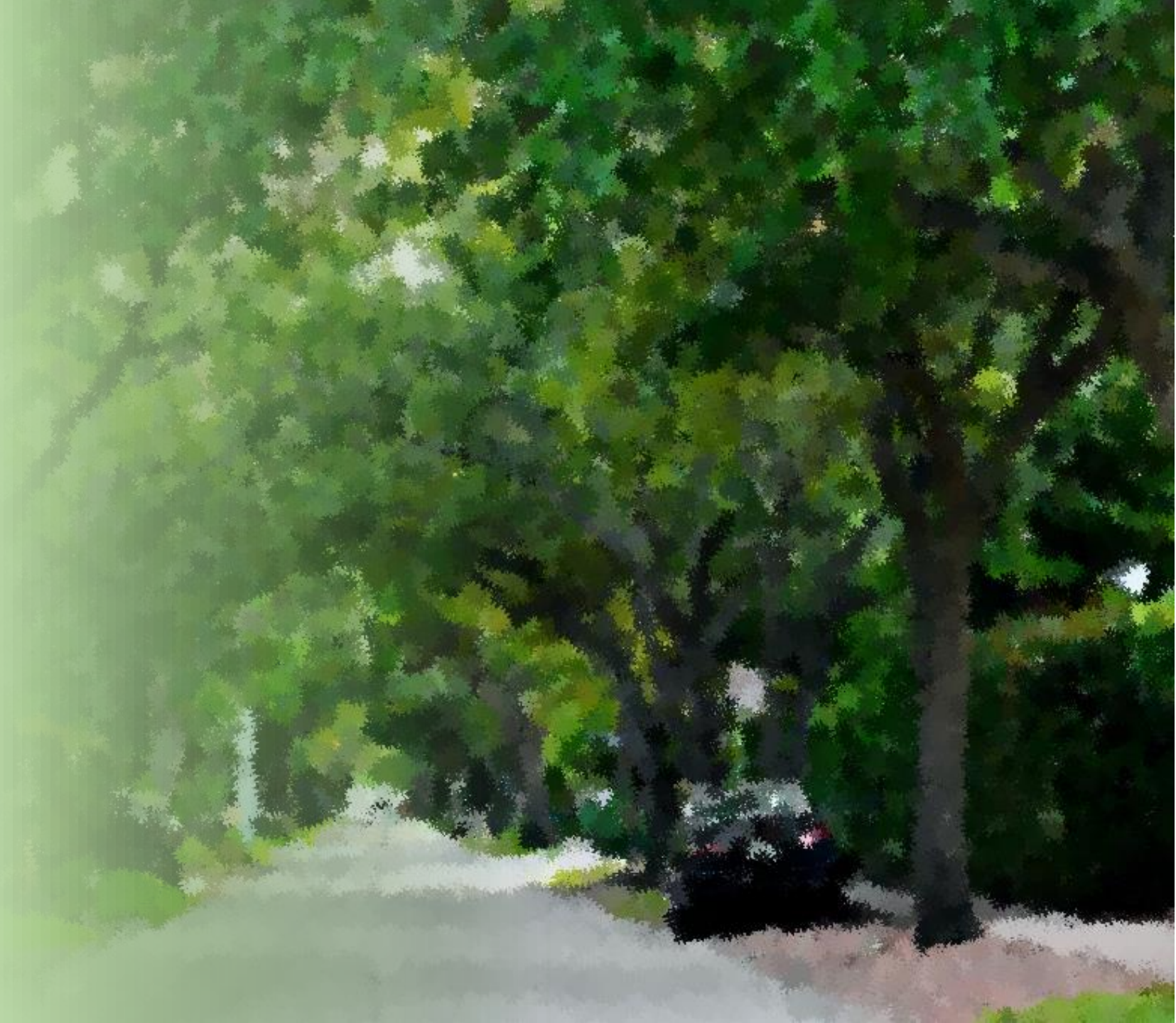
