropriate, adequate and in compliance with VCS rules.

3.9 Monitoring

The methodology monitoring sections include suggestions on stratification, as well as instructions on what is required in the monitoring plan. As per VCS Standard section 4.8.1 and 4.8.4, and AFLOU section 4.8.1 specifics on parameters to be monitored, the purpose of monitoring, frequency of monitoring, the methods to be used for monitoring, and procedures for managing data quality are provided, both in the monitoring section (Section 9), in Appendices D, E and F, and are again summarised in Appendix M. As per VCS Standard section 4.8.2 conservative values were confirmed to be used to ensure against an overestimation of net GHG emission reductions and removals.

As per AFLOU section 4.8.2 with regards to leakage monitoring, at verification the project proponent shall provide documentation that the project will not significantly affect hydrologically connected areas. This was reviewed during the methodology assessment of leakage and considered to be appropriate and sufficient.

Monitoring procedures are appropriate, adequate and in compliance with the VCS rules.

3.10 Data and Parameters

The list of variables, data and parameters, and description of the frequency of monitoring for project validation are listed in Appendix J of the methodology, while Appendix K is a complete list of all variables monitored, data and parameters, and description of frequency monitored. They include methane emissions flux, nitrous oxide emissions flux, soil carbon measurements, biomass measurements and measurements to determine energy use. Data that can be used to quantify the carbon pools specified for WRC projects are covered in a reasonable fashion.

Data and parameters monitored are appropriate, adequate and in compliance with VCS rules. The methodology (Section 9.2.3.1) is also compliant with VCS 4.1.7 regarding the use of default factors.

3.11 Use of Tools/Modules

The methodology refers to one module of the VCS Soil Carbon Methodology for guidance design, allocation and demarcation of soil sampling locations within a soil measurement plot, and on soil sampling protocols. It is appropriate that some soil sampling guidance is specific to this methodology, while the methodology developers also refer to the general sampling guidance provided in the previously existing VCS soil methodology, due to the unusual situation of a synthetically deposited parent material (the dredged materials). The Soil Carbon Methodology is used properly.

Assessors confirmed the methodologies compliance with VCS 4.1.6 regarding the use of models (peer-reviewed, tested, parameters, uncertainty, comprehensive, conservatism of factors, etc.).

These requirements are discussed in Section 9.2.3.1, 9.2.2.1, and 9.2.3.2.4 of the methodology. The tools/modules are use appropriately within the methodology.

3.12 Adherence to the Project Principles of the VCS Program

Relevance: The methodology deals with the GHG sources, sinks and reservoirs that are pertinent to wetland creation. The data to be collected and the other methodology used for some SOC procedures (VCS Soil Carbon Methodology) were assessed to be relevant and appropriate.

Completeness: All relevant GHG pools, emissions and removals are covered, and the methodology offers complete instructions regarding how to develop a WRC project under the methodology, including procedures for determining the baseline scenario, demonstrating additionality, quantification of GHG emission removals, and monitoring procedures.

Accuracy: The methods proposed in the methodology have been confirmed to reduce bias and uncertainty to the greatest extent possible.

Transparency: During the course of the first assessment the methodology developer was transparent; addressing all questions and concerns, and did not limit access to any documentation.

Conservativeness: The methodology GHG emissions are unlikely to be overestimated following the procedures described in the methodology.

3.13 Relationship to Approved or Pending Methodologies

No other wetland creation methodology has been approved.

3.14 Stakeholder Comments

The public comment period was 04 December 2012 – 02 January 2013. As indicated by VCS, no public comments were received during the public comment period.

4 Resolution of Corrective Action Requests and Clarification Requests

During the course of the first assessment there were 52 Non-Conformity Reports (NCR's), 25 Clarifications (CL's) and 2 Opportunities for Improvement (OFI's) issued. Through the course of four (4) Rounds of review, all NCR's and CL's were adequately addressed. Refer to Appendix B for a complete list of all non-conformity reports and clarification requests, including a summary of how these issues were resolved.

5 Assessment Conclusion

ESI confirms that all first assessment activities for the *Methodology for Coastal Wetland Creation* adhere to the criteria established for this assessment as documented in this report and are complete. ESI concludes without any qualifications or limiting conditions that the methodology element documentation (*Methodology for Coastal Wetland Creation, Version 1.182a*) meets the requirements of VCS Program Guide, VCS Standard, VCS AFLOU Requirements, and the VCS

Methodology Approval Process. Therefore, ESI recommends that VCSA approve the methodology element (*Methodology for Coastal Wetland Creation, Version 1.182a*) as prepared by CH2M Hill and ecoPartners.

6 Report Reconciliation

After the second assessment of the methodology was completed ESI reviewed the revisions to the methodology. Further, on 10 December 2013 a second revised report from the second assessor (SCS) was received from VCS which reflects the additional discussions related to ARR activities. ESI found no issue with the changes made during the first reconciliation process and no changes to the methodology (version 1.182a) were made during the second reconciliation; therefore no specific discussions were needed with the second assessors to address reconciliation of any items.

7 Evidence of Fulfilment of VVB Eligibility Requirements

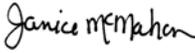
As set out in the VCS Methodology Approval Process for WRC and ARR AFOLU Methodology Elements:

- 1) Both validation/verification bodies shall be eligible under the VCS Program to perform validation for sectoral scope 14 (AFOLU); AND
- 2) At least one of the validation/verification bodies shall use an AFOLU expert (Shawn McMahon) in the assessment; AND
- 3) At least one of the validation/verification bodies shall have completed at least ten project validations in any sectoral scope. Project validations can be under the VCS Program or an approved GHG program, with the projects having been registered under the applicable program. A validation of a single project under more than one program (e.g., VCS and CDM) counts as one project validation. The validation/ verification body that meets this eligibility requirement may be the same validation/verification body that uses an AFOLU expert.

ESI fulfils the eligibility requirements in the following ways:

- 1) ESI is accredited by the American Standards Institute under ISO 14065:2007 for GHG Validation and Verification Bodied; including validation/verification of assertions related to GHG emission reductions and removals at the project level for Land Use and Forestry (Group 3). VCS accepts this accreditation.
- 2) During the methodology assessment, ESI applied for VCS AFOLU-Wetlands Expert status, which was approved for Shawn McMahon. Additionally, ESI added Luis de la Torre, a VCS Approved Standardized Methods Expert. Both were full team members, who attended the meetings and completed the technical review.
- 3) To date, ESI has completed 18 VCS project validations under AFOLU. Please see Appendix C for the required evidence.

8 Signature

Report Submitted to:	<p>Verified Carbon Standard Association 1730 Rhode Island Ave. NW, Suite 803, Washington, D.C. 20036</p> <p>CH2M Hill 700 Main Street, Suite 400 Baton Rouge, LA 70801 www.ch2mhill.com</p>
Report Submitted by:	<p>Environmental Services, Inc. -Corporate Office 7220 Financial Way, Suite 100 Jacksonville, Florida 32257</p>
ESI Lead Validator Name and Signature	 <p>Shawn McMahon Lead Validator</p>
ESI Division Regional Technical Manager Name and Signature	 <p>Janice McMahon Vice President and Forestry, Carbon and GHG Division Regional Technical Manager</p>
Date:	16 December 2013

RS/SMM/CLS/JPM/rmb VO12063 Coastal Wetlands Creation Methodology Assessment Report-Final.doc
K pf 12/16/13f

Appendix A – List of Documents Reviewed/Received

Documents Received 20 October 2012

- VCS MAP Form v3.1_Wetland Creation_CH2MHILL_signed.pdf
- CH2M HILL_wetland creation_activity penetration technical support.pdf
- Methodology for Wetland Creation v1.119.pdf

Documents Received 1 November 2012

- Methodology for Wetland Creation v1.125.pdf
- Compare_1.119_1.125.pdf
- Methodology for Wetland Creation v1.125.docx

Documents Received 13 November 2012

- Wetlands Meth Credit Generation v1.11.xlsx

Documents Received 16 November 2012

- data-2012-11-14-08-43-24.3gp
- data-2012-11-13-09-00-21.3gp
- data-2012-11-13-13-36-38.3gp

Documents Received 7 January 2013

- Response to NCR4 v1.2.xlsx
- CH2M Hill NCR Round 1 11-21-12 v1.30.xlsx
- Methodology for Coastal Wetland Creation v1.152.docx
- Methodology for Coastal Wetland Creation v1.152.pdf
- Response NCR55 and NCR56 v1.0.docx
- Response to NCR2 and NCR69 v1.1.docx

Documents Received 15 January 2013

- Yu et al 2008 Hydrological conditions N2O, CH4, CO2 hardwood forest.pdf
- A_list of references_coastal wetland creation meth.docx
- Baldocchi BAMS 2001.pdf
- Baldocchi Ecology 1988.pdf
- burba anderson 2007.pdf
- Callaway et al.Estuaries & Coasts.2012.pdf
- Couvillion_2011_Land Loss_SIM3164_Pamphlet.pdf
- Couwenberg 2009_Methane_emissions_from_peat_soils.pdf
- craft1991.pdf
- Folse et al_CRMS SOP_2012.pdf
- henri 2001_lossonignition.pdf
- Kadlec and Wallace 2009.pdf
- kljun et al. 2004_BLM.pdf
- Lundberg2012_GHG_louisiana.pdf
- mauder et al. 2008.pdf
- Smith et al_1983_N2O emission from gulf coast wetlands.pdf
- USACE 1993 methods sedimentation technical note.pdf
- Whalen_2005_methane wetlands.pdf"

Documents Received 22 January 2013

- Yu et al 2006_Direct measurement denit in FW marsh diverted Miss R.pdf

Documents Received 26 February 2013

- Methodology for Coastal Wetland Creation v1.158.docx"

- CH2M Hill NCR Round 2 2-6-13 v1.4.xlsx
- Meth compare v155-v158.pdf

Documents Received 4 March 2013

- Methodology for Coastal Wetland Creation v1.158.docx
- CH2M Hill NCR Round 2 2-6-13 v1.4.xlsx
- Meth compare v155-v158.pdf

Documents Received 2 May 2013

- LI-7700_Calibration.pdf
- LI-7200_Calibration.pdf

Documents Received 22 May 2013

- Discussion Alloch_Autochthonous Carbon in Tidal Systems_v13.docx

Documents Received 14 June 2013

- Methodology for Coastal Wetland Creation v1.167.pdf
- 2013_0614_RTC on NCR 56.docx
- CH2M_Hill_NCR_Round_3_2013-03-20 v1.3.xlsx
- Compare 2013.06.14 Allochthonous Carbon.pdf
- Methodology for Coastal Wetland Creation v1.167.docx"

Documents Received 18 June 2013

- Methodology for Coastal Wetland Creation v1.165.docx2013_0614_RTC on NCR 56.docx
- Methodology for Coastal Wetland Creation v1.165.pdfCompare 2013.06.14 Allochthonous Carbon.pdf

Documents Received 17 July 2013

- Methodology Compare v165 v167.pdf
- Methodology for Coastal Wetland Creation v1.167.docx

Documents Received 1 August 2013

- Methodology Compare v165 v167b.pdf
- Methodology for Coastal Wetland Creation v1.167b.docx

From LICOR Website

- LI-7200_Manual_Rev5.pdf

Documents Received from VCS on 09 and 10 October 2013

- VCS_CH_AssessmentReport_091313.pdf
- Coastal_Wetland_Creation_Methodology_First_Assessment_Report_DRAFTv3 + VCSA.pdf
- Methodology for Coastal Wetland Creation v1 182.docx

Documents Received 13 November 2013

- Methodology for Coastal Wetland Creation v1.182a.docx

Documents Received from VCS on 10 December 2013

- VCS_CH_AssessmentReportTrkChgs_120913.pdf
- VCS_CH_AssessmentReport_120913.pdf

Appendix B – Corrective Action and Clarification Requests

METHODOLOGY ELEMENT FIRST ASSESSMENT - NON-CONFORMITY REPORTS (NCR) / CLARIFICATION (CL) REQUESTS

1. Non-Conformity Report

VCS Criteria: 4.1.4	
Methodology elements shall be guided by the principles set out in Section 2.4.1. They shall clearly state the assumptions, parameters and procedures that have significant uncertainty, and describe how such uncertainty shall be addressed. Where applicable, methodology elements shall provide a means to estimate a 90 or 95 percent confidence interval. Where a methodology applies a 90 percent confidence interval and the width of the confidence interval exceeds 20 percent of the estimated value or where a methodology applies a 95 percent confidence interval and the width of the confidence interval exceeds 30 percent of the estimated value, an appropriate confidence deduction shall be applied. Methods used for estimating uncertainty shall be based on recognized statistical approaches such as those described in the IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories. Confidence deductions shall be applied using conservative factors such as those specified in the CDM Meth Panel guidance on addressing uncertainty in its Thirty Second Meeting Report, Annex 14.	
Evidence Used to Assess Conformance: 2.3.1.5; 8.4.2.1; Appendix B & C	
Findings: It is not clear that the equation is approved for use nor that it is conservative.	
Non-conformity report (NCR):	
Please provide a discussion regarding how the flux measurement methods set out in in this methodology (sections 9.2.2 and 9.2.3) is conservative and results in conservative (high) estimation of project emissions.	
Please clarify why the methodology allows for another equation to be used in lieu of G.18 (in the test of Eq. G.18). The validator believes these should be requirements of the methodology. Also, please clarify where the methodology provides the means to estimate a 90 or 95 percent confidence interval (when applicable).	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Please see document "Response to NCR2 and NCR69.docx" 7 January 2013	
Evidence used to close NCR: The methodology sufficiently details in section 9.2.2.3 and 9.2.3.3 how flux measurement methods are conservative. Specifically, they require that flux measurements be made in the portions of the project area that are subject to the largest fluxes and at times of the year during which fluxes are greatest. Addressed.	
Regarding equation 18, the methodology provides the option of using Eq 18 to allow project proponents to use sampling designs and measurement methods specifically appropriate to their project. It is also noted that as alternate sampling designs may require different estimators for uncertainty, a deviation would potential be required at time of validation. Addressed.	
Date closed:	6 February 2013

