

**Carbon Accretion & Riparian Benefits (CARB) – Red River Pilot Project**  
 California Assembly Bill 1305 - Voluntary Carbon Market Disclosures  
 May 2024 (Rev\_0)

Project Overview	<p>Carbon Accretion and Riparian Benefits (CARB) is a group forestry-based carbon capture project spanning over 18,000 acres (12,183 forested acres) of land across Arkansas, Louisiana, Oklahoma, and Texas. The goal of the project is to provide a mechanism to aggregate tracts of land with similar forest types to create larger conservation corridors. The pilot project began in 2022 with the enrollment of 14 initial landowners. To date, over 200,000 hardwood seedlings have been planted. Over 30,000 metric tons of CO<sub>2</sub>e is estimated to be sequestered annually within the pilot project area (almost 1MM tons in the project baseline). A baseline carbon inventory report was submitted in July 2023 and initial credit issuance was approved in October 2023.</p> <p>Generating revenue via land use practices that enhance carbon capture in natural sinks provides an incentive for adjacent landowners to participate in the project, while encouraging broader adoption of conservation practices as new tracts are enrolled annually. Through these annual enrollments, the project will continue expanding to link forested areas to form conservation corridors along the Red River, its tributaries, and their adjacent wetlands.</p> <p>CARB is designed to be complementary to the USDA Agricultural Conservation Easement Program (ACEP), which includes Agricultural Land Easements (ALE) that have established forestry-based conservation practices on easements across the project region. In response to historic regional deforestation, these easement programs have effectively replanted or protected native hardwood forests, thereby preventing the conversion of these working lands to non-agricultural uses. The resulting patchwork of conservation easements presents an opportunity for aggregation of both ACEP lands and adjacent tracts to create a broader habitat protection project. Additionally, over 60% of the acreage enrolled in USDA-ACEP that were measured as part of the baseline study will require active intervention to successfully reestablish native hardwood timber stands. Beyond these ACEP easements, a wide variety of managed and unmanaged timber exists in the region; however, this pilot project is strategically focused on the following forest types:</p> <ul style="list-style-type: none"> <li>- Reforested agricultural lands;</li> <li>- Native bottomland mixed hardwood stands;</li> <li>- On-going afforestation, reforestation, and revegetation (ARR) opportunities; and</li> <li>- Commercially managed forests adjacent to the forest types above.</li> </ul> <p>Grouping these forest types that exist in similar settings to the ACEP easements encourages the expansion of conservation corridors over time. Properly stratifying each participating tract added to the project over time will allow for increased statistical confidence in the mean carbon inventory and accrual rates within each strata of the group project. The CARB project development leverages revenues generated from the voluntary carbon credit market and connects privately owned tracts to protect and enhance riparian habitats. Participating landowners receive 60% of net credit revenue and the payment structure incentivizes owners to improve newly planted, recently converted or existing bottomland hardwood stands into more resilient stands, which contain highly durable stocks of forest-based carbon and provide many other co-benefits. <a href="#">(Link to CARB project documentation)</a></p>
Protocols	<a href="https://bcarbon.org/forest-carbon">BCarbon Forest Carbon Protocol https://bcarbon.org/forest-carbon</a>
Location	United States: Four States Region of Arkansas, Louisiana, Oklahoma and Texas
Project Timeline	Up to 55-year evergreen crediting period contract with participating landowners <a href="#">(Link to CARB project documentation)</a>
Project Start Date	July 2022
Date and Quantity of Emissions Removals	26,000 interim credits issued in October 2023 (2023 Vintage). Group project with annual credit issuance that varies based on on-going enrollments
Project Type	Improved Forest Management (imbedded reforestation projects)
Durability Period	Up to 55 year crediting period with 10 year residual monitoring ( <a href="https://bcarbon.org/forest-carbon">https://bcarbon.org/forest-carbon</a> )
Independent Third-Party Verification Parties	BCarbon Pilot Project with 3rd Party biometrician review (Auburn University Staff)
Annual Emissions Reduced or Carbon Removed	Over 30,000 Mt/CO <sub>2</sub> e of modeled annual removal capacity, with 26,000 digitally minted removal credits. (Pilot data not inclusive of over 8,500 MtCO <sub>2</sub> e/acre of annual belowground carbon accruals)

<b>Accountability Measures</b>	
Project Reversals	In lieu of project buffer pool, BCarbon requires bonding to cover potential reversals at an mutually agreed level (20% basis for pilot project)
Unintentional Reversals	Project materiality monitoring requires all owners to report any reversals (intentional or unintentional) over 5-acres. At the project level, Carbon Rho completes interim desktop reviews between field measurement of test plots and reports any material losses to the group project baseline that exceed 5-percent of annual project sequestrations (e.g. annual removal basis for material losses).
Intentional Reversals	Landowner must cure breach of contract by restoring intentional reversal to make the group project pool of credits whole.
Future Emissions Reductions that Do Not Materialize	<b>Emission reduction credits are <u>not created</u> using the BCarbon Forest Carbon Protocol</b>
<b>Pertinent Data and Calculation Methods</b>	
Protocols & Standards	Improved Forestry Management Protocol with imbedded afforestation/reforestation tracts. Static baseline; however, baseline is not used as basis for generating avoided emissions credits, as all crediting is based on future measured drawdown of CO2. 5-Year measurement and net carbon accounting process includes ex ante and ex post modeling of interim carbon removals via the US Forest Service Forest Vegetation Simulator (e.d. ex post allow for true-up accounting). BCarbon Forest Carbon Protocol <a href="https://bcarbon.org/forest-carbon">https://bcarbon.org/forest-carbon</a>
Inventory and Assessment Reports	<a href="https://bcarbon.changecode.io/portfolio/red-river-pilot-project-carbon-accretion-and-riparian-benefits-(carb)">https://bcarbon.changecode.io/portfolio/red-river-pilot-project-carbon-accretion-and-riparian-benefits-(carb)</a>
Carbon Volume and Credit Equations / Calculations	Annual ex-ante modeling with 5-year measurement and net carbon accounting/true-up frequency (US Forest Service - Forest Vegetation Simulator; See 2023 project baseline report link above)
<b>Supplemental Voluntary Carbon Market Disclosures</b>	
3rd Party Project Certifications	<a href="https://texanbynature.org/projects/carbon-rho-red-river-corridor-pilot-project/">https://texanbynature.org/projects/carbon-rho-red-river-corridor-pilot-project/</a>
Independent Rating Agency Data	<b>TBD - Independent project rating by BeZero (in progress)</b>
Sustainable Forest Management Plan	<a href="#">(Link to CARB project documentation)</a>
<b>Primary Attributes</b>	
Acres	18,060 (deeded) and 12,183 (forested)
Ecosystem Region	Potential to impacts up to six unique ecoregions, including Texas blackland prairies; East central Texas plain; South central plains; Ouachita mountains; Arkansas valley and Mississippi alluvial plain
Ecosystem Type	Alluvial floodplain and adjacent riparian habitat
Ecosystem Age Class or Development Stage	Varies (see baseline carbon inventory)
Property Condition	Varies (see baseline carbon inventory)
Co-Benefits	1) Riparian habitat & biodiversity (restoration, protection, and/or enhancement); (2) UN SDGs - 6,13,14,15,16 ; (3) Water quality; (4) Soil erosion control; (5) Recreation (6) Aesthetics & tangible/intangible ecosystem services