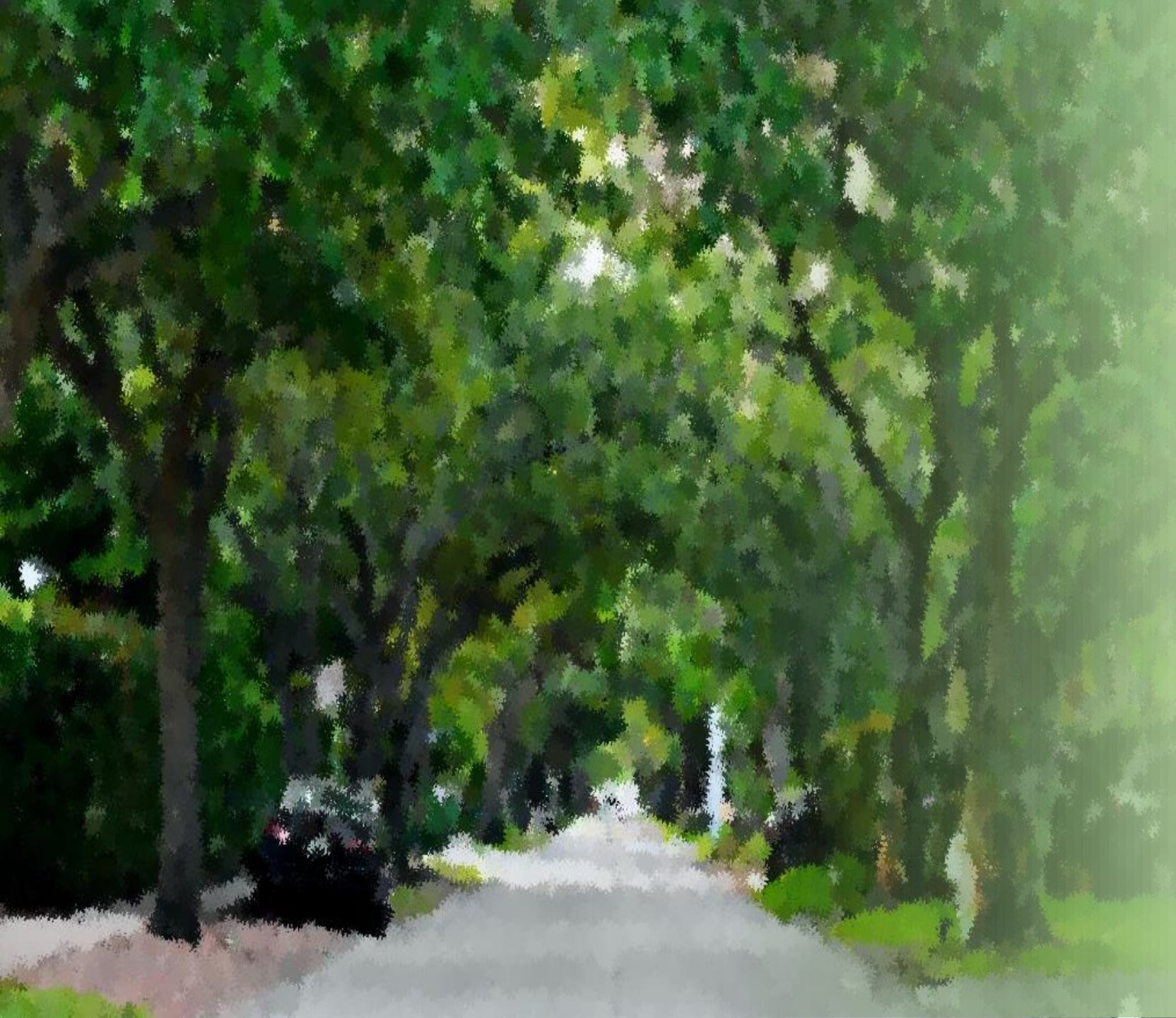


