



City of Naples

2023 Urban Forest Plan

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INTRODUCTION

The City of Naples is a beautiful community located on the Gulf of Mexico. Residents and elected officials take great pride in the integration of natural and built environments that provide for an appealing quality of life. Having a diverse and well managed urban forest adds greatly to preserving small town character, environmental sensitivity, and an extraordinary quality of life; all part of the City's initiatives and priorities in the 2021 Vision Document.

The Comprehensive Plan for the City of Naples states, "Naples is a premier city that offers a high quality of life exemplified by cleanliness, safety, well-maintained homes and businesses, distinctive architecture, tree-lined streets, landscaped medians, a high level of municipal services, environmental corridors, pristine beaches, and tropical climate." A critical element goal is to "Make Naples the green jewel of southwest Florida", the Urban Forest and its management is a large part of meeting this goal.

This Urban Forest Plan provides an overview of the care, preservation, pruning, planting, removal, or disposition of City trees and palms. It provides data concerning work

performed to the urban forest during FY2021-2022 (October 1, 2021-September 30, 2022) and outlines the work to be completed during FY2022-2023. This urban forest report contains data of the work performed through September 25, 2022, work during the last week of September focused on the preparation and response to Hurricane Ian which hit the on September 28, 2022. Upon completion of Hurricane Ian work, a report will be prepared to outline the hurricane's impact on the urban forest. The city, through its Community Services Department – Parks & Parkways Division, currently manages an urban forest of 21,143 inventoried trees (142 species). There are approximately 88 tree planting locations that are vacant. The department supervises or performs all components of landscape management on public spaces.

The City of Naples is proud to have earned the designation of “Tree City USA” for the past 25 consecutive years and has received the “Tree City USA Growth Award” for 15 years. These awards are presented to the city by the Arbor Day Foundation, a non-profit organization dedicated to the planting of trees in the United States. The Arbor Day Foundation states trees “help stop climate change and provide many benefits to us every day. They offer cooling shade, block cold winter winds, attract birds and wildlife, purify our air, prevent soil erosion, clean our water, and add grace and beauty to our homes and communities.”

In 2019, the Food and Agriculture Organization of the United Nations (FAO) along with the Arbor Day Foundation developed a Tree Cities of the World designation. The international program celebrates cities across all continents that meet core standards for the care and planning of urban trees and forests. The City of Naples was a member of the inaugural class and has received this designation for a third consecutive year.

The city continuously works to maintain a resilient urban forest. Naples strives to plant native species of both trees and palms. Maintaining diversity in the tree population is a key consideration for final planting recommendations. Research shows that urban forests should maintain diversity in species to mitigate the opportunities for catastrophic disease or pest infestation that could significantly alter the character and quality of the existing tree canopy. The city works diligently to ensure the local tree population is diverse and to avoid the dominance and vulnerabilities of monocultures. Trees introduced into the built environments of Florida's urban communities are not always comprised of native species. Therefore, non-invasive, tropical exotics have a role when enhancing the City's character and tree-minded community.

The 2023 Urban Forest Plan provides planned maintenance, management, and restoration of the urban forest in Naples so that the city can continue and further its tradition of being the “Green Jewel of Southwest Florida.” This plan assists in helping the City of Naples continue their commitment to public safety, environmental stewardship, and best practices.



TREE PROTECTION ORDINANCE

In June of 2017, the City Council adopted a revised Chapter 38 – Tree Protection of the City’s Code of Ordinances. This chapter of the code provides articles for protecting publicly owned trees. The ordinance protects City owned and managed trees and palms within the right-of-way, parks, medians, and other public spaces. This revised ordinance strengthens the protection of the City’s Urban Forest while also being a more user-friendly and readable document.

On March 4, 2020, City Council approved ordinance amendments to Chapter 38. The Florida State Legislature and Governor approved, in 2019, Florida State Statute 163.045 titled “Tree pruning, trimming or removal on residential property”. This law prohibits local government from requiring residents to obtain a permit to remove a tree, on private residential property, if the property owner has proof from an arborist or landscape architect that the tree is a safety hazard. Since the City’s Tree Protection Ordinance conflicted with State Statute, the City Ordinance was amended. Florida State Statute 163.045 was revised in 2022 for clarification to terms, these changes had no impact on the City’s code.

Chapter 38 establishes the City's Tree Board stating, "*The city hereby establishes a tree board for the purposes of enforcement of this chapter. The community services advisory board shall act ex-officio as the tree board.*"

The members of the 2022 Tree Board (Community Services Advisory Board) are:

Anne Russell Foster, Chair

Jo-Anne Jeffreys, Vice Chair

Kathy Swingley

Nathaniel Smith

David Land



URBAN FOREST MANAGEMENT POLICY

The urban forest program has been widely supported by City residents and scientific evidence shows there are numerous environmental benefits from trees including temperature modification and cooling, reduction of air pollutants, energy conservation, and contributions towards sustaining and improving property values. Additionally, trees aid in stormwater management by reducing surface run-off. They intercept rainwater and the root systems promote filtration and storage.

The City Council was presented with the program management strategies on November 3, 2008, and approved Resolution #08-12282 on December 3, 2008. This resolution established a policy and uniform procedures for the selection of tree species for City streets and management components of the City's urban forest.

On June 16, 2010, City Council was asked to consider approving a resolution to amend Resolution 08-12282. The amended resolution specifically addressed changes for the selection of tree species for the Park Shore area based on a revised tree plan prepared and approved by the Board of Directors for the Park Shore Property Owners Association. City Council approved Resolution 10-12699.

A review of the urban forest program is scheduled before the City Council in FY2022-2023.



URBAN FOREST EDUCATION PROGRAM

The City of Naples created educational materials in 2021 relating to the Urban Forest and Tree Protection Ordinance. Naples has a large investment in the Urban Forest and these publicly owned trees are an important part of Naples community identity. The completed educational material serves in developing a public program to provide important information. The materials developed seek to reach two target groups that have daily interaction with the City's Urban Forest. The first group, our city residents, which received information on our Urban Forest management, how to care for their private plantings and preparing for storms. This was accomplished by a mailer direct to all mailboxes within

the limits of the City of Naples. The second group is contractors; landscape and tree trimming companies as well as construction and demolition companies. The city developed a brochure to inform them on the Tree Protection Ordinance and the tree alteration permit process. Brochures remain available in various areas of the city to include City parks and administrative offices.

The second component to the education program was the development of a Naples Urban Forest web site; naplesurbanforest.com. The web site contains information on tree protection, our tree inventory and how to apply for a Tree Alteration Permit. Development of the web site will continue over the next few years to offer additional information to the residents, visitors, and businesses of Naples.





