



Fort Myers Beach Management & Planning Session

Diamondhead Beach Resort
2000 Estero Blvd.
Fort Myers Beach, FL 33931

AMENDED Agenda

Thursday, August 10, 2023

9:00 AM

ORDER OF BUSINESS

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. ITEMS FOR DISCUSSION

A. Presentation: Estero Island Garden Club

Cathy Turner, Vice President of Communications will speak about native plants

B. Presentation: FY23/24 Budget

Preparation for the upcoming FY23/24 Town of Fort Myers Beach Budget

C. Presentation: FY 23-24 Health Insurance Renewal

Review of Health Insurance Renewal Recommendations for 23-24 FY

D. Public/Elected Official participation via phone, Zoom, etc.

A discussion regarding public and elected office participation at meetings via phone, Zoom, etc.

E. ResilientLee: Recovery Task Force

An open discussion of the ResilientLee Recovery Task Force

NEW F. Special Exceptions/Variances/CPDs

The Town Attorney will provide a briefing and an overview of the definitions and appropriate uses of "special exceptions", "variances", "CPDs" and "amendments to the Comprehensive Plan". The Town Attorney will also discuss another tool available to the Town which is included in the Town's current land development code - "Development Agreements".

G. Presentation: Let's Go FMB

Pink Zones

- H. Discuss Proposed Updates to Tree Ordinance
Discuss Updates to Tree Ordinance
- I. Proposed Ordinance: Vegetation and Trees
Discuss Vegetation and Tree Requirements for Single Family Homes
- J. Discuss Water Management District's request to update the Town Water Conservation and Water Shortage Ordinances.
Discuss Water Management District's request to update the Town Water Conservation and Water Shortage Ordinances.

IV. AGENDA MANAGEMENT

- A. August 2023

V. ADJOURNMENT

NOTE: THIS MEETING IS STREAMED LIVE ON YOUTUBE.

IF A PERSON DECIDES TO APPEAL A DECISION MADE BY THE COUNCIL IN ANY MATTER CONSIDERED AT THIS MEETING/HEARING, SUCH PERSONS MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDING IS MADE, TO INCLUDE THE TESTIMONY AND EVIDENCE UPON WHICH ANY SUCH APPEAL IS TO BE BASED.



For special accommodation, please notify the Town Clerk's Office at least 72 hours in advance. (239) 765-0202

In accordance with the Americans with Disabilities Act (ADA), persons needing a special accommodation to participate in the Board's proceedings should contact the Town Clerk's Office not later than three days prior to the proceedings.

1. **Requested Motion:**

Meeting Date: August 10, 2023

Cathy Turner, Vice President of Communications will speak about native plants

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

5. **Background:**

Attachments:

1. EIGC Advisor to Town of FMB

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

Gretchen R.H. Vose, Town Attorney

Date: August 03, 2023

Amy Baker, Town Clerk

Date: August 03, 2023

Andy Hyatt, Town Manager

Date: August 03, 2023

**Discussion of EIGC Advisory Services with the
Town of Fort Myers Beach
and its Advisory Committees**

Town Council M&P session on August 10, 2023

Estero Island Garden Club (EIGC)

Email: EsteroIslandGardenClub@Gmail.com

Website: [https://www.ourgrouponline.org/ EsteroIslandGardenClub/Index.htm](https://www.ourgrouponline.org/EsteroIslandGardenClub/Index.htm)

Facebook: Estero Island Garden Club

Cathy Turner
EIGC Vice President Communications

Estero Island Garden Club began in 1959. 80% of our membership prior to Hurricane Ian have renewed their membership for the 2023/2024 club year even though many are not yet back on the Island!

Today we focus on education, conservation and serving the gardening community.

We provide resources and opportunities for civic and environmental responsibility.

Our website has reference material.

We collaborate with commercial/institutional entities as they develop their landscape plans.

We also plan to invite the Town and community to a group presentation in the fall on the basics principles and examples on choosing the right plant for the right place and at the right time.

Our meetings have been open to the public and once a month we host a speaker on gardening and vegetation topics. We will host our first meeting post Ian in November at the Mound House. We hope to eventually return to the Library when they are back open.

EIGC has been responsible for and maintained various gardens which sadly are gone except for the Memorial Garden at Bay Oaks Recreation Building. We have cleaned it out and will spruce it up in fall.

EIGC would be happy to serve as an advisor for the Town of Fort Myers Beach, the Town Council and its advisory committees.

We have have considerable expertise with local vegetation including all native plants. We have a vast number of professional contacts with whom we consult.

We have many members with extensive background with vegetation in our community plus a few “Master” Gardeners who are excited to participate in the beautification of our Island with vegetation on an advisory/consultation basis. We are not able to provide any of the labor preparing gardens and doing the planting.

We hope to assist the Town and the community in making great plant selections for great locations which are easy to establish and require little maintenance.

Our club is not funded beyond its normal operating expenses. We are not a 501c3. We cannot fund any Town vegetation projects, but would be happy to assist in fundraising where I’m sure we can realize the funds needed for small-scale vegetation plans.

Some thoughts to begin beautifying with Vegetation:

Start an “Adopt a Block Revitalization with Vegetation” campaign along Estero Boulevard seeking volunteers to plant (replant) and maintain (weed) the area between the curb and the sidewalk. This initiative was started before Ian and needs to be revisited. Plants to be provided through funds raised. This would need Town participation to water. Even all-native plants need to be watered until well established.

Start an “Adopt a Beach Access Revitalization with Vegetation” campaign. Again, would need Town assistance with watering. All-native plants, trees and Shrubs to be provided by funds raised. (This would be separate from the beach access clean up adoptions by Lee County I believe.)

For Town property we recommend at least 75% all native and 25% Florida Friendly plantings. We do not recommend plants that are not accustomed to be weather in South west Florida - “northern plants”! Again, right plant, right place, right time.

We do not generally recommend plantings in pots as they require more maintenance and watering.

We are confident that with our advice we can assist the Town and its community with beautifying the Island with vegetation taking less time, less effort, costing less, and producing long lasting, beautiful vegetation.

1. **Requested Motion:**

Meeting Date: August 10, 2023

Preparation for the upcoming FY23/24 Town of Fort Myers Beach Budget

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

5. **Background:**

Attachments:

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

Amy Baker, Town Clerk

Date: August 02, 2023

Andy Hyatt, Town Manager

Date: August 02, 2023

1. **Requested Motion:**

Meeting Date: August 10, 2023

Review of Health Insurance Renewal Recommendations for 23-24 FY

Why the action is necessary:

The current health insurance plan expires 9/30/2023. In depth review of current plans and other options in the market has been completed to ensure we secure the most competitive rates and comprehensive plans that align with our staff's needs.

What the action accomplishes:

Health Insurance renewal and coverage for the 23-24 FY for Town of Fort Myers Beach benefit eligible employees.

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

Insurance renewal and coverage for the 23-24 FY for Town of Fort Myers Beach benefit eligible employees.

5. **Background:**

As the new Human Resources Manager of the Town of Fort Myers Beach, I find it important to explore the health insurance market thoroughly to ensure we secure the most competitive rates and comprehensive plans that align with our staff's needs. With the insurance policy set to expire on 9/30/2023, We have been working with our agent of record to go out to the insurance market and review carrier options to ensure the Town receives the most advantageous insurance rates and plans available. Below is my detailed plan in which we have been working on the last few months:

1. Assessment of Current Policy: Review existing insurance policy and its coverage to understand its strengths and limitations.
2. Consultation with Insurance Experts: Seek input from insurance experts or brokers to gain insights into the latest insurance trend and market conditions
 - Evaluate options to potentially obtain more comprehensive coverage or better rates based on the municipality's specific needs.
3. Comparison of Insurance Providers: Present a comparison of quotes and proposals from multiple insurance providers to ensure a thorough assessment of available options.
4. Public Engagement and Transparency: Communicate the insurance renewal process, its impact on the municipality, and any potential changes in coverage for Town staff.
5. Budget Consideration: Present the financial implications of the insurance renewal and any potential adjustments to the budget that may be necessary.
 - Recommend a course of action that balances cost effectiveness with adequate coverage.
6. Council Decision: Request council members to vote on the renewal of the insurance policy, considering the recommendations and findings presented.
 - Negotiate and finalize the insurance renewal contract with the chosen provider.

Thank you for your attention to this matter. I look forward to discussing the insurance renewal and recommendations at the upcoming meeting on 8/10/2023.