2. Non-Conformity Report

<p>VCS Criteria: 4.1.6</p> <p>1) Models shall be publicly available, though not necessarily free of charge, from a reputable and recognized source (eg, the model developer’s website, IPCC or government agency).</p> <p>2) Model parameters shall be determined based upon studies by appropriately qualified experts that identify the parameters as important drivers of the model output variable(s).</p> <p>3) Models shall have been appropriately reviewed and tested (eg, ground-truthed using empirical data or results compared against results of similar models) by a recognized, competent organization, or an appropriate peer review group.</p> <p>4) All plausible sources of model uncertainty, such as structural uncertainty or parameter uncertainty, shall be assessed using recognized statistical approaches such as those described in 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 1, Chapter 3.</p> <p>5) Models shall have comprehensive and appropriate requirements for estimating uncertainty in keeping with IPCC or other appropriate guidance, and the model shall be calibrated by parameters such as geographic location and local climate data.</p> <p>6) Models shall apply conservative factors to discount for model uncertainty (in accordance with the requirements set out in Section 4.1.4), and shall use conservative assumptions and parameters that are likely to underestimate, rather than overestimate, the GHG emission reductions or removals.</p> <p>Note – The criteria set out in (2)-(6) above are targeted at more complex models. For simple models, certain of these criteria may not be appropriate, or necessary to the integrity of the methodology. Such criteria may be disregarded, though the onus is upon the methodology developer to demonstrate that they are not appropriate or necessary.</p>	
<p>Evidence Used to Assess Conformance: Section 9.2.3.2.</p>	
<p>Findings: It is unclear from this section, titled Proxy Modelling, whether all requirements are addressed.</p>	
<p>Non-conformity report (NCR): Please ensure all requirements are included in the methodology.</p>	
<p>Date issued:</p>	<p>21 November 2012</p>
<p>Project proponent response/actions and date:</p> <p>1) Already incorporated in Section 9.2.3.1.</p> <p>2) Section 9.2.2.1 requires the proponent to select a model from peer-reviewed literature and demonstrate that the model is appropriate for the region.</p> <p>3) Section 9.2.2.1 requires the proponent to select a model from peer-reviewed literature and demonstrate that the model is appropriate for the region. It requires the model's applicability be established via a direct comparison to field data.</p> <p>4) Section 9.2.2.1 provides guidance for assessing uncertainties and appropriateness of models from the literature. It requires uncertainty be assessed by direct comparison to field data and that a model's conservativeness be demonstrated. Also see response to finding 2.</p> <p>5) Section 9.2.2.1 provides guidance for assessing uncertainties and appropriateness of models from the literature. It requires uncertainty be assessed by direct comparison to field data and that a model's conservativeness be demonstrated.</p> <p>6) Section 9.2.3.2.4 provides guidance on using conservative assumptions and parameters. Further, throughout the methodology, the authors have provided guidance and numerous examples for how to follow the methods in a conservative manner.</p>	
<p>Evidence used to close NCR:</p>	

1) Confirmed - addressed.	
2) Confirmed - addressed.	
3) Confirmed - addressed.	
4) Confirmed - addressed.	
5) Confirmed – addressed.	
6) Confirmed – addressed.	
Date closed:	6 February 2013

3. Non-Conformity Report

VCS Criteria: 4.1.7	
1) Where the methodology uses third party default factors and/or standards, such default factors and standards shall meet with the requirements for data set out in Section 4.5.6, mutatis mutandis.	
2) Where the methodology itself establishes a default factor, the following applies:	
a) The data used to establish the default factor shall comply with the requirements for data set out in Section 4.5.6, mutatis mutandis.	
b) The methodology shall describe in detail the study or other method used to establish the default factor.	
c) The methodology developer shall identify default factors which may become out of date (i.e., those default factors that do not represent physical constants or otherwise would not be expected to change significantly over time). Such default factors are subject to periodic re-assessment, as set out in VCS document Methodology Approval Process.	
3) Where methodologies allow project proponents to establish a project-specific factor, the methodology shall provide a procedure for establishing such factors.	
Evidence Used to Assess Conformance: Section 9.2.3.1 and other relevant sections.	
Findings: Origin of the default factors is unclear. (formerly NCR 4)	
Non-conformity report (NCR): Please ensure all requirements are included in the methodology.	
Date issued:	21 November 2012
Project proponent response/actions and date: Please see document "Response to NCR4.xlsx." 7 January 2013	
Non-conformity report (NCR): Though none were initially located, for clarity please identify if the methodology permits the use of any project specific factors.	
Date issued:	6 February 2013
Project proponent response/actions and date: The default factors set in 9.2.3.1 are not established by the meth, but are from third-party peer-reviewed data. However, the source of the data in Table 17 is unclear.	
Also, since the requirements under 4.5.6 of the Standard are embedded in the Methodology requirements section, the validator believes these could be lost in a typical validation/verification review at the project level.	
Please state in the methodology that where default factors are used, they must be consistent with the most current version of the VCS Standard's requirements for default factors (currently located in Section 4.5.6 VCS Standard V3.3.)	
Non-conformity report (NCR): The default factors set in 9.2.3.1 are not established by the Methodology, but are from third-party peer-reviewed data. However, the source of the data in Table 17 is unclear. Is it the same source as Table 16?	

<p>Also, since the requirements under 4.5.6 of the VCS Standard are embedded in the Methodology requirements section, the validator believes these could be lost in a typical validation/verification review at the project level.</p> <p>Please state in the methodology that where default factors are used, they must be consistent with the most current version of the VCS Standard's requirements for default factors (currently located in Section 4.5.6 VCS Standard V3.3).</p>	
Date issued:	20 March 2013
<p>Project proponent response/actions and date: The relevant data sources for Table 17 are listed within the table for each wetland type.</p> <p>Added clarification to section 9.2.3.1 to state that default factors must conform to requirements in current version of the VCS Standard.</p>	
<p>Evidence used to close NCR: Data sources confirmed for Table 17. Clarification (addition to methodology) regarding default factors confirmed. Addressed.</p>	
Date closed:	14 June 2013

4. Non-Conformity Report

<p>VCS Criteria: 4.1.8</p> <p>Where proxies are used, it shall be demonstrated that they are strongly correlated with the value of interest and that they can serve as an equivalent or better method (eg, in terms of reliability, consistency or practicality) to determine the value of interest than direct measurement of the value itself.</p>	
<p>Evidence Used to Assess Conformance: Section 9.2.3.2.</p>	
<p>Findings: It is not clear where this requirement is addressed in the methodology.</p>	
<p>Non-conformity report (NCR): Please ensure all requirements are included in the methodology.</p>	
Date issued:	21 November 2012
<p>Project proponent response/actions and date: Section 9.2.3.2.3 and Appendix F provide guidance for how to assess model fit in order to ensure that proxy models produce sufficiently reliable and consistent estimates. The second MR requirement in section 9.2.3.2.3 requires demonstration that a proxy method is strongly correlated with the value of interest. Section 9.2.3.2.4 provides additional guidance regarding the range of parameter values to which proxy models may be applied. Added a PD requirement in section 9.2.3.2.3 to require justification that the proxy is an equivalent or better method than direct measurement.</p> <p>7 January 2013</p>	
<p>Evidence used to close NCR: The proposed revisions sufficiently address the VCS requirements regarding proxies.</p>	
Date closed:	6 February 2013

5. Non-Conformity Report

VCS Criteria: 4.1.12	
Methodologies shall include sufficient information and evidence to allow the reader to reach the same assessment conclusion on the appropriateness and rigor of the standardized method reached by the two validation/verification bodies in the methodology approval process, noting that the confidentiality of proprietary data may be protected as set out in Section 4.5.6(5). To aid the readability and clarity of methodologies, such information and evidence may be included in appendices to methodology documents rather than in the body of the documents themselves. Following their initial approval, methodologies are subject to periodic re-assessment, as set out in VCS document Methodology Approval Process.	
Evidence Used to Assess Conformance: Section 7	
Findings: Methodology does not offer sufficient information to allow any reader to reach the same assessment.	
Non-conformity report (NCR): The expert believes that the methodology does not offer sufficient information to allow any reader to reach the same assessment. Details of these issues are explained below. These are basically the procedure for activity penetration (5% rule).	
Date issued:	21 November 2012
Project proponent response/actions and date: Section 7 and Appendix H have been revised significantly in response to several NCRs (e.g., NCRs 7-11, 22). The methodology authors believe that the methodology now more clearly describes the use of standardized methods and more clearly justifies the positive list. 7 January 2013	
Evidence used to close NCR: Appendix H gives now sufficient references to support the same level of analysis for different users. Addressed.	
Date closed:	6 February 2013

6. Non-Conformity Report

VCS Criteria: 4.3.1	
The methodology shall use applicability conditions to specify the project activities to which it applies and shall establish criteria that describe the conditions under which the methodology can (and cannot, if appropriate) be applied. Any applicability conditions set out in tools or modules used by the methodology shall also apply.	
Evidence Used to Assess Conformance: Section 4	
Findings: More detail is needed regarding the geographic scope.	
Non-conformity report (NCR): Although discussed in the in-person meeting, please provide a revised methodology version that more clearly specifies the geographic scope to the entire U.S. (Applicability Condition #5). Also please clarify/specify if it is continental U.S. or entire U.S.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised section 7.2 to define geographic scope as "Areas within the coastal zone boundary, and which meet the definition of Waters of the United States." Sources for coastal zone boundaries and definition of Waters of the U.S. are also included.	

7 January 2013	
Evidence used to close NCR: The revised section sufficiently describes the geographic scope of the methodology. Addressed.	
Date closed:	6 February 2013

7. Non-Conformity Report

VCS Criteria: 4.3.2	
Precise specification of the project activity is required to provide a carefully targeted standardized method with an appropriate level of aggregation with respect to the project activity. The applicability conditions shall be specified accordingly and shall cause to be excluded from the methodology, to the extent practicable; those classes of project activities that it can be reasonably assumed will be implemented without the intervention created by the carbon market. For example, the methodology may exclude facilities larger than a specific size or capacity, constructed before a given date or that have regular access to lower cost fuels than most facilities. The methodology shall demonstrate how the applicability conditions achieve such objective with respect to free-riders.	
Evidence Used to Assess Conformance: Page 11.	
Findings:	
<p>The Methodology does not appear to clearly specify the effect of scale in the project activity. There is no protocol to categorize the scope of work based on scale (E.g. total CAPEX USD per total amount of acres). The reason for this is economic, for very large restoration or creation of lands, the carbon market could not be significant and that level of work will be implemented only with federal funds or equivalent or could be a policy-issue of the VCS mechanism. Methodology developer shall include references such as project budget or amount of area created to cover this issue or confirm that the issue is not pertinent today if applicable.</p> <p>As reference, the CDM Executive Board had similar concerns with large transportation systems where CAPEX could move from a few millions to billions and restricted the use of carbon credits based on scale, only for some type of projects and small scale (indeed the issue still is in discussion at the Board as it has become politically sound).</p> <p>Finally, the issue of free riders is not covered specifically in this proposal; there are not specifications of legal bindings, permissions or equivalents to avoid this effect.</p>	
Non-conformity report (NCR):	
As this point cannot be derived subjectively from other parts of the Methodology, it should be clearly stated.	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Per email from Shawn McMahon (dated 12/20/2012), the validation team considers this NCR to be adequately addressed by the methodology.	
7 January 2013	
Evidence used to close NCR: After this NCR was issued, internal discussions revealed that the wetland creation, such as would be created by the methodology are not impacted by scale. To our knowledge and experience wetland projects over a certain size to not breach a threshold that makes them viable for federal or other funding that would permit implementation without the intervention created by the carbon market. This was confirmed with both wetland experts and verbally with VCS. Addressed.	

Date closed:	6 February 2013
---------------------	-----------------

8. Non-Conformity Report

VCS Criteria: 4.3.6	
The applicability of the methodology or a performance benchmark shall be limited to the geographic area for which data are available, or it shall be demonstrated that data from one geographic area are representative of another or that it is conservative to apply data from one geographic area to another. Representativeness shall be determined in terms of the similarity of the geographic areas considering such factors as those set out in Section 4.3.5 above. Likewise, it shall be determined that it is conservative to apply data from one geographic area by considering the same factors. In determining whether two areas are sufficiently similar, or that it is conservative, to allow data to apply from one area to another, only factors related to the baseline scenario and additionality need to be considered.	
Evidence Used to Assess Conformance: Section 7.	
Findings: Is not clear how the requirement 4.3.6 has been considered for the entire geographic scope of the methodology and how the conservativeness of data applicability and representativeness was demonstrated.	
Non-conformity report (NCR): Please ensure the requirement 4.3.6 has been considered for the entire geographic scope of the U.S., and please demonstrate conservativeness of data applicability and representativeness.	
Date issued:	21 November 2012
Project proponent response/actions and date: Section 4.3.6 of the VCS Standard (which concerns the performance method) is not applicable to this methodology.	
Non-conformity report (NCR): The requirement states "The applicability of the methodology or a performance benchmark ...". Please clarify how this requirement is not applicable with regards to applicability or provide evidence that requirement 4.3.6 has been considered for the entire geographic scope of the U.S. and demonstrate conservativeness of data applicability and representativeness.	
Date issued:	6 February 2013
Project proponent response/actions and date: Not applicable, per phone conversation with Shawn McMahon 2/12/2013.	
Evidence used to close NCR: Addressed – performance method is not used in this methodology.	
Date closed:	20 March 2013

9. Non-Conformity Report

VCS Criteria: 4.3.8	
The methodology shall clearly specify the project activity in terms of a technology or measure and its context of application. A technology or measure encompasses the plant, equipment, process, management and conservation measure or other practice that directly or indirectly generates GHG emission reductions and/or removals. The context of application refers to the conditions or circumstances under which such technology or measure may be implemented.	
Evidence Used to Assess Conformance: Section 2.1	
Findings: More detail is needed as to the circumstances (technical constraints, specific technical standards, water level, among others).	
Non-conformity report (NCR): The Methodology specifies the measures and its context of application but, the detail of the circumstances needs clarifications (technical constraints, specific technical standards, water level,	

among others).	
Date issued:	21 November 2012
Project proponent response/actions and date:	
<p>Added description of wetland establishment methods and considerations to section 2.1.1: "The project activity of creating a wetland from open water first requires the project proponent to select a proper site location that is adjacent to a sediment source which contains a sufficient volume and is within the technical capabilities of delivering the required sediment to the project site to meet design criteria. It is common, but not required, to construct a temporary retention dike around the project area to contain the sediment material and allow for dewatering and compaction in the initial years after project construction. The temporary dike is typically constructed by machinery such as an excavator. Once complete, the project area is filled with sediment via hydraulic or mechanical dredge, pipelines, or other mechanical methods to the proper elevation as determined in the engineering and design documents based on water levels (current and projected), sediment characteristics, and geotechnical analyses. The retention dikes may be designed to naturally subside to elevations which will allow for tidal exchange and hydrologic connectivity but may require manual breaches or removal after the project area sediment has consolidated to target levels."</p>	
7 January 2013	
Evidence used to close NCR: The proposed revision sufficiently discusses the general technical process involved with wetland creation in open water. Addressed.	
Date closed:	6 February 2013

