

# **City of Naples**

**2024 Urban Forest Plan** 

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When Columbus approached our shores in 1492, he named the land "La Florida", for the breathtaking abundance of flowering plants and trees that welcomed him as his ship approached her shores.

The horticulture of the first land in the New World to be discovered and the last to be settled never failed to dazzle newcomers, beginning in 1885 when Naples, nestled in the natural landscape established by Mother Nature between Naples Bay and the Gulf of Mexico, was founded.

On December 1, 1923, the Town of Naples was incorporated as a municipality under Chapter 9846 of the Laws of Florida, Special Acts of Legislature. On June 13, 1949, the Town of Naples charter was abolished, and the City of Naples was created as a municipal corporation in the state of Florida; a governmental designation based on population growth among other things.

The City of Naples is celebrating 100 years and in the tradition of many events this year, we begin the 2024 Urban Forest Report with a Centennial Fun Fact on the first trees.

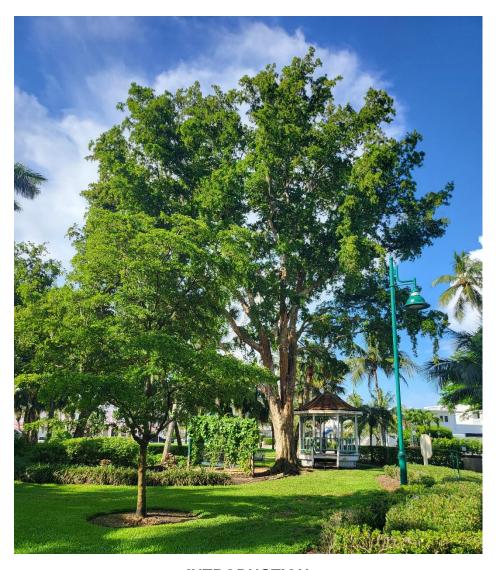
#### CENTENNIAL FUN FACT

In 1912, Naples residents John Hachmeister, William J. Pulling and Mrs. William B. Haldeman sailed to Cape Sable, at the southernmost tip of Florida, and brought coconut palm seedlings back to Naples from the 1,200-acre Waddell Coconut Grove. Returning to Naples, they commissioned Andrew Weeks to plant the seedlings on both sides of Pier Street (12th Avenue South) from the Hotel Naples to the Naples Pier. As the trees matured, guests arriving to Naples by boat, disembarked onto the Pier and were welcomed by magnificent palm fronds swaying amidst clusters of hundreds of coconuts. With this planting, Naples had the start of what we today call our Urban Forest; 11 years before Naples became a city, Naples was a "tree city".



The first Naples City Manager, Fred Lowdermilk, was hired in 1949. Reflecting in 1965 about what he expected to accomplish in Naples, Fred Lowdermilk said, "Without any crystal ball gazing I could see a future in Naples. They had a good zoning ordinance, and I decided I could go to work in an unspoiled town, beautify it, and give it a good street system," and he did.

Lowdermilk praised the residents of Naples for accepting his beautification guidelines. "Naples is a city of beautiful gardens today," he continued, "because the spirit of beautification exists among the people. In no other city in the United States with the possible exception of Coral Gables do you find better care given to yards, lawns, and the grounds of homes as well as apartments."



## 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.

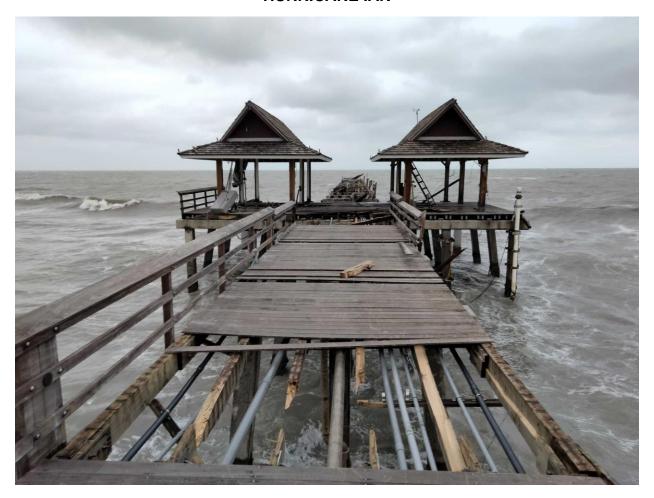
This Urban Forest Plan provides an overview of the care, preservation, pruning, planting, removal, or disposition of City trees and palms. It provides data concerning work performed to the urban forest during FY2022-2023 (October 1, 2022-September 30, 2023) and outlines the work to be completed during FY2023-2024. The city, through its Parks, Recreation, & Facilities Department – Parks & Parkways Division, manages an urban forest of 20,804 inventoried trees. There are 134 tree planting locations that are vacant.

