

Cumberland County Carbon Tree Bank

A Tree Planting initiative to increase public
health that adds economic value

-one tree at a time!

The Carbon Tree Bank was the vision of the Fayetteville Metropolitan Area Air Quality Stakeholders (Formerly the Cumberland County Air Quality Stakeholders).

The vision was to complete projects that would have a similar impact on air quality as removing 5000 vehicles from the road.

The Carbon Tree Bank was The first of these projects.

About

Air Quality Stakeholders of Fayetteville Planning Area

- Formerly the AQ Stakeholders of Cumberland County
- Tasked with examining and implementing initiatives to reach Ozone Attainment.
- The region achieved attainment in 2008
- In 2012 the region joined Ozone Advanced



What is a Carbon Bank?

The value is determined based on the species and age of each tree

Loblolly and Longleaf Pine

created when new trees are planted

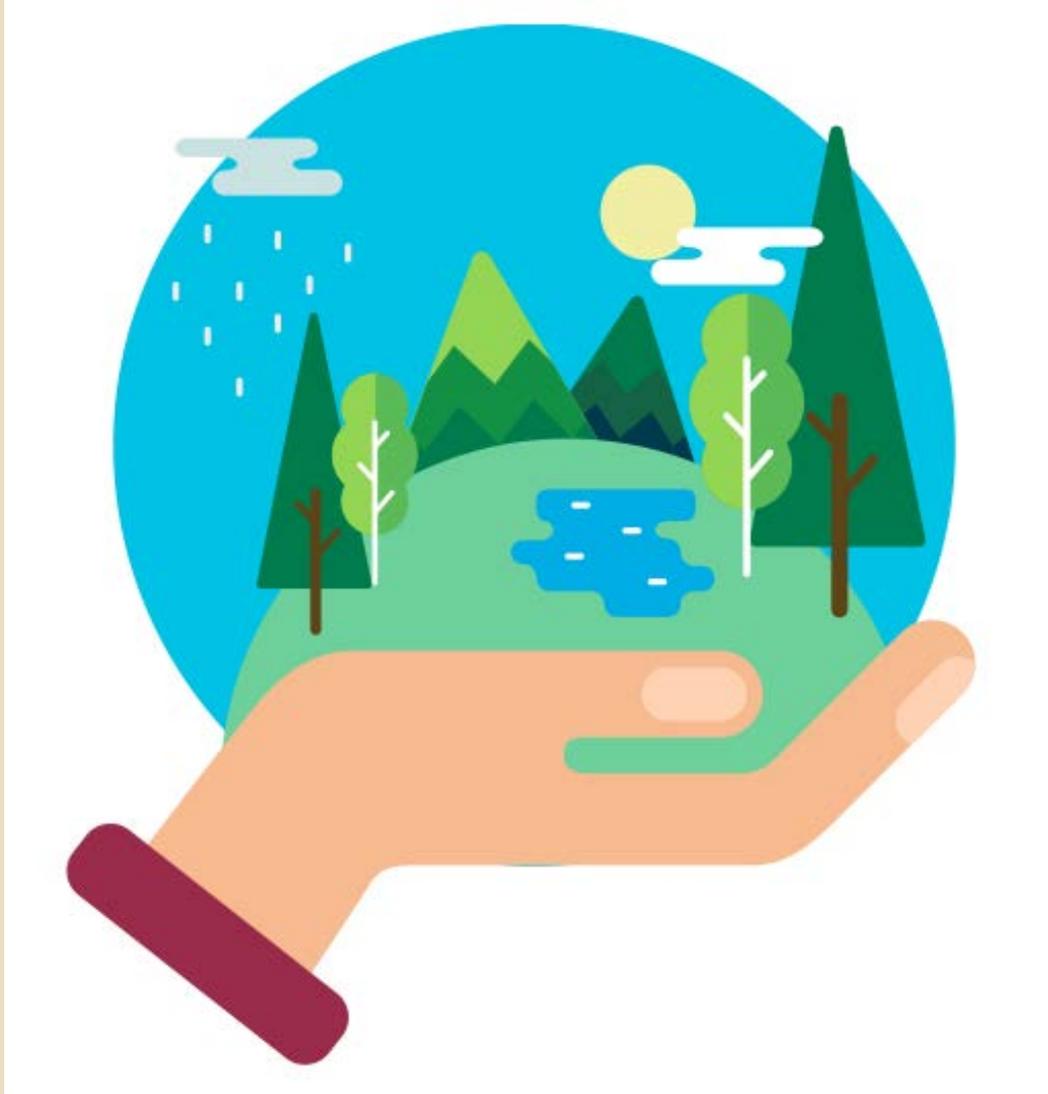
Planted on Cumberland County Schools Property

The trees have an associated carbon emissions value or credit

3 -5 metrics tons of Carbon per Tree

Large industry, universities, land owners, and others all invest in carbon offsets and create a thriving carbon market.