10. Non-Conformity Report

VCS Criteria: 4.3.9	
<p>The applicability conditions shall establish the scope of validity of the methodology, including the geographic scope. In establishing the scope of validity of the methodology, the methodology shall clearly demonstrate that there is similarity across the sub-areas of the geographic scope in factors such as socio-economic conditions, climatic conditions, energy prices, raw material availability and electricity grid emission factors, as such factors relate to the baseline scenario and additionality, It may be necessary to limit the applicability of the methodology to comply with this requirement.</p>	
Evidence Used to Assess Conformance: Section 7.	
Findings: Needs to demonstrate that there is similarity across the sub-areas of the geographic scope. (Formerly NCR 11)	
Non-conformity report (NCR):	
<p>Please ensure the methodology clearly demonstrates that there is similarity across the sub-areas of the geographic scope in factors such as socio-economic conditions, climatic conditions, energy prices, raw material availability and electricity grid emission factors, as such factors relate to the baseline scenario and additionality, Please demonstrate where the methodology considers these, or make the demonstration separately for the validator.</p>	
Date issued:	21 November 2012
Project proponent response/actions and date:	
<p>The methodology authors believe that project-level requirements for demonstration of similarity with respect to the conditions listed in this finding would only be appropriate if they were expected to affect the baseline determination or the additionality assessment. However, the factors listed do not seem to be relevant for the baseline determination (which is open water, in which none of the usual market-related factors are applicable) or the additionality assessment (which is established by the positive</p>	

<p>list). These factors would seem relevant to additionality only if there is spatial variability in these conditions which affects whether wetland creation is reaching the 5% penetration level in different sub-areas; however, the methodology authors are not aware of any such variability that would bring into question the penetration level in a particular region.</p>	
<p>7 January 2013</p>	
<p>Non-conformity report (NCR): The argument is understood, however the requirement clearly requests that elements such as socioeconomic factors and climatic conditions be considered. Particularly with climatic conditions, issues such as hurricanes and extreme tidal fluctuations are factors which are relevant to the baseline scenario. If as indicated in the methodology (definitions section) some non-open water baseline scenarios are possible, additional factors from this requirement may come into play and need to be considered.</p>	
<p>Date issued:</p>	<p>6 February 2013</p>
<p>Project proponent response/actions and date: Added language to section 7 to more fully explain how the methodology authors considered socio-economic factors and climatic conditions. The revised applicability condition (geographic scope restricted to include only areas of open water) eliminates many of the socio-economic factors to be considered.</p>	
<p>Non-conformity report (NCR): The explanation that the climatic conditions are monitored for their long-term trends does seem to address that a one-time event would be captured. Addressed.</p> <p>However, the statement that socio-economic impacts (example limited to oyster farming) are not common enough is not supported. Also, the statement that this should not vary across different geographic regions is also not supported.</p>	
<p>Date issued:</p>	<p>20 March 2013</p>
<p>Project proponent response/actions and date: No action required.</p>	
<p>Evidence used to close NCR:</p> <p>The validator met with Sam Hoffer of VCS to obtain clarification on the requirement with regards to socio-economic impacts. VCS verbally clarified that the intent of this requirement was to ensure similarity of these factors with relation to only the baseline scenario and additionality, and not simply similarity. Addressed.</p>	
<p>Date closed:</p>	<p>7 May 2013</p>

11. Non-Conformity Report

<p>VCS Criteria: 4.4.2</p> <p>In identifying GHG sources, sinks and reservoirs relevant to the project, the methodology shall set out criteria and procedures for identifying and assessing GHG sources, sinks and reservoirs that are controlled by the project proponent, related to the project or affected by the project (i.e., leakage).</p>
<p>Evidence Used to Assess Conformance: Section 5; Section 8.4.3; Section 9.4.3</p>
<p>Findings: Not clarified for each SSR included in Table 7 if it shall be controlled, related to, or affected by the project proponent.</p>
<p>Non-conformity report (NCR):</p> <p>Please clarify for each SSR included in Table 7 if it shall be controlled, related to, or affected by the project proponent.</p> <p>Please provide a PD requirement to list the included GHG sources.</p>

Section 8.4.3.2 refers to section 9.2.3.1 - 9.2.3.3 to determine if nitrous oxide emissions are de minimis, however these sections do not define specifically what would qualify as de minimus.	
Date issued:	21 November 2013
Project proponent response/actions and date: A column has been added to Table 7 (section 5.1) indicating whether each SSR is affected by the project. Added a PD requirement to list the included GHG sources (section 5.1). Sections 8.4.3.1 and 8.4.3.2 have been revised to include a definition for de minimus. 7 January 2013	
Evidence used to close NCR: Table 7 and table 8 now sufficiently detail the SSR's. The requirement to list SSR's has also been added as well as the definition for de minimus. Addressed.	
Date closed:	6 February 2013

12. Non-Conformity Report

VCS Criteria: 4.4.3 In identifying GHG sources, sinks and reservoirs relevant to the baseline scenario, the methodology shall: 1) Set out criteria and procedures used for identifying the GHG sources, sinks and reservoirs relevant for the project.	
Evidence Used to Assess Conformance: Section 5.2, Table 8	
Findings: Are pools noted in Table 8 relevant to the project, baseline, or both?	
Non-conformity report (NCR): Please describe if the pools noted in Table 8 shall be relevant to the project, baseline, or both.	
Date issued:	21 November 2012
Project proponent response/actions and date: A column has been added to Table 8 (section 5.2) indicating the scenario(s) for which each pool is relevant. 7 January 2013	
Evidence used to close NCR: The proposed revisions sufficiently lists the relevant pools and describes the justification for inclusion or exclusion. Addressed.	
Date closed:	6 February 2013

13. Non-Conformity Report

VCS Criteria: 4.5.1 Methodologies using a project method shall establish criteria and procedures for identifying alternative baseline scenarios and determining the most plausible scenario, taking into account the following: 1) The identified GHG sources, sinks and reservoirs.	
Evidence Used to Assess Conformance: Section 5.2, Table 8	
Findings: Unclear which pools are applicable to the baseline.	
Non-conformity report (NCR): Please state in Section 5.2 Table 8, which pools are applicable to the baseline.	

Date issued:	21 November 2012
Project proponent response/actions and date:	
None of the pools in Table 8 (section 5.2) are applicable to the baseline; this has been reflected in the new "Relevant to:" column.	
7 January 2013	
Evidence used to close NCR: Revision addressed the pools relevant to the baseline. Addressed.	
Date closed:	6 February 2013

14. Non-Conformity Report

VCS Criteria: 4.5.1	
Methodologies using a project method shall establish criteria and procedures for identifying alternative baseline scenarios and determining the most plausible scenario, taking into account the following:	
2) Existing and alternative project types, activities and technologies providing equivalent type and level of activity of products or services to the project.	
Evidence Used to Assess Conformance: Section 6	
Findings: Unclear that the VCS requirements in 4.5.1 are included in the methodology.	
Non-conformity report (NCR):	
Please ensure the VCS requirements in 4.5.1 are included in the methodology. Although the methodology developer discussed in the meeting that they feel these items have been addressed in the additionality section, the validator believes these requirements should be unique to the baseline section.	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Revised section 6.2 (and 2nd PD requirement in that section) to require proponents to describe the likely fate of dredged sediments in the baseline, indicating that the sediments would not be used for wetland creation activities in the baseline scenario, and thus there are no alternative activities that use the local sediment supply to create wetlands.	
7 January 2013	
Evidence used to close NCR: The proposed revision sufficiently addresses the existing and alternate project types in the baseline scenario. Addressed.	
Date closed:	6 February 2013

15. Non-Conformity Report

VCS Criteria: 4.5.4	
The methodology shall identify alternative baseline scenarios and determine either the most plausible baseline scenario or an aggregate baseline scenario for the project activity. Aggregate baseline scenarios shall be determined by combining likely scenarios on a probabilistic (i.e., likelihood) basis.	
Evidence Used to Assess Conformance: Section 6	
Findings: Please ensure the VCS requirements in 4.5.4 are included in the methodology.	
Non-conformity report (NCR):	
Please ensure the VCS requirements in 4.5.4 are included in the methodology. Although the methodology developer discussed in the meeting that they feel these items have been addressed in the additionality section, the validator believes these requirements should be unique to the baseline	

section.	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Section 4.5.4 of VCS Standard refers to Performance Method and therefore is not applicable to this methodology. See response to finding 17 regarding inclusion of requirements in 4.5.1 of VCS Standard.	
7 January 2013	
Evidence used to close NCR: The methodology proposes to use activity methods; therefore this NCR regarding performance methods is confirmed to be not applicable. Addressed.	
Date closed:	6 February 2013

16. Non-Conformity Report

VCS Criteria: 4.6.2	
Methodologies shall use a project method, performance method and/or activity method to determine additionality. The high level specifications and procedural steps for each approach are set out in Sections 4.6.3 to 4.6.9 below. New methodologies developed under VCS shall meet this requirement by doing one of the following:	
2) Developing a full and detailed procedure for demonstrating and assessing additionality directly within the methodology; or	
Evidence Used to Assess Conformance: Section 7.	
Findings: The Methodology is selecting the Activity Penetration protocol under the VCS standard, but the validator believes the level of detail is insufficient, as the VCS requirement is for a full and detailed procedure.	
Non-conformity report (NCR): Please provide more detail.	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Added considerable detail to section 7, describing the procedure used to demonstrate additionality and to define an activity/region for the positive list. Additions include: an additional sub-section describing the regulatory surplus requirement (see finding 24); provided documentation of data sets used (described more fully in Appendix H) and procedure for resolving discrepancies among data sets (see finding 25); added wetland-specific factors considered when determining the maximum adoption potential; explicitly stated the procedure of determining the maximum adoption potential and the observed penetration; added statement that activity penetration is not higher than 5%.	
7 January 2013	
Evidence used to close NCR: The proposed revisions sufficiently details the procedure used to demonstrate activity penetration. Addressed.	
Date closed:	6 February 2013

17. Non-Conformity Report

VCS Criteria: 4.6.8	
The project activity shall meet with the requirements on regulatory surplus set out under the project method in Section 4.6.3.	
Evidence Used to Assess Conformance: Sections 4 and 7.	

Findings:	
Per supporting information, the methodology developer indicates that there are no laws, regulations or other legal requirements for wetlands to be created in the US, but this is anecdotal. Please include a protocol of the categories of information to be analysed to conclude that regulatory surplus does not affect additionality.	
Non-conformity report (NCR):	
Please include a requirement in Section 4 & Section 7 that a project is not mandated by any law, in accordance with Section 4.6.3.	
Date issued:	21 November 2013
Project proponent response/actions and date:	
An applicability condition has been added (section 4) requiring that none of the project activities are mandated by law.	
Added a subsection (7.1 and a PD requirement to provide guidance on the regulatory surplus requirement.	
7 January 2013	
Evidence used to close NCR: The proposed revision sufficiently addresses projects mandated by law. Addressed.	
Date closed:	6 February 2013

18. Non-Conformity Report

VCS Criteria: 4.6.9, 1) Option A: Activity Penetration
The methodology shall demonstrate that the project activity has achieved a low level of penetration relative to its maximum adoption potential, as follows:
a) The methodology shall demonstrate that the project activity has achieved a low level of penetration relative to its maximum adoption potential, determined using the following equation...
Evidence Used to Assess Conformance: Section 2 and section 7.
Findings: The methodology needs to consider treatment of data and treatment of timeframes to take the accumulated data for maximum adoption potential calculation.
Non-conformity report (NCR):
The methodology does not consider two issues:
[1] The treatment of the data. There are many federal agencies reporting wetlands but the methodology shall have guidance to select data of agencies with independent measurements (E.g. USACE, USG Survey and Fish & Wildlife Service), this will assure data with different frequencies and sampling size and coverage. The dataset of all these reports will show some differences that shall be explained statistically and expected not significantly different and showing the same trend of degradation of wetlands. The Methodology shall clearly state how to deal with more than source, analysis of dataset and valid credentials of sources of data.
[2] The treatment of the timeframes to take the accumulated data for maximum adoption potential calculation is a critical issue. Data after 1950 is based on aerial measurements (well developed after second World War) and Landsat (available in the 70's) and have high accuracy and no need for adjustment. But, data before these years, specifically data taken from the 19th century and accumulated over the years, will show significant problems, starting with the definition of wetland, the frequency of measurements, the technology used (theodolites are available since 1890 and its precision has changed in time, initial measurement were estimation using ropes and levels). Any

<p>accumulation of area before 1950 requires a cap to cover the uncertainties to be conservative enough. Methodology developer must provide a clear protocol to justify this cap or to establish an "uncertainty assessment" with clear guidance. The Methodology developer proposed 16,744 ac of activity versus 1,205,000 ac lost, in this case the ac lost has to be fractioned in time and adjusted to express correctly the APy.</p>	
Date issued:	21 November 2012
<p>Project proponent response/actions and date: [1] Added language to 2nd paragraph of section 7 providing guidance for what data sets to use for activity penetration and how to resolve any discrepancies. Added PD requirement in section 7.1 for documentation and justification of selected data set. [2] The pre-1950 data is taken from Couvillion 2012, which the methodology authors believe to be a strong analysis, for the following reasons. First, the study conservatively assumes approx. 10% of the domain of analysis experienced no conversion prior to 1977, so that only areas with consistent data were included. Second, the 1932 data set appears to be in line with the long-term trend of conversion. The long-term 1932-2010 rate of conversion (15,450 ac/yr) is higher than the 1985-2010 rate of conversion (10,605 ac/yr), but significantly lower than conversion rates during other portions of the 20th century (e.g., 1973-1999 rate of 20,300 ac/yr).</p> <p>7 January 2013</p>	
<p>Evidence used to close NCR: [1] A statement is included to cover discrepancies. Addressed. [2] Couvillion has research in this topic supported by Government Agencies, not individually and no peer review, but the Government agencies are the most relevant of this sector and have put the information in their networks without restriction and clear institutional sponsorship. These agencies have organizational structures that assure review of the material previously. Addressed.</p>	
Date closed:	6 February 2013

19. Non-Conformity Report

<p>VCS Criteria: 4.6.9 1) Option A: Activity Penetration... b) The level of penetration of the project activity shall be no higher than five percent.</p>	
<p>Evidence Used to Assess Conformance: Section 7.1</p>	
<p>Findings: Please ensure the level of penetration is less than 5%.</p>	
<p>Non-conformity report (NCR): After the above has been taken into consideration, please ensure the level of penetration is less than 5%.</p>	
Date issued:	21 November 2012
<p>Project proponent response/actions and date: Given the methodology authors' confidence in the USGS study (Couvillion 2012), the activity penetration continues to be less than 5%.</p> <p>7 January 2013</p>	
<p>Evidence used to close NCR: The Couvillion study sufficiently supports activity penetration. Addressed.</p>	
Date closed:	6 February 2013

