

Team Name & School: Canopy Keepers - Elite Scholars Academy

Teacher Name: Ms. Mather

Green Heart Action Plan

Problem Definition/ Problem Statement

In today's society, people want to expand and advance which creates a growing problem of over industrialization. This increases deforestation to open acres of land to build. My group notices on a daily basis that in Clayton and surrounding counties, more and more trees are being cut down to build new neighborhoods, convention centers, gas stations, etc. This reduces the tree canopy level in Metro Atlanta, bringing summer temperatures to dangerous temperatures for some life forms. We also notice in Clayton County and local cities, it is hotter where there are less trees, and green spaces to naturally absorb the sunlight. In addition, trees bring a natural cooling system and cities are losing them—they're losing a key factor to cooling the city during a hot season. It's not only affecting cities, nutrient levels in soil depletes when temperatures are at a constant high, drying out the land. This is caused by organic matter decomposing quicker, releasing carbon, which reduces humus in the soil, directly affecting the nutrients in the soil. The loss of tree canopies also directly affects pollinators in the area, reducing biodiversity. *Our goal is to raise awareness* and to have our communities help treat this growing issue.

Root Cause of the Problem

Trees in Jonesboro are mainly cut down to ensure utility reliability, public safety, and urban development. Georgia Power and local crews remove branches or entire trees that threaten power lines to prevent outages, while the GDOT(Georgia Department of Transportation) clears roadside vegetation to improve driver visibility and create safe "clear zones." Additionally, dead or diseased trees are taken down to prevent storm damage, and large-scale land clearing often occurs to make room for new housing and commercial projects as the area expands. We can see over the past years, temperatures increasingly spike. The following are average temperatures recorded during summer (May-July) for Jonesboro during the past seven years, dating back to 2019. (From a trusted source) *

92F*-2025

91F*-2024

89F*-2023

81F*-2022

80F*-2021

81F*-2020

82F*-2019



List at Least Three Credible Resources that Support Your Problem Statement

<https://heathtreeservice.com/atlanta-the-city-in-a-forest/#:~:text=According%20to%20a,38%25%20in%201996.>

<https://www.nature.org/en-us/about-us/where-we-work/united-states/washington/stories-in-washington/voice-for-healthy-urban-trees/>

[https://cityofhoodriver.gov/tree-committee/benefits-of-the-urban-forest/#:~:text=Trees%20produce%20oxygen%2C%20and%20also, and%20infrastructure%20\(reference%205\).](https://cityofhoodriver.gov/tree-committee/benefits-of-the-urban-forest/#:~:text=Trees%20produce%20oxygen%2C%20and%20also, and%20infrastructure%20(reference%205).)

Proposed Solution

We want to increase tree growth and tree canopy in our community because we've seen temperatures rising over the past 3 summers. Planting native tree species and promoting tree growth within our community will help increase the canopy in our area.

How We Will Measure Our Success

First, we look at old data charts of temperatures in Jonesboro and some other cities in our county. We will then measure our success by collecting the temperatures of Jonesboro over the next few years to see if temperature progressively gets better or not. In addition to measuring the temperatures, we'll analyze the amount of trees we'd have planted throughout our initiative

Who are Decision Makers We Need to Reach

In order to plant trees in public spaces, we will need permission from the local municipal government, the Department of Public Works, GA Environmental specialists, Parks and Recreational Department (they work to ensure safety, maintain infrastructures and urban management).

Our 3-5 Step Plan for Change

1. We'd need to ask permission from local municipal governments, the Department of Parks and Recreation, and consult with authorities to map out safe places to plant trees. During this time, we can also ask for donations of seeds of native trees from



stores such as Lowe, HomeDepot, Walmart, and even civilians who are willing to help.

2. We'd then have to raise awareness about our issue—advocate and promote tree growth through social media, and possibly use reusable posters (to reduce the use of paper and plastic) in hot spots such as Walmart, bakeries, City Hall, etc. During this time, we'd also form a “Canopy Keepers” volunteer group to spread awareness and to plant trees.
3. Once we have the support we need, we can start to counter the tree canopy levels by promoting and bringing the community together to plant species native to our community. This step is where we plan a schedule to get the community together and actually plant trees.

We then continue to care for the saplings, keeping the work up to take care of the plants for months, maybe even years until they are fully grown. We will chart the change in temperature every month for a while until our efforts pay off—the temperatures get cooler during summer because of a higher level of tree canopy. We'd also chart the amount of trees in specific areas—mainly what we planted—and see if we made a difference.

Impact & Equity

We hope our mission raises awareness about tree canopies, deforestation, and improves the quality of the environment of our community, Jonesboro. We want to create more green spaces and replenish the tree canopy by planting native species trees and doing what we can to preserve the trees we have. Saving our tree canopy will allow younger generations to be able to enjoy and live happier healthier lives. We hope that our project will accomplish more trees around our area so that they can absorb the carbon in our area decreasing the temperature. Carrying out this mission successfully can improve one's mental health with the additional green spaces, air purification, creating carbon sinks, and increasing biodiversity.



What Help We Need to Be Successful

The backbone of the mission is a team of people willing to support us and help promote tree growth, and reach out to higher authorities for permission to expand our mission. We need help writing persuasive and informed presentations and letters to our city council and businesses to explain the problem and get them on board with being part of the solution. We also need money to help purchase planting material and tools, create posters, and buy trees species native to our community if we do not get them donated.