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 2024 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.



#### **HURRICANE IAN**



On September 28, 2022, at 3:05pm, Hurricane Ian made landfall in southwest Florida on Cayo Costa as a Category 4 Atlantic Hurricane. Hurricane Ian's eyewall passed North of the City of Naples. In Collier County, the highest wind speeds recorded were between 100-110 MPH. Hurricane Ian also pushed a ten-to-fifteen-foot storm surge inland throughout SWFL. 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.

The Urban Forest inventory was at 21,143 plantings, on September 27, 2022, prior to Hurricane Ian's arrival on September 28, 2022. The Urban Forest 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 as part of the recovery from Hurricane Irma in 2017.

In comparing the loss in Hurricane Irma (2017) and Hurricane Ian (2023), the City went from a 10% loss to a 1% loss. While these were different storms, the wind speeds are comparable. Staff believes a major influence on the reduced loss is our increased tree maintenance. During the budget process in 2017, city staff were 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 trees with less dead or declining branches as well as better canopy form thus leading to stronger trees.



## 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, the 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 an assessment 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."

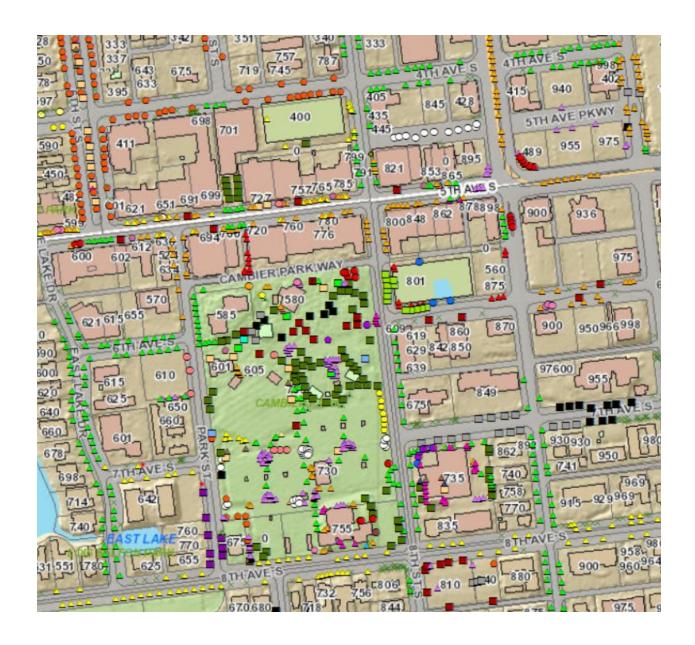
The members of the 2023 Tree Board are:

Anne Russell Foster, Chair Jo-Anne Jeffreys, Vice Chair

Kathy Swingley Nathaniel Smith

Brian Smith Christina Muracco





## TREE & PALM INVENTORY

The city has an inventory of all trees and palms in the Urban Forest. Tree inventories are a critical element to the management of an Urban Forest. The data within the inventory can be used for a variety of tasks, including making risk-related decisions, setting budgets, allocating staff and equipment, developing maintenance plans and projects, and selecting species for planting.

Naples' first tree inventory was conducted in March 2001. Over the years, the inventory has been reassessed using staff, interns, and outside contractors. There have been changes made to the information collected on each site as well as a change in the management platform. The current inventory is managed in ArcGIS, which is a mapping and analysis application. There are 31 data categories for each point managed in the

inventory. The collected data includes common and scientific name, location and address, trim cycle, and open fields for notes. The inventory also includes the GPS points for each planting site. The data contained within the inventory is made readily available to the public. The inventory map is on the City's website for access by residents, visitors, builders, and landscapers for information and planning purposes. The data can also be overlaid with other City maps such as zoning or utilities.