Crescent Lake Community Tree Inventory

2023 Annual Report





St. Pete Urban Forestry

In 2023, St. Pete started a Community Forestry program. This neighborhood-based format focuses on forestry planning and development by aligning with the priorities of the resident groups.

Priorities could include tree planting for a blend of the following strategies:

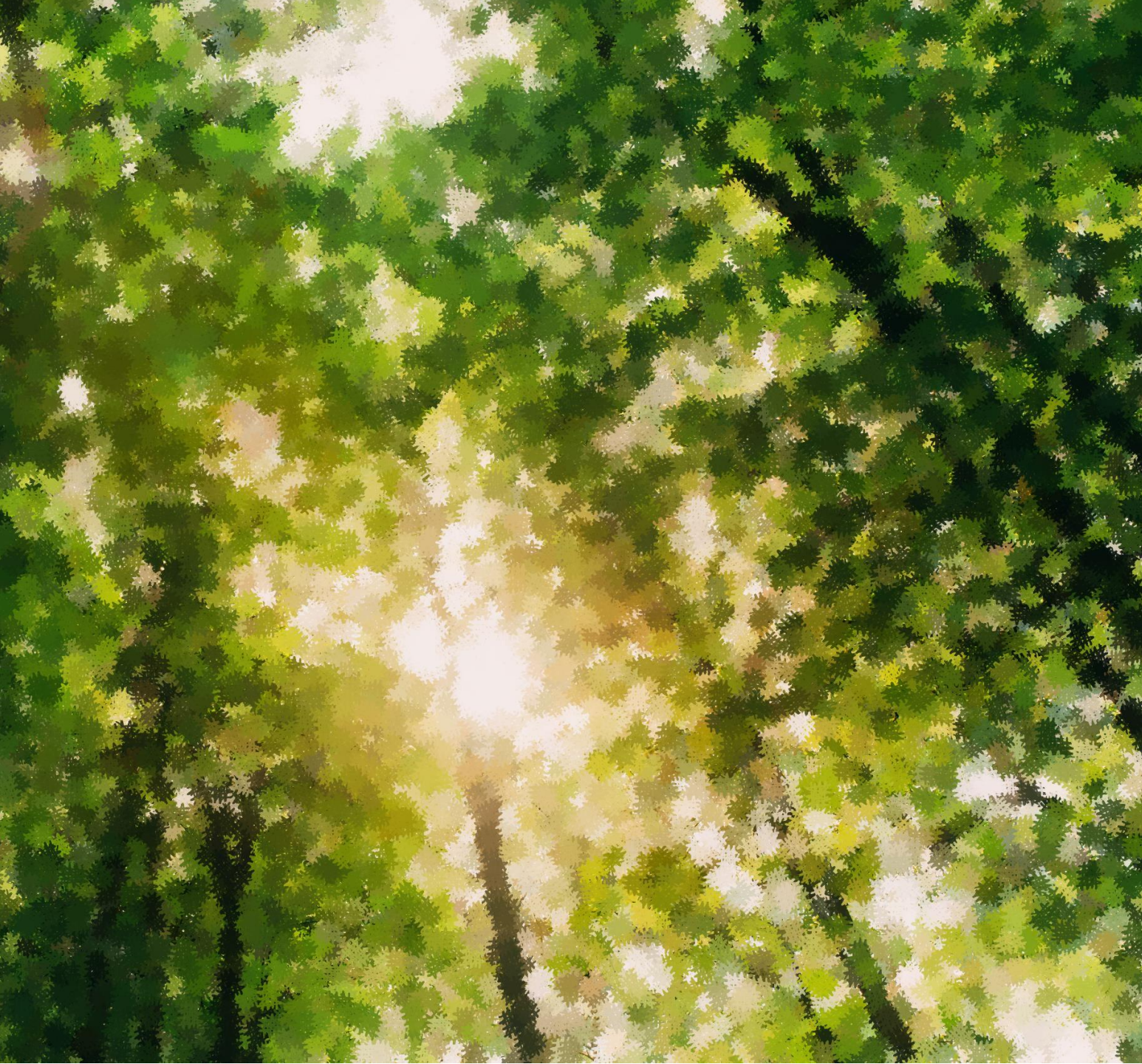
- Long-lived trees that provide shade and energy efficiency
- Trees that supply natural habitat
- Trees that provide seasonal floral display