TREE & PALM INVENTORY

The city has an inventory of trees and palms in the Urban Forest. A citywide tree inventory was originally conducted by Davey Resources in March 2001. Due to storm and hurricane activity resulting in heavy loss and replanting, the inventory became inaccurate. The city was able to complete an update to the tree inventory in June 2008 with the award of a grant through the Florida Department of Agriculture and Consumer Services. As the City continued to manage and grow the Urban Forest, it became clear that the inventory needed to contain information such as GPS points to allow for better mapping and overlay options. In September 2012, the city accepted a Florida Department of Agriculture and Consumer Services grant. Under this grant, the city hired a part-time student intern for the sole purpose of making improvements to the City's Urban Forest Inventory. The outcome was an updated City tree inventory to include all new planting and replacement trees from the numerous City tree programs as well as removals. This inventory contains not only the data for managing the urban forest, such as species and trim cycle but also includes GPS points for each planting. The data contained within this inventory is made readily available to the public. The inventory map is on the City's website for access by residents, visitors, builders, landscapers, and any members of the public, for information and planning purposes. The data can also be overlaid with other City maps such as Zoning or Utilities. City staff has continued to update the inventory regularly to account for new plantings and removals. To keep the inventory current and account for changes that may have been unknown to City staff, the 2016-17 fiscal year budget had funding for the hiring of interns to assist in the collection of Urban Forest data to update our records and capture additional data points. The city was approximately halfway through to up-

date when Hurricane Irma hit Naples. Hurricane Irma caused the loss of 9.82% of our Urban Forest.

The inventory continues to be updated by the City Arborist regularly to account for new tree plantings, removals, and tracking maintenance activities. The city currently manages an urban forest of 29,990 inventoried points, to include vacant and private plantings in the right-of-way. Using this inventory, staff can easily track the pruning and maintenance of City-owned trees and palms. The inventory also allows for specific and helpful notes. date when Hurricane Irma hit Naples. Hurricane Irma caused the loss of 9.82% of our Urban Forest.

On September 6, 2018, City Council awarded a contract to Arbor Pro Inc to update the existing Urban Forest inventory. The scope of work included inventorying all City property as well as trees and palms not inventoried previously, including private trees in city right of ways and recording potential tree planting sites on streets. The services within this contract accomplished an important part of maintaining the City's comprehensive proactive tree care program. This project was a critical update of the current citywide tree inventory and is used to understand urban forest dynamics, change, and the maintenance needs of the Urban Forest. The data collected during the inventory can be used for a variety of tasks, including making risk-related decisions, setting budgets, allocating staff and equipment, developing plans, and selecting trees for planting. The new inventory also updated the species identifications within our forest. This update to the species identification and, in some cases, corrected species identification will assist the staff in the best management of the Urban Forest. The city received the new tree inventory data in February 2019.

The inventory continues to be updated by the City Arborist regularly to account for new tree plantings, removals, and tracking maintenance activities. The city currently manages an urban forest of 29,990 inventoried points, to include vacant and private plantings in the right-of-way. Using this inventory, staff can easily track the pruning and maintenance of City-owned trees and palms. The inventory also allows for specific and helpful notes.

The City's current inventory is attached to this report as Attachment 1. The city will have the next inventory up-date completed in FY2024-2025.



CANOPY COVERAGE

Canopy coverage, also known as canopy cover or crown cover, is defined as the proportion of the forest-covered by the vertical projection of the tree crowns. Unlike the Urban Forest inventory managed by the city, canopy coverage is calculated using all trees and palms within the City limits, private and public ownership is included equally.

In FY2019-20, the City contracted with The Davey Tree Expert Company - Davey Institute to have a Canopy Coverage Assessment completed for our city. The assessment is a statistical estimation using random point sampling. The city had the assessment completed for 2019, 2005, and 1999. A total of 500 random points were selected within the city boundaries. Each point was recorded as a tree or not a tree; the percentage of coverage was calculated.

| | |
|------|--------|
| 2019 | 29.40% |
| 2005 | 24.80% |
| 1999 | 29.60% |

There is debate in the management of Urban Forestry as to what a suitable canopy coverage percent should be. Factors to consider are the climate, land use, tree species, as well as local municipal funding for Urban Forestry. A recent survey and study by the University of Florida, Dr. Andrew Koeser, found that the average canopy coverage for cities in Florida is 32.3%. The City of Naples is very close to this average. To increase our canopy coverage, replanting efforts should focus on hardwood species which will provide for greater canopy coverage. The city will have the next canopy coverage assessment completed in FY2024-25.

TREE FILL-IN PROGRAM

For FY2021-22, City Council appropriated \$300,000 to replace lost trees and palm under a Capital Improvement Project. Funding for the Tree Fill-in Program continued the restoration of the urban forest after Hurricane Irma and includes the sites vacant from years prior. The planting for 2022 also included \$84,859.00 from the Blair Foundation Tree Challenge. The city was able to install 243 trees and palms using \$384,859.00. The plantings were installed primarily on neighborhood streets.

| TREE & PALM 5-YEAR PLANTING HISTORY | | | | |
|-------------------------------------|------|------|------|------|
| 2018 | 2019 | 2020 | 2021 | 2022 |
| 252 | 384 | 312 | 240 | 243 |

For FY2022-23, City Council approved a \$300,000 Capital Improvement Project for the Tree Fill-in Program. This funding will be to continue the effort to restore the urban forest and begin to allow streets species review. The review will including right tree, right place efforts, assessing declining trees for removal & replacement, and locations where conditions are favorable for a different/changed species to increase diversity.



The city continuously strives for a balanced urban forest; maintaining diversity to avoid creating an unhealthy monoculture. Best management practices for urban forest recommends that no one species exceed 10% of the total tree population. Currently, three species exceed this recommendation Cuban Royal Palm, Coconut Palm, and Palmetto (Sabal Palm). The city is no longer selecting or allowing the selection of these species for new street tree designations. The replanting of existing vacant sites continues; however, staff is working with residents and homeowners' associations to select new street tree species along streets where conditions are favorable for a different/changed species.

The city considers the above ground as well as the underground utilities when selecting species and planting sites. In partnership with FPL, the City participates in the "Right Tree, Right Place" planting practices. This practice will enable trees and palms to grow to their maximum species potential while causing the least conflict.

*"I WAS UNDER THE IMPRESSION THAT ALL
PEOPLE LIKE TO HAVE TREES PLANTED IN
FRONT OF THEIR HOUSES UNTIL I STARTED
PLANTING TREES IN FRONT OF HOUSES"*

*CHARLES A. YOUNG
BALTIMORE FORESTER, 1946*



TREE & PALM MAINTENANCE PROGRAM

The maintenance of the City urban forest includes scheduled pruning, removals, watering, fertilization, and insect and disease management.

The City contracts tree and palm pruning as well as tree removal and stump grinding. Fertilization of ficus trees and foxtail palms through deep-root injection has been contracted out since the FY2016-17.

Tree watering and insect and disease management are conducted by City staff. The City Community Services Department has two ISA Certified Arborists on staff who continue to plan, monitor, and manage all maintenance activities on city-owned street trees and palms.

Contracted Services

Pruning: The level of service for pruning allows for hardwood trees and Sabal palms to be pruned on a 2-year trim cycle. Funding levels also allow Coconut palms to be trimmed twice per year. Date palm species as well as Royal Poinciana, Copper Pod, and other tropical flowering trees are funded for annual trimming. In FY 2021-2022, 10,898 trees and palms were pruned.