The inventory is 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 29,607 inventoried points, to include vacant sites and private plantings in the right-of-way. The City's current inventory is included as Attachment 1. The city will have a complete re-inventory of the Urban Forest 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. In simpler terms, a tree canopy is the layer of leaves, branches, and stems of trees that cover the ground when viewed from above and that can be measured as a percentage of a land area shaded by trees. 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.

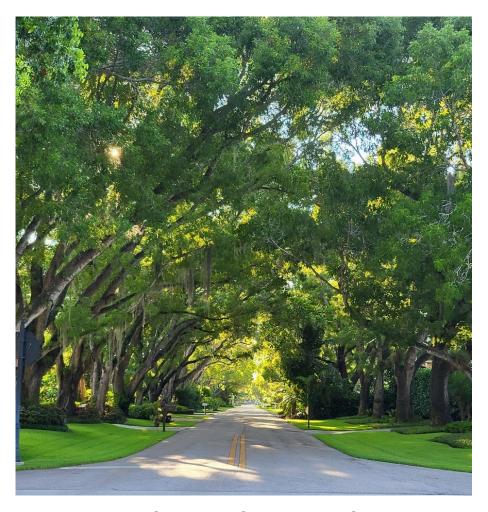
A Canopy Coverage Assessment is a statistical estimation using random point sampling, each point is recorded as a tree or not a tree. The percentage of coverage is calculated

from this point data. The city has the assessment data for 2019, 2005, and 1999. With the arrival of Hurricane Ian and the tree loss experienced, the city had a Canopy Coverage Assessment completed in March 2023. The canopy coverage declined by about 2% as a result of Hurricane Ian; this small decline was expected. The city will have the next canopy coverage assessment completed in FY2024-25. When this assessment is completed, an increase in the canopy coverage is anticipated as a direct result of the city's continued restoration and planting efforts. Canopy coverage can be gained by replanting efforts focusing on hardwood species.

2023	27.60%
2019	29.40%
2005	24.80%
1999	29.60%

A survey and study by the University of Florida, Dr. Andrew Koeser, found that the average canopy coverage for cities in Florida is 32.3%. Factors affecting canopy coverage are the climate, land use, tree species, as well as local municipal funding for Urban Forestry.





## **DESIGNATED STREET TREES**

The urban forest program has been widely supported by City residents and elected officials. 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 of Naples has a well-established Street Tree Program; streets within the City have a designated street tree for planting within the public right-of-way. Due to aggressive replanting efforts since Hurricane Irma hit in 2017 and the need to change designated species to follow "Right Tree, Right Place" the program needs review and up-dating.

The City Council was presented with the Designated Street Tree Program 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, the 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. The City Council approved Resolution 10-12699.

There have been several changes to the designated species for three different reasons. The reasons are powerlines (Right Tree, Right Place), Class I invasive exotic removals, and palm species reduction. A review of the Urban Forest Management Policy (Designated Street Tree Program) was part of the action plan for the 2023 Urban Forest Report. Staff presented the Designated Street Tree Program to the Community Services Advisory Board, sitting as the Tree Board, on March 22, 2022. It was unanimously approved. The program was presented to the City Council on May 2, 2022. At this meeting, the City Council requested that due to the time between reviews (2008 to 2022), that this matter go before the President's Council. The program changes were presented to the President's Council on May 23, 2022, and no comments or concerns were received. The City Council received a presentation to review and discuss the changes on December 5, 2022. At that meeting, the City Council approved Resolution 2022-14986.

With our continued efforts to plant "Right Tree, Right Place" and reduce the quantity of palm plantings within our Urban Forest, staff is planning a presentation and amendment to the resolution for the City Council in the Fall of 2023.





TREE FILL-IN PROGRAM

The City's tree fill-in program allows for the replacement of lost trees and palms primarily along neighborhood streets. For the FY2022-23, City Council appropriated \$300,000 to replace lost plantings as part of the Capital Improvement Program. The City also appropriated the last of the Blair Foundation Tree Challenge funds in the amount of \$51,938.00. Plantings took place in the Spring of 2023 and focused primarily on restoration of the urban forest from Hurricane Irma and Hurricane Ian. Tree Fill-in 2023 installed 211 trees and palms for a total of \$351,938.00.

The City Council approved a \$300,000 Capital Improvement Project for FY2023-2024 to continue the Tree Fill-in Program. This funding will continue the effort to restore the urban forest and begin to allow streets species review. The streets species review will include right tree, right place efforts, assessing declining trees for removal & replacement, increasing diversity, and increasing canopy coverage.