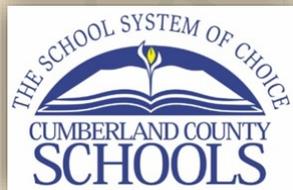
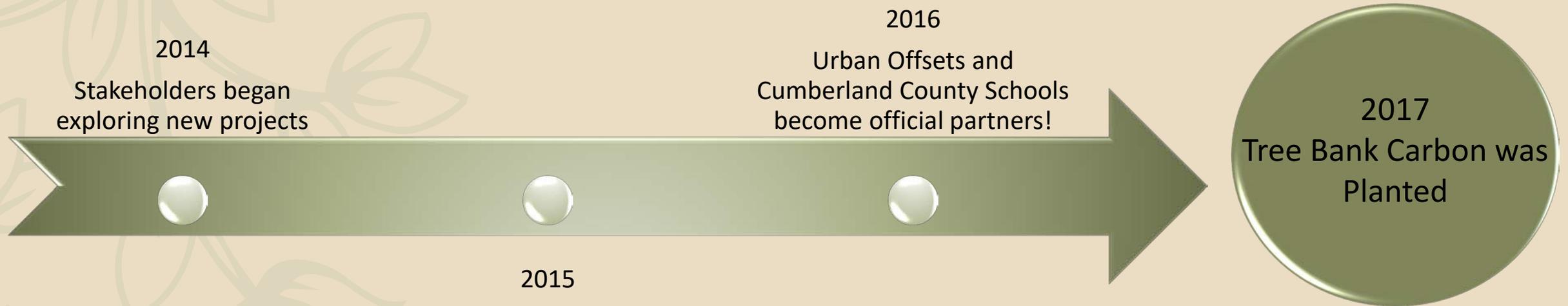
Urban Offsets Market



Why a Carbon Tree Bank?

- Fayetteville Cumberland County is considered NOx limited
- Vehicle emissions are the largest contributor of NOx.
- Fayetteville and Fort Bragg has an influx of commuters each day.
- Offsetting the impact of those emissions made the most sense.

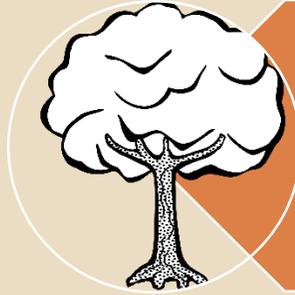
Project Development



Planting Day!



Cumberland County Schools Carbon Bank



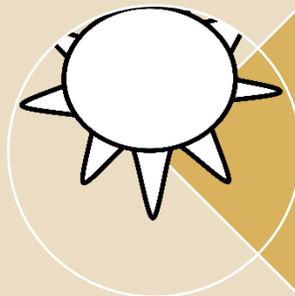
4,753

Number of loblolly and longleaf pines
planted at three Cumberland County
school sites in 2017!



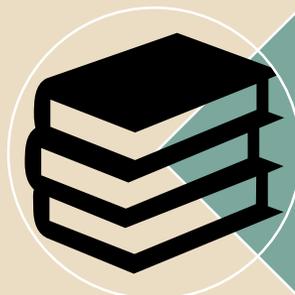
23K Metric Tons

Amount of CO² sequestered over the
life of the trees – 40 years.



Decrease

Urban heat island effect, CO² and
particulate matter!



Incentives

Living-learning lab and revenue
stream for schools!

Additional Benefits



Public Health

- Carbon dioxide removal
- Particulate matter removal
- Shade and heat wave mitigation



Economic

- Carbon credit sale revenue
- Reduced electric consumption
- Less maintenance costs, compared to other gray mitigation strategies



Environmental

- Erosion prevention
- Mitigating flood risk
- Storm water mitigation

Partner with us

Reforest the Sandhills, make a smart investment, and leave a legacy of responsibility and stewardship for future generations!