Attachments:

Financial Impact:

6. Alternative Action

Town would renew with the current insurer/consortium and absorb a 13.8% increase.

7. Staff Recommendations:

8. Recommended Approval:

Joe Onzick, Finance Director

Date: July 31, 2023

Gretchen R.H. Vose, Town Attorney

Date: August 03, 2023

Amy Baker, Town Clerk

Date: August 03, 2023

Andy Hyatt, Town Manager

Date: August 03, 2023

1. **Requested Motion:**

Meeting Date: August 10, 2023

A discussion regarding public and elected office participation at meetings via phone, Zoom, etc.

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

5. **Background:**

Attachments:

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

Gretchen R.H. Vose, Town Attorney

Date: August 03, 2023

Amy Baker, Town Clerk

Date: August 03, 2023

Andy Hyatt, Town Manager

Date: August 03, 2023

1. **Requested Motion:**

Meeting Date: August 10, 2023

An open discussion of the ResilientLee Recovery Task Force

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

5. **Background:**

The ResilientLee Support Team appreciated the opportunity to review with you the Initiative development process, key Initiatives and technical briefs, the Resilience Overlay, and federal funds mapping.

Attached you will find materials including July's meeting presentation of the Recovery Task Force, Initiative matrices and supporting projects, and an update on U.S. Small Business Administration data.

The next steps for Recovery Task Force members include:

- **One-on-One Meetings:** The ResilientLee Support Team looks forward to meeting with each member in August to closely review Initiatives and provide analysis on Initiatives that have been identified for your jurisdictions and organizations. Materials related to initiatives will be delivered to you in advance of one-on-one meetings. We are grateful for your time and direction and anticipate robust and productive conversations.
- **Proposed Community Engagement Strategy:** RTF Members will receive a separate email communication from the ResilientLee Support Team today that provides a proposed approach to a second round of community engagement in September. We respectfully request your guidance on the activities and dates identified by next Friday, August 4.

Attachments:

1. Recovery Task Force Meeting Presentation 07282023
2. Emergent Issues July SBA Update
3. Initiative Matrices with Supporting Projects 07262023 (2)

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

Date: August 03, 2023

Gretchen R.H. Vose, Town Attorney

Amy Baker, Town Clerk

Date: August 03, 2023

Andy Hyatt, Town Manager

Date: August 03, 2023



Lee County Recovery Task Force

July 28, 2023

RESILIENT
LEE

RESILIENTLEE.ORG

The background of the slide features a photograph of a large, classical-style building with numerous white columns. The image is slightly blurred and has a dark blue overlay. A thick, solid orange horizontal bar spans the width of the slide, positioned above the main title. Another orange bar is located below the title, featuring a diagonal cut on its right side.

Welcome & Introductions



Pledge of Allegiance

Minutes Approval

Minutes Approval

Review Meeting Minutes

- RTF Meeting June 23, 2023

Approval of Meeting Minutes

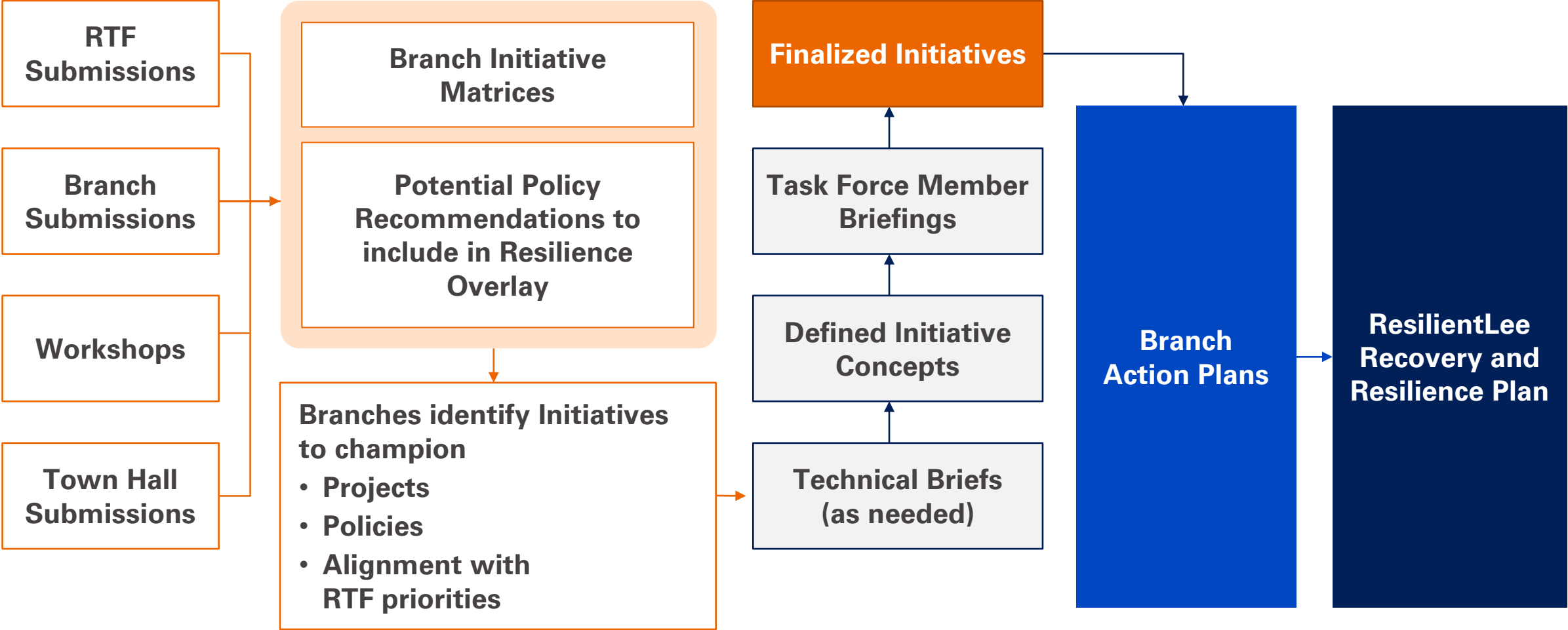
- Posted to Resilientlee.org



The background of the slide features a photograph of a large, classical-style building with many white columns. The image is slightly blurred and has a dark blue overlay. A thick, solid orange horizontal bar spans the width of the slide, positioned above and below the main title text.

Branch Initiative Review

Initiative Development Process Overview



Discussion Questions



Is this feasible?



Is this desirable for the ResilientLee Plan?



Are there any gaps?

Initiatives

Branch members have identified Initiatives to move forward with, aligning with Branch Priorities (see printed packet).

Note: Some Initiatives intersect among Branches.

 **Telehealth / Mobile Clinics**

Resilience Hubs

 **Hydrological / Ecological Conditions**

 **Elevation/Buyout Program**

 **Community Transportation Needs**

Diversify / Harden Communications

How will Initiative goals be achieved?

Initiatives are supported by Projects, Policies, and are in alignment with RTF priorities:

- ✓ Projects include direct actions that support Initiative goals.
- ✓ Policies include regulatory changes or additions to support Initiative goals.
- ✓ Alignment with RTF Priorities include existing projects to be redesigned, funded, and elevated in priority to support Initiative goals.

Telehealth / Mobile Clinics

Priority



Access through mobile services and for special needs environments that includes necessary services and accessibility to facilities built to provide services, pharmacy services, and mental health services .

Received 83 notions of support from community members before RTF approval.

