

CASE STUDY

Alligator River Avoided Conversion Project



**Duke Forest Carbon Offsets Workshop
Chapel Hill, NC
November 13, 2012**



Blue Source™

About Blue Source

Blue Source has built the largest portfolio of North American emission reduction credits and projects.

Carbon Credit Portfolio

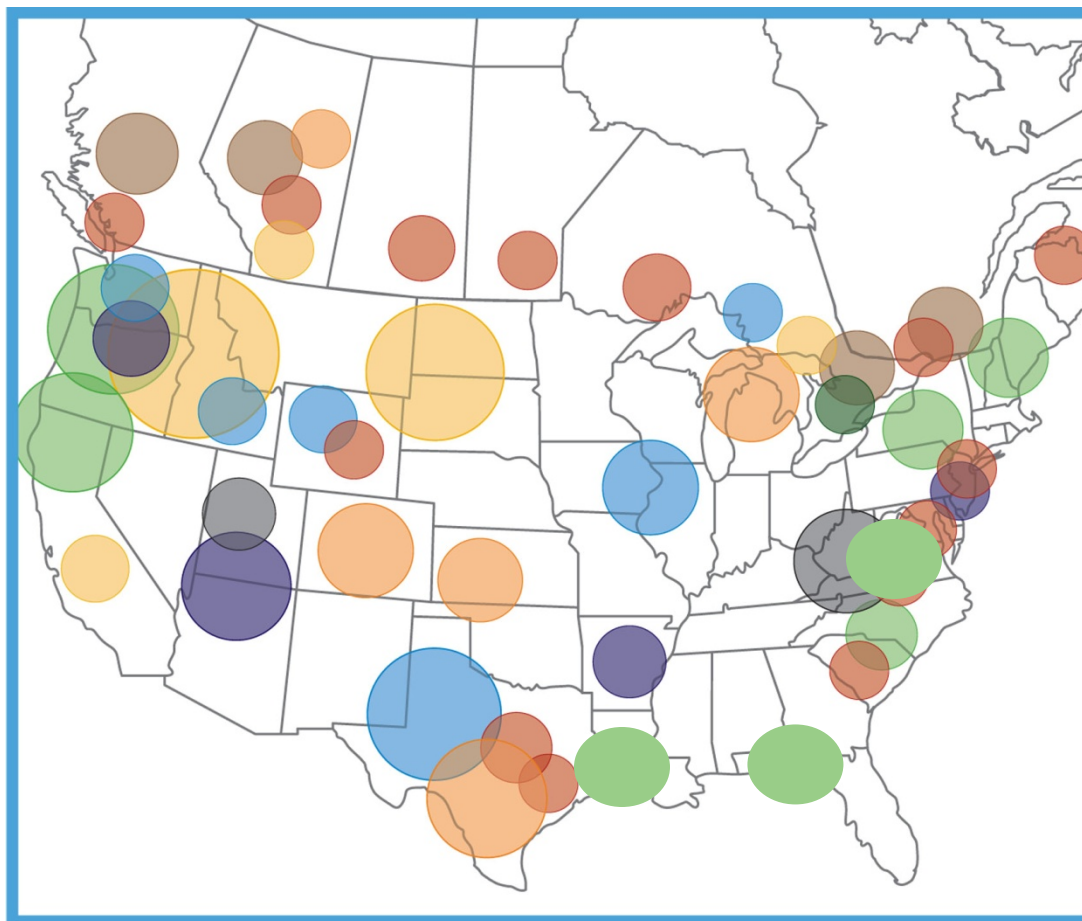
- Leading N. American project developer and marketer since 2001
- >100M tonne portfolio, >20M tonnes sold
- All active voluntary and regulatory standards/registries (CAR, VCS, ACR, AB, CSA)
- Projects in 48 states, all Canadian provinces
- Most CAR listed forestry projects
- First-of protocol development in numerous carbon categories

Services

- Carbon Credit Supply – structuring, marketing, sales
- Project Development – net-back model aligns incentives, provides landowner full market upside without upfront cost/risk
- Technical Services – quantification and valuation of emission reductions, market and regulatory strategy