1

Become a Project Owner:

Dedicate sidewalks, parking lot corners or fields of vacant land to plant more trees.

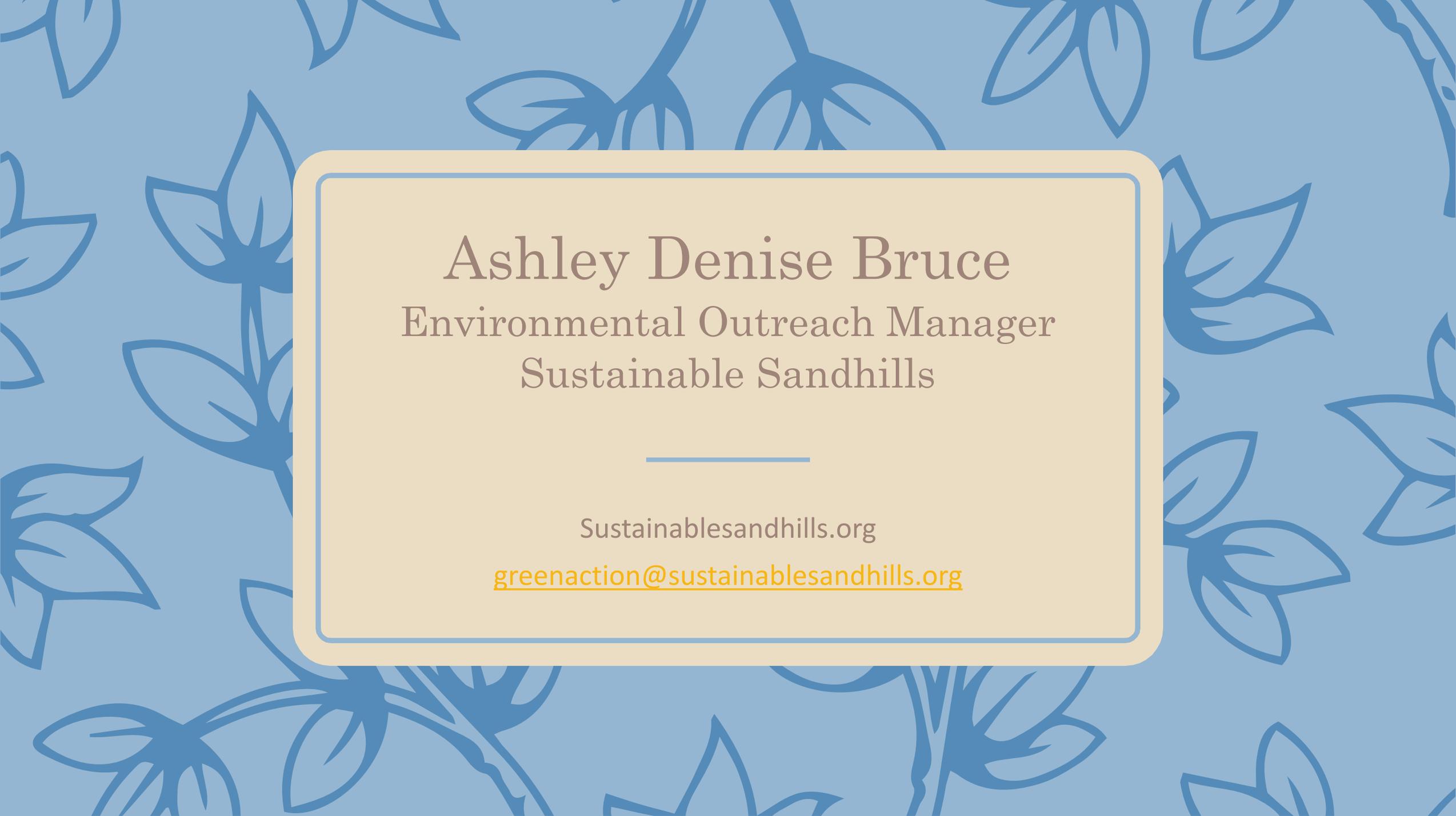
2

Purchase Carbon Credits:

Reduce the carbon footprint of your house, your business, your lifestyle by investing in carbon credits.

3

Become a Sponsor: Tap your inner philanthropist and help others without the means to invest.



Ashley Denise Bruce
Environmental Outreach Manager
Sustainable Sandhills

Sustainablesandhills.org

greenaction@sustainablesandhills.org