Initiative



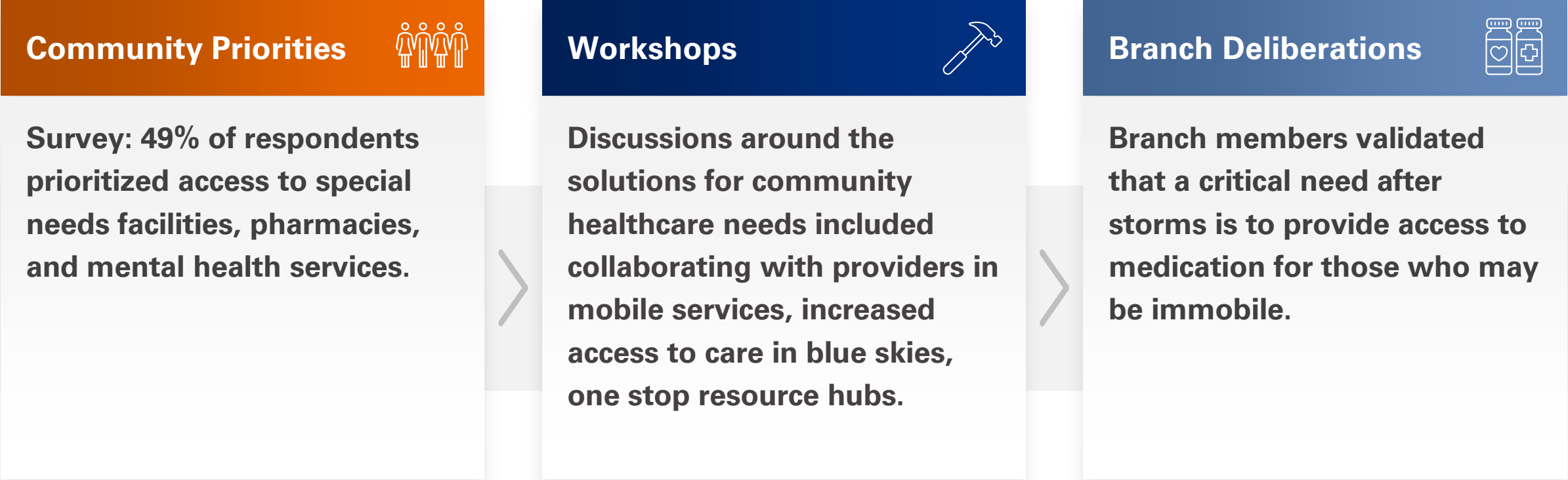
Provide accessible care through telehealth and mobile clinics.

- Branch: Health and Social Services
- Supporting Branch(es): Planning & Capacity, Infrastructure

Initiatives were reviewed/updated by Branch members.

Initiative Development Process

Provide accessible care through telehealth and mobile clinics.



Telehealth / Mobile Clinics Proposed Solutions

Initiative: Provide accessible care through telehealth and mobile clinics.

Mobile Health Fleet Ensure mobile health units are storm protected and can support pharmacies, food distribution, mental health services, triage, emergency transport and other immediate needs after a disaster. Source: Branch Intake Form	Mobile Health Policies & Procedures Develop procedures and policies to support mobile health unit capabilities in both blue skies and gray skies and help coordinate the transition into disaster response. Source: June Branch Meeting	Increased Access in Vulnerable Areas Use mobile health services to provide care in areas with vulnerable populations that are homebound, disproportionately impacted by disasters, and have limited or no access to transportation. Source: Workshop
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Discussion Questions



Is this feasible?



Is this desirable for the ResilientLee Plan?



Are there any gaps?

Resilience Hubs

Priority



Coordination provided by a resilience hub with dependable and real time information and based on prior mapping of critical care infrastructure.

- Resilience hubs: community facilities to support residents, coordinate communication, distribute resources, and provides a look at the nexus of resilience, emergency management, mitigation, and social equity increasing community success before, during, and after disasters.

Received 28 notions of support from community members before RTF approval.

Initiative



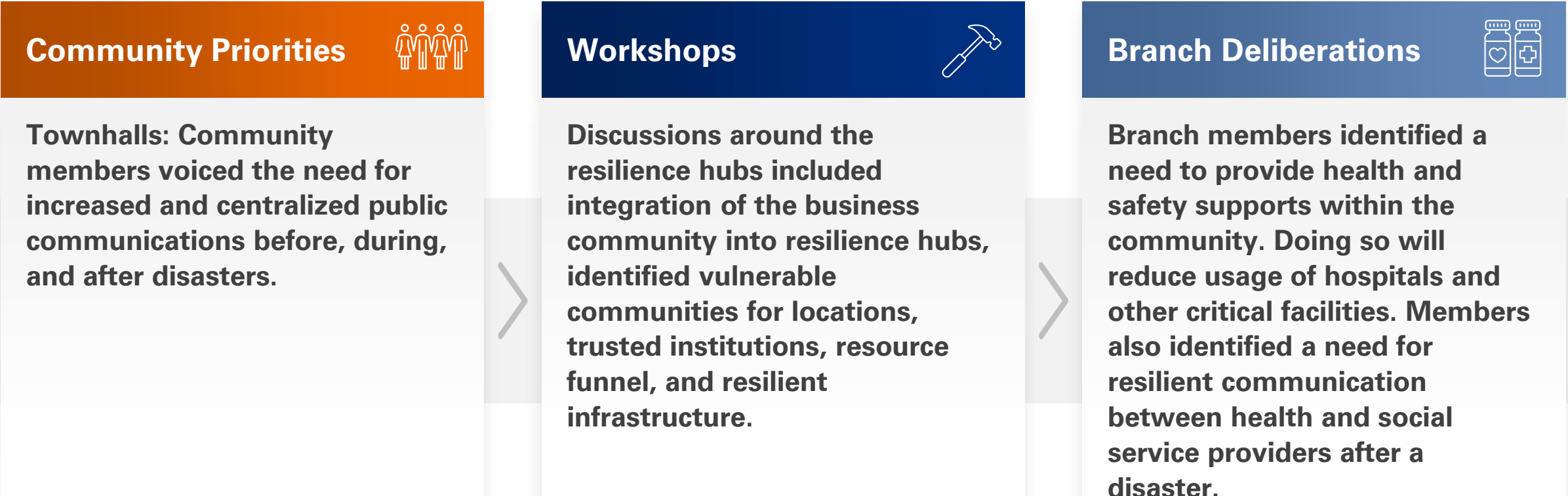
Inventory health and social service assets to create a map of critical care infrastructure and codify a network of resilience hubs that can be called upon during or after an emergency.

- Branch: Health and Social Services
- Supporting Branch(es): Cultural Resources, Infrastructure, Planning & Capacity

Initiatives were reviewed/updated by Branch members.

Initiative Development Process

Inventory health and social service assets to create a map of critical care infrastructure and codify a network of resilience hubs that can be called upon during or after an emergency.



Resilience Hubs Technical Brief



Best Practices

- Facilities that can service residents within and outside the disaster.
- Leverage preexisting, resilient infrastructure with reliable administrative elements.
- Utilize community-owned or non-profit infrastructure through philanthropic support or local funding.
- Developing ties across agencies and sectors to streamline research and efforts.
- Promote understanding of the Hubs.

Relevant Real-World Examples

Miami-Dade County, Florida: Miami's Resilience Hub Network Strategy, an accomplishment of multi-governmental collaboration.

Fulton County, Georgia: Funded through a \$300,000 community grant from the Southeast Sustainability Directors Network and the Southeast Sustainable Communities Fund.

California: Community Resilience Centers fund neighborhood resilience centers that strengthen community connections and can withstand disasters.

Local Leads

- Sustainability Office
- Health Department division
- Emergency Preparedness
- Environmental Service
- Non-for-Profits
- Community Foundation

Resilience Hub Proposed Solutions

Initiative: Inventory health and social service assets to create a map of critical care infrastructure and codify a network of resilience hubs that can be called upon during or after an emergency.

Non-profit Organization Partnership  Leverage the existing community partnerships and network of resources with organizations like the United Way to collaborate on the development of Resilience Hubs. Source: Branch Intake Form	Blue Sky Services  Identify needs and offer blue sky services to support vulnerable community populations including low-to moderate-income, elderly, and disabled. Source: Workshops	Resilience Hub Facility Hardening  Identify funding to harden existing facilities owned by non-profit organizations to be used as Resilience Hubs. Source: Branch Intake Form
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Discussion Questions



Is this feasible?



Is this desirable for the ResilientLee Plan?