The city strives for a balanced urban forest; maintaining diversity to avoid creating an unhealthy monoculture. Best management practices for urban forests recommend that no one species exceeds 10% of the total tree population. Currently, three species exceed this recommendation: the 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 are 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



**URBAN FOREST MANAGEMENT** 

The Parks, Recreation, & Facilities Department, formerly the Community Services Department, houses the Parks and Parkways Division where the responsibility of the Urban Forest is managed. Two ISA Certified Arborists are on staff to plan, monitor, and manage all aspects of the City of Naples Urban Forest. Additionally, there are landscape techs, irrigation techs, and a supervisor who provides support services that are critical to the Urban Forest. These services include trimming, watering, fertilization, and pest management.

The Parks & Parkways staff are equipped to trim trees or palms that have minor defects needing attention between trim cycle work. This includes a low branch over a driveway, damage from afternoon rain, or seed pods on a lower stature palm. Water, via a water truck, to new or struggling tree is delivered by staff. Trees and palms planted in managed landscapes do not require an independent fertilization program. They can compete for their nutrients using their root systems that can grab from adjoining plant fertilization programs. Fertilization is provided twice a year to most of our managed areas. City trees and palms are monitored for signs of nutrient deficiencies and fertilized, as necessary. Trees and palms are monitored for disease and insects. Should signs develop, they are reviewed and treated using the current industry standards by Parks and Parkways staff.



## HARDWOOD PRUNING

Canopy trees have numerous benefits to cities. Benefits include temperature modification and cooling, reduction of air pollutants, storage of stormwater, and energy conservation. Overall, canopy trees help to increase property values. Scientific studies have proven that urban trees improve our emotional well-being, reduce stress, and offer health-related benefits. One such experiment showed that auto commuters experienced less physiological stress when driving routes that were dominated by trees, rather than routes with buildings dominated roadsides. The City of Naples has 87 varieties of canopy trees, or hardwoods, within our managed inventory; they account for almost 7,000 plantings within the right-of-way, parks, and medians.

The City of Naples manages the urban forest pruning on a schedule by location and species. During the 2017 budget hearings, the trim cycles for all species were reviewed and increased to allow for the best management and care of the trees. Under the current pruning, hardwoods such as Mahogany, Shady Lady, or Live Oaks, are pruned on a 2-year cycle. The understory species, such as Stoppers or Bottlebrush, are also pruned on a 2-year cycle. Tropical flowering trees, such as Royal Poinciana or Copper Pod, are

trimmed annually. Naples prunes trees year-round. The start of each fiscal year, which is October, is the start of the cycle. The hardwood pruning estimated schedule for FY2023-24 is below.

Species or Location	Estimated Time Frame
Street Trees	October - March
Mahogany Riveria Dr Black Olive Shady Lady Stoppers Satinleaf	
Parks  Lowdermilk Park  Fleischmann Park  Anthony Park  Sandpiper Park  Goodlette Linear Park  Orchid Linear Park  Seagate School Park  City Operation Center	April to May
Medians  Central Ave Banyan Blvd Gulf Shore Blvd N (Lowdermilk) Golden Gate Parkway Misc cul-de-sac - South	June to July
5 <sup>th</sup> Ave S (Annual)	August
Tropical Flowering (Annual) Royal Poinciana Copperpod Hong Kong Orchid Tree Queen Crape Myrtle Golden Shower Tree Wild Tamarind	September

## **PALM PRUNING**

Palms are planted to offer that tropical vibe that residents and visitors associate with Florida and specifically beach communities like Naples. The city has 37 different varieties of palms within our managed inventory; they account for almost 14,000 plantings within the right-of-way, parks, and medians.

No species conveys the tropics quite like the Coconut palm. The city has an estimated 3,200 Coconut palms. This species is trimmed twice per year in October and April. Trimming removes dead or declining fronds, any nuts, or seed pods, and also lifts the fronds to a 9-3 clock appearance. Date species are trimmed annually with the same standards as the Coconuts. Cabbage or Sable palms, the state tree of Florida, are pruned every other year, again with the same trimming standards as the Coconut palm. The palm trimming schedule for FY2023-24 is below.