St. Pete Community Forestry

Robust community engagement is vital to this format. To begin, resident groups, or “tree teams” are trained to gather data on existing neighborhood trees to better understand the species biodiversity, age and condition of the existing forest asset, and the mapping of potential planting locations of new trees.

In 2023, eight new neighborhoods were trained on TreePlotter, an online tree inventory mapping tool. Currently, 15 neighborhoods are actively performing their inventories and more than 4500 trees have been mapped.



St. Pete Urban Forestry

The City of St. Pete uses TreePlotter, a tree inventory program. This program records trees and generates economic benefits using iTree data sourced from the USDA US Forest Service research.

Over the last 30+ years, the Forest Service has studied the impact common native and introduced tree species has on communities by tracking species, size, land use, and condition factors. This allows us to annually report these community tree benefits.

2023 Crescent Lake's Tree Benefits

ECOSYSTEM BENEFITS



Total Tree Value and Savings

Total Annual Monetary Benefit: \$349.94

Benefits are only calculated for trees with defined species, DBH, condition, and crown light exposure based on i-Tree research.

CARBON (LIFETIME)



Carbon Storage
33,845.40 (lbs) ?

CO₂ Storage
124,099.80 (lbs) ?

CO₂ Storage
Monetary Benefit
\$2,885.27 ?

CARBON (ANNUAL)



Carbon Monetary
Benefit
\$54.11 ?

CO₂ Sequestered
2,361.73 (lbs) ?

AIR QUALITY (ANNUAL)



Air Quality Monetary
Benefit
\$202.41 ?

Pollutants Removed
24.71 (lbs) ?

STORMWATER (ANNUAL)



Stormwater Monetary
Benefit
\$93.42 ?

Runoff Avoided
1,388.39 (ft³) ?

Interception
4,423.61 (ft³) ?

