

- 1) About 100 people per day are moving to the Charlotte region. Much of our growth is happening as suburban sprawl, which results in more air and water pollution, loss of tree canopy and critical wildlife habitats, and an automobile-dependent growth pattern. Smart Growth America has identified the Charlotte-Gastonia-Rock Hill area as the 5th largest sprawling metro area in the nation.

Develop a plan that allows Charlotte to accommodate its current and future population growth in a way that's sustainable for people and the planet?

- 2) Today about 76% of Charlotteans drive alone to and from work. This has negative impacts on our environment, health, social connectivity, and economic mobility. A recent study found that the single strongest predictor of whether a family escapes poverty is commute time. Last year in Charlotte, 28 pedestrians were struck by cars and killed while walking the city's streets. The average one-way trip time on CATS for a public transit trip requiring transfers is 90 minutes.

Develop a plan to help the Charlotte area to decrease the percentage of people driving alone to work?

Anne Springs Close Greenway & Our Surrounding Communities



1. Pollution and Erosion on Steele Creek

Steele Creek is a perennial waterway that travels through the greenway to Sugar Creek then into the Catawba River. Steele Creek flows through Charlotte, close to Carowinds, and into South Carolina. Similarly, Sugar Creek begins in Charlotte and travels through South Carolina until it connects to the Catawba River. Both perennial waterways travel through the Greater Charlotte area and feed the Catawba River Water Basin.

The tail-end of Steele Creek passes through ASCG before it feeds into Sugar Creek. Significant erosion and creek widening have been seen over the last several years in our section of Steele Creek. Erosion is largely due to fast moving waters after heavy rain events. Our heavily impacted stream banks cannot stand up against these events. Slowing the water on our property may benefit Sugar Creek, but without slowing upstream Steele Creek will still suffer heavily and results will be minimal.

Propose a way to address the rapid erosion of many urban creeks (including Steele Creek) in the Charlotte region due to stormwater run-off and flashiness.

2. Invasive Tree-of-Heaven and the invasive Spotted Lanternfly

The Tree of Heaven (TOH) can grow to heights of 80-100 feet tall and a single female tree may produce 300,000 winged seeds annually, giving this invasive the ability to reproduce across great distances. The seeds can travel and establish in forest openings. The TOH is an extreme re-sprouter and difficult to successfully remove/ knock back.

The TOH is the preferred host of the Spotted Lanternfly (SLF), it may even be a requirement in the SLF's life cycle. The SLF will likely make its way into the Carolinas, despite programs to slow the progression in more northern states. The SLF feeds on 70+ species of plants including pine trees and fruiting crops such as peaches, nectarines, apples, and grapes. The broad diet of SLF has led to Pennsylvania (PA) reporting to the USDA, in 2018, a potential to lose \$18 billion in agricultural commodities from this insect alone.

ASCG has a plan to begin removing TOH on our property but removing TOH from ASCG will not stop the impact of SLF on the Greater Charlotte area and the Carolinas as a whole. Widespread involvement is needed.

Propose a solution that would address the elimination of TOH in the Charlotte region and thus stop or slow the introduction of SLF.



- 1) The best way to protect birds from being hit by cars is to keep trash off the roads. When raptor prey such as mice and rats are on the roadways feeding on the trash, raptors swoop down to eat them and are unable to see and avoid oncoming vehicles. The vast majority of the injured raptors brought to the Carolina Raptor Center have been hit by cars.

Create a public advocacy campaign to get people to stop throwing their trash -- even biodegradable trash like banana peels -- out of their car window.

- 2) Urban raptor habitats are threatened by continued development in the city. The loss of these habitats has a dramatic impact on the entire food chain because raptors are apex predators for many of the rodents, snakes, and other prey they feed on so when raptors are lost, other animal populations are not controlled naturally.

Suggest solutions to build, protect, or create new and more urban raptor habitat in our region.

1) Plastics/Trash (choose one challenge area to focus on)

- Styrofoam - During stream and lake cleanups, styrofoam is one of the most difficult types of trash to recover. It disintegrates into small pieces which cannot be picked up by hand.

Propose some ways to reduce the amount of styrofoam from reaching the river.

- Plastic Grocery Bags - If you walk along any urban creek you are bound to see plastic bags stuck in trees.

Develop a solution or program to eliminate the use of plastic grocery bags.

- Shoreline users - In areas where it is popular to fish or sit by the shore there are large concentrations of trash. This trash almost always ends up in the creek, lake, or river from wind or when the water rises after a storm.

Develop a program to effectively communicate to shoreline users that they need to throw their trash away or pack their trash out?

2) Stormwater

- Private property runoff - Runoff from roofs and driveways contributes pollution and stream degradation. These impervious surfaces move water faster than if the water was allowed to fall on grass or forested areas.

Develop ways that property owners can mitigate their impervious surface? Examples might include rain gardens and barrels. How could these projects be promoted and funded?

3) Shoreline Restoration

- The degradation of shorelines along the Catawba River, her lakes, creeks, and streams causes flooding, habitat destruction, and pollutants to enter the waterways.

Develop ideas that can be useful to residents that are struggling with destruction of their local shorelines to assist in solving the problem. Examples might include a 'Restore a Creek' Kit that can be given to residents to explain why it is happening and include items to fix it or a plan to address the issue using native plants.

1) Tracking health of new trees

TreesCharlotte distributes more than 3,000 new trees to Charlotte residents to plant at their homes every planting season. While high-level canopy surveys and Google maps prove that new trees are growing in Charlotte, TreesCharlotte has no on-the-ground data that proves the trees we distribute are flourishing. Past attempts to survey tree recipients online or by phone have had low participation and on-site visits are difficult to arrange. This lack of data is a problem on several levels, from lack of transparency to donors to fully knowing whether our efforts are paying off.

Challenge: Create a solution that will allow TreesCharlotte to track the health of its Tree Giveaway trees.

2) Tree care for new trees

Trees that are properly watered, mulched and pruned in their early years tend to fare better as they age. If trees have a strong, healthy start, they tend to have fewer major issues at full maturity that can be prohibitively expensive to the owner. Yet this early care is rarely done, creating a host of future problems.

Challenge: Develop a program that helps new tree owners provide proper care for their young trees.