<u>Species</u>	Estimated Start Date		
Coconut palms	October 1		
Date Species	December 15		
Coconut palms	April 1		
Cabbage palms	June 15		

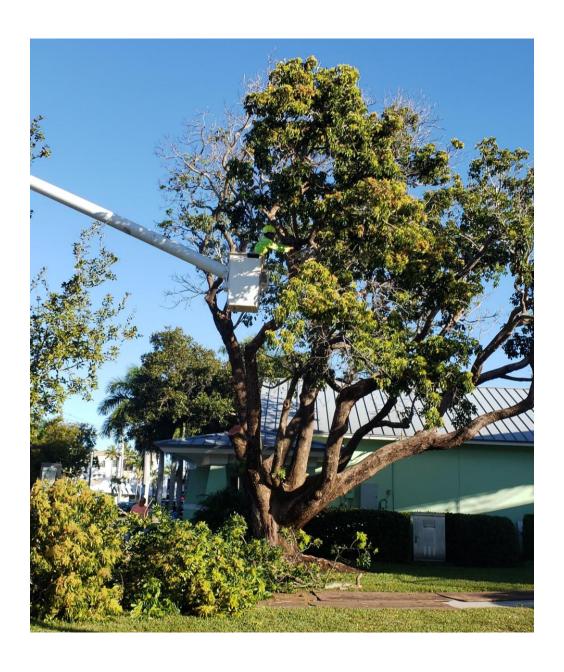


Palm species like the Royal or Foxtail are self-pruning and do not require additional maintenance. However, in high foot traffic areas like 5<sup>th</sup> Avenue South and Baker Park, the City of Naples bands the Royal Palms. Banding is installed on the crown shaft to prevent dead or declining fronds from falling; acceptable banding material includes rubber bungee cords or nylon strap. Palms that are managed in this manner have the bands check and/or changed out 3-5 times per year.



**REMOVAL & STUMP GRINDING** 

The management program for any Urban Forest must include a removal & stump grinding component. The removal of trees or palms can be difficult and even emotional as many trees become a connection to memories of loved ones, life milestones, or happy times. Removal services are utilized for hardwood and palm trees that have died, are in decline, have been significantly damaged by lightning or vehicles or are significantly damaged by wind or storms within City rights-of-way, medians, and parks. Plantings considered a safety hazard must be assessed and removed if the hazard cannot be mitigated. After removal, the stump and exposed roots are ground below grade. The city removed 205 trees in FY2022-2023. Our removal numbers are higher this year than the historic average annualized attrition rate loss of 125 trees due to residual impacts from Hurricane lan. Once a tree is removed, its location is reviewed. If replanting is favorable, the location is recorded as vacant in the inventory for replacement.



## **INVASIVE EXOTIC MANAGEMENT**

The City's greenspace management includes a commitment to the long-term management of invasive exotic plants on City managed property. City staff monitor invasive exotic plants on a continuous basis and remove invasive exotic plants when identified. Invasive exotic management involves removing invasive exotics and regrowth management of park space as well as the removal of Class 1 invasive exotic trees, as designed by the Florida Exotic Pest Plant Council.

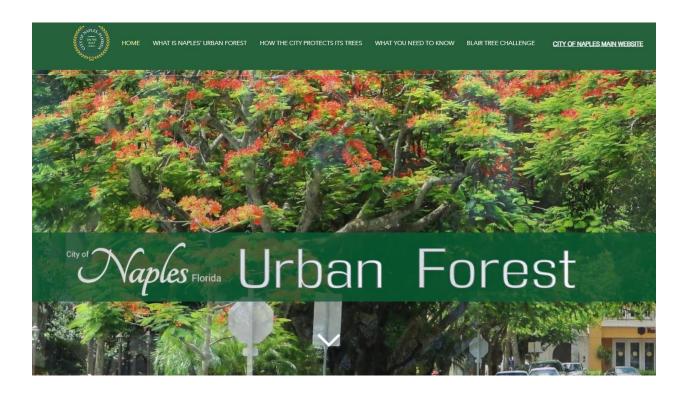
The Naples Preserve, during FY 2015-2016, was contracted to remove exotic species including Ear Leaf Acacia, Melaleuca, Carrotwood, Albizia, Brazilian Pepper, and Downy Rose Myrtle. Maintenance at the site continues to monitor and remove regrowth of the

exotics. Projects to remove tree species that do not occur naturally in the Florida upland habits, pine flatwoods and oak-rosemary scrub, are also being undertaken.