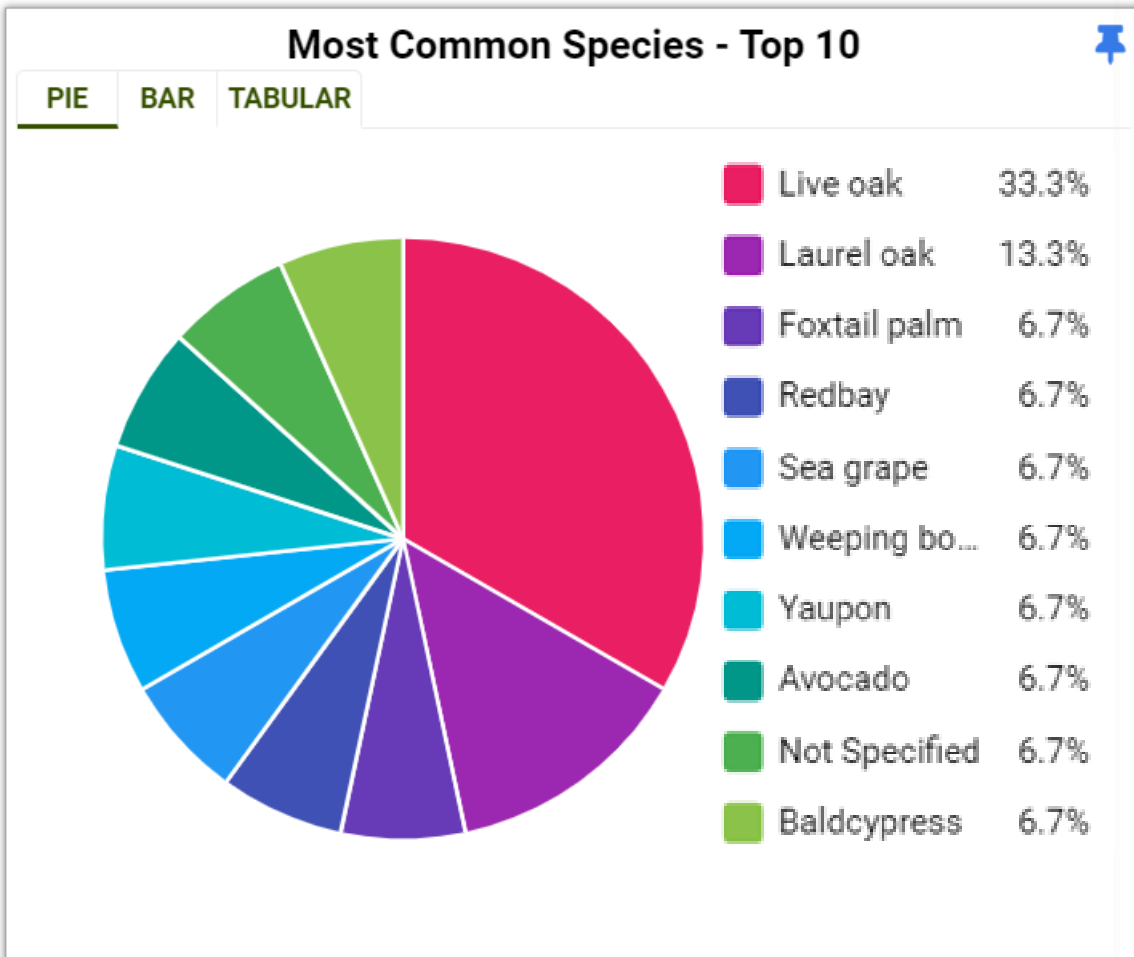


Crescent Lake's Tree Benefits

This chart illustrates the 2023 tree benefits derived from Crescent Lake's inventorying of 3 trees.

This annual benefit amount increases significantly when additional benefits like energy efficiency (shade), increase in property value, and positive impacts on resident health are included.