20. Non-Conformity Report

VCS Criteria: 4.6.9 1) Option A: Activity Penetration	
c) Where the project activity has been commercially available in any area of the applicable geographic scope for less than three years (i.e., it uses a new technology or measure), it shall be demonstrated that the project activity faces barriers to its uptake. Such barriers shall be demonstrated in accordance with Step 3 (barrier analysis) of the latest version of the CDM Tool for the demonstration and assessment of additionality.	
Evidence Used to Assess Conformance: Section 7.	
Findings: Unclear if the project activity has been commercially available in the applicable geographic scope for less than three years.	
Non-conformity report (NCR): Although unlikely, please demonstrate that the project activity has not been commercially available in the applicable geographic scope (entire US) for less than three years.	
Date issued:	21 November 2013
Project proponent response/actions and date: Wetland creation using sediment from the dredging of navigation channels in the U.S. has occurred since the 1960s (see Appendix H) and has been referred to more recently as beneficial use of dredge materials when habitat is created. However, such activities have never been carried out for commercial purposes. 7 January 2013	
Evidence used to close NCR: While we do feel that wetland creation using dredging materials does exist for commercial purposes (commercial wetland mitigation banks), the understanding is that these well exceed 3 years previous. Addressed.	
Date closed:	6 February 2013

21. Non-Conformity Report

VCS Criteria: 4.8.2	
Standards and factors used to derive GHG emissions data shall meet the following requirements:	
1. Be publicly available from a reputable and recognized source (e.g., IPCC, published government data, etc.).	
Evidence Used to Assess Conformance: Section 9	
Findings: Missing references previously requested.	
Non-conformity report (NCR): The validator has previously requested references for some of the data. This is pending final review of sources of data.	
Date issued:	21 November 2012
Project proponent response/actions and date: Copies or links to key references are provided. 7 January 2013	
Evidence used to close NCR: All reference documents were provided as requested in the other NCR's. Addressed.	
Date closed:	6 February 2013

22. Non-Conformity Report

VCS Criteria: 4.8.2	
Standards and factors used to derive GHG emissions data shall meet the following requirements:	
2) Be reviewed as part of its publication by a recognized competent organization.	
Evidence Used to Assess Conformance: Section 9	
Findings: Missing references previously requested.	
Non-conformity report (NCR):	
The validator has previously requested references for some of the data. This is pending final review of sources of data.	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Copies or links to key references are provided.	
7 January 2013	
Evidence used to close NCR: All reference documents were provided as requested in the other NCR's. Addressed.	
Date closed:	6 February 2013

23. Non-Conformity Report

VCS Criteria: 4.8.5	
The methodology shall establish criteria and procedures for monitoring, which shall cover the following: 1) Purpose of monitoring.	
Evidence Used to Assess Conformance: Section 9.2	
Findings: Could not locate a requirement that the project include a purpose for monitoring.	
Non-conformity report (NCR):	
Please include a requirement that the project include a purpose for monitoring	
Date issued:	21 November 2012
Project proponent response/actions and date:	
A requirement that the monitoring plan include a purpose for monitoring has been added.	
7 January 2013	
Evidence used to close NCR: Requirement included under section 9.2. Addressed.	
Date closed:	6 February 2013

24. Non-Conformity Report

VCS Criteria: AFOLU Requirement v.3.3, 4.6.1	
Methodologies shall establish procedures to quantify all significant sources of leakage. Leakage is defined as any increase in GHG emissions that occurs outside the project boundary (but within the same country), and is measurable and attributable to the project activities. All leakage shall be accounted for, in accordance with this Section 4.6. The three types of leakage are:	
Evidence Used to Assess Conformance: Section 8.3	
Findings: The validator believes Section 8.3 should require more detail from the applicable VCS rules (4.6.1-4.6.7). The leakage potential described in Section 8.3 does not appear to consider the likelihood of leakage on a larger scale (scope is entire US).	

Non-conformity report (NCR):	
The leakage potential described in Section 8.3 does not appear to consider the likelihood of leakage on a larger scale (scope is entire US).	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Revised section 8.3.3 to more clearly state what is required to demonstrate no negative effects on hydrologically connected areas. In particular, the proponent must show certain agency permitting documents in order to demonstrate no negative hydrologic impacts on surrounding areas.	
7 January 2013	
Non-conformity report (NCR): The language provided further supplements the case for preventing ecological leakage. However the requirement states that "Methodologies shall establish procedures to quantify all significant sources of leakage". To ensure this, the methodology should have procedures for identifying significant sources and require accounting for any leakage that is not de minimus. Section 8.3.3 falls somewhat short of this. To address this portion of the NCR we think it would be helpful to discuss in conference to clarify.	
Additionally, pending NCR #12 and 33 above, if ARR is included, then the methodology should address any leakage that could occur as a result of this activity.	
Date issued:	6 February 2013
Project proponent response/actions and date: In section 4, added applicability condition 7: "The project proponent has obtained the necessary permits to demonstrate that the project will not significantly affect hydrologically connected areas (see section 8.3.3)."	
In the case of ARR, we believe that leakage is not relevant here because of applicability condition 6 (in section 4), which prohibits commercial harvest.	
Evidence used to close NCR: Addressed – obtaining permits is sufficient to demonstrate that the project will not have adverse hydrologic impacts on adjacent areas. Additionally prohibition of commercial harvest sufficiently addresses concerns for ARR leakage.	
Date closed:	20 March 2013

25. Non-Conformity Report

VCS Criteria: AFOLU Requirement v3.3, 4.8.3
Where measurement plots or data from research plots are used to calibrate belowground biomass, soil carbon and dead wood decay models (as described above in Section 4.5.3), sound and reliable methods for monitoring changes in carbon stocks, including representative location of samplings sites and sufficient frequency and duration of sampling shall be applied. In addition, plots used to calibrate soil carbon models shall be measured considering appropriate sampling depths, bulk density and the estimated impact of any significant erosion (or plots with significant erosion shall be avoided). Data used to calibrate belowground biomass and dead wood models shall consider an estimation of oven-dry wood density and the state of decomposition.
Evidence Used to Assess Conformance: Section E.5
Findings: No guidance is included regarding the size of or the depth at which the bulk density sample is to be taken.
Non-conformity report (NCR):
Please advise the methodology user on whether a single bulk density sample will represent the entire

sampling depth, or sub increments of the sampling depth, and how those samples should be taken in each case, if more than one way is possible.	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Section E.5 has been revised to provide more guidance in developing a soil sampling plan and to provide appropriate references for developing a plan that is applicable to the specific circumstances relevant to a project.	
7 January 2013	
Evidence used to close NCR: The proposed revised language provides sufficient guidance regarding development of a sampling plan. Addressed.	
Date closed:	6 February 2013

26. Non-Conformity Report

VCS Criteria: AFOLU Requirements v. 3.3, 4.2.16	
Eligible WRC activities are those that increase net GHG removals by restoring wetland ecosystems or that reduce GHG emissions by rewetting or avoiding the degradation of wetlands.	
Evidence Used to Assess Conformance: Sections 2.1, 2.1.1 and 5.2.	
Findings: Methodology does not provide protocol for requiring confirmation that open water of proposed project sites was previously wetland which would be necessary to meet definition of "restoring" wetlands ("restoration activities are those that result in reestablishment of ecological processes, functions, and biotic and/or abiotic linkages..." in Section 4.2.19(1) of AFOLU Requirements); methodology presently requires only that project area be "open water".	
Non-conformity report (NCR):	
Proposed methodology is not applicable for "rewetting or avoiding the degradation of wetlands."	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Revised Applicability Condition 4 in section 4 to state that project area must meet the definition of degraded wetland prior to implementation of project activities. (For clarification of definition of degraded wetland, see response to finding 40 below.)	
Revised section 6.1 to change most references of 'open water' to 'degraded wetland.'	
Added PD requirement in section 6.1 requiring documentation that project area previously met definition of a wetland.	
Added guidance in section 6.1 for how to demonstrate area historically met the definition of a wetland (i.e. use USFWS data).	
7 January 2013	
Evidence used to close NCR: Section 4 (Applicability Condition 4) and 6.1 now stipulate that project area meet eligibility criterion by meeting definition of degraded wetland or demonstrating that project area formerly met definition of wetland. Addressed.	
Date closed:	6 February 2013

27. Non-Conformity Report

VCS Criteria: AFOLU Requirements v.3.3, 4.2.17	
...Activities that affect the hydrology of the project area are only eligible where changes in hydrology result in the accumulation or maintenance of soil carbon stock.	

Evidence Used to Assess Conformance: Sections 2.1.1, 2.1.2 and 4.	
Findings: Need to include a vegetative management plan to ensure GHG benefits.	
Non-conformity report (NCR): Please specify that project proponents must include a vegetation plan to ensure created wetland will provide GHG benefits.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised first MR requirement in section 2.1 to include: "This documentation must demonstrate that the project activity results in the accumulation or maintenance of soil carbon stock." 7 January 2013	
Evidence used to close NCR: Addressed. The requirement ensures the GHG benefits. Conformance of which can be assessed on a case by case basis by the validator.	
Date closed:	6 February 2013

28. Non-Conformity Report

VCS Criteria: AFOLU Requirements v.3.3, 4.2.19 1) Restoring Wetland Ecosystems (RWE): This category includes activities that reduce GHG emissions or increase carbon sequestration in a degraded wetland through restoration activities. Such activities include enhancing, creating and/or managing hydrological conditions, sediment supply, salinity characteristics, water quality and/or native plant communities. For the purpose of these requirements, restoration activities are those that result in the reestablishment of ecological processes, functions, and biotic and/or abiotic linkages that lead to persistent, resilient systems integrated within the landscape, noting the following:	
Evidence Used to Assess Conformance: Sections 2.1, 2.1.1, 4.2.19(1) and 6.1	
Findings: AFOLU Requirements statement for RWE is that activities in this category include "...and/or managing native plant communities." Methodology in Section 2.1 states it is "permissible to implement either project activity individually", including only substrate establishment. The "and/or" requirement indicates vegetation must be part of plan. AFOLU Requirement is that reestablishment "lead to persistent, resilient systems integrated within the landscape..."; methodology does not appear to address how project proponents will ensure persistency of wetland system after implementation. This is a key consideration based on methodology developed primarily to address recreating wetlands in coastal Louisiana that have been lost as a result of sediment deprivation from activities associated with Mississippi River alterations and diversion of sediments to maintain wetlands. The methodology identifies a single initial sediment deposition in open water to re-establish wetlands.	
Non-conformity report (NCR): The methodology must specify how these wetlands will be shown to be persistent if natural sediment transport system present in baseline condition, which led to loss of the wetland, is not modified to provide sufficient sediment source to prevent loss of re-established wetland, or in the absence of suitable sediment supply, how the wetland will persist. Persistency and resiliency also tied to AFOLU Requirement to account for projections of expected relative sea level rise (section 4.3.2.25) for coastal wetlands.	
Date issued:	21 November 2012
Project proponent response/actions and date: Added to section 2.1 (along with an MR requirement): "The project proponent shall include a plan for the establishment and maintenance of a permanent wetland plant community after project	

<p>construction. This plan may include natural colonization or manual planting or seeding of the project area. The plan also shall demonstrate how the project will be maintained over the project lifetime. Maintenance requirements and activities will vary geographically due to different ecological and physical processes which may influence the project area (e.g., elevation deficit vs. shoreline erosion). Active maintenance may not be required if the created wetland is designed and constructed to offset local processes which may have led to the initial deterioration of the historic wetland. For instance, projects created in more protected areas may not be as susceptible to shoreline erosion forces. In addition, other non-related restoration projects near the project area may help alleviate historic issues such as nutrient and sediment source deficits. In Louisiana, for example, future planned diversions of Mississippi River water are designed to supply fresh water, nutrients, and sediment to surrounding wetlands and may influence and sustain the project area depending on proximity to and configuration with the diversion."</p> <p>7 January 2013</p>	
<p>Evidence used to close NCR: Addition to Section 2.1 addresses AFOLU Requirement for managing native plant communities and persistency and resiliency by requiring inclusion of a plan for the establishment and maintenance of a permanent wetland plant community after project establishment. Addressed.</p>	
<p>Date closed:</p>	<p>6 February 2013</p>

29. Non-Conformity Report

<p>VCS Criteria: AFOLU Requirements v3.3, 4.2.19 1) a) Methodologies shall establish the appropriate change in water table depth (such as raising, lowering or restoring hydrological function) that is expected for eligible project activities, considering the following baseline scenario conditions:</p>	
<p>Evidence Used to Assess Conformance: N/A</p>	
<p>Findings: Methodology does not specify criteria for project proponents to follow regarding placement of sediments to ensure proper water table levels/elevation of wetland in both tidal and non-tidal project cases. (Formerly NCR 43)</p>	
<p>Non-conformity report (NCR): Methodology must specify criteria for project proponents to follow regarding placement of sediments to ensure proper water table levels/elevation of wetland in both tidal and non-tidal project cases.</p>	
<p>Date issued:</p>	<p>21 November 2012</p>
<p>Project proponent response/actions and date: Added to section 2.1 (along with an MR requirement): "The project proponents shall demonstrate that the project engineering and design takes into account local water level elevation, tidal range, geotechnical characteristics, sea-level rise projections, and the range of plant growth within those constraints." 7 January 2013</p>	
<p>Non-conformity report (NCR): Though the methodology now requires that "The project proponents shall demonstrate that the project engineering and design takes into account local water level elevation, tidal range, geotechnical characteristics, sea-level rise projections, and the range of plant growth within those constraints.", this does not appear to specify an "appropriate change in water table depth expected for eligible activities."</p>	
<p>Date issued:</p>	<p>6 February 2013</p>
<p>Project proponent response/actions and date: Pending the revisions to the Methodology. Related</p>	

to Number 48.	
Evidence used to close NCR: VCS provided clarification on the requirement that it was not intended for methodologies to specify an actual number or range of depth, instead that they should clarify the expected change (raise/lower) in the water table depth based on the project activity, which the methodology now does. Addressed.	
Date closed:	14 February 2013

30. Non-Conformity Report

VCS Criteria: AFOLU Requirements v.3.3, 4.2.19 1) a) ii ...Activities that restore hydrological function to an impounded wetland or lower the water table depth shall restore hydrological flow, considering the dynamics of the system and the hydrological connectivity necessary to maintain carbon stock and GHG fluxes.	
Evidence Used to Assess Conformance: N/A	
Findings: Methodology does not identify use of impoundments to re-establish wetlands in open water, but in meetings with Methodology developer (11/13 - 11/14), use of dike construction to contain sediments deposited for establishing wetlands was identified as likely method under the methodology for coastal Louisiana.	
Non-conformity report (NCR): Methodology should provide protocol for project proponents proposing to use dikes as an interim step in re-establishing wetlands in open water to follow in demonstrating that hydrological flow would be restored to provide for re-establishing ecological processes per 4.2.19(1).	
Date issued:	21 November 2012
Project proponent response/actions and date: Added to section 2.1: "Wetland creation projects shall be designed such that the wetland, over time, will support the ecological processes and functions of a mature wetland habitat. If retention dikes are part of the design, natural degradation and manual breaches shall be planned in order to allow for regular tidal exchange or hydrologic connectivity to the surrounding area. The created wetland shall support wetland vegetation species capable of contributing to soil carbon accumulation." 7 January 2013	
Evidence used to close NCR: Additions to Section 2.1 (paragraphs 2 and 4) requires planning to allow for regular tidal exchange or hydrologic connectivity to the surrounding area, and accounting for local hydrologic conditions. Addressed.	
Date closed:	6 February 2013