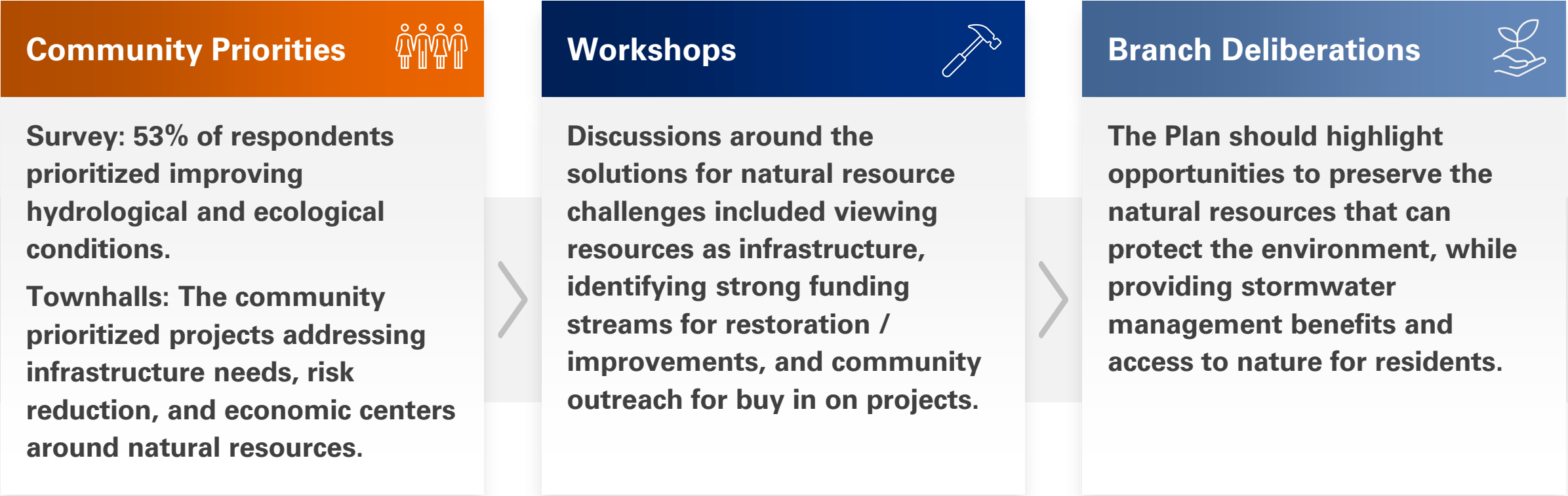
Are there any gaps?

Hydrological / Ecological Conditions

Priority 	Initiative 
Direct actions to improve hydrological and ecological conditions Received 172 notions of support from community members before RTF approval.	Identify direct actions to improve hydrological and ecological conditions (e.g., rails to trails, floodplain acquisitions, mangrove restoration etc.). • Branch: Natural Resources • Supporting Branch(es): Infrastructure, Housing, Planning & Capacity, Economic Recovery Initiatives were reviewed/updated by Branch members.

Initiative Development Process

Identify direct actions to improve hydrological and ecological conditions.



Green Infrastructure Technical Brief



Best Practices

- Constructed Wetlands
- Bioswales
- Rain Gardens and Planter Boxes
- Permeable Pavements
- Urban Tree Canopy
- Green Roofs
- Citizen and Community Participation and Education 9,000 lineal feet of bioswales in fall 2020.

Relevant Real-World Examples

Constructed Wetlands: Curry Lake in Babcock Ranch serves as a model for surface-water management strategies. About 70 acres of land have been rehydrated to previous conditions.

Bioswales: Cape Coral launched a pilot program funded by \$2.2 million in Total Maximum Daily Load grant funding from the Department of Environmental Protection to replace 1,600 catch basins and install approximately 9,000 lineal feet of bioswales in fall 2020.

Local Leads

- Lee County Natural Resources Department
- Lee County Utilities Department
- Municipal Public Works Departments

Regional Leads

- Southwest Florida Water Management District Agencies
- Florida Gulf Coast University Water School
- Collaboratory
- University of Florida FIBER

Hydrological / Ecological Conditions

Initiative: Identify direct actions to improve hydrological and ecological conditions.

Rail to Trails  Purchase, develop, and maintain existing Seminole Gulf Rail corridors into multi use network of trails and stormwater drainage infrastructure to improve stormwater management and mitigate flooding. Source: Branch Intake Form	Protect / Restore Coastal Wetlands  Identify and acquire coastal wetlands to protect from coastal development and reduce impact of future storm events. Source: Project Intake Form	Reduce Nutrient Pollution  Implement green infrastructure that reduces nutrient loading in water ways to address red tide and harmful algae blooms (HABs). Source: Branch Meetings
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Discussion Questions



Is this feasible?



Is this desirable for the ResilientLee Plan?



Are there any gaps?

Elevation / Buyout Program

Priority

Address workforce housing issues and development incentives for vulnerable populations and communities, particularly regarding homeless individuals.

Received 147 notions of support from community members before RTF approval.

Initiative

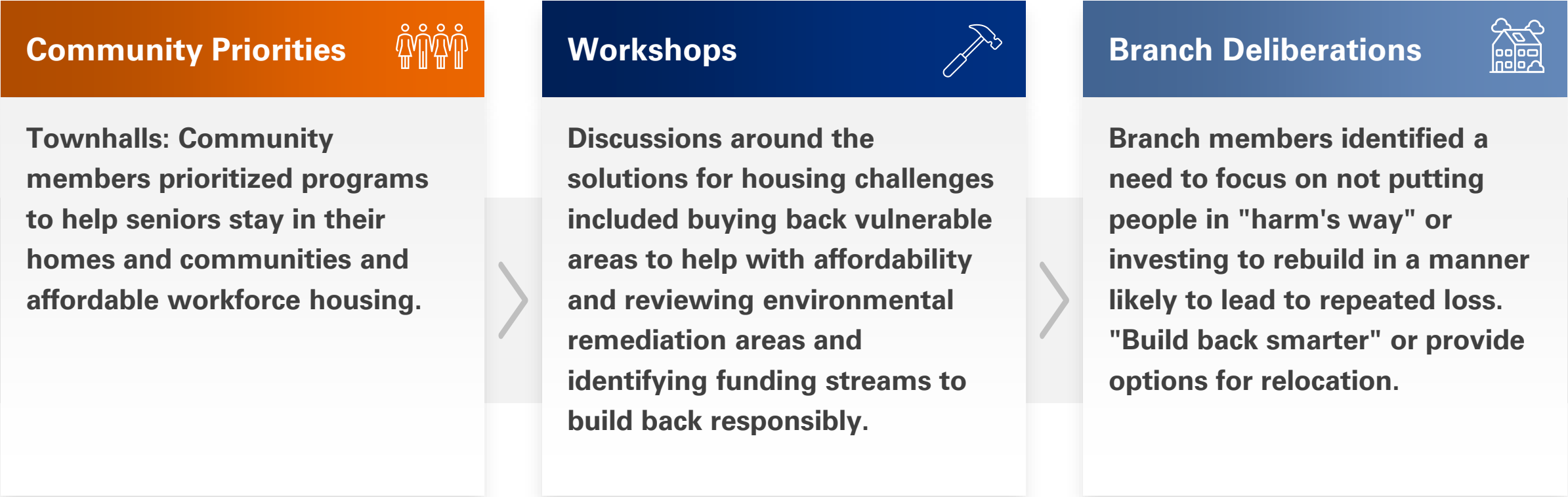
Create an elevation and/or buyout program.

- Branch: Housing
- Supporting Branch(es): Natural Resources, Infrastructure, Planning & Capacity

Initiatives were reviewed/updated by Branch members.

Initiative Development Process

Create an elevation and/or buyout program.



Elevation / Buyout Program

Initiative: Create an elevation and/or buyout program.

Buyout Program

\$

Develop a voluntary buyout program allowing workforce housing residents to sell their properties to municipalities, reducing future funding.

Source: Project Intake Form

Elevation Program

↑

Mitigate flooding in ground level single family homes by elevating properties through an elevation program that helps fund projects.

Source: Project Intake Form

Buyout Technical Brief

Best Practices

- Identifying properties and the degree of reduction in risk of the acquisition.
- An initial assessment and survey of interested property-owners.
- Identifying a plan for relocation and resources available to assist residents.
- Maintaining an open space in perpetuity.
- Relocating residents outside of a local jurisdiction.
- Identifying a timeline for application submissions.

Relevant Real-World Examples

City of Bonita Springs: Voluntary Home Buyout Program acquired property from low and moderate-income households in high-risk flood areas.

Department of Public Safety, North Carolina: The Strategic Buyout Program offered eligible property owners, located in flood-prone areas, the chance to sell their home and relocate to a safer area in fall 2020.

City of Panama City: Purchased 21 properties suffering from repetitive flooding since Michael. Land will be turned into a community park that intentionally floods to reduce impacts to neighboring residences.

Funding

CDBG-DR

- Focused on long-term recovery
- Fund supplement and fill remaining gaps

Hazard Mitigation Grant Program

- Focused on long-term recovery
- Disaster-related grant

Flood Mitigation Assistance

- Focused on repetitive and severe repetitive loss property
- Annual competitive grant that provides funding to all 50 states

Discussion Questions



Is this feasible?