Royal Palm Banding: in high foot traffic areas, the City of Naples bands the Royal Palms. This banding prevents the fronds from dropping. Palms that are managed in this manner have the bands checked and/or changed out 3-5 times per year.



Tree Removal and Stump Grinding: The tree removal services are required when trees and palms have died, are in decline, are considered a safety hazard, have been significantly damaged by lightning or vehicles or are significantly damaged by wind or storms. After removal, the stump and exposed roots are ground below grade. The city lost 109 trees in FY2021-2022. Once a tree is removed, its location is reviewed. If replanting is favorable, the location is recorded as vacant in the inventory for replacement.

Fertilization: The fertilization (deep root injection) of Ficus trees and Foxtail palms has been contracted out since FY2016-17. The city provides for deep root fertilization twice a year for Foxtail palms and every other year for Ficus trees.

Lethal Bronzing Disease: Lethal Bronzing Disease is making its way across Florida. This disease was first identified in Texas and called Texas Phoenix Palm Decline as it was associated with the same pathogen isolated in the *Phoenix canariensis* in the early 2000s. This disease has since traveled to Florida, being identified in the Tampa area in 2006. The city has had no confirmed cases of Lethal Bronzing Disease; however, it is being monitored by staff.



In-House Services

Watering: The Community Services Department's Parks and Parkways Division staff provide watering services as needed for new or struggling trees and plants, where irrigation is not available. Water is delivered by truck.

Fertilization: Landscape and sod fertilization is scheduled twice a year; generally, in October and May, provided weather conditions are favorable. Trees and palms are monitored for signs of nutrient deficiencies and fertilized, if necessary, and in accordance with the City's application restrictions. Citywide fertilization is conducted by the Parks and Parkways staff and complies with the City of Naples Code of Ordinances Chapter 52, Article 7.

Tree Insect and Disease Management: Trees and palms are treated for disease and insects by Parks and Parkways staff as necessary. Each staff member in the Parks and Parkways Division obtains a Limited Lawn and Ornamental Pesticide license. There are also seven (7) employees that have the Ornamental and Turf Spray license.



INVASIVE EXOTIC MANAGEMENT PLAN

The City's greenspace management includes a commitment to the long-term management of invasive exotic plants within City limits. City staff monitors City property for invasive exotic plants on a continuous base and removes invasive exotic plants when identified.

During FY 2015-2016, the City contracted for the removal of exotic species at the Naples Preserve. The species removed included Ear Leaf Acacia, Melaleuca, Carrotwood, Albizia, Brazilian Pepper, and Downy Rose Myrtle. Bi-annual maintenance at the site continues to monitor and remove regrowth of the exotics. In the FY2022-23 budget, funding is provided to continue the annual exotic management.

Baker Park, Anthony Park, and Naples Landings have had funded projects to remove exotics along the water frontage. The removal of exotics along the water will allow for better water views and usage of that area. In addition, it will promote the growth of the mangroves already lining these banks. In the FY2022-23 budget, funding is provided to continue the annual exotic management.

The City's FY 2019-20 budget there was \$10,000 in Contracted Services to allow for the removal of trees and palms within our Urban Forest inventory that are classified at Class 1 invasive, exotics by the Florida Exotic Pest Plant Council. In FY2021-2022, the city removed 10 exotic trees from our Urban Forest; there are 13 remaining. This project remains funded in FY2022-23 in the amount of \$10,000 to continue the removal efforts.

ARBOR DAY 2022



The City of Naples was able to proceed with an Arbor Day celebration for the first time in 2-years. On June 29, 2022, in an effort to reach the future “tree huggers”, we partnered with the River Park Inclusion Camp for our event. After painting pots in the days leading up, the campers were able to select and plant a succulent in the painted pot to take home. We provided the campers with instructions and spray bottles to care for the new plants.

Mayor Heitmann, at the June 15, 2022, City Council meeting read our Arbor Day Proclamation.



City of Naples

TERESA LEE HEITMANN
MAYOR

PROCLAMATION

- WHEREAS,** in 1872, J. Sterling Morton proposed to the Nebraska Board of Agriculture that a special day be set aside for the planting of trees; and
- WHEREAS,** this holiday, called Arbor Day, was first observed with the planting of more than a million trees in Nebraska, and Arbor Day is now observed throughout the nation and the world; and
- WHEREAS,** trees reduce erosion of our precious topsoil by wind and water, reduce heating and cooling costs, clean the air, and produce oxygen and provide habitat for wildlife; and
- WHEREAS,** trees are a renewable resource giving us paper, wood for our homes, fuel for our fires, and countless other wood products; and
- WHEREAS,** trees in our city increase property values, enhance the economic vitality of business areas, and beautify our community; and
- WHEREAS,** the City of Naples will be recognized for the 25th year as a *Tree City USA* city by the National Arbor Day Foundation and desires to continue its tree-planting practices. The City has also been awarded the prestigious Tree City USA Growth Award for 15 consecutive years, and;
- WHEREAS,** the City of Naples has been recognized for three years as a *Tree Cities of the World* city, including being part of the 2019 inaugural class.
- NOW, THEREFORE, I, Teresa Heitmann,** by virtue of the authority vested in me as Mayor of the City of Naples, Florida, do hereby proclaim June 29, 2022, be designated as:

ARBOR DAY

in the City of Naples and urge all citizens to celebrate Arbor Day by supporting efforts to protect our trees and woodlands, and to plant trees to gladden the heart and promote the well-being of this and future generations.

IN WITNESS THEREOF, I have hereunto set my hand this 15th day of June 2022.


Teresa Heitmann, MAYOR

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TREE CITY USA

During the past 25 years, the City of Naples has been annually recognized as a Tree City USA recipient.

The Tree City USA program, established in 1976, is a nationwide movement that provides the framework necessary for communities to manage and expand their public trees. More than 3,600 communities have committed to becoming a Tree City USA. They have achieved Tree City USA status by meeting four core standards of sound urban forestry management: maintaining a tree board or department, having a community tree ordinance, spending at least \$2 per capita on urban forestry (Naples spends \$81.49), and celebrating Arbor Day.

TREE CITY USA GROWTH AWARD

The City of Naples has received the growth award for the past 15 years.

The Tree City USA Growth Award is awarded by the Arbor Day Foundation to recognize higher levels of tree care by participating Tree City USA communities. The Growth Award highlights innovative programs and projects as well as increased commitment of resources for urban forestry.

TREE CITIES OF THE WORLD

The Food and Agriculture Organization of the United Nations (FAO) along with the Arbor Day Foundation has recognized the City of Naples with Tree Cities of the World designation. The international program celebrates cities across all continents that meet core standards for the care and planning of urban trees and forests. The Tree Cities of the World program is built off the success of the Arbor Day Foundation's Tree City USA program. The vision of the Tree Cities of the World program is to connect cities around the world in a new network dedicated to sharing and adopting the most successful approaches to managing city trees and forests.