31. Non-Conformity Report

VCS Criteria: AFOLU Requirements v.3.3, 4.2.19 1) a) iii ...Activities that restore hydrological function to an open water wetland shall restore the hydrological flow, considering the dynamics of the system and the hydrological connectivity necessary to maintain carbon stock and GHG fluxes.	
Evidence Used to Assess Conformance: N/A	
Findings: Does not appear to provide protocol for project proponent to demonstrate that hydrological flow would be restored to provide for re-establishing ecological processes per 4.2.19(1).	
Non-conformity report (NCR): Methodology does not provide protocol for project proponent to demonstrate that hydrological flow would be restored to provide for re-establishing ecological processes per 4.2.19(1). Also see	

comment above regarding use of dikes as an interim step in re-establishing wetland in open water.	
Date issued:	21 November 2012
Project proponent response/actions and date: See 3rd paragraph of section 2.1 (and response to finding NCR42). The methodology authors added a requirement for a plan for the establishment of the wetland, which shall include either evidence that the "wetland is designed and constructed to offset local processes - including impaired hydrological connectivity - which may have led to the initial deterioration of the historic wetland." 7 January 2013	
Evidence used to close NCR: Additions to Section 2.1 (paragraphs 2 and 4) requires planning to allow for regular tidal exchange or hydrologic connectivity to the surrounding area, and accounting for local hydrologic conditions. Addressed.	
Date closed:	6 February 2013

32. Non-Conformity Report

VCS Criteria: AFOLU Requirements v.3.3, 4.3.25 For project activities implemented on coastal wetlands, methodologies shall establish criteria and procedures for establishing the geographic boundary that considers projections of expected relative sea level rise. The procedures shall account for the potential effect of sea level rise on the lateral movement of wetlands during the project crediting period and the potential that the wetlands will migrate beyond the project boundary.	
Evidence Used to Assess Conformance: N/A	
Findings: Methodology must set and describe criteria for project proponents to set geographic boundary of project that considers SLR. Alternatively, methodology could justify why this is not needed, e.g. no lateral movement expected. Suggested that methodology describe criteria for including SLR into project design to ensure successful projects. (Formerly NCR 48)	
Non-conformity report (NCR): Methodology does not specify use of dikes to contain sediment as an interim step in re-establishing wetlands in open water. Deposition of non-contained sediment to re-establish wetland would require accounting for potential effect of sea level rise.	
Date issued:	21 November 2012
Project proponent response/actions and date: Added paragraph (and PD requirement) to section 5.3 requiring the proponent to consider the potential for lateral movement due to sea level rise. 7 January 2013	
Non-conformity report (NCR): The requirements state that the methodology shall establish "criteria and procedures..." The revision to the methodology passes this requirement on to the project proponent, but there remains a lack of criteria. By what criteria will the project proponent be judged as to whether the project considers sea level rise and lateral movement of wetlands in delineating the project boundary? I believe that is the intent of the requirements that the methodology have criteria and procedures for the project proponent in this regard. For example, will this be done through some type of predictive modelling with anticipated movement of wetland material inland for undiked scenarios? Primarily looking for some general criteria so that verifiers have some metric to determine if it was implemented appropriately.	
Date issued:	6 February 2013
Project proponent response/actions and date: Based on phone conversation with VCS (3/5/13),	

added criteria to section 5.3 for wetland design to guide proponents and assessors in the extent to which the project design will be resilient in the presence of sea level rise.	
Evidence used to close NCR: Added criteria sufficiently detail wetland design. Addressed.	
Date closed:	14 June 2013

33. Non-Conformity Report

VCS Criteria: AFOLU Requirements v3.3, 4.4.10 2) 2) The long-term average climate variables influencing water table depths and the timing and quantity of water flow. The long-term average climate variables shall be determined using data from climate stations that are representative of the project area and shall include at least 20 years of data.	
Evidence Used to Assess Conformance: Section 6.	
Findings: Does not appear to provide explanation of how this information is being used in the methodology.	
Non-conformity report (NCR): Please provide explanation of how this information is being used in the methodology. Methodology should reference climate variables data that is relevant.	
Date issued:	21 November 2012
Project proponent response/actions and date: Added to section 6.1 (along with a clarification to PDR 18): "The project proponent shall provide evidence of long-term water level changes in the project area to support the historical spatial/areal wetland trend analysis with minimum record length of 20 yr of hydrological data (water table, water level, sea level)." 7 January 2013	
Non-conformity report (NCR): Please further explain how this information is being used as "to support the historical spatial/areal wetland trend analysis" is not clear.	
Date issued:	6 February 2013
Project proponent response/actions and date: Revised section 6.1 and PDR 21 to more clearly state the analysis must demonstrate a long-term pattern of wetland loss. 25 February 2013	
Evidence used to close NCR: Addressed. Section 6.1 now sufficiently demonstrates a long term pattern of wetland loss.	
Date closed:	20 March 2013

34. Non-Conformity Report

VCS Criteria: AFOLU Requirements v.3.3, 4.4.10 3) Planned water management activities (such as dam construction).	
Evidence Used to Assess Conformance: Section 6.1	
Findings: Does not appear to address future river diversions.	
Non-conformity report (NCR): Please identify future river diversions as a potential water management activity that could influence baseline, and provide criteria/procedures for project proponent to follow. River diversions (past and future) must also be identified in baseline reassessment at time of reassessment.	

Date issued:	21 November 2012
Project proponent response/actions and date:	
Added to section 6.1: "The project proponent shall show the project boundary and the proximity to any existing and/or future water management activities (e.g., river diversions) which could influence the project area. If water management activities are identified (either existing or planned over the next 10 years), the project proponent shall address the potential for land-building based on significant deposition of sediment in the project area in the absence of project activities. An updated figure of water management activities shall also be identified in the baseline reassessment."	
7 January 2013	
Evidence used to close NCR: The proposed revision sufficiently addresses the requirement regarding future river diversions. Addressed.	
Date closed:	6 February 2013

35. Non-Conformity Report

VCS Criteria: AFOLU Requirements v.3.3, 4.4.11 2)	
Progressive subsidence of deltas or peatlands leading to a rise in relative water table depths, thus reducing CO ₂ emissions but possibly increasing CH ₄ emissions in freshwater systems.	
Evidence Used to Assess Conformance: N/A	
Findings: Methodology does not appear to address subsidence.	
Non-conformity report (NCR):	
Please demonstrate that the methodology considers this aspect.	
Date issued:	21 November 2012
Project proponent response/actions and date:	
This NCR is not applicable in the baseline case. In the open water state, or baseline scenario, methane emissions do not change with increased water level (increased sea level rise/subsidence). Methane emissions are highest from vegetated wetlands or during initial phases of deterioration.	
7 January 2013	
Evidence used to close NCR:	
The narrative provided sufficiently justifies the lack of applicability to open water baseline scenarios. Addressed.	
Date closed:	6 February 2013

36. Non-Conformity Report

VCS Criteria: AFOLU Requirements 4.5	
Where wetland soils are subject to sedimentation or erosion, the procedure for determining the SDT shall conservatively account for the associated gain or loss of soil organic carbon. This assessment is not mandatory in cases where soil organic carbon content on average may be deemed de minimus as set out in Section 4.3.3.	
Evidence Used to Assess Conformance: N/A	
Findings: Does not provide protocol for identifying how underlying causes of loss of original wetlands leading to open water condition would be addressed.	
Non-conformity report (NCR):	
Methodology does not address protocol for identifying how underlying causes of loss of original wetlands leading to open water condition would be addressed.	

Date issued:	21 November 2012
Project proponent response/actions and date: In the baseline scenario, SDT is not applicable, as carbon stock changes are not monitored. In the project scenario, the methodology includes requirements to monitor soil loss or gain. 7 January 2013	
Evidence used to close NCR: Client indicates SDT is not applicable. Concern regarding accounting for wetland soils subject to erosion (underlying cause leading to original wetland loss) in baseline scenario appears to be addressed by response to spreadsheet item 50. Addressed.	
Date closed:	6 February 2013

37. Non-Conformity Report

VCS Criteria: AFOLU Requirements v3.3, 4.5.28 Where relevant, the fate of transported organic matter as a result of sedimentation, erosion and oxidation shall be assessed conservatively based on peer-reviewed literature and considering the following:	
Evidence Used to Assess Conformance: N/A	
Findings: Currently does not provide justification that sediment carbon is not significant. (Formerly NCR 55)	
Non-conformity report (NCR): Please address this issue and provide justification that sediment carbon is not significant. Alternatively, methodology may establish applicability requirements that this is not relevant.	
Date issued:	21 November 2012
Project proponent response/actions and date: Please see document "Response to NCR55 and NCR56.docx" 7 January 2013	
Evidence used to close NCR: See NCR 38 – Addressed.	
Date closed:	3 August 2013

38. Non-Conformity Report

VCS Criteria: AFOLU Requirements v3.3, 4.5.28 2) It is conservative to not account for further sedimentation in the project area in the project scenario. Where soil carbon is included in the project boundary, sedimentation shall be accounted for so that carbon sequestration resulting from the growth of vegetation can be estimated separately from carbon accumulated in sedimentation. In the absence of the project activity, such high carbon silt would be washed out to sea and would not have been emitted in the baseline and as such carbon accumulated in sedimentation is not eligible for crediting.	
Evidence Used to Assess Conformance: N/A	
Findings: Carbon sequestration resulting from the growth of vegetation in the project scenario does not appear to be addressed. (Formerly NCR 56)	
Non-conformity report (NCR): Please address for project scenario. Potentially, this could be demonstrated as not relevant for coastal Louisiana, but this needs to be demonstrated for the entire US.	
Date issued:	21 November 2012
Project proponent response/actions and date:	

Please see document "Response to NCR55 and NCR56.docx"	
7 January 2013	
<p>Non-conformity report (NCR): As stated in the requirements, "Where soil carbon is included in the project boundary, sedimentation shall be accounted for so that carbon sequestration resulting from the growth of vegetation can be estimated separately from carbon accumulated in sedimentation." Since soil carbon is included, the argument that sedimentation/erosion (import of carbon to the project boundary) should not be considered significant is not relevant as sedimentation must be accounted for.</p>	
Date issued:	6 February 2013
<p>Project proponent response/actions and date:</p> <p>The methodology author has provided justification that wetlands in the coastal zone of Louisiana are net exporters of carbon and accounting of sedimentation is not required. (See justification in Appendix I.)</p> <p>The methodology also now includes criteria for demonstrating that carbon accumulation from sediment import is negligible for projects located outside Louisiana (section 5.2.1.2), and if carbon accumulation from such sedimentation is not negligible, the methodology now includes methods for monitoring allochthonous carbon (section 9.2.6).</p>	
<p>Non-conformity report (NCR): Clarification: Regarding the tidal/non-tidal issue, the majority of arguments provided by the project proponent throughout the validation and indeed the majority of language in the methodology speak to tidal and estuarial systems, not non-tidal systems. Specifically:</p> <ol style="list-style-type: none"> 1. Dr Bargameshi's statements are all predicated on and reference tidal systems 2. Even though the methodology requires a case by case demonstration for transported organic matter, that very section (5.2.1.2) only references tidal systems (tidal energy, tidal dispersive flux, estuary). <p>It is clear that this methodology has been focused on tidal systems and it is not fully understood why there is an insistence to include non-tidal systems through the application of the "coastal zone" boundary. Additionally, there is concern that as the methodology developer has focused on tidal systems during the validation, so has the validation team during their review. Please provide a discussion why it is appropriate to include non-tidal systems when all indications are that tidal has been the focus of the methodology developer.</p> <p>NCR: Also, please provide greater detail in the methodology outlining the procedures for differentiating allochthonous from autochthonous carbon using marker horizons.</p> <p>Clarification: Additionally, Section 5.2.1.2 of the methodology states "For projects located outside Louisiana, the project proponent may conservatively exclude allochthonous carbon by using publicly available regional case studies, peer-reviewed literature or regional models to justify that the import of organic matter will not cause carbon accretion estimates to be significantly overestimated.", however the requirement in section 4.3.6 #6 of the Standard indicates that: Models shall apply conservative factors to discount for model uncertainty (in accordance with the requirements set out in Section 4.1.4), and shall use conservative assumptions and parameters that are likely to underestimate, rather than overestimate, the GHG emission reductions or removals. Should the statement not be revised to provide assurance that the exclusion would be likely to underestimate carbon accretion estimates? Please clarify.</p>	

Date issued: 7 May 2013	
Project proponent response/actions and date: See document "2013_0614_RTC on NCR 56.doc"	
Evidence used to close NCR: ESI held several phone discussions to express concern over the non-tidal inclusions, and that the "coastal zone" term would bring in the Great Lakes, which arguably do not have "reasonable tidal exchange". CH2M Hill responded by removing non-tidal from the methodology and excluding the Great Lakes. The issue of tidal freshwater wetlands was then raised for inclusion by CH2M Hill. ESI expressed some concern over these waters being included as it is not clear if they would qualify as having "reasonable tidal exchange" as many would be lacustrine systems with the potential to be impacted by floods. CH2M Hill pointed out that outside of LA a demonstration of allochthonous carbon would have to be done if these waters were to be included. Within LA the methodology specifically states as criteria "For projects located in Louisiana and not within the direct influence of a river diversion or river mouth". ESI felt this was an acceptable way to exclude concerns about floodwaters. Addressed.	
Date closed:	2 August 2013

39. Non-Conformity Report

VCS Criteria: AFOLU Requirements v3.3, 4.5.35	
Where relevant, methodologies shall establish procedures to account for any changes in carbon sequestration or GHG emission reductions resulting from lateral movement of wetlands due to sea level rise, or coastal squeeze associated with any structures that prevent wetland landward migration and cause soil erosion.	
Evidence Used to Assess Conformance: N/A	
Findings: SLR needs to be addressed in greater detail. (Formerly NCR 56).	
Non-conformity report (NCR): Refer to prior comment about taking SLR into account in project boundary/project design criteria. Methodology may demonstrate that created wetlands under this methodology will not be subject to wetland migration/lateral movement.	
Date issued:	21 November 2012
Project proponent response/actions and date: Added paragraph (and PD requirement) to section 5.3 requiring the proponent to consider the potential for lateral movement due to sea level rise. 7 January 2013	
Non-conformity report (NCR): The addition in section 5.3 refers to setting the project boundary, and does not meet this requirement that the methodology provide procedures to account for changes in GHGs due to lateral movement caused by slr. Alternatively, the methodology developer can provide a justification why this is not relevant (see phrase "where relevant").	
Date issued:	6 February 2013
Project proponent response/actions and date: This requirement is not relevant because changes in GHG emissions resulting from lateral movement are inherently captured by the methodology's monitoring requirements (i.e., if a portion of the project area is submerged as a result of sea level rise, that portion of the project area will be excluded from carbon accounting).	
Evidence used to close NCR: Methodology developer justifies why emissions from lateral movement are already captured by monitoring. Addressed.	