Is this desirable for the ResilientLee Plan?



Are there any gaps?

Community Transportation Needs

Priority



Long-term improvements for livability.

Received 72 notions of support from community members before RTF approval.

Initiative



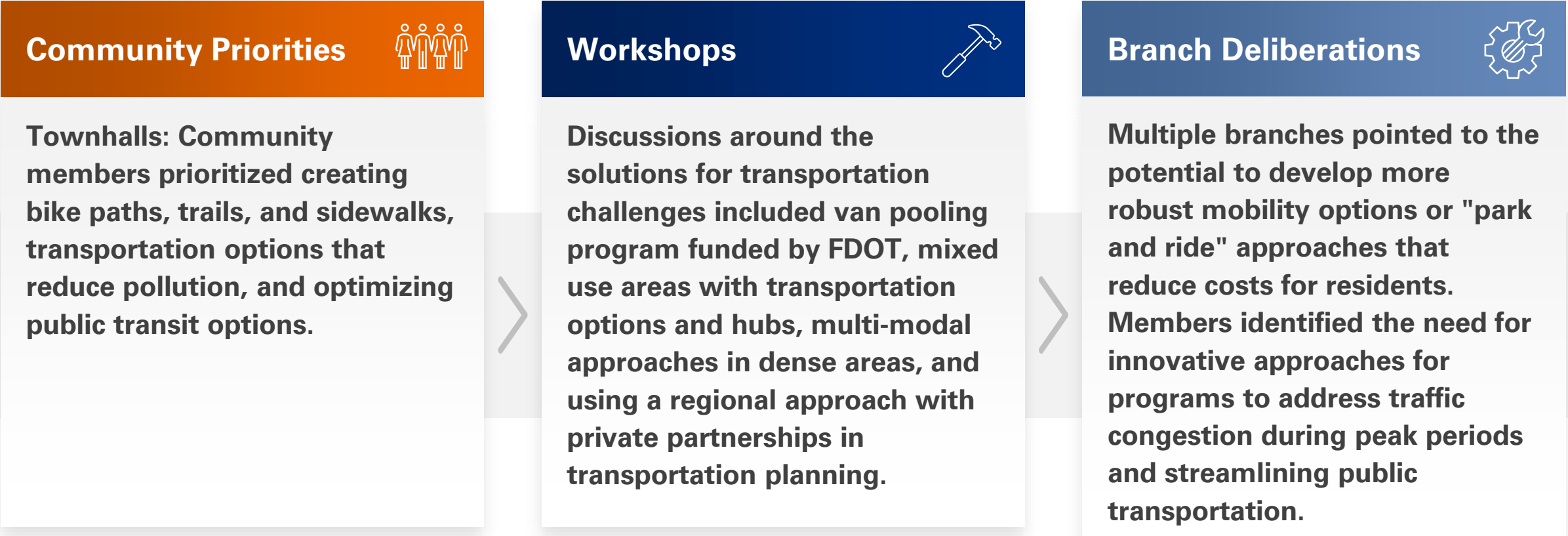
Assess community transportation needs, accounting for projected growth, to improve livability.

- Branch: Infrastructure
- Supporting Branch(es): Planning & Capacity, Natural Resources, Education & Workforce, Economic Recovery, Housing, Cultural Resources, Health & Social Services

Initiatives were reviewed/updated by Branch members.

Initiative Development Process

Assess community transportation needs, accounting for projected growth, to improve livability.



Transportation Technical Brief



Best Practices

- Carpooling
- Vanpooling
- Flexible Work Schedules
- Mass Transit
- Working From Home
- Bicycling/Walking
- Park & Ride Facilities
- Guaranteed Ride Home

Relevant Real-World Examples

Commute Tampa Bay: This program is a free, public service from the Tampa Bay Area Regional Transit Authority (TBARTA). Findings: the more people who vanpool, the more traffic congestion is reduced.

Commercialized Ride Share and Carpooling Programs: Vanpooling with GoTriangle and Commute with Enterprise programs are easy and cost-effective rideshare programs. The purpose of these programs is to provide travel choices to ensure mobility, sustain the quality of the environment, preserve community values, and reduce energy consumption.

Local Leads

- Lee Tran
- The Lee County Metropolitan Planning Organization
- Lee County Department of Transportation
- Municipal Public Works and Transportation departments

Community Transportation Needs

Initiative: Assess community transportation needs, accounting for projected growth, to improve livability.

Multi Modal Transportations 	Mobility Hub & Community Center 	Freight Transportation 
Connect areas with creative solutions to reduce commute times and account for population growth including third party partnerships, “park and ride” hubs, and creating a multi-modal mobility coalition.	Construction of a 3-level structure to include a 2-level parking garage and a safe room, commercial kitchen, and community center for mixed use to occupy the third level. The parking garage will create a Mobility Hub in a neighborhood developing towards Family Recreation and Accessibility.	Incorporate railways in freight transportation to expand capabilities and reduce transportation load on roadways.
Source: Branch Intake Form	Source: Project Intake Form	Source: Workshops

Discussion Questions



Is this feasible?



Is this desirable for the ResilientLee Plan?



Are there any gaps?

Diversify / Harden Communications

Priority



Preserving, hardening, and integrating redundant systems into critical infrastructure, such as water, power, transportation, communications, medical facilities, and sanitary infrastructure systems, while including a holistic approach to both public and private providers of services.

Received 285 notions of support from community members before RTF approval.

Initiative



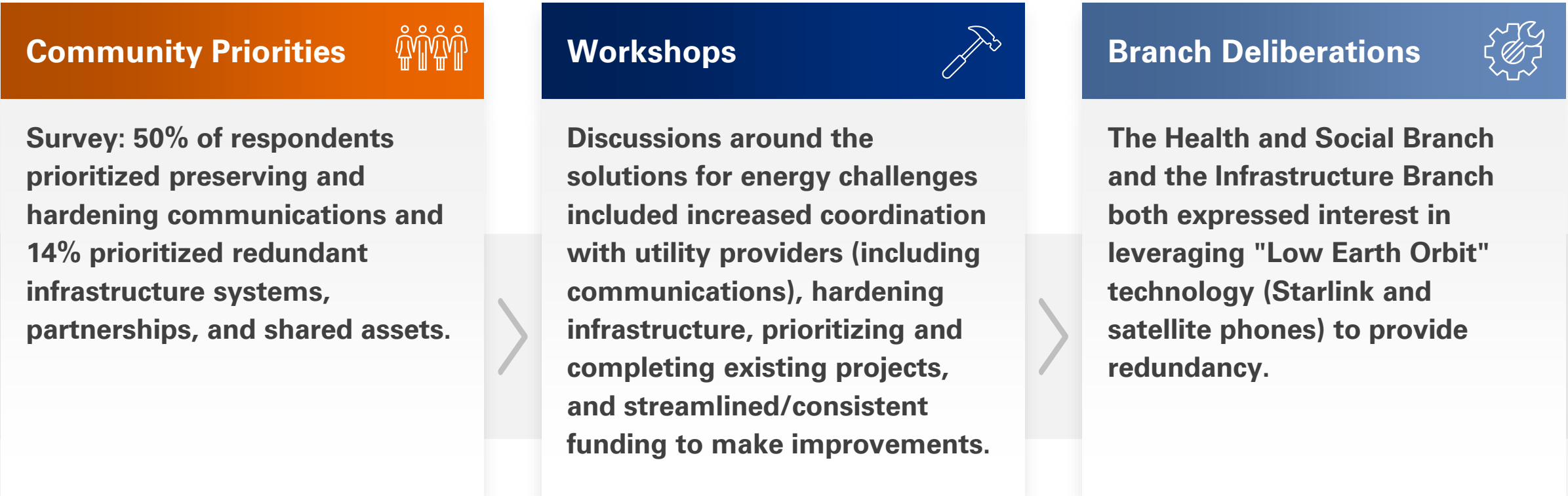
Diversify and harden communication infrastructure to enable continued operations with new technologies, private sector contracts, and enhanced infrastructure to reduce service disruptions.

- Branch: Infrastructure
- Supporting Branch(es): Planning & Capacity, Health & Social Services, Education & Workforce, Economic Recovery

Initiatives were reviewed/updated by Branch members.

Initiative Development Process

Diversify and harden communication infrastructure to enable continued operations with new technologies, private sector contracts, and enhanced infrastructure to reduce service disruptions.