2023 Crescent Lake's Top 10 most common species

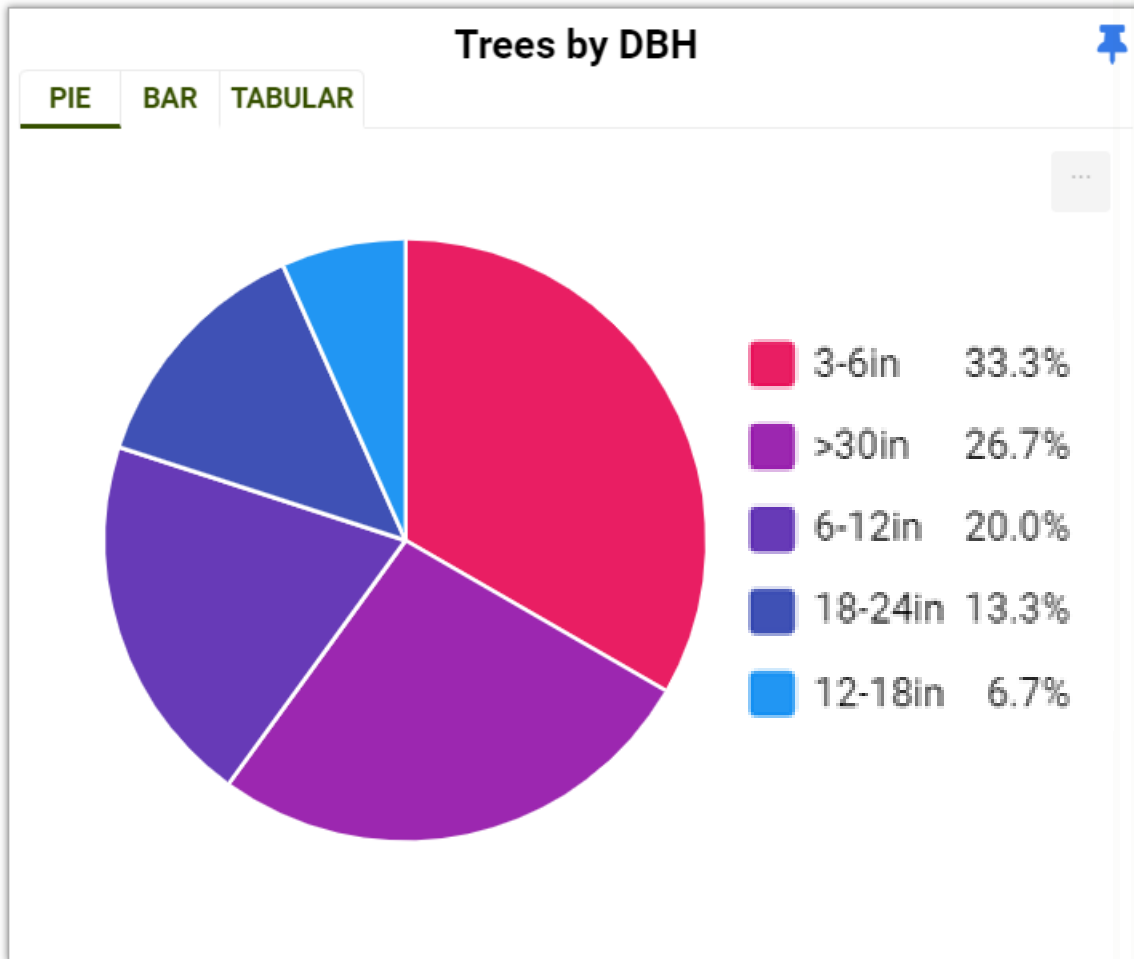


St. Pete Tree Biodiversity

One of the vulnerabilities of St. Pete's urban forest asset is its marginal species diversity. While most of the top 10 species are native to the Pinellas peninsula, the top two species make up more than 50% of the total tree species. The urban forestry standard is to have **no more than 5% of any one species and no more than 10% of any one genus.**

Managing biodiversity increases forest stand resilience from biotic diseases and abiotic vulnerabilities.