After being part of the inaugural class, the City of Naples was recognized for the third consecutive year as a Tree Cities of the World. To achieve recognition, a city must meet the five core standards: establish responsibility, set the rules, know what you have, allocate the resources, and celebrate achievements. The City of Naples is joined by cities like Paris, Toronto, Madrid, New York, and Atlanta in receiving this prestigious status.





2022-23 BUDGET

In the 2022-23 budget, the urban forest did not receive any significant changes in funding. The City Council did approve the operational funding as requested by staff.

CAPITAL IMPROVEMENT PROJECTS

In the 2022-23 fiscal years' budget, Parks & Parkways has two Capital Improvement Projects (CIP) that will affect the urban forest. The first CIP is \$300,000 for Tree Fill-In and Replacement. This funding will be to continue the effort to restore the urban forest and begin to allow streets species review. The review will include right tree, right place efforts, assessing declining trees for removal & replacement, and locations where conditions are favorable for a different/changed species to increase diversity.

The second CIP is \$300,000 for the Landscape Median Restoration program. This funding will be utilized for the installation of landscaping within the medians on Central Avenue. Additionally, it will allow for the design of median improvements from Banyan Blvd.

2022 Action Plan Summary - FINAL

The following represents the Community Services Department 2022 Action Plan for the Urban Forest Plan:

1. Tree Inventory
 - a. Right Tree, Right Place – Continue to identify ROW tree planting locations that conflict with overhead and underground utilities and recommend understory trees approved by FPL for planting beneath overhead power lines.
COMPLETE: The Spring 2022 planting plan is completed and includes street tree species changes utilizing “Right Tree, Right Place”.
 - b. Continue to evaluate species population of existing inventory and provide recommendations to ensure that no one species significantly exceeds 10% of the total tree population or consider target population percentages that are appropriate for Naples.
COMPLETE: The Spring 2022 planting plan is completed and includes street tree species changes to work toward reduced planting of Royal and Coconut Palms which are the species over 10% in the Naples Urban Forest. The selection of these species for streets is no longer supported as we work to reduce the population.
2. Continue with the removal and replacement plan, developed in 2019, for the invasive exotic trees inventoried in the Urban Forest.
COMPLETE: Under the exotic tree removal program, ten trees were removed in February. The species removed were Bishopwood and Carrotwood.
3. Review current Urban Forest Management Policies
 - a. Up-date Street Tree Species Designation List
UPDATE: The Street Tree Species Designation has been completed and was presented to the CSAB – Tree Board in March; it was approved and recommended to forward to City Council. The item was before City Council on May 2, 2022. City Council requested a workshop to review the Urban Forest, this will be scheduled for the Fall of 2022.
 - b. Planting Policies
UPDATE: This item will be placed on hold pending the City Council workshop to review the Urban Forest as direction may come from that workshop to be added to policy.
4. Blair Foundation Tree Challenge
 - a. Raise \$500,000 to be matched dollar for dollar to reach \$1,000,000 goal
COMPLETE: The City received many donations in the first quarter as the campaign ended on December 31, 2021. The total amount raised during

the last quarter is \$22,400, this brings the total to \$372,626 including the match.

2023 Action Plan Summary

The following represents the Community Services Department 2023 Action Plan for the Urban Forest Plan:

1. Tree Inventory
 - a. Right Tree, Right Place – Continue to identify ROW tree planting locations that conflict with overhead and underground utilities and recommend understory trees approved by FPL for planting beneath overhead power lines.
 - b. Continue to evaluate species population of existing inventory and provide recommendations to ensure that no one species significantly exceeds 10% of the total tree population or consider target population percentages that are appropriate for Naples.
2. Continue with the removal and replacement plan, developed in 2019, for the invasive exotic trees inventoried in the Urban Forest.
3. Review current Urban Forest Management Policies
 - a. Up-date Street Tree Species Designation List
 - b. Planting Policies



RECOMMENDED ACTION

City staff recommends the following action be taken by the Naples City Council and Community Services Advisory Board:

1. Approve the 2023 Urban Forest Plan.

ATTACHMENT 1

Urban Tree & Palm Inventory

| Naples Tree Species | 2019 | 2020 | 2021 | 2022 | % Of 2022 Total |
|----------------------------------|-------------|-------------|-------------|-------------|------------------------|
| African Tulip Tree | 1 | 1 | 1 | 1 | 0.00% |
| Alexandra Palm | 43 | 73 | 117 | 123 | 0.58% |
| Areca Palm | 39 | 39 | 39 | 38 | 0.18% |
| Australian (Tropical) Almond | 10 | 10 | 10 | 10 | 0.05% |
| Australian Tree Fern | 1 | 1 | 1 | 1 | 0.00% |
| Bahamian Strongback | 1 | 1 | 0 | 0 | 0.00% |
| Bald (Common) Cypress | 108 | 140 | 140 | 140 | 0.66% |
| Bamboo Species | 2 | 2 | 2 | 2 | 0.01% |
| Banana | 2 | 2 | 2 | 2 | 0.01% |
| Banyan | 5 | 5 | 5 | 2 | 0.01% |
| Bay Rum | | | 9 | 9 | 0.04% |
| Big-Leaf (African) Mahogany | 8 | 8 | 8 | 8 | 0.04% |
| Bismarck Palm | 24 | 28 | 28 | 28 | 0.13% |
| Black Mangrove | 3 | 3 | 3 | 3 | 0.01% |
| Black Olive | 248 | 245 | 242 | 242 | 1.14% |
| Blue Latan Palm | 1 | 1 | 1 | 1 | 0.00% |
| Bridalveil | | | 13 | 27 | 0.13% |
| Canary Island Date Palm | 15 | 14 | 14 | 14 | 0.07% |
| Carpentaria Palm | 57 | 56 | 52 | 52 | 0.25% |
| Carrotwood | 22 | 17 | 13 | 0 | 0.00% |
| Chinese Fountain (Fan) Palm | 117 | 116 | 114 | 114 | 0.54% |
| Chinese Hibiscus | 1 | 1 | 1 | 1 | 0.00% |
| Christmas Palm | 80 | 80 | 80 | 80 | 0.38% |
| Clustered Fishtail Palm | 1 | 1 | 1 | 1 | 0.00% |
| Coconut Palm | 3092 | 3232 | 3331 | 3357 | 15.88% |
| Cocoplum | 1 | 1 | 1 | 1 | 0.00% |
| Copperleaf | 1 | 0 | 0 | 0 | 0.00% |
| Copperpod | 36 | 54 | 58 | 58 | 0.27% |
| Crape Myrtle (including hybrids) | 17 | 34 | 36 | 38 | 0.18% |
| Croton | 1 | 1 | 1 | 1 | 0.00% |
| Cuban Laurel | 666 | 692 | 707 | 710 | 3.36% |
| Cuban Pink Trumpet Tree | 116 | 198 | 205 | 206 | 0.97% |
| Cuban Royal Palm | 5449 | 5349 | 5292 | 5308 | 25.11% |
| Dahoon Holly | 15 | 14 | 14 | 8 | 0.04% |
| Date Palm | 6 | 6 | 6 | 6 | 0.03% |
| Desert Senna | 20 | 20 | 20 | 20 | 0.09% |
| Dwarf Schefflera | 1 | 1 | 1 | 1 | 0.00% |
| Earleaf Acacia | 1 | 1 | 1 | 0 | 0.00% |
| East Palatka Holly | 251 | 285 | 272 | 267 | 1.26% |
| Eastern Wax Myrtle | 10 | 10 | 10 | 10 | 0.05% |
| Fall Orchid Tree | 3 | 3 | 3 | 3 | 0.01% |
| Fiddle Leaf Fig | 1 | 1 | 1 | 1 | 0.00% |