Diversify / Harden Communications

Initiative: Diversify and harden communication infrastructure to enable continued operations with new technologies, private sector contracts, and enhanced infrastructure to reduce service disruptions.

Satellite Communications

Analyze Low Earth Orbit (LEO) satellite technologies to identify best providers that meet community needs and support first responders/critical facilities in immediate disaster response operations.

Source: Project Intake Form

Cell Tower Expansion

Construct additional cell towers to improve services in remote areas, improve infrastructure resilience, co-locate towers near resource hubs, and increase oversight on restoration efforts.

Source: Branch / Project Intake Form

911 System Improvements

Increase the 911 system line capacities to support neighboring counties during disasters and develop pre-recorded emergency messages to assist community members with guidance on how to receive assistance in case of system overload.

Source: Project Intake Form

Communications Technical Brief



Hurricane Ian Challenges

- Restoration efforts should be coordinated with interdependent partners (transportation and energy) to align priorities and streamline services.
- Oversight on restoration efforts was limited due to lack of infrastructure ownership.
- 911 system technology did not go offline but system lines were overwhelmed.

Best Practices

- Low Earth Orbit (LEO) Satellites
- County ownership of infrastructure to increase resilient construction and restoration oversight
- Co-locating Cell/ Radio Towers to Streamline Restoration Efforts
- 911 System Capabilities/Capacities and Partnerships
- Wellness Check Reconciliation
- Solar Powered Towers
- Drone Reconnaissance Capabilities

Local Leads

- Lee County Public Safety

Support Partners

- Communication Service Providers
- Municipal Police Departments
- Lee County Department of Transportation
- County/Municipal Public Works
- Private Contractors
- Florida State Emergency Support Function 2: Communications

Discussion Questions



Is this feasible?



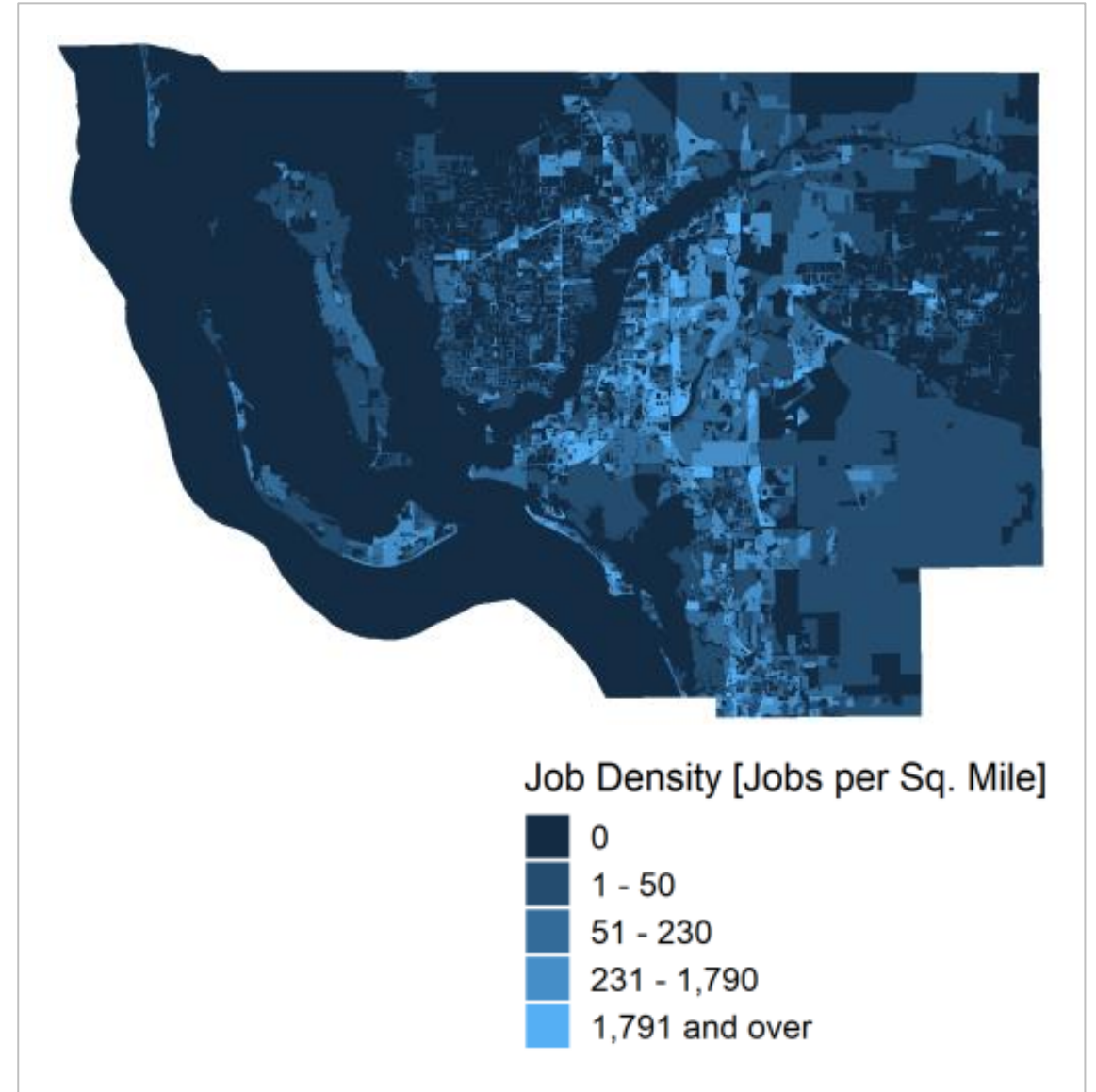
Is this desirable for the ResilientLee Plan?



Are there any gaps?

Resilience Overlay

- Mapping community challenges and characteristics provides a visualization of how different community elements intersect geographically.
- Overlays can include layers like job densities, to inform key decisions (e.g., where should workforce housing be prioritized?)



Resilience Overlay

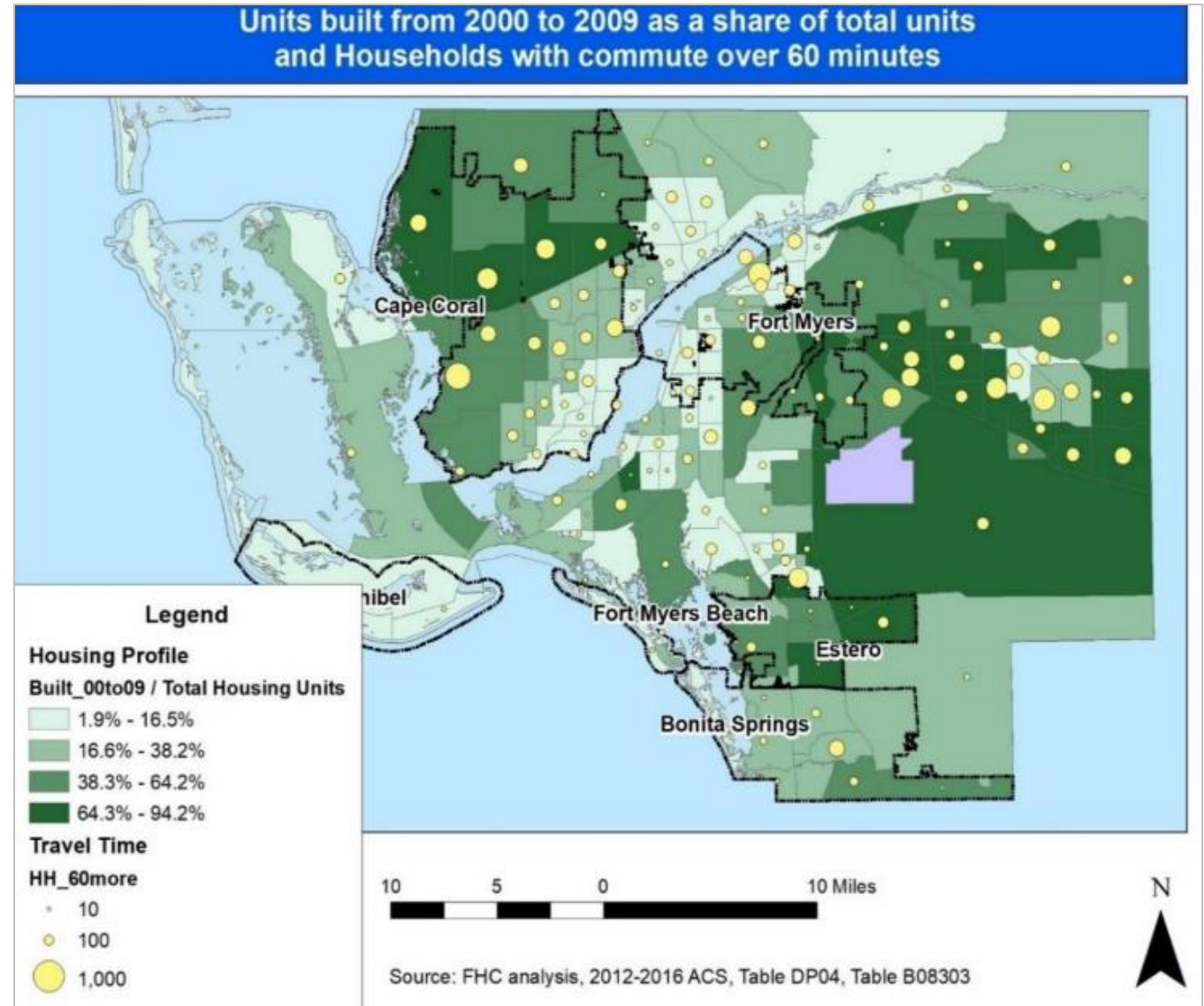
- Overlay map areas that are at risk of natural disasters. Other key vulnerabilities are also mapped.
- Policy and process improvement recommendations are then added to provide an understanding of where certain actions should be prioritized.
- Some of the Initiatives recommended by the Branches can be supported by a regional policy or process improvement approach and captured in the "Resilience Overlay."