Date closed:	20 March 2013
---------------------	---------------

40. Non-Conformity Report

VCS Criteria: 4.6	
In such cases, the project proponent shall be required to demonstrate that such changes in water table depths or export caused by the project do not lead to increases in GHG emissions outside the project area, or the affected areas shall be identified and the resulting leakage shall be quantified and accounted for.	
Evidence Used to Assess Conformance: Section 8.3.3	
Findings: For tidal wetlands, if all potential project areas are large, interconnected water bodies, then provide justification that impact to water table is insignificant. For non-tidal wetlands being created, must demonstrate that federal permits/environmental documentation required by methodology is sufficient to ensure no GHG impacts outside the project area (e.g. drowning an existing wetland). Connect the dots.	
Non-conformity report (NCR): If environmental documentation could allow for GHG impacts outside project area, then accounting procedures will be needed.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised section 8.3.3 (including a PD and monitoring requirement) to more clearly specify the types of agency permitting documents that would be acceptable to demonstrate no negative hydrologic impacts on surrounding areas. By requiring this documentation, the methodology does not allow for GHG impacts outside the project area; therefore no additional accounting procedures are needed. 7 January 2013	
Evidence used to close NCR: After additional review by the verifier, it is noting that this requirement is specific to rewetting projects. Since the methodology does not include rewetting, the NCR is not applicable. Addressed.	
Date closed:	20 March 2013

41. Non-Conformity Report

VCS Criteria: General	
Evidence Used to Assess Conformance: Section 8.3.3	
Findings: Agency letters of no objection do not carry same weight as Section 404 or Section 10 permitting, or NEPA EA/FONSI or EIS document since individual agencies have narrower focus. Projects of the type proposed by the Methodology would be expected to require Section 404 or Section 10 permitting, and may require NEPA document.	
Non-conformity report (NCR): Projects of the type proposed by the Methodology would be expected to require Section 404 or Section 10 permitting, and may require NEPA document.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised section 8.3.3 (including the PD and monitoring requirement) to more clearly specify the types of agency permitting documents deemed acceptable to demonstrate no negative hydrologic impacts on surrounding areas. By requiring this documentation, the methodology does not allow for GHG	

impacts outside the project area; therefore no additional accounting procedures are needed.	
7 January 2013	
Evidence used to close NCR: Section 8.3.3 revised to remove agency letters of no objection from USEPA, NOAA, and USFWS as documents acceptable for demonstrating no negative effects on hydrologically connected areas, and clarifying Section 404 permit compliance, and Section 10 if applicable, would be required. Addressed.	
Date closed:	20 March 2013

42. Non-Conformity Report

VCS Criteria: General	
Evidence Used to Assess Conformance: Sections 6.1.1, 8.4.3.1 and 8.4.3.2	
Findings: The word "may" is used which is too open ended with undesirable room for interpretation.	
Non-conformity report (NCR): Paragraph 1 - "may be demonstrated." Please limit the use of the word "may" throughout the methodology. The methodology should include explicit requirements and use terms like "must" and "shall."	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised 1st sentence of section 6.1.1 to state 'shall' vs. 'may.' Using 6.1.1 method is optional (the proponent could choose 6.1.2 instead), but if they choose 6.1.1 then the method described is required. Did not revise 8.4.3.1 and 8.4.3.2 - determining whether these emissions are de minimus is optional, therefore 'may' is appropriate. To clarify, we use the word 'may' purposefully when something is optional. We use the word 'shall' when something is required (should also be reflected in PDRs).	
7 January 2013	
Evidence used to close NCR: Usage of may confirmed for these specific instances. Addressed.	
Date closed:	6 January 2013

43. Non-Conformity Report

VCS Criteria: General	
Evidence Used to Assess Conformance: Section 6.1.2	
Findings: Paragraph 2 - "Typically, this analysis should..." Please clearly define what must occur for this baseline spatial analysis.	
Non-conformity report (NCR): Please clearly define what must occur for this baseline spatial analysis.	
Date issued:	21 November 2012
Project proponent response/actions and date: Section 6.1.2 has been revised to more clearly demonstrate requirements of the baseline spatial analysis. Requirements previously embedded in a paragraph now appear in a bulleted list.	
7 January 2013	
Evidence used to close NCR: The proposed language in 6.1.2 clearly states what must be met to conduct the analysis. Addressed.	
Date closed:	6 January 2013

44. Non-Conformity Report

VCS Criteria: General	
Evidence Used to Assess Conformance: Section 6.1.2.2	
Findings: Need clarification of the intent of 90% minimum user's accuracy.	
Non-conformity report (NCR): Paragraph 1 - "a suggested minimum user's accuracy is 90%." Why is this suggested? This should be explicit.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised to explicitly require 90% accuracy when error-checking or ground-truthing (now appears in section 6.1.2). 7 January 2013	
Evidence used to close NCR: Revision now explicitly requires the 90% accuracy. Addressed.	
Date closed:	6 January 2013

45. Non-Conformity Report

VCS Criteria: General	
Evidence Used to Assess Conformance: Appendix A	
Findings: "...may deviate".	
Non-conformity report (NCR): Please include requirement parameters to ensure the methodology is not open-ended. Please clarify the term "default" stratification.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised 1st paragraph in Appendix A to more clearly state that any alternate methods (methodology deviations as defined by VCS) must meet all requirements in section 9 and must be justified to the project VVB. Added a sentence to 2nd paragraph of Appendix A to more clearly describe the default stratification methods, in particular by referring to the sections which provide guidance for monitoring of carbon stocks, methane, and nitrous oxide. 7 January 2013	
Evidence used to close NCR: Appendix A has been sufficiently revised to clearly show alternate methods must meet requirements in section 9, and to clearly define default stratification. These are addressed.	
Date closed:	20 March 2013

46. Non-Conformity Report

VCS Criteria: General	
Evidence Used to Assess Conformance: E.6.3 Table	
Findings: It is unclear what the source of the default equations is.	
Non-conformity report (NCR): Please clarify the source of these default equations.	

Date issued:	21 November 2012
Project proponent response/actions and date: The references/sources were included in Table 19, Section E.6.3 for each equation. 07 January 2013	
Evidence used to close NCR: References provided. Addressed.	
Date closed:	06 February 2013

47. Non-Conformity Report

VCS Criteria: General	
Evidence Used to Assess Conformance: Section 3 Definitions.	
Findings: Many definitions throughout Methodology do not appear to be consistent with VCS definitions.	
Non-conformity report (NCR): Please ensure all definitions are the same as VCS definitions for the same term.	
Date issued:	21 November 2012
Project proponent response/actions and date: Reviewed definitions and revised accordingly, in response to an earlier request from VCS. 07 January 2013	
Evidence used to close NCR: Definitions appear consistent with VCS definitions. Addressed.	
Date closed:	06 February 2013

48. Non-Conformity Report

VCS Criteria: General Technical Comment	
Evidence Used to Assess Conformance: Page 94	
Findings: The validator is concerned over bias of self-calibration of measurement equipment. (Formerly NCR 74).	
Non-conformity report (NCR): Calibration can be done by user and a factory. The first one has a conflict of interest and does not assure quality. Only third-party calibration with proven experience should be allowed.	
Date issued:	21 November 2012
Project proponent response/actions and date: The methodology authors believe that calibration by the user should be permissible, as long as user provides documentation of adherence to manufacturer-recommended procedures and the use of standard gases. Added MR requirement to section 9.2.2.3.3 and guidance to section C.2.5. 07 January 2013	
Non-conformity report (NCR): With regard to QA procedures, there is no guarantee that user will adhere perfectly or in good quality to the manufacturers procedures. The calibration of electronics requires a certified procedure in most carbon projects to assure minimum uncertainty.	
Date issued:	06 February 2013
Project proponent response/actions and date: Revised section C.2.5 (Calibration) to provide more requirements and guidance for proper calibration of methane sensors. The methodology now includes more specific guidance for proper calibration, and a requirement that certain equipment be returned to	

the factory for calibration.	
Evidence used to close NCR: Appropriate language has been added to conform to the manufacturer's recommendations for calibration. Issue addressed.	
Date closed:	14 June 2013

49. Non-Conformity Report

VCS Criteria: General Technical Comments	
Evidence Used to Assess Conformance: Appendix E	
Findings: There is protocol to avoid compaction based on bulk density of soil, this density has a protocol in E.6.1 and a reference to "Nelson and Sommers (1982)" is added, but this reference has no direct effect in a search on internet.	
Non-conformity report (NCR): Methodology Developer should include a more detailed protocol to measure the density as compaction as a critical issue or mention a public and reliable link.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised reference to Nelson and Summers (1996), which can be found on the internet. 07 January 2013	
Evidence used to close NCR: Reference located. Addressed.	
Date closed:	06 February 2013

50. Non-Conformity Report

VCS Criteria: General Technical Comment	
Evidence Used to Assess Conformance: Section F.2	
Findings: General	
Non-conformity report (NCR): In F2, the four assumptions are fine for least square method, but it is recommended to have initial directions to treat "outliers" shown in the measurements, the project participant should have clear guidance to treat the outliers if shown and refine his measurements.	
Date issued:	21 November 2012
Project proponent response/actions and date: Added a sentence to section F.2 to clarify the treatment of outliers: "Diagnostic plots shall be used to check for 'outlier' data points, which shall be included in the model fitting unless they are determined to be erroneous." 07 January 2013	
Evidence used to close NCR: The proposed revision sufficiently addresses the NCR. Addressed.	
Date closed:	06 February 2013

51. Non-Conformity Report

VCS Criteria: General	
Evidence Used to Assess Conformance: Page 75.	
Findings: The USDA laboratory manual includes 6 basic methods for determining bulk density, each with at least two permutations.	

Non-conformity report (NCR): Please advise the methodology user which of these methods is suitable for the field conditions expected in these environments. If more than one is suitable, please include guidance to explain the situations where one method would be more suitable than another.	
Date issued:	21 November 2012
Project proponent response/actions and date: In Laboratory Analysis Section 9.2.7.5 and Soil Sample Analyses Section E.6 USDA reference was deleted and changed for consistency. "Soil samples shall be analysed for bulk density and SOC by a qualified laboratory following the methods of Nelson and Sommers 1996 and Ball 1964, respectively, or comparable methods." 7 January 2013	
Evidence used to close NCR: Section E.6.1. Bulk Density The methodology developers have specified a method for bulk density determinations (dividing the dry weight of core samples of known volume by the volume).	
Date closed:	21 January 2013

52. Non-Conformity Report

VCS Criteria: General Technical Comments	
Evidence Used to Assess Conformance: General	
Findings: Reference requested as validator did not have access.	
Non-conformity report (NCR): Please provide a copy of Yu, et al (2006); pertinent pages of the dissertation by Lundberg, and a link to the pertinent studies in the EPA database to confirm some values in table 17.	
Date issued:	21 November 2012
Project proponent response/actions and date: These references were provided to Caitlin Sellers on 11/16/2012. Copies or links to key references are provided. 7 January 2013	
Evidence used to close NCR: Copy of Yu, et al, 2006 was provided, and emissions fluxes in Table 17 were confirmed.	
Date closed:	24 January 2013

53. Clarification

VCS Criteria: VCS Standard v3.3, 4.1.2 Methodologies shall be informed by a comparative assessment of the project and its alternatives in order to identify the baseline scenario. Such an analysis shall include, at a minimum, a comparative assessment of the implementation barriers and net benefits faced by the project and its alternatives.	
Evidence Used to Assess Conformance: Section 6 of Methodology	
Findings: The comparative assessment requirement should be included in the Methodology.	
Clarification (CL): Although discussed in the in-person meeting, please clarify where this requirement is addressed in the methodology. It is understood that the baseline determination requirement for projects be project-specific, so although the additionality tool may include components of this, please demonstrate that the methodology requires this assessment specifically for the baseline (note that a clarification request was submitted to the secretariat at VCS regarding where this must be located).	

Date issued:	21 November 2012
Project proponent response/actions and date: The methodology authors believe that the assessment of the most plausible baseline scenario (section 6.1) adequately addresses this issue. It shows that the alternative baseline scenario of natural reestablishment is very unlikely, "based upon historical evidence of land accretion and loss" (for which the methods of analysis are described in sections 6.1.1 and 6.1.2). 07 January 2013	
Clarification (CL): While the assessment of the most plausible baseline scenario analysis shows that the alternative baseline scenario of natural reestablishment is very unlikely, it does not satisfy the intent of a comparative assessment of the implementation barriers and net benefits faced by the project and its alternatives.	
Date issued:	06 February 2013
Project proponent response/actions and date: Added guidance for proponent to perform comparative assessment of project and its alternatives, and to provide evidence of. Inserted PDR.18 to specifically assess alternative baseline scenarios: "Evaluation of each potential baseline scenario and the barriers to implementation for each. Justification for why selected baseline scenario is most likely under current conditions."	
Evidence used to close CL: The requirement for the comparative assessment sufficiently addresses the validator's concerns.	
Date closed:	20 March 2013

54. Clarification

VCS Criteria: VCS Standard v3.3, 4.4.1 The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios. Justification for GHG sources, sinks and reservoirs included or excluded shall be provided.	
Evidence Used to Assess Conformance: Sections 2.2.1 and section 5.	
Findings: It is unclear if and how ARR activities are allowed within the Methodology.	
Clarification (CL): Please clarify if ARR activities are allowed within the project boundary, and if so, please demonstrate how all applicability criteria for ARR projects have been addressed in the Methodology.	
Date issued:	21 November 2012
Project proponent response/actions and date: Added guidance to section 2.1.2 regarding applicability of ARR methods when woody vegetation is established. Added applicability condition prohibiting commercial harvest. 7 January 2013	
Clarification (CL): As ARR is being included optionally in the methodology, please include all related VCS requirements for ARR projects in the appropriate sections (boundary, baseline, leakage, etc.). In particular the requirement in "AFOLU Requirements" section 4.2.1 that "The project area shall not be cleared of native ecosystems within the 10 year period prior to the project start date, as set out in Section 3.1.6," which is valid for all WRC as well. Additionally, the methodology states that the "Project area must meet the definition of degraded wetland before project activities are implemented and would have remained a degraded wetland in the	

absence of the project activities." The inference in various sections of the methodology is that only open water baseline scenarios will be used. If this is the case, then please state this as an applicability criterion.	
Date issued:	06 February 2013
Project proponent response/actions and date: Added guidance (and a requirement - PDR 6) in section 5.3 for all projects to demonstrate that project area was not cleared of native ecosystems within 10 years of the project start date). This section and requirement applies to both WRC and ARR activities.	
Revised the quoted text (applicability condition 4) to include 'open water' as well as 'degraded wetland.'	
Evidence used to close CL: The added requirement sufficiently addresses the validator's concerns.	
Date closed:	20 March 2013