2023 Crescent Lake's Trees by DBH

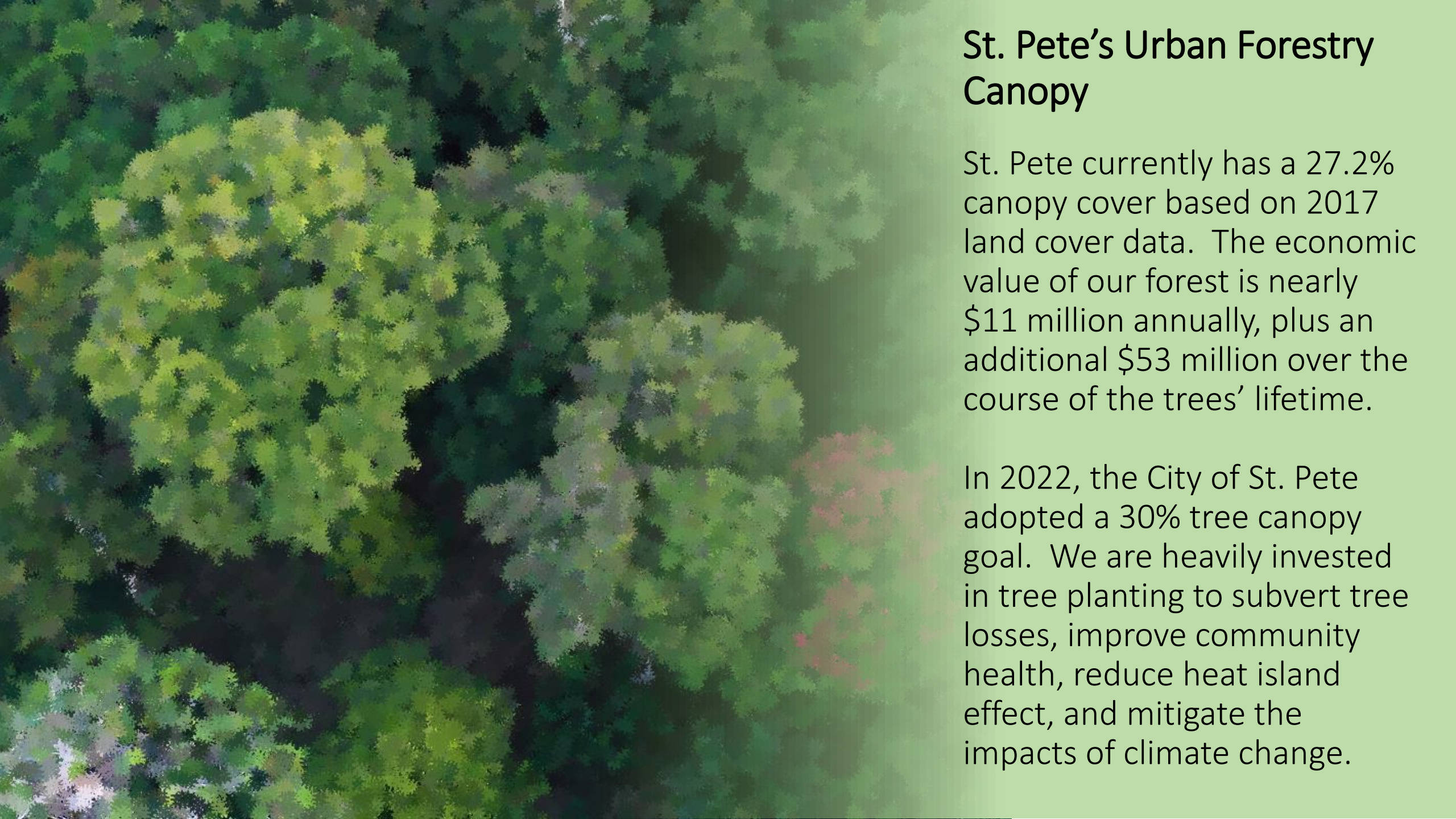


*Optimal tree age diversity would contain 15% in each size class

St. Pete Tree Age Diversity

St. Pete's urban forest has a second vulnerability: *minimal age diversity*. A healthy and resilient urban forest should have a mixed age. An example of this vulnerability is St. Pete's large Laurel Oak losses that were all planted in the same ten-year period. This chart reflects the uneven distribution of tree size which favors trees in the 3-6" diameter size.

Best urban forestry management practice is to conduct tree planting investments in five-year increments across the urban forest stand



St. Pete's Urban Forestry Canopy

St. Pete currently has a 27.2% canopy cover based on 2017 land cover data. The economic value of our forest is nearly \$11 million annually, plus an additional \$53 million over the course of the trees' lifetime.