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 allows for better water views and usage of that area. In addition, it promotes the growth of the mangroves already lining these banks; funding continues for exotic management.

In FY 2019-20, a program was developed to allow for the removal of trees and palms within our Urban Forest inventory that are classified as Class 1 invasive exotics by the Florida Exotic Pest Plant Council. The city has removed 34 Class 1 invasive exotic trees. This project remains funded in FY2023-24 in the amount of \$10,000 to remove the remaining 6 trees and complete the removal efforts.

## NAPLESURBANFOREST.COM



The City of Naples developed an Urban Forest web site in 2019; 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 continues as additional information is added for the residents, visitors, and businesses of Naples.



## LOGO

The Naples Urban Forest has a logo! The logo was developed using the image of a Southern Live Oak (Quercus virginiana) tree located in Bowline Bend mini park in the Moorings area. It will be used to identify projects, communications, and events that feature the Naples Urban Forest.

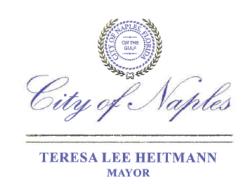
#### **ARBOR DAY 2023**



The City of Naples celebrated Arbor Day with a Royal Poinciana Festival and 100 tree give-a-way. On June 3, 2023, we held the Royal Poinciana Festival at Baker Park. In attendance to help the city celebrate were a few of our local partners in trees; Naples Botanical Gardens, Audubon of the Western Everglades, and the Florida Forest Service.

To continue with the City of Naples centennial celebration, we had a 100 tree give-a-way. The Naples Botanical Gardens grew 100 trees for the city. Species given away were Pimenta doica (Allspice), Pimenta racemose (Bay Rum), and Sideroxylon foetidissimum.

Vice Mayor Mike McCabe was in attendance to read our Arbor Day Proclamation and help celebrate the day.



## 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 the erosion of our precious topsoil by wind and water, reduces heating and cooling costs, cleans the air, producing oxygen and providing 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 celebrates this Arbor Day 2023 by hosting a Royal Poinciana Festival;
  and
- WHEREAS, the Royal Poinciana tree is a strikingly beautiful flowering tree that is beloved by many residents and visitors.
- NOW, THEREFORE, I, Michael McCabe, by virtue of the authority vested in me as Vice Mayor of the City of Naples, Florida, do hereby proclaim June 3, 2023 to be designated as:

#### ARBOR DAY

in the City of Naples and urge all citizens to celebrate Arbor Day and to support efforts to protect our trees and woodlands.

IN WITNESS THEREOF, I have hereunto set my hand this 3rd day of June 2023.

Michael McCabe, VICE MAYOR

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TELEPHONE (239) 213-1000 FAX (239) 213-1010 CELL (239) 351-0600 EMAIL: MayorHeitmann@naplesgov.com



## TREE CITY USA

The City of Naples is proud to have earned the designation of "Tree City USA" for the 26<sup>th</sup> consecutive year. The award is 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."

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 from all 50 states, Washington D.C., and Puerto Rico 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 16 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 the 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 fourth 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.



## **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.
    - **COMPLETE:** Tree Fill-in 2023 planting was developed and planted using the 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:** Staff are working with the Lake Park Neighborhood Associations to be the first area to change species. There are 2 streets with Royal Palms that will be presented to the City Council in the Fall of 2023 for a change of species to a canopy tree.
- Continue with the removal and replacement plan, developed in 2019, for the invasive exotic trees inventoried in the Urban Forest.
   COMPLETE: As a result of Hurricane Ian damage, 5 invasive exotic trees were removed. The city has 7 remaining invasive exotic trees to remove. These are
- 3. Review current Urban Forest Management Policies

scheduled for removal in FY2023-24.

a. Up-date Street Tree Species Designation List
 <u>COMPLETED:</u> City Council approved the up-dated Designated Street
 Tree Program on 12/5/2022, Resolution # 2022-14986

# **2024 Action Plan Summary**

The following represents the Parks, Recreation, & Facilities Department 2024 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 Tree Protection Ordinance.
- 4. Develop hurricane preparedness and "Helpful Hints" web site and literature.