55. Clarification

VCS Criteria: VCS Standard v3.3, 4.4.3	
3) Compare the GHG sources, sinks and reservoirs identified for the project with those identified in the baseline scenario, to ensure equivalency and consistency.	
Evidence Used to Assess Conformance: Section 5.2, Table 8	
Findings: It is unclear how the Methodology includes the requirements of 4.4.3 of the VCS Standard.	
Clarification (CL):	
Please clarify where the methodology requires this comparison (relevance between the project and baseline).	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Although the methodology does not require the proponent to make this comparison explicitly, the methodology authors believe the accounting methods ensure equivalency and consistency between the project and baseline. The only GHG sources which may occur in both the baseline and project scenarios are a) emissions from dredging (the baseline estimates of which shall be conservative and justifiable per the guidance in section 6.2.2; also, both scenarios employ the same emissions factors in Table 11), and b) CH4 emissions from the land-atmosphere interface (baseline CH4 emissions are monitored subject to the same requirements as the project scenario, as described in section 9.2.2). Further, the accounting methods ensure that all the sources and sinks listed in Table 7 (section 5.1) are equivalent in that they are all quantified using the same unit of measure (tCO ₂ e).	
7 January 2013	
Evidence used to close CL: As a clarification from our NCR, the VCS requirement does not state the comparison is a requirement of the project proponent, rather the responsibility of the methodology itself. However the consistency of emissions factors, units of measure and accounting methods in the methodology sufficiently address this NCR. Addressed.	
Date closed:	06 February 2013

56. Clarification

VCS Criteria: VCS Standard v3.3, 4.5.1	
Methodologies using a project method shall establish criteria and procedures for identifying alternative baseline scenarios and determining the most plausible scenario, taking into account the following:	

...	
3) Data availability, reliability and limitations.	
Evidence Used to Assess Conformance: Section 6.	
Findings: It is unclear how the Methodology includes the requirements of 4.5.1 of the VCS Standard.	
Clarification (CL): Please clarify if this has been taken into account for the baseline scenario.	
Date issued:	21 November 2012
Project proponent response/actions and date: Section 6.1.2 has been revised to more clearly address data availability, reliability, and limitations when demonstrating the baseline scenario. 07 January 2013	
Evidence used to close CL: The proposed revisions sufficiently address data availability, reliability and limitations when demonstrating the baseline scenario. Addressed.	
Date closed:	06 February 2013

57. Clarification

VCS Criteria: VCS Standard v3.3, 4.5.1	
4) Other relevant information concerning present or future conditions, such as legislative, technical, economic, socio-cultural, environmental, geographic, site-specific and temporal assumptions or projections.	
Evidence Used to Assess Conformance: Section 6	
Findings: It is unclear how the Methodology includes the requirements of 4.5.1 of the VCS Standard.	
Clarification (CL): Please clarify if this has been taken into account for the baseline scenario.	
Date issued:	21 November 2012
Project proponent response/actions and date: The only allowable baseline scenario is open water (degraded wetland). The methodology provides procedures in section 6 for demonstrating that the most plausible baseline scenario is open water. These are based on historical evidence of land use change and loss, which inherently captures the effects of conditions of the type described here (e.g. policy, technology, economic, etc.). Further, the additionality analysis includes criteria related to regulatory surplus, which concludes that there are currently no laws or regulation directing the construction of wetlands in any particular location. A project specific-requirement for demonstrating regulatory surplus is included in section 7.1, which includes examples of the types of regulations that should be considered. Given that wetland creation does not generate revenue (apart from potential carbon-related revenue), it appears unlikely that factors described in this section of the standard could impact the baseline in ways that are not captured by the land use change and regulatory surplus analyses already included in the methodology. 07 January 2013	
Clarification (CL): The definition of degraded wetland provided in the methodology does include open water but also allows for "similarly degraded state". This would appear to include lands that are not open water and are subject to other plausible baseline scenarios. Please address in the alternative baseline scenarios section.	

<p>With regards to revenue generated by wetland creation in an alternative baseline scenario, what about wetland mitigation banks for use with state and federal regulatory compliance either with regards to the specific location? Also with regards to the associated dredge fill, does this negatively impact other projects which would have used this fill in the non-project scenario? In light of the fact that some potentially non-open water baseline scenarios may be included, please consider all the aspects of this requirement.</p>	
Date issued:	6 February 2013
<p>Project proponent response/actions and date: The alternative baseline scenarios section (6.1) has been revised to state 'open water.'</p>	
<p>To more fully consider alternative baseline scenarios, section 6.1 now includes guidance and a requirement (PDR 19) to provide the results of a comparative assessment of alternative baseline scenarios. Given that the project boundary is now limited to areas of open water, we believe that by far the most likely baseline scenario is a continuation (and/or expansion) of open water.</p>	
<p>Evidence used to close CL: The validator confirms the most likely scenario and considers this addressed.</p>	
Date closed:	20 March 2013

58. Clarification

<p>VCS Criteria: VCS Standard v3.3, 4.6.1</p> <p>The methodology shall establish a procedure for the demonstration and assessment of additionality based upon the requirements set out below. Note that such requirements are for methodology development, and projects shall demonstrate and assess additionality in accordance with the requirements set out in the applied methodology.</p>	
<p>Evidence Used to Assess Conformance: Section 7</p>	
<p>Findings: It is unclear how the Methodology establishes the assessment of additionality.</p>	
<p>Clarification (CL):</p> <p>The procedure is anecdotal, only mentioning the 5% penetration level rule and does not clearly state the protocol to treat the databases of land over time, accuracy of measurements over time and other uncertainties affecting the calculation. Further work is needed. Please see comments in Section 4.6.8. Please see comments in Section 4.6.8.</p>	
Date issued:	21 November 2012
<p>Project proponent response/actions and date:</p> <p>The methodology authors addressed the issues of accuracy and uncertainties in responses to finding 18.</p> <p>07 January 2013</p>	
<p>Evidence used to close CL: This issue is sufficiently addressed in NCR18. Addressed.</p>	
Date closed:	06 February 2013

59. Clarification

<p>VCS Criteria: VCS Standard v3.3, 4.6.2</p> <p>Note - Reference in a methodology to the VCS requirements on additionality is insufficient. The VCS requirements are high level requirements and do not represent a full and detailed procedure for the demonstration of additionality. The only exception to this is with respect to regulatory surplus (i.e., methodologies may directly reference the VCS requirements on regulatory surplus and do not need to</p>	
--	--

further develop a procedure for demonstrating and assessing regulatory surplus).	
Evidence Used to Assess Conformance: Section 7	
Findings: It is unclear if the Methodology Developer reviewed the note from Section 4.6.2 of the VCS Standard.	
Clarification (CL): Please review this note and its relevance, if any, to Section 7 of the methodology.	
Date issued:	21 November 2012
Project proponent response/actions and date: The methodology provides an activity method for determining additionality. Under the positive list approach, as specified by section 4.1.11 of the VCS Standard, projects that implement activities on the positive list are automatically deemed additional. The full and detailed procedure for demonstrating additionality, therefore, consists of demonstrating that the project implements activities on the positive list. Procedures by which this is demonstrated are described in sections 4, 6, 7, and Appendix H of the methodology. In summary, the methodology deems wetland creation activities as additional and qualifies them for a positive list based on low rates of adoption in the United States. Appendix H details the analysis used to determine that the rates of adoption are low. Applicability conditions are provided to ensure that individual projects fit into the context by which the methodology authors conducted the analysis which determined the rates of adoption are low. These include a requirement that projects include activities intended to create new wetlands via vegetation establishment, substrate establishment, or both; restrictions to geographic scope; a requirement to provide evidence that, in the absence of the project, the baseline scenario consists of open water (satisfied by land use change analysis); and requirements that project activities are not mandated by law. 7 January 2013	
Evidence used to close CL: The narrative provided sufficiently clarifies the activity method proposed and the procedures for demonstration. Addressed.	
Date closed:	06 February 2013

60. Clarification

VCS Criteria: 4.8.1 The methodology shall describe the data and parameters to be reported, including sources of data and units of measurement.	
Evidence Used to Assess Conformance: Section 9 of Methodology	
Findings: The Data and Parameters section is not consistent.	
Clarification (CL): Please note Sections 9.1 and 9.2 of the VCS Methodology Template v3.2. It appears the format of the data and parameter tables is not consistent. This may not need to be corrected, but just noting this.	
Date issued:	21 November 2012
Project proponent response/actions and date: All fields in the variable tables in the VCS Methodology Template are retained in the tables in the methodology. The methodology authors chose to display variables in one unified table in order to be more efficient and user-friendly. 7 January 2013	
Evidence used to close CL: Clarification addresses the location of the variables. Addressed.	

Date closed:	06 February 2013
---------------------	------------------

61. Clarification

VCS Criteria: VCS Standard v3.3, 4.8.1 4) Be current at the time of quantification.	
Evidence Used to Assess Conformance: Section 9	
Findings: The manual referenced in this section has a more recent update since 1982.	
Clarification (CL): As discussed in the meeting, please explain why a more recent version of the 1982 manual was not referenced in the methodology.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised the source (and references to the source in Appendix E) as follows: Nelson, D.W., and L.E. Sommers. 1996. Total Carbon, Organic Carbon, and Organic Matter. p. 961-1010. In D.L. Sparks (ed.) Methods of Soil Analysis. Part 3. Chemical Methods. Soil Science Society of America Book Ser. 5. SSSA and ASA, Madison, Wis. 7 January 2013	
Evidence used to close CL: The sources have been updated to reflect more current research as discussed.	
Date closed:	06 February 2013

62. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.1.3 Where a methodology combines AFOLU project categories, the methodology shall adhere to all sets of requirements pertaining to each and every project category covered, either separating activities, or where activities cannot be separated, taking a conservative approach to each requirement.	
Evidence Used to Assess Conformance: All	
Findings: It is unclear if and how ARR activities will be combined with the WRC activities.	
Clarification (CL): Please clarify if there is any intent to combine other AFOLU types into this methodology, or if it is "closed" for only WRC activities.	
Date issued:	21 November 2012
Project proponent response/actions and date: The methodology authors intend for ARR activities to be allowable, and thus have made the following revisions: Added guidance to section 2.1.2 regarding applicability of ARR methods when woody vegetation is established. Added applicability condition prohibiting commercial harvest. 7 January 2013	
Clarification (CL): Please refer to NCR #54 above.	
Date issued:	06 February 2013
Project proponent response/actions and date: See response to NCR 54 above. Because ARR activities fall within the project activities listed in section 2.1, all subsequent requirements in the	

methodology apply to both WRC and ARR activities.	
Evidence used to close CL: Addressed.	
Date closed:	20 March 2013

63. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.3.5 Reductions of N ₂ O and/or CH ₄ emissions are eligible for crediting if in the baseline scenario the project area would have been subject to livestock grazing, rice cultivation, burning and/or nitrogen fertilization.	
Evidence Used to Assess Conformance: Section 5 and section 8.	
Findings: Need clarification on why this aspect was not mentioned if ARR is allowable project type.	
Clarification (CL): Please clarify if the methodology developer interpreted this rule to be not applicable to the WRC methodology.	
Date issued:	21 November 2012
Project proponent response/actions and date: Since the baseline scenario is open water (degraded wetland), none of the activities listed would have occurred. 7 January 2013	
Clarification (CL): The definition of degraded wetland provided in the methodology does include open water but also allows for "similarly degraded state". This would appear to include lands that are not open water and are subject to other plausible baseline scenarios. Please discuss with regards to similarly degraded wetlands.	
Date issued:	6 February 2013
Project proponent response/actions and date: Methodology has been revised throughout so that it is restricted to areas of open water. Thus, this requirement is not applicable to the methodology.	
Evidence used to close CL: Validator confirmed the requirement is not applicable to the methodology.	
Date closed:	20 March 2013

64. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.3.6 Reductions of CH ₄ emissions are eligible for crediting if fire would have been used to clear the land in the baseline scenario.	
Evidence Used to Assess Conformance: Section 5 and section 8.	
Findings: Need clarification on why this aspect was not mentioned if ARR is allowable project type.	
Clarification (CL): Please clarify if the methodology developer interpreted this rule to be not applicable to the WRC methodology.	
Date issued:	21 November 2012
Project proponent response/actions and date: Since the baseline scenario is open water (degraded wetland), fire would not have been used to clear the land. 7 January 2013	

Clarification (CL): The definition of degraded wetland provided in the methodology does include open water but also allows for "similarly degraded state". This would appear to include lands that are not open water and are subject to other plausible baseline scenarios. Please discuss with regards to similarly degraded wetlands.	
Date issued:	06 February 2013
Project proponent response/actions and date: Methodology has been revised throughout so that it is restricted to areas of open water. Thus, this requirement is not applicable to the methodology.	
Evidence used to close CL: Validator confirmed the revisions occurred as stated.	
Date closed:	20 March 2013

65. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.5.3 ...Methodologies shall set out criteria and procedures to reliably establish the pattern of carbon loss over time using empirical evidence, such as studies that use primary data or locally calibrated models, or methodologies shall apply an appropriate decay model (such as a linear or exponential decay function) that is scientifically sound, based on empirical evidence and not likely to overestimate early carbon losses.	
Evidence Used to Assess Conformance: All	
Findings: Criteria and procedures do not appear to adequately address the scope of the methodology.	
Clarification (CL): Please clarify if the data for establishing the pattern of carbon loss over time is appropriate for the entire scope (US) of the project	
Date issued:	21 November 2012
Project proponent response/actions and date: It appears this finding is related to section 4.5.3 of AFOLU Requirements. This requirement is not applicable to this methodology because carbon would not "have been lost in the baseline scenario due to land use conversion or disturbance." 7 January 2013	
Evidence used to close CL: Confirmed that the original finding was not applicable.	
Date closed:	06 February 2013

66. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.2.16 ...The project area shall meet an internationally accepted definition of wetland, such as from the IPCC, Ramsar Convention on Wetlands, those established by law or national policy, or those with broad agreement in the peer-reviewed scientific literature for specific countries or types of wetlands.	
Evidence Used to Assess Conformance: 3 (definitions)	
Findings: The definition of wetland should consider VCS definition and scope of applicability.	
Clarification (CL): Definition for wetland given in Methodology Section 3 as "Please see current VCS definition." VCS definition appears to be any that meets an "internationally accepted definition of wetland" included in this paragraph in Section 4.2.16 of AFOLU Requirements (IPCC, Ramsar Convention on Wetlands, those established by law or national policy, or those with broad agreement in the peer-reviewed scientific literature for specific countries or types of wetlands). Based on methodology restricting	

geographical applicability to coastal Louisiana (with indications in meetings with methodology developer on 11/13 - 11/14 that applicability desired for continental United States), consideration should be given to clarify the definition of wetland to be an accepted definition established by national law. However, methodology developer also should consider that RWE specifies activities in a "degraded wetland" [AFOLU Requirement 4.2.19(1)], and open water not supporting rooted aquatic plants would not meet definition of wetlands under Section 404 of Clean Water Act; however, it would meet definition under IPCC. Please clarify	
Date issued:	21 November 2012
Project proponent response/actions and date:	
Added 'degraded wetland' to section 3, to clarify that degraded wetlands (which may include areas of open water) were areas that once met the definition of 'wetland.'	
Clarified the definition of 'wetland' in section 3 by including the U.S. national (EPA) definition: "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." (source: http://el.erdc.usace.army.mil/elpubs/pdf/wlman87.pdf .)	
7 January 2013	
Evidence used to close CL: Clarification provided in Section 3 (Definitions) through addition of definition for 'degraded wetland' and through revised definition of 'wetland'. Addressed.	
Date closed:	06 February 2013

67. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.3.22	
Combined category projects shall apply the relevant WRC requirements for the soil carbon pool and the respective non-WRC AFOLU project category requirements for the other pools, unless the former may be deemed <i>de minimus</i> (as set out in Section 4.3.3) or conservatively excluded (as set out in Section 4.3.4)	
Evidence Used to Assess Conformance: Sections 2.1.2 & 4	
Findings: More description is needed for the possibility of a combined ARR/WRC project.	
Clarification (CL):	
If ARR + WRC are proposed, Methodology must describe which requirements/GHG pools the project proponent must follow, or procedure to determine pools are <i>de minimus</i> , or demonstrate how this has already occurred.	
Date issued:	21 November 2012
Project proponent response/actions and date:	
With the changes made to include ARR methods and requirements (see findings 12, 33), the GHG pools did not change, nor did the procedure to determine which pools are <i>de minimus</i> . New requirements for ARR + WRC are found in sections 2.1.2, 4 (see findings 12, 33).	
7 January 2013	
Evidence used to close CL: The appropriate pools have been selected for both ARR and WRC. Addressed.	
Date closed:	06 February 2013

68. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.3.24	
For RWE projects, N ₂ O emissions shall be included in the project boundary. The methodology shall establish the criteria and procedures by which the N ₂ O source may be deemed de minimus (as set out in Section 4.3.3) or conservatively excluded (as set out in Section 4.3.4).	
Evidence Used to Assess Conformance: Section 9.2.3.1	
Findings: Non-point sources of N are not referenced in 9.2.3.1.	
Clarification (CL): Please clarify if these were considered to be relevant/significant to the methodology development.	
Date issued:	21 November 2012
Project proponent response/actions and date: Added language in section 9.2.3.1 to account for non-point nitrogen sources. The sources of the default values inherently include non-point nitrogen sources. 7 January 2013	
Evidence used to close CL: The proposed language sufficiently addresses the concerns regarding non-point sources of nitrogen. Addressed.	
Date closed:	06 February 2013

69. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.4.19	
Combined category projects shall use the relevant WRC requirements and the respective non-WRC AFOLU project category requirements for the determination and establishment of the baseline scenario.	
Evidence Used to Assess Conformance: N/A	
Findings: The applicability of combining ARR activities is unclear.	
Clarification (CL): Please specify when ARR is applicable and what criteria must be followed.	
Date issued:	21 November 2012
Project proponent response/actions and date: ARR is applicable when vegetation establishment (section 2.1.2) includes woody vegetation. Methods and requirements have been added to sections 2.1.2, 4 (see findings 12,33,46). 7 January 2013	
Evidence used to close CL: The methods and requirements added satisfy the requirement for criteria as does the definition for when ARR is applicable. Addressed.	
Date closed:	06 February 2013

70. Clarification

VCS Criteria: VCS AFOLU Requirements v3.3, 4.5.26	
Baseline emissions shall be estimated conservatively and consider that the water table depth in the project area may rise during the project crediting period due to any or all of the causes identified in alternative baseline scenarios as set out in Section 4.4.11.	
Evidence Used to Assess Conformance: Definitions	
Findings: Methodology unclear on its definition of Open Water.	

Clarification (CL): Please clarify definition of open water is less than 10% vegetative cover, and vegetation is sparse and not contiguous. This type of vegetation would convert to open water over time and has insignificant C sequestration benefits.	
Date issued:	21 November 2012
Project proponent response/actions and date: The definition of open water has been clarified in section 3: "Water with 90% of its area having a depth that does not support emergent vegetation and no more than 10% sparse vegetation (water with dense vegetation is not considered open water)." In the baseline scenario, it is conservative to assume that vegetation converts to open water and is accounted for accordingly. 7 January 2013	
Evidence used to close CL: The revised definition sufficiently defines "open water". Addressed.	
Date closed:	06 February 2013

71. Clarification

VCS Criteria: General/Technical	
Evidence Used to Assess Conformance: Section 8.2.5	
Findings: Clarification is needed regarding stratification related to disturbance and also monitoring.	
Clarification (CL): Would like clarification on statement that "if re-stratification is necessary, the new strata shall be effective as of the date of disturbance. In the event that vegetated strata convert to open water as a result of a disturbance, it is conservative to apply monitoring data from a vegetated stratum to the open water stratum." Additional Clarification: What's not clear in section 8.2.5 is why it is conservative to apply monitoring data from a vegetated stratum to the open water stratum. Which GHGs / removals / emissions are implicit in this statement? Section 8 is about project reductions/emissions and 8.2.5 is emissions from disturbances such as marsh die-back or storms. In the project case, monitoring data from a prior vegetated area that is converted to open water would include net C sequestration. The conversion to open water would preclude future C sequestration. So it seems the opposite – that it is not conservative to apply GHG data from a vegetated area to an open water area.	
Date issued:	21 November 2012
Project proponent response/actions and date: Removed second sentence (and clarified first sentence) of the text quoted in the finding at left. The assessor is correct that applying monitoring data from a vegetated stratum to the open water stratum may not always be conservative in the project scenario. The original intent of the first sentence of the quoted text (requiring re-stratification immediately after the disturbance event) was to ensure that no GHG accounting methods are applied erroneously to outdated strata. Thus, the revised text appropriately requires the proponent to re-stratify after disturbances in order to maintain the accuracy of the stratification. 7 January 2013	
Evidence used to close CL: The narrative provided sufficiently addresses the clarification request. Addressed.	

Date closed:	06 February 2013
---------------------	------------------

72. Clarification

VCS Criteria: General/Technical	
Evidence Used to Assess Conformance: Section 9.2.3.1	
Findings: Clarification is needed regarding default values for N2O.	
Clarification (CL): Are the tables in 9.2.3.1 adequate to set a default value for N ₂ O?	
Date issued:	21 November 2012
Project proponent response/actions and date: Nitrous oxide flux from wetlands in general is considered negligible given that saturated soils favor complete reduction of NO ₃ to N ₂ (Meronigal et al. 2004). Exceptions exist when external nitrate loading occurs or wetlands that experience wide extremes in drawdown and reflooding. In the case of Louisiana, where wetlands are saturated for extended durations, Table 16 presents default values that are consistent with the fundamental knowledge of biogeochemical processes of saturated wetlands. Furthermore, the values should be considered robust under background conditions given the long-term (2 years) and comprehensive nature of the study (along the salinity gradient) (DeLaune et al. 1983). The data in Table 16 are not necessarily suitable as defaults outside of Louisiana. The project proponent in other regions should develop appropriate geographic defaults, as noted in the methodology. Table 17 demonstrates that low or high nitrous oxide emissions can occur with nitrate loading, and the methodology provides guidance on when project areas must consider the potential for significant nitrous oxide emissions. Source: Meronigal, J.P., M.E. Hines, and P.T. Visscher. 2004. Anaerobic metabolism: linkages to trace gases and aerobic processes.p.317-424 In: Schelesinger, W.H. (ed.) Biogeochemistry. Elsevier-Pergamon, Oxford, U.K. 7 January 2013	
Evidence used to close CL: The narrative provided sufficiently addresses the clarification request. Addressed.	
Date closed:	06 February 2013

73. Clarification

VCS Criteria: General/Technical	
Evidence Used to Assess Conformance: Section 9.2.2.1	
Findings: Clarification is needed regarding when timing of measurement for methane flux.	
Clarification (CL): Is measuring methane flux for one season adequate under all circumstances, or would taking measurements under relatively "normal" climatic conditions be important (no droughts, no 100-year floods, etc.)?	
Date issued:	21 November 2012
Project proponent response/actions and date: The range of conditions when measurements should be taken are specified in section 9.2.2.4.1."Sampling shall occur when water levels are within 30 cm above or below the average annual water level or water table (for non-tidal systems) or when water level is within mean low and mean high water (i.e., not during extended low water events)." 7 January 2013	

Evidence used to close CL: Section 9.2.2.4.1 contains range in water level or water table acceptable for sampling, eliminating concerns for sampling under atypical conditions. Addressed.	
Date closed:	06 February 2013

74. Clarification

VCS Criteria: General/Technical	
Evidence Used to Assess Conformance: Section 6.1.2.1	
Findings: Clarification is needed regarding cloud cover, level of accuracy and seasonal changes in water patterns.	
Clarification (CL): Can cloud cover, etc., be removed? What is the level of accuracy to for this exercise? Should seasonal changes in water patterns be specified (for consistency in the timing of an image)?	
Date issued:	21 November 2012
Project proponent response/actions and date: Section 6.1.2 has been revised to include season, accuracy, and cloud cover requirements. Max cloud cover at each date restricted to 20% (ok to use multiple images); accuracy must be at least 90%; restricted window to same 3-month period of each year. These requirements are adapted directly from an approved AFOLU methodology (VM0006). 7 January 2013	
Evidence used to close CL: The requirements regarding seasonal timing and cloud cover have been provided. Addressed.	
Date closed:	06 February 2013

75. Clarification

VCS Criteria: General Technical Expert Comments	
Evidence Used to Assess Conformance: Section 8.4.2.1	
Findings: Clarification is needed regarding the conservative nature of omission of fluxes.	
Clarification (CL): The validator is concerned with the omission of the fluxes from the confidence deduction; although the methodology developer asserts these are conservative, there is no known exception for the confidence deduction. Please clarify.	
Date issued:	21 November 2012
Project proponent response/actions and date: Please see the document "Response to NCR 2 and 69." 7 January 2013	
Evidence used to close CL: The proposed approach is recognized as conservative. Based on the note on conservativeness from VCS at the end of section 2.4.1 of the VCS Standard this CL is considered addressed.	
Date closed:	06 February 2013

76. Clarification

VCS Criteria: General Technical Expert Comments	
Evidence Used to Assess Conformance: A1 and A4	

Findings: Clarification is needed regarding confidence levels.	
Clarification (CL): The protocols are using as allowable degree of error 10% and 15%, and different confidence levels of 95% and 90%. Check if the examples and recommended confidence levels can be the same.	
Date issued:	21 November 2012
Project proponent response/actions and date: Revised equations A.1, A.4, A.6 to be consistent: 15% error, 95% confidence. 7 January 2013	
Evidence used to close CL: The methodology now consistently requires 15% error and 95% confidence. Addressed.	
Date closed:	06 February 2013

77. Clarification

VCS Criteria: General Technical Expert Comments	
Evidence Used to Assess Conformance: General	
Findings: Clarification is needed regarding sampling of accretion material.	
Clarification (CL): Please clarify that when the accretion material is sampled separately from the original project soil, a separate bulk density sample that represents the accreted material must accompany the soil carbon sample.	
Date issued:	21 November 2012
Project proponent response/actions and date: Section E.5 clarified that bulk density and carbon determination must be taken on the accretion layer. 07 January 2013	
Evidence used to close CL: Section E.5 now specifies that accretion layers are sampled separately. Addressed	
Date closed:	21 January 2013

78. Opportunity for Improvement

VCS Criteria: General Technical Expert Comments	
Evidence Used to Assess Conformance: General	
Findings: General	
Opportunity for Improvement (OFI): Check section numbers and references to section numbers throughout document.	
Date issued:	21 November 2012
Project proponent response/actions: One section numbering error was found and corrected. No other errors were found.	
Evidence used to close CL: Section numbering corrected. Addressed.	
Date closed:	06 February 2013

79. Opportunity for Improvement

VCS Criteria: General Technical Expert Comments	
Evidence Used to Assess Conformance:	

Section 9.2.3.1	
Findings: General	
Opportunity for Improvement (OFI): Consider modifying statement that the project area does not contain "a direct hydrologic connection" to an NPDES major discharger - coastal Louisiana likely has direct hydrologic connection to NPDES major dischargers.	
Date issued:	21 November 2012
Project proponent response/actions: Revised section 9.2.3.1 to read "downstream of and in close proximity to" vs. "contain a direct hydrologic connection."	
Evidence used to close CL: Section 9.2.3.1 revised to restrict 'direct hydrologic connection' to location within an outfall or downstream and in close proximity. Addressed.	
Date closed:	06 February 2013

APPENDIX C - PROJECT VALIDATION EVIDENCE FOR ESI

Name of Project	Validation Report – Date Issued	Date Project Registered	GHG Program Registered With
Restoration of degraded areas and reforestation in Cáceres and Cravo Norte, Colombia	24 February 2011	14 March 2011	VCS
TIST Program in Kenya VCS-001	2 March 2011	15 April 2011	VCS
TIST Program in Kenya VCS-002	2 March 2011	15 April 2011	VCS
TIST Program in Kenya VCS-003	2 March 2011	15 April 2011	VCS
TIST Program in Kenya VCS-004	2 March 2011	17 April 2011	VCS
TIST Program in Kenya VCS-005	16 December 2011	22 December 2011	VCS
Bull Run Overseas Forest Carbon Project: Phase 1	15 March 2012	13 April 2012	VCS
TIST Program in Uganda VCS-001	20 March 2012	25 May 2012	VCS
TIST Program in Uganda VCS-002	20 March 2012	25 May 2012	VCS
TIST Program in Uganda VCS-003	20 March 2012	25 May 2012	VCS
TIST Program in Uganda VCS-004	20 March 2012	25 May 2012	VCS
Protection of the Bolivian Amazon Forest	26 March 2012	25 May 2013	VCS
Lower Mississippi Valley Grouped Afforestation Project	11 October 2012	12 November 2012	VCS
Reforestation of Degraded Lands in the Valle California of Patagonia, Chile	18 June 2012	29 August 2012	VCS
TIST Program in Kenya – VCS-006	27 September 2012	01 October 2012	VCS
TIST Program in Uganda – VCS-005	7 March 2013	13 March 2013	VCS
TIST Program in Uganda – VCS-006	7 March 2013	13 March 2013	VCS
TIST Program in India VCS-001	7 March 2013	13 March 2013	VCS