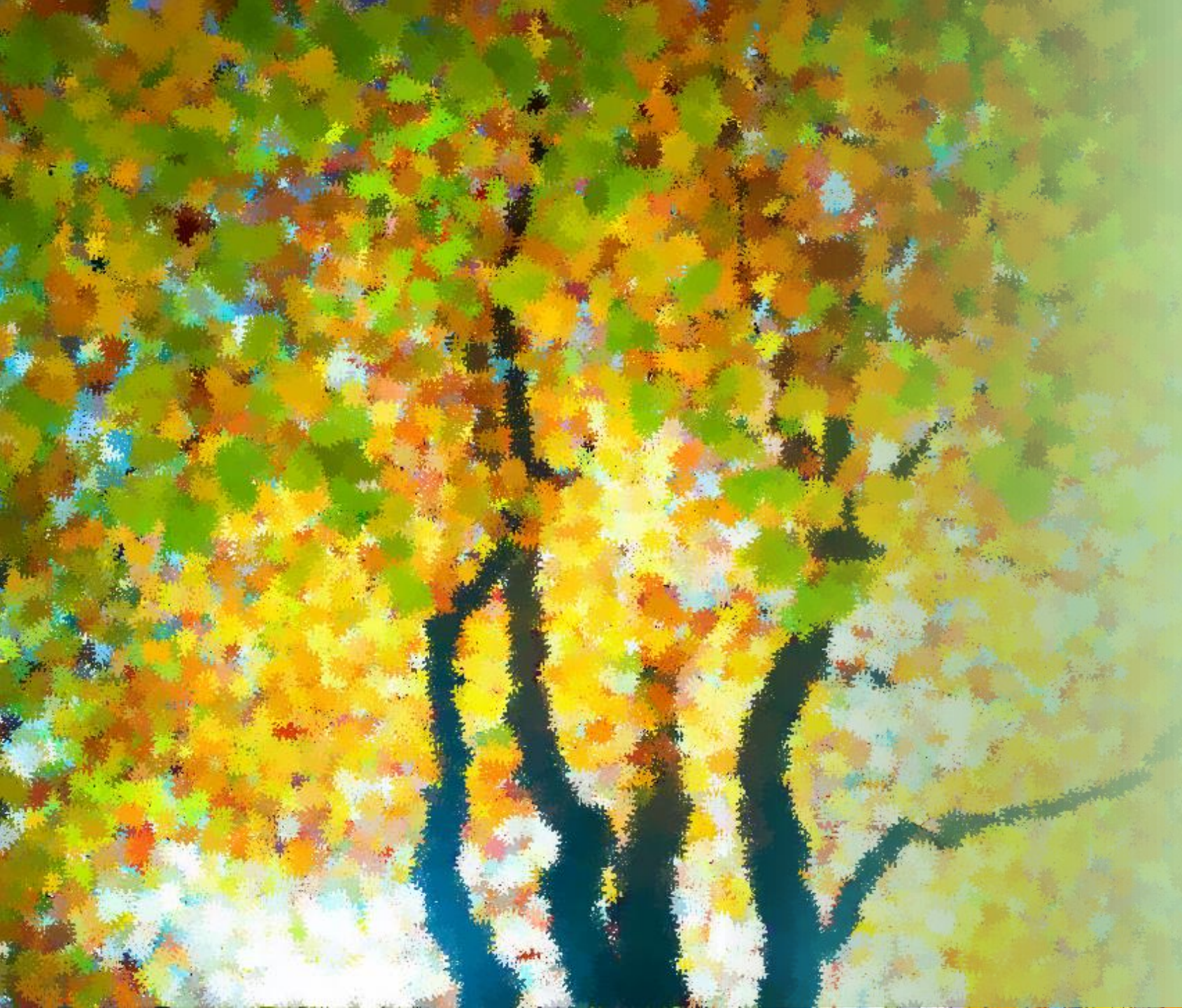
In 2022, the City of St. Pete adopted a 30% tree canopy goal. We are heavily invested in tree planting to subvert tree losses, improve community health, reduce heat island effect, and mitigate the impacts of climate change.



Urban Forestry Action Items

There are several tasks that neighborhoods and residents can complete to improve St. Pete's urban forest. Listed below are some suggestions for neighborhood tree teams to create a more resilient community forest:

- Complete a street and park tree inventory in your neighborhood
- Coordinate with residents to inventory trees on private property
- Collaborate with St. Pete Urban Forestry staff to develop plans and set neighborhood tree canopy goals.



Questions?

Would you like to
schedule a
neighborhood tree
inventory training?

Please contact Dean
dean.hay@stpete.org

Thank you