| Naples Tree Species | 2019 | 2020 | 2021 | 2022 | % Of 2022 Total |
|--------------------------------------|-------------|-------------|-------------|-------------|------------------------|
| Fiddlewood | 3 | 0 | 0 | 0 | 0.00% |
| Filibusta Palm | 2 | 2 | 1 | 1 | 0.00% |
| Firebush | 2 | 2 | 2 | 2 | 0.01% |
| Florida Strangler Fig | 9 | 9 | 9 | 10 | 0.05% |
| Florida Thatch Palm | 225 | 238 | 231 | 236 | 1.12% |
| Formosa Flamegold (Golden Rain Tree) | 19 | 19 | 19 | 18 | 0.09% |
| Foxtail Palm | 789 | 807 | 811 | 801 | 3.79% |
| Geiger Tree | 10 | 21 | 31 | 39 | 0.18% |
| Giant Bird of Paradise | 11 | 11 | 11 | 11 | 0.05% |
| Giant Dionon | 2 | 2 | 2 | 2 | 0.01% |
| Glaucous Senna (Cassia) | 1 | 0 | 0 | 0 | 0.00% |
| Golden Shower Tree (Shower of Gold) | 50 | 48 | 50 | 49 | 0.23% |
| Green Buttonwood | 133 | 139 | 139 | 161 | 0.76% |
| Gumbo-Limbo | 68 | 81 | 114 | 115 | 0.54% |
| Hispaniola Palmetto | 1 | 1 | 1 | 1 | 0.00% |
| Hong Kong Orchid Tree | 20 | 30 | 30 | 33 | 0.16% |
| Hurricane Palm | 8 | 8 | 8 | 8 | 0.04% |
| Indian Laurel Fig | 1 | 1 | 1 | 1 | 0.00% |
| Jacaranda | 14 | 16 | 16 | 16 | 0.08% |
| Jackfruit | 1 | 1 | 1 | 1 | 0.00% |
| Japanese Privet (Ligustrum) | 246 | 247 | 244 | 257 | 1.22% |
| Java Plum | 10 | 5 | 5 | 4 | 0.02% |
| Key Thatch Palm | 3 | 3 | 3 | 3 | 0.01% |
| Lady Palm | 5 | 5 | 5 | 5 | 0.02% |
| Laurel Oak | 29 | 27 | 26 | 26 | 0.12% |
| Leadball Tree | 3 | 3 | 3 | 3 | 0.01% |
| Madagascar Olive | 12 | 12 | 12 | 12 | 0.06% |
| Mahogany | 1687 | 1800 | 1807 | 1825 | 8.63% |
| Mango | 7 | 5 | 5 | 6 | 0.03% |
| Mediterranean Fan Palm | 4 | 1 | 1 | 1 | 0.00% |
| Medjool Date Palm | 6 | 6 | 6 | 6 | 0.03% |
| Mexican Fan (Washington) Palm | 60 | 59 | 59 | 52 | 0.25% |
| Mixed Mangrove Species | 1 | 1 | 1 | 1 | 0.00% |
| Monkey Apple | 2 | 2 | 2 | 2 | 0.01% |
| Montezuma Cypress | 1 | 1 | 1 | 1 | 0.00% |
| Montgomery Palm | 282 | 275 | 304 | 335 | 1.58% |
| Necklace Pod | 5 | 3 | 3 | 3 | 0.01% |
| Palmetto (Sabal/Cabbage Palm) | 2714 | 2759 | 2729 | 2650 | 12.53% |
| Paradise Tree | 8 | 8 | 9 | 9 | 0.04% |
| Paurotis Palm | 12 | 12 | 12 | 12 | 0.06% |
| Peregrina (Jatropha) | 86 | 76 | 73 | 73 | 0.35% |
| Pigmy Date Palm | 263 | 260 | 255 | 225 | 1.06% |
| Pindo Palm | 9 | 9 | 0 | 0 | 0.00% |
| Pink Ball Dombeya | 1 | 1 | 0 | 0 | 0.00% |

| Naples Tree Species | 2019 | 2020 | 2021 | 2022 | % Of 2022 Total |
|----------------------------|-------------|-------------|-------------|-------------|------------------------|
| Pink Powderpuff | 1 | 1 | 1 | 1 | 0.00% |
| Pink Trumpet Tree | 20 | 19 | 24 | 27 | 0.13% |
| Plumeria | 5 | 5 | 3 | 3 | 0.01% |
| Pond Apple | 9 | 9 | 9 | 8 | 0.04% |
| Pond Cypress | 5 | 5 | 5 | 5 | 0.02% |
| Pongam | 33 | 33 | 32 | 32 | 0.15% |
| Ponytail Palm | 2 | 2 | 2 | 2 | 0.01% |
| Prickly Lime | 1 | 0 | 0 | 0 | 0.00% |
| Purple Glory Tree | 1 | 1 | 1 | 1 | 0.00% |
| Queen Crape Myrtle | 12 | 10 | 10 | 10 | 0.05% |
| Queen Palm | 5 | 5 | 3 | 3 | 0.01% |
| Queensland Umbrella Tree | 16 | 14 | 14 | 14 | 0.07% |
| Red Cluster Bottlebrush | 47 | 50 | 50 | 50 | 0.24% |
| Red Maple | 11 | 11 | 11 | 11 | 0.05% |
| Red-Edged Dracaena | 3 | 3 | 3 | 3 | 0.01% |
| Rosea Trumpet Tree | 3 | 3 | 3 | 3 | 0.01% |
| Royal Poinciana | 188 | 221 | 224 | 233 | 1.10% |
| Rubber Plant | 15 | 15 | 15 | 15 | 0.07% |
| Rustyleaf Fig | 22 | 19 | 19 | 19 | 0.09% |
| Sabicu | 1 | 1 | 1 | 1 | 0.00% |
| Sand Live Oak | 53 | 36 | 36 | 36 | 0.17% |
| Santa Maria (Calophyllum) | 16 | 16 | 18 | 18 | 0.09% |
| Satinleaf | 25 | 41 | 41 | 40 | 0.19% |
| Saw Palmetto | 4 | 4 | 4 | 4 | 0.02% |
| Screw Pine | 11 | 11 | 12 | 12 | 0.06% |
| Sea Grape | 109 | 113 | 142 | 142 | 0.67% |
| Sea Hibiscus | 2 | 2 | 3 | 3 | 0.01% |
| Sea Myrtle | 1 | 1 | 1 | 1 | 0.00% |
| Senegal Date Palm | 9 | 8 | 8 | 9 | 0.04% |
| Shady Lady Black Olive | 371 | 439 | 473 | 475 | 2.25% |
| Shavingbrush Tree | 1 | 1 | 1 | 1 | 0.00% |
| Silver Buttonwood | 87 | 87 | 103 | 103 | 0.49% |
| Silver Date Palm | 4 | 6 | 6 | 6 | 0.03% |
| Silver Palm | 3 | 3 | 2 | 0 | 0.00% |
| Silver Trumpet Tree | 30 | 32 | 31 | 32 | 0.15% |
| Simpson Stopper | 1 | 30 | 47 | 48 | 0.23% |
| Small-leaved Pitch Apple | 1 | 1 | 1 | 1 | 0.00% |
| Solitaire Palm | 515 | 530 | 528 | 526 | 2.49% |
| Song of India | 1 | 1 | 1 | 1 | 0.00% |
| Southern Live Oak | 879 | 922 | 937 | 938 | 4.44% |
| Southern Slash Pine | 105 | 105 | 104 | 105 | 0.50% |
| Spanish Bayonet | 1 | 1 | 1 | 1 | 0.00% |
| Star Pine | 2 | 0 | 0 | 0 | 0.00% |
| Strawberry Guava | 48 | 43 | 45 | 45 | 0.21% |