North America Portfolio Scale & Diversity

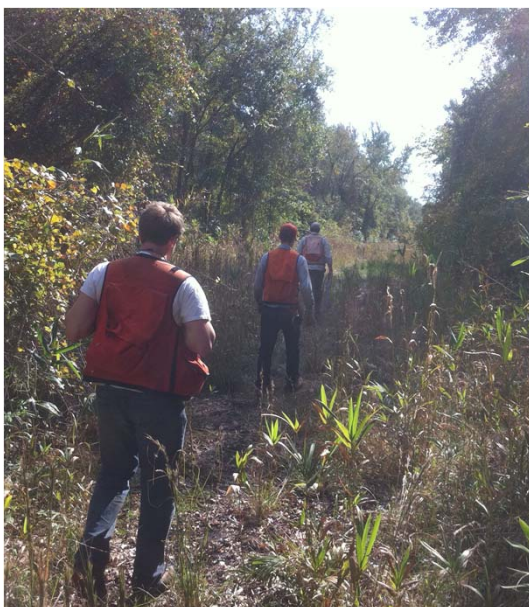
Blue Source's portfolio has been amassed over the past 10 years and totals 100s of million tonnes in the US (4 states) and Canada.



- Agriculture
- Forestry
- Carbon Capture & Storage
- Landfill Methane Capture
- Coal Mine Methane Capture
- Anaerobic Digestion
- Industrial Gas Destruction
- Biomass
- BioFuels

Forestry Project Development & Commercialization

Blue Source has extensive experience in creating *and selling* tonnes in the market. Speed, technical knowledge, premium pricing are central to success



- Protocol Assessment &/or Development
- Forest Carbon Inventory Design & Implementation
- Management Plan Development & Baseline Analysis
- Project Design
- Validation / Verification
- Registration
- Marketing, Sales, Contracting
- Transition to California ARB Compliance

Additional Case Studies: 9 North Carolina Forest Projects

Registered &/or Sold:

Pungo River Forest Conservation

Noles North & South Forest Conservation

Pocosin Forest Conservation/Restoration

- 5k acre AC (agriculture) + AR
- Revised soil methodology
- Aggregation



In Process:

Alligator River Forest Restoration

1 Additional Forest Conservation

1 Additional Forest Improvement

1 Additional Forest Restoration

Other Examples: Audubon, TNC, TIMOs

Audubon Beidler Forest Improvement

- ~6k acre IFM (no-harvest)
- Preserves unique ecosystem

Bishop Forest Improvement

- 250k acre IFM (FSC)
- Scale (acreage, products)



vs.

TNC Working Woodlands

- FSC plan and certification provided by TNC
- Small landowner aggregation
- >20k acres protected



Case Study 1 - Alligator River Forst Conversion Project

- CAR Avoided Conversion
- ~3K acres, Hyde County, NC
- Native bottomland hardwoods
- Conversion to agriculture prevented by easement



- 2010-11 verified, registered, sold (pre-sale accelerated owner value)
- First of CAR forestry outside CA, soil carbon quantification

Alligator River Habitat Protection



Costly and Time-Consuming Process (Plus ARB Transition)

Multiple tasks, documents, analyses:

- Designation of Authority Form
- Project Submittal Form
- Attestation of Title
- Boundary Map
- Signed Easement
- Inventory
- Growth Model / Baseline
- Monitoring Plan
- Project Design Document
- First Verification / Validation
- Project Implementation Agreement
- Initial Registration / Transfer
- Sales, Contracting
- Ongoing monitoring/verification



Significant upfront costs (>\$100k/project)

- Inventory
- Legal
- Appraisal
- Growth, baseline modeling
- Verification
- Registration

Forest Project Development Observations

- Restrictions on management can be limited (easement terms, reversals)
- Still burdensome for small projects (stocks and acres, easements)
- Solutions exist to 100 year+ commitment and invalidation risk
- Great progress by CAR and verifiers but still “first-ofs” for all
- No substitute for local knowledge + project experience to mitigate risk



Thank You!



Jeff Cole
Vice President
Blue Source
415-637-5333
jcole@bluesource.com