## ATTACHMENT 1

## **Urban Tree & Palm Inventory**

North Town Country		2004	2000	2000	% Of
Naples Tree Species	2020	2021	2022	2023	2023 Total
African Tulip Tree	1	1	1	1	<b>Total</b> 0.00%
Allexandra Palm	73	117	123	150	0.72%
Areca Palm	39	39	38	38	0.12%
Australian (Tropical) Almond	10	10	10	9	0.04%
Australian Tree Fern	1	1	1	1	0.00%
Bahamian Strongback	1	0	0	0	0.00%
Bald (Common) Cypress	140	140	140	140	0.67%
Bamboo Species	2	2	2	2	0.01%
Banyan	5	5	2	5	0.02%
Bay Rum		9	9	9	0.04%
Big-Leaf (Africian) Mahogany	8	8	8	8	0.04%
Bismarck Palm	28	28	28	28	0.13%
Black Mangrove	3	3	3	3	0.01%
Black Olive	245	242	242	238	1.14%
Blue Latan Palm	1	1	1	1	0.00%
Bridalveil		13	27	27	0.13%
Canary Island Date Palm	14	14	14	14	0.07%
Carpentaria Palm	56	52	52	50	0.24%
Carrotwood	17	13	0	0	0.00%
Chinese Fountain (Fan) Palm	116	114	114	113	0.54%
Chinese Hibiscus	1	1	1	1	0.00%
Christmas Palm	80	80	80	80	0.38%
Coconut Palm	3232	3331	3357	3284	15.79%
Copperpod	54	58	58	56	0.27%
Crape Myrtle (including hybrids)	34	36	38	38	0.18%
Cuban Laurel	692	707	710	705	3.39%
Cuban Pink Trumpet Tree	198	205	206	208	1.00%
Cuban Royal Palm	5349	5292	5308	5253	25.25%
Dahoon Holly	14	14	8	7	0.03%
Date Palm	6	6	6	5	0.02%
East Palatka Holly	285	272	267	244	1.17%
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%
Filibusta Palm	2	1	1	1	0.00%
Florida Strangler Fig	9	9	10	9	0.04%
Florida Thatch Palm	238	231	236	212	1.02%
Formosa Flamegold (Golden Rain Tree)	19	19	18	18	0.09%
Foxtail Palm	807	811	801	767	3.69%

					% Of
Naples Tree Species	2020	2021	2022	2023	2023
					Total
Geiger Tree	21	31	39	34	0.16%
Giant Bird of Paradise	11	11	11	10	0.05%
Giant Dioon	2	2	2	2	0.01%
Golden Shower Tree (Shower of Gold)	48	50	49	48	0.23%
Green Buttonwood	139	139	161	183	0.88%
Gumbo-Limbo	81	114	115	112	0.54%
Hispaniola Palmetto	1	1	1	1	0.00%
Hong Kong Orchid Tree	30	30	33	30	0.14%
Hurricane Palm	8	8	8	3	0.01%
Indian Laurel Fig	1	1	1	1	0.00%
Jacaranda	16	16	16	8	0.04%
Japanese Privet (Ligustrum)	247	244	257	243	1.17%
Java Plum	5	5	4	2	0.01%
Key Thatch Palm	3	3	3	3	0.01%
Lady Palm	5	5	5	5	0.02%
Laurel Oak	27	26	26	27	0.02%
Leadball Tree	3	3	3	0	0.00%
Madagascar Olive	12	12	12	12	0.06%
Mahogany	1800	1807	1825	1801	8.66%
Mango	5	5	6	1	0.00%
Mediterranean Fan Palm	1	1	1	1	0.00%
Medicerranean Fam Faim  Medjool Date Palm	6	6	6	6	0.00%
Mexican Fan (Washington) Palm	59	59	52	52	0.05%
	1	1	1	1	0.25%
Mixed Mangrove Species	2	2	2	2	0.00%
Monkey Apple	1	1	1	1	0.01%
Montezuma Cypress	275	304	335	298	
Montgomery Palm	2759				1.43%
Palmetto (Sabal/Cabbage Palm)		2729	2650	2645	12.71%
Paradise Tree	8	9	9	4	0.02%
Paurotis Palm	12	12	12	12	0.06%
Peregrina (Jatropha)	76	73	73	67	0.32%
Pigmy Date Palm	260	255	225	224	1.08%
Pink Powderpuff	1	1	1	1	0.00%
Pink Trumpet Tree	19	24	27	13	0.06%
Plumeria	5	3	3	3	0.01%
Pond Apple	9	9	8	8	0.04%
Pond Cypress	5	5	5	5	0.02%
Pongam	33	32	32	28	0.13%
Ponytail Palm	2	2	2	1	0.00%
Purple Glory Tree	1	1	1	1	0.00%
Queen Crape Myrtle	10	10	10	10	0.05%
Queen Palm	5	3	3	3	0.01%
Queensland Umbrella Tree	14	14	14	13	0.06%
Red Cluster Bottlebrush	50	50	50	50	0.24%
Red Maple	11	11	11	11	0.05%
Rosea Trumpet Tree	3	3	3	3	0.01%
Royal Poinciana	221	224	233	235	1.13%
Rubber Plant	15	15	15	14	0.07%
Rustyleaf Fig	19	19	19	19	0.09%