| Naples Tree Species | 2019 | 2020 | 2021 | 2022 | % Of 2022 Total |
|--------------------------------|---------------|---------------|---------------|---------------|------------------------|
| Surinam Powderpuff | 4 | 4 | 4 | 4 | 0.02% |
| Sweet Acacia | 1 | 1 | 0 | 0 | 0.00% |
| Sweet Viburnum | 4 | 4 | 4 | 4 | 0.02% |
| Tahitian Screwpine | 1 | 1 | 1 | 1 | 0.00% |
| Taiwan Sugar Palm | 1 | 1 | 1 | 1 | 0.00% |
| Tamarind | 2 | 2 | 2 | 7 | 0.03% |
| Teddy Bear Palm | 6 | 6 | 6 | 6 | 0.03% |
| Texas Olive | 1 | 1 | 1 | 1 | 0.00% |
| Tipu | 15 | 15 | 15 | 15 | 0.07% |
| Toog; Bishopwood | 19 | 18 | 12 | 9 | 0.04% |
| Traveler's Tree | 9 | 9 | 9 | 9 | 0.04% |
| Triangle Palm | 8 | 8 | 6 | 6 | 0.03% |
| Trident Maple | 1 | 1 | 1 | 1 | 0.00% |
| Velvet Pittosporum | 1 | 1 | 1 | 1 | 0.00% |
| Vera Tree | 11 | 12 | 29 | 33 | 0.16% |
| Weeping Bottlebrush | 10 | 13 | 49 | 91 | 0.43% |
| Weeping Fig | 26 | 27 | 26 | 25 | 0.12% |
| West Indian Lilac | 1 | 1 | 0 | 0 | 0.00% |
| Wild Tamarind (Lysiloma) | 4 | 15 | 17 | 21 | 0.10% |
| Willow Species | 1 | 1 | 1 | 1 | 0.00% |
| Winin Palm | 1 | 1 | 1 | 1 | 0.00% |
| Woman's Tongue | 8 | 4 | 4 | 1 | 0.00% |
| Yellow Latan Palm | 1 | 1 | 1 | 1 | 0.00% |
| Yellow Poinciana | 2 | 2 | 2 | 2 | 0.01% |
| Zulu Fig | 2 | 2 | 2 | 2 | 0.01% |
| Private *Not included in total | 8761 | 8837 | 8798 | 8759 | |
| | | | | | |
| Total | 20,120 | 20,773 | 21,067 | 21,143 | |
| <i>Change</i> | 2,279 | 653 | 294 | 76 | |
| | | | | | |
| <i>Vacant</i> | 2,727 | 1,374 | 1,064 | 88 | |
| <i>Palm Trees</i> | 13,887 | 14,036 | 14,098 | 14,045 | 66.43% |
| <i>Understory Trees</i> | 838 | 919 | 995 | 1041 | 4.92% |
| <i>Majorstory Trees</i> | 5,395 | 5,818 | 5,974 | 6,057 | 28.65% |
| | | | | | |
| <i>Median and Island Trees</i> | 2,660 | 2,737 | 2,814 | 2,799 | 13.24% |
| <i>Park Trees</i> | 4,377 | 4,510 | 4,517 | 4,550 | 21.52% |
| <i>ROW Trees</i> | 13,083 | 13,526 | 13,736 | 13,794 | 65.24% |

| Top 10 Species | Count | % Of 2022 Total |
|-------------------------------|-------|-----------------|
| Cuban Royal Palm | 5308 | 25.11% |
| Coconut Palm | 3357 | 15.88% |
| Palmetto (Sabal/Cabbage Palm) | 2650 | 12.53% |
| Mahogany | 1825 | 8.63% |
| Southern Live Oak | 938 | 4.44% |
| Foxtail Palm | 801 | 3.79% |
| Cuban Laurel | 710 | 3.36% |
| Solitaire Palm | 526 | 2.49% |
| Shady Lady Black Olive | 475 | 2.25% |
| Montgomery Palm | 335 | 1.58% |





Hurricane Ian
Urban Forest Impact –
By the Numbers

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PREFACE

What is a hurricane? As defined by the National Oceanic and Atmospheric Administration, “Hurricanes are intense storms that originate in the tropics. Hurricanes begin life as a small gathering of disorganized storms which gain energy from the heat of the ocean water”.

On September 28, 2022, at 3:05pm, Hurricane Ian made landfall in southwest Florida on Cayo Costa Island as a Category 4 Atlantic Hurricane. A Category 4 hurricane is considered a major storm with winds ranging from 130 to 156 mph. A hurricane of this strength causes catastrophic damage to homes and property, as well as downed power poles that have potential to leave areas without power and uninhabitable for months. Hurricane Ian also pushed a ten-to-fifteen-foot storm surge inland throughout SWFL.

Hurricane Ian’s eyewall passed north the City of Naples. The storm surge in Naples was historic, flooding first-floor apartments, covering half of Tin City, and leaving 5th Avenue's iconic shops underwater. Fire Station #1 was flooded, substantially damaging the equipment in the building. In Collier County, the highest wind speeds recorded were between 100-110 MPH.

This report, Hurricane Ian Urban Forest Impact – By the Numbers, provides informational statistical data on the impact of Hurricane Irma on the City of Naples Urban Forest.

The Inventory

The Urban Forest inventory was at 21,143 plantings, representing 141 species on September 27, 2022, prior to Hurricane Ian's arrival on September 28, 2022. The Urban Forest is city managed through its Parks, Recreation, & Facilities Department.

The staff has completed its assessments to the Urban Forest. This assessment identified 227 trees and palms that were lost to Hurricane Ian. This represents a 1.07% loss to the Urban Forest. This loss was spread throughout the city with no one area being hit harder than another.

The city had no species with 100% loss. The two tree species with the highest percent loss were Bishopwood and Java Plum both of which are Class 1 Invasive Exotics. On the opposite end of the spectrum, there were 106 species with zero loss. The species include several Florida native species that have been added to our Urban Forest since recovery from Hurricane Irma in 2017.