The Planning & Capacity Branch is designing a Resilience Overlay to capture these Initiatives and show on maps where they would be most important to implement and enact.

Overlay Example (1 of 2)

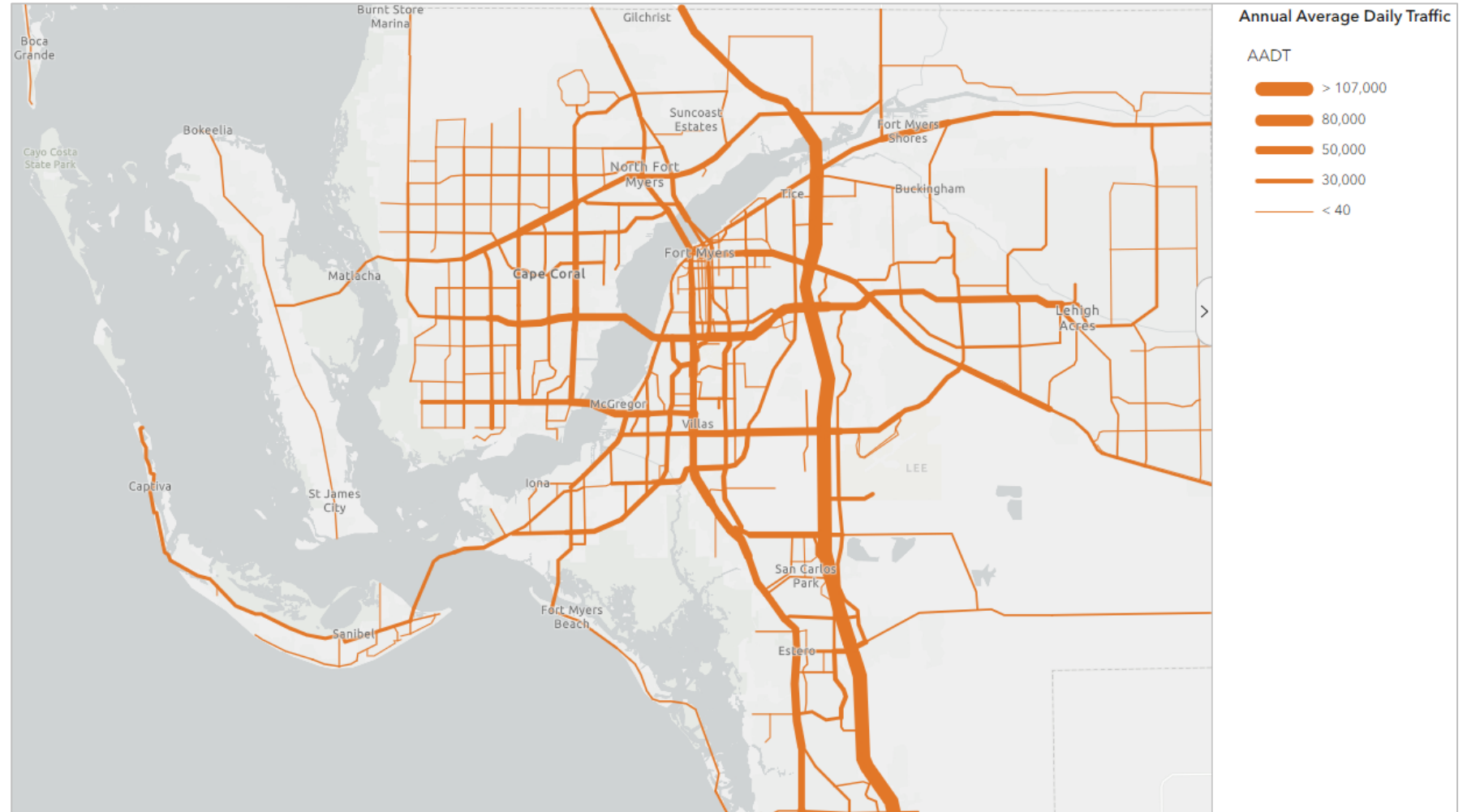
- Overlaying households with commute times over 60 minutes with Annual Average Daily Traffic routes (next slide) can provide visual data that helps determine where to prioritize certain projects.
- If lowering traffic congestion is a goal, this informs an understanding of where residents are traveling from.



Overlay Example (2 of 2)

- Cross referencing different community elements through the use of these maps will help inform the Branch Initiatives and projects.

Annual Average Daily Traffic



Branch Overlay Initiatives and Projects

Planning & Capacity



Initiative: Develop a resilience overlay (maps and policies) that increases intergovernmental coordination and hazard mitigation in planning efforts.

Project: Map hardened hurricane shelter facilities and identify gaps in community access.

Housing



Initiative: Create a mixed-use development overlay that provides land to developers to create a LMI housing neighborhood that also incorporates stormwater storage, greenspace and other public amenities.

Project: Make changes to zoning for more mixed-use housing and commercial areas.

Infrastructure



Initiative: Analyze countywide infrastructure needs to inventory existing critical structures, document key issues experienced during and immediately after Hurricane Ian and develop solution plans for identified gaps.

Project: Integrate bike paths, trails, and sidewalks into communities to move towards walkable cities.

One-on-One Briefing

What is a One-on-One Briefing?



- 90-minute briefings provide opportunity for the ResilientLee Support Team to detail identified Initiatives and receive guidance regarding how they may be best implemented through Branch Action Plans.
- RTF Members are strongly encouraged to include subject matter experts and technical advisors from their jurisdiction in the conversations.
- Read-ahead materials, including draft Initiative documents spotlighting projects and funding sources, will be delivered to RTF Members in advance of the meetings for review.

RTF Members:

- Please coordinate with the ResilientLee Support team to schedule these meetings if you have not already done so.
- After the meetings please:
 - Review and circulate information within organizations;
 - Capture feedback from SMEs and jurisdictions; and
 - Capture other work that is being done that aligns with the Plan.



Funding Streams Mapping

Funding Streams Mapping

PROTECT Discretionary Grant Program from U.S. Department of Transportation | Economic Development Administration (EDA) FY 2023 Disaster Supplemental Funding

- The Funding Analysis for Jurisdictional Submitted Projects was distributed and identifies projects that could be eligible for funding through these grants.
 - 106 projects were found to be potentially eligible for EDA funds.
 - 18 projects were found to be potentially eligible for PROTECT funds.
- Note: the deadline to apply for the PROTECT Grant Program is **August 18, 2023**.
 - We strongly encourage jurisdictions to apply for these opportunities and begin developing grant applications as soon as possible.
- The EDA Funding **does not have a deadline** and applications will be accepted on a rolling basis.
- Please let us know if you have any questions or concerns!