					% Of
Naples Tree Species	2020	2021	2022	2023	2023
					Total
Sabicu	1	1	1	1	0.00%
Sand Live Oak	36	36	36	36	0.17%
Santa Maria (Calophyllum)	16	18	18	12	0.06%
Satinleaf	41	41	40	27	0.13%
Saw Palmetto	4	4	4	4	0.02%
Screw Pine	11	12	12	12	0.06%
Sea Grape	113	142	142	133	0.64%
Sea Hibiscus	2	3	3	3	0.01%
Sea Myrtle	1	1	1	0	0.00%
Senegal Date Palm	8	8	9	8	0.04%
Shady Lady Black Olive	439	473	475	461	2.22%
Shavingbrush Tree	1	1	1	1	0.00%
Silver Buttonwood	87	103	103	100	0.48%
Silver Date Palm	6	6	6	6	0.03%
Silver Palm	3	2	0	0	0.00%
Silver Trumpet Tree	32	31	32	30	0.14%
Simpson Stopper	30	47	48	42	0.20%
Small-leafed Pitch Apple	1	1	1	1	0.00%
Solitaire Palm	530	528	526	505	2.43%
Southern Live Oak	922	937	938	932	4.48%
Southern Slash Pine	105	104	105	94	0.45%
Spanish Bayonet	1	1	1	0	0.00%
Strawberry Guava	43	45	45	44	0.21%
Sweet Viburnum	4	4	4	3	0.01%
Taiwan Sugar Palm	1	1	1	1	0.00%
Tamarind	2	2	7	12	0.06%
Texas Olive	1	1	1	1	0.00%
Tipu	15	15	15	13	0.06%
Toog; Bishopwood	18	12	9	3	0.01%
Traveler's Tree	9	9	9	1	0.00%
Triangle Palm	8	6	6	5	0.02%
Trident Maple	1	1	1	1	0.00%
Vera Tree	12	29	33	30	0.14%
Weeping Bottlebrush	13	49	91	93	0.45%
Weeping Fig	27	26	25	25	0.12%
Wild Tamarind (Lysiloma)	15	17	21	22	0.11%
Winin Palm	1	1	1	1	0.00%
Woman's Tongue	4	4	1	1	0.00%
Yellow Latan Palm	1	1	1	1	0.00%
Yellow Poinciana	2	2	2	2	0.01%
Ylang-ylang				5	0.02%
Zulu Fig	2	2	2	2	0.01%
Vacant	1,374	1,064	88	134	
	00 777	04.00=	04.412	00.001	
Total	20,773	21,067	21,143	20,804	

Tree Category	2020	2021	2022	2023	% Of 2023 Total
Vacant	1,374	1,064	88	134	
Palm Trees	14,036	14,098	14,045	13,794	66.30%
Understory Trees	919	995	1041	969	4.66%
Majorstory Trees	5,818	5,974	6,057	5,907	28.39%

Tree Location	2020	2021	2022	2023	% Of 2023 Total
Median and Island Trees	2,737	2,814	2,799	2,721	13.08%
Park Trees	4,510	4,517	4,550	4,393	21.12%
ROW Trees	13,526	13,736	13,794	13,690	65.80%

Top 10 Species	Count	% Of 2023 Total
Cuban Royal Palm	5253	25.25%
Coconut Palm	3284	15.79%
Palmetto (Sabal/Cabbage Palm)	2645	12.71%
Mahogany	1801	8.66%
Southern Live Oak	932	4.48%
Foxtail Palm	767	3.69%
Cuban Laurel	705	3.39%
Solitaire Palm	505	2.43%
Shady Lady Black Olive	461	2.22%
Montgomery Palm	298	1.43%