In comparing the loss in Hurricane Irma (2017) and Hurricane Ian, the City went from a 10% loss to a 1% loss. While these were different storms, the wind speeds are comparable. Staff believes that a major influence on the reduced loss is due to our increased tree maintenance. During the budget process in 2017, city staff was supported by City Council to change to a 2-year trimming cycle; this was an increase from trimming every 3 to 4 years. This tree management change provided for trees with less dead or declining branches as well as better canopy form thus leading to stronger trees.

City staff believes that additional tree loss could occur. There are trees and palms that will be monitored during the upcoming growing season to confirm that they are able to generate healthy new growth. Additionally, there may be hardwood trees deemed hazardous as restorative trimming continues during the fiscal year. As the hardwood trees are trimmed, it may be determined that the tree sustained more damage than was visible from ground inspections; our trimming contractor will be able to view the trees from above utilizing aerial equipment and provide feedback on damages, potentially changing the position on the tree health and viability.

ATTACHMENT 1

Urban Tree & Palm Inventory

| Naples Tree Species | 27-Sep-22 | Lost in Hurricane Ian | Street | Park | Median | New Inventory | Percent Lost by Species |
|----------------------------------|------------------|------------------------------|---------------|-------------|---------------|----------------------|--------------------------------|
| African Tulip Tree | 1 | | | | | 1 | 0.00% |
| Alexandra Palm | 123 | | | | | 123 | 0.00% |
| Areca Palm | 38 | | | | | 38 | 0.00% |
| Australian Almond | 10 | | | | | 10 | 0.00% |
| Australian Tree Fern | 1 | | | | | 1 | 0.00% |
| Bald Cypress | 140 | | | | | 140 | 0.00% |
| Bamboo Species | 2 | | | | | 2 | 0.00% |
| Banana | 2 | | | | | 2 | 0.00% |
| Banyan | 5 | | | | | 5 | 0.00% |
| Bay Rum | 9 | | | | | 9 | 0.00% |
| Big-Leaf Mahogany | 8 | | | | | 8 | 0.00% |
| Bismarck Palm | 28 | | | | | 28 | 0.00% |
| Black Mangrove | 3 | | | | | 3 | 0.00% |
| Black Olive | 242 | 4 | 1 | | 3 | 238 | 1.65% |
| Blue Latan Palm | 1 | | | | | 1 | 0.00% |
| Bridalveil | 27 | | | | | 27 | 0.00% |
| Canary Island Date Palm | 14 | | | | | 14 | 0.00% |
| Carpentaria Palm | 52 | 2 | | 1 | 1 | 50 | 3.85% |
| Chinese Fountain Palm | 114 | | | | | 114 | 0.00% |
| Chinese Hibiscus | 1 | | | | | 1 | 0.00% |
| Christmas Palm | 80 | | | | | 80 | 0.00% |
| Clustered Fishtail Palm | 1 | | | | | 1 | 0.00% |
| Coconut Palm | 3,357 | 33 | 31 | | 2 | 3,324 | 0.98% |
| Cocoplum | 1 | | | | | 1 | 0.00% |
| Copperpod | 58 | 5 | 5 | | | 53 | 8.62% |
| Crape Myrtle (including hybrids) | 38 | | | | | 38 | 0.00% |
| Croton | 1 | | | | | 1 | 0.00% |
| Cuban Laurel | 710 | 4 | 3 | | 1 | 706 | 0.56% |
| Cuban Pink Trumpet Tree | 206 | 15 | 13 | | 2 | 191 | 7.28% |
| Cuban Royal Palm | 5,308 | 15 | 14 | | 1 | 5,293 | 0.28% |
| Dahoon Holly | 8 | | | | | 8 | 0.00% |
| Date Palm | 6 | | | | | 6 | 0.00% |
| Desert Senna | 20 | | | | | 20 | 0.00% |
| Dwarf Schefflera | 1 | | | | | 1 | 0.00% |
| East Palatka Holly | 267 | 2 | 1 | 1 | | 265 | 0.75% |

| Naples Tree Species | 27-Sep-22 | Lost in Hurricane Ian | Street | Park | Median | New Inventory | Percent Lost by Species |
|------------------------|-----------|-----------------------|--------|------|--------|---------------|-------------------------|
| Eastern Wax Myrtle | 10 | | | | | 10 | 0.00% |
| Fall Orchid Tree | 3 | | | | | 3 | 0.00% |
| Fiddle Leaf Fig | 1 | | | | | 1 | 0.00% |
| Filibusta Palm | 1 | | | | | 1 | 0.00% |
| Firebush | 2 | | | | | 2 | 0.00% |
| Florida Strangler Fig | 10 | | | | | 10 | 0.00% |
| Florida Thatch Palm | 236 | | | | | 236 | 0.00% |
| Formosa Flamegold | 18 | | | | | 18 | 0.00% |
| Foxtail Palm | 801 | 6 | 6 | | | 795 | 0.75% |
| Geiger Tree | 39 | | | | | 39 | 0.00% |
| Giant Bird of Paradise | 11 | | | | | 11 | 0.00% |
| Giant Dioon | 2 | | | | | 2 | 0.00% |
| Golden Shower Tree | 49 | 1 | 1 | | | 48 | 2.04% |
| Green Buttonwood | 161 | 1 | 1 | | | 160 | 0.62% |
| Gumbo-Limbo | 115 | | | | | 115 | 0.00% |
| Hispaniola Palmetto | 1 | | | | | 1 | 0.00% |
| Hong Kong Orchid Tree | 33 | 4 | 3 | | 1 | 29 | 12.12% |
| Hurricane Palm | 8 | | | | | 8 | 0.00% |
| Indian Laurel Fig | 1 | | | | | 1 | 0.00% |
| Jacaranda | 16 | 2 | 2 | | | 14 | 12.50% |
| Jackfruit | 1 | | | | | 1 | 0.00% |
| Japanese Privet | 257 | 2 | | 2 | | 255 | 0.78% |
| Java Plum | 4 | 1 | | 1 | | 3 | 25.00% |
| Key Thatch Palm | 3 | | | | | 3 | 0.00% |
| Lady Palm | 5 | | | | | 5 | 0.00% |
| Laurel Oak | 26 | 1 | | 1 | | 25 | 3.85% |
| Leadball Tree | 3 | | | | | 3 | 0.00% |
| Madagascar Olive | 12 | | | | | 12 | 0.00% |
| Mahogany | 1,825 | 58 | 57 | 1 | | 1,767 | 3.18% |
| Mango | 6 | | | | | 6 | 0.00% |
| Mediterranean Fan Palm | 1 | | | | | 1 | 0.00% |
| Medjool Date Palm | 6 | | | | | 6 | 0.00% |
| Mexican Fan Palm | 52 | | | | | 52 | 0.00% |
| Mixed Mangrove Species | 1 | | | | | 1 | 0.00% |
| Monkey Apple | 2 | | | | | 2 | 0.00% |
| Montezuma Cypress | 1 | | | | | 1 | 0.00% |
| Montgomery Palm | 335 | | | | | 335 | 0.00% |
| Necklace Pod | 3 | | | | | 3 | 0.00% |

| Naples Tree Species | 27-Sep-22 | Lost in Hurricane Ian | Street | Park | Median | New Inventory | Percent Lost by Species |
|--------------------------|-----------|-----------------------|--------|------|--------|---------------|-------------------------|
| Palmetto | 2,650 | 3 | | 1 | 2 | 2,647 | 0.11% |
| Paradise Tree | 9 | | | | | 9 | 0.00% |
| Paurotis Palm | 12 | | | | | 12 | 0.00% |
| Peregrina | 73 | | | | | 73 | 0.00% |
| Pigmy Date Palm | 225 | | | | | 225 | 0.00% |
| Pink Powderpuff | 1 | | | | | 1 | 0.00% |
| Pink Trumpet Tree | 27 | 2 | 1 | | 1 | 25 | 7.41% |
| Plumeria | 3 | | | | | 3 | 0.00% |
| Pond Apple | 8 | | | | | 8 | 0.00% |
| Pond Cypress | 5 | | | | | 5 | 0.00% |
| Pongam | 32 | 2 | 1 | | 1 | 30 | 6.25% |
| Ponytail Palm | 2 | | | | | 2 | 0.00% |
| Purple Glory Tree | 1 | | | | | 1 | 0.00% |
| Queen Crape Myrtle | 10 | | | | | 10 | 0.00% |
| Queen Palm | 3 | | | | | 3 | 0.00% |
| Queensland Umbrella Tree | 14 | | | | | 14 | 0.00% |
| Red-Edged Dracaena | 3 | | | | | 3 | 0.00% |
| Red Cluster Bottlebrush | 50 | | | | | 50 | 0.00% |
| Red Maple | 11 | | | | | 11 | 0.00% |
| Rosea Trumpet Tree | 3 | | | | | 3 | 0.00% |
| Royal Poinciana | 233 | 2 | 1 | | 1 | 231 | 0.86% |
| Rubber Plant | 15 | | | | | 15 | 0.00% |
| Rustyleaf Fig | 19 | | | | | 19 | 0.00% |
| Sabicu | 1 | | | | | 1 | 0.00% |
| Sand Live Oak | 36 | | | | | 36 | 0.00% |
| Santa Maria | 18 | | | | | 18 | 0.00% |
| Satinleaf | 40 | 1 | 1 | | | 39 | 2.50% |
| Saw Palmetto | 4 | | | | | 4 | 0.00% |
| Screw Pine | 12 | | | | | 12 | 0.00% |
| Sea Grape | 142 | | | | | 142 | 0.00% |
| Sea Hibiscus | 3 | | | | | 3 | 0.00% |
| Sea Myrtle | 1 | | | | | 1 | 0.00% |
| Senegal Date Palm | 9 | | | | | 9 | 0.00% |
| Shady Lady Black Olive | 475 | 19 | 4 | | 15 | 456 | 4.00% |
| Shavingbrush Tree | 1 | | | | | 1 | 0.00% |
| Silver Buttonwood | 103 | 1 | 1 | | | 102 | 0.97% |
| Silver Date Palm | 6 | | | | | 6 | 0.00% |
| Silver Trumpet Tree | 32 | 5 | 5 | | | 27 | 15.63% |

| Naples Tree Species | 27-Sep-22 | Lost in Hurricane Ian | Street | Park | Median | New Inventory | Percent Lost by Species |
|----------------------------|------------------|------------------------------|---------------|-------------|---------------|----------------------|--------------------------------|
| Simpson Stopper | 48 | 3 | 3 | | | 45 | 6.25% |
| Small-leaved Pitch Apple | 1 | | | | | 1 | 0.00% |
| Solitaire Palm | 526 | 14 | 13 | | 1 | 512 | 2.66% |
| Song of India | 1 | | | | | 1 | 0.00% |
| Southern Live Oak | 938 | 4 | 3 | 1 | | 934 | 0.43% |
| Southern Slash Pine | 105 | 3 | | 3 | | 102 | 2.86% |
| Spanish Bayonet | 1 | | | | | 1 | 0.00% |
| Strawberry Guava | 45 | 1 | | | 1 | 44 | 2.22% |
| Surinam Powderpuff | 4 | | | | | 4 | 0.00% |
| Sweet Viburnum | 4 | 1 | | 1 | | 3 | 25.00% |
| Tahitian Screwpine | 1 | | | | | 1 | 0.00% |
| Taiwan Sugar Palm | 1 | | | | | 1 | 0.00% |
| Tamarind | 7 | | | | | 7 | 0.00% |
| Teddy Bear Palm | 6 | | | | | 6 | 0.00% |
| Texas Olive | 1 | | | | | 1 | 0.00% |
| Tipu | 15 | 1 | 1 | | | 14 | 6.67% |
| Bishopwood | 9 | 5 | | 3 | 2 | 4 | 55.56% |
| Traveler's Tree | 9 | | | | | 9 | 0.00% |
| Triangle Palm | 6 | | | | | 6 | 0.00% |
| Trident Maple | 1 | | | | | 1 | 0.00% |
| Velvet Pittosporum | 1 | | | | | 1 | 0.00% |
| Verawood Tree | 33 | 1 | 1 | | | 32 | 3.03% |
| Weeping Bottlebrush | 91 | 3 | 1 | | 2 | 88 | 3.30% |
| Weeping Fig | 25 | | | | | 25 | 0.00% |
| Wild Tamarind | 21 | | | | | 21 | 0.00% |
| Winin Palm | 1 | | | | | 1 | 0.00% |
| Woman's Tongue | 1 | | | | | 1 | 0.00% |
| Yellow Latan Palm | 1 | | | | | 1 | 0.00% |
| Yellow Poinciana | 2 | | | | | 2 | 0.00% |
| Zulu Fig | 2 | | | | | 2 | 0.00% |
| | | | | | | | |
| Total | 21,143 | 227 | 174 | 16 | 37 | 20,916 | 1.07% |
| | | | | | | | |
| <i>Vacant</i> | 88 | | | | | 315 | |
| <i>Palm Trees</i> | 14,045 | 73 | 18 | 3 | 4 | 13,972 | 0.52% |
| <i>Understory Trees</i> | 1,041 | 14 | 12 | 1 | 17 | 1,027 | 1.34% |
| <i>Majorstory Trees</i> | 6,057 | 140 | 141 | 9 | 12 | 5,917 | 2.31% |

Top 5 Lost - Total Count

| | |
|-------------------------|----|
| Mahogany | 58 |
| Coconut Palm | 33 |
| Shady Lady Black Olive | 19 |
| Cuban Pink Trumpet Tree | 15 |
| Cuban Royal Palm | 15 |

Top 5 Lost - Percent

| | |
|---------------------|--------|
| Bishopwood | 55.56% |
| Java Plum | 25.00% |
| Sweet Viburnum | 25.00% |
| Silver Trumpet Tree | 15.63% |
| Jacaranda | 12.50% |