Community Engagement Strategy

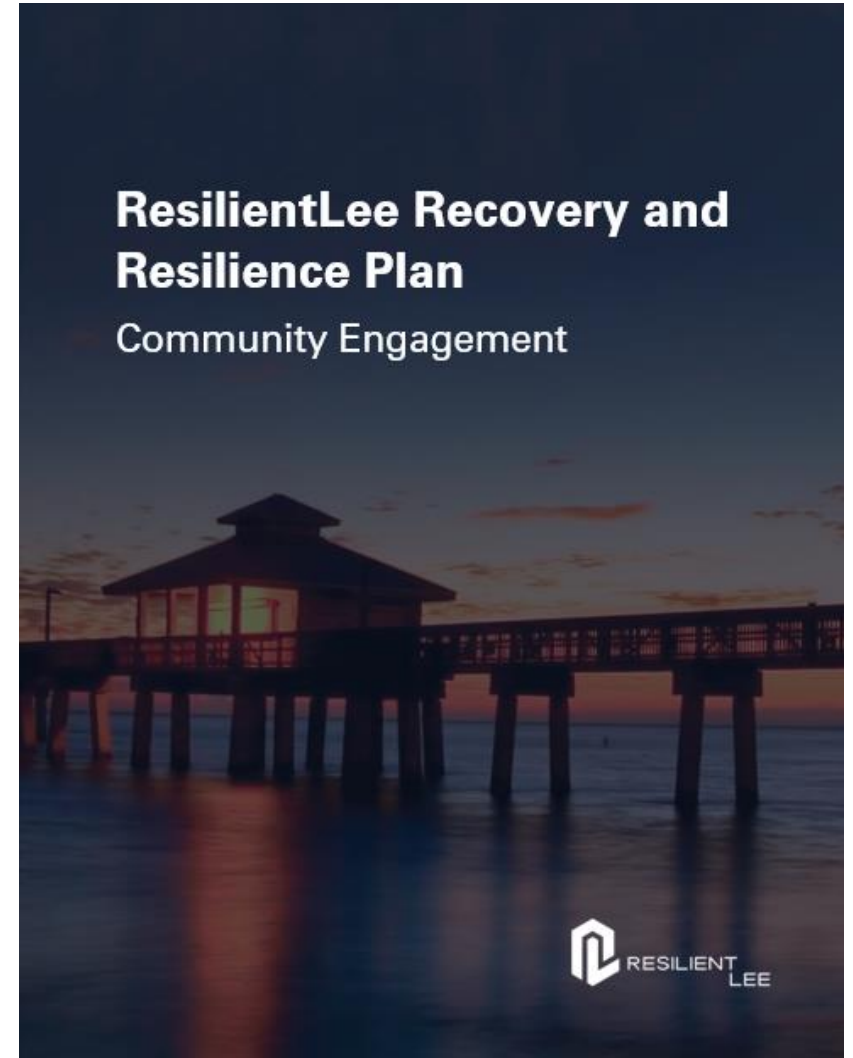
Community Engagement Plan

Town Halls

- Two in-person Town Halls: Fort Myers Beach & Dunbar
- One virtual Town Hall hosted on Zoom
 - Purpose: Update the community on Plan development and seek input on the Initiatives, draft Projects, and draft implementation plans.

Virtual Campaign

- Allows municipalities and jurisdictions to interact with one another on Initiative and Project-related subject matter.
- Users can leave comments on Initiatives and Projects listed, and other users can interact with the chain of comments.
- Specializes in analytics and can provide an analysis of the community members and their priorities in real time.



Email: info@resilientlee.org



Neighborhood Plan Update

Neighborhood Plan Update

Communities

 **Unincorporated Lee County:**
Matlacha, San Carlos Island, Fort Myers Shores,
Harlem Heights, and Lehigh Acres

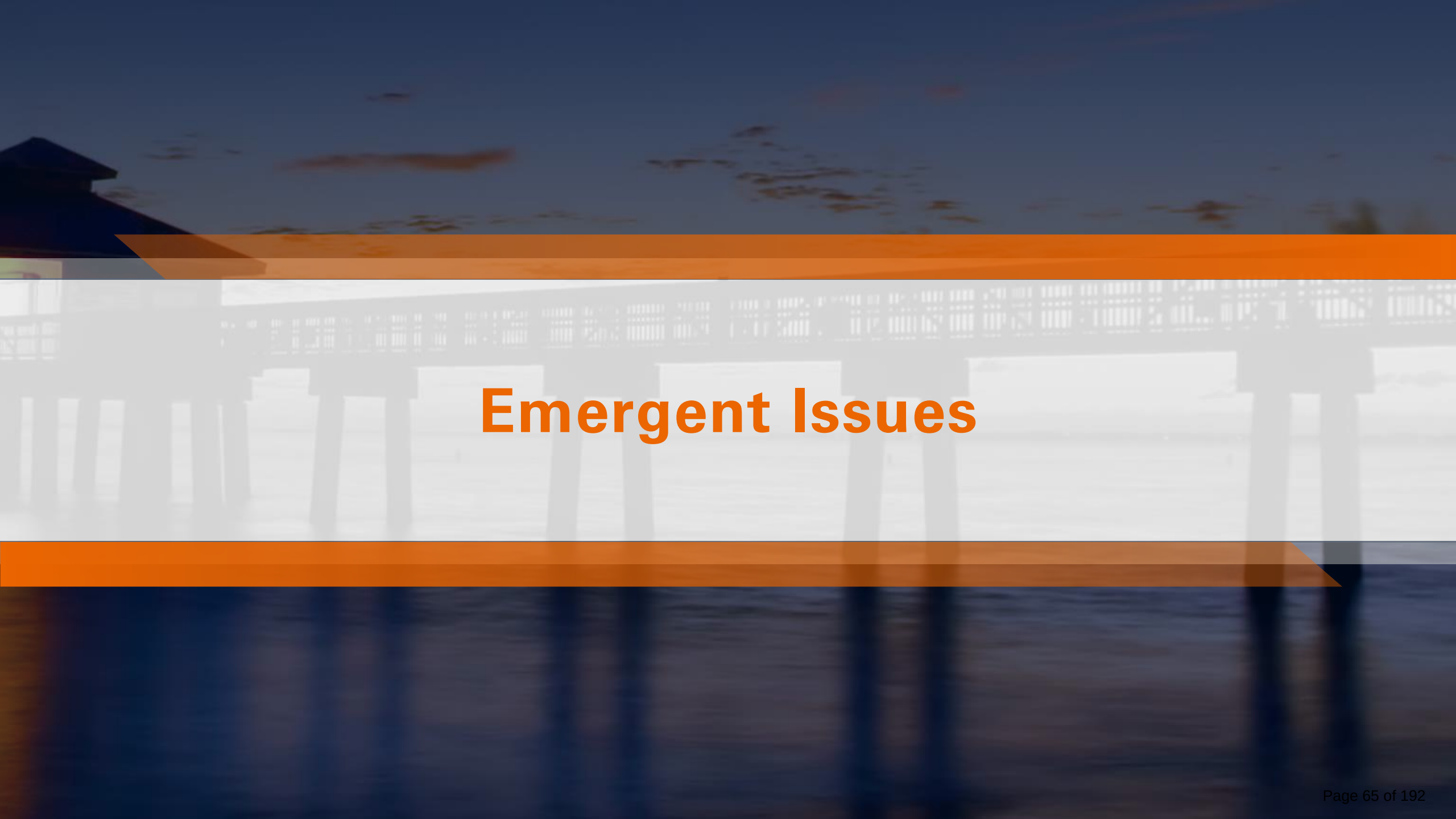
 **Fort Myers:**
Dunbar, Edgewood/Riverside, and Midtown

 **Cape Coral:**
Bimini Basin and Southeast Cape Coral

 **Bonita Springs:**
Old 41 Road

 **Village of Estero:**
Olde Estero District

 **Fort Myers Beach:**
Times Square / Old San Carlos

The background of the slide features a photograph of a classical building with a series of white columns. The image is slightly blurred and has a dark blue overlay. A thick, semi-transparent orange horizontal bar spans the width of the slide, positioned behind the title text.

Emergent Issues

Emergent Issues Discussion

Small Business Administration (SBA)

- The ResilientLee support team is actively collaborating with SBA leadership to resolve identified issues and to identify the appropriate individual within.
- SBA proposed RTF members submit a list of businesses and/or individuals needing assistance to Resilient Lee email (info@resilientlee.org) including:
 - Applicant's Full Name
 - Application Number
 - Brief description of the concern/challenge
 - Applicant's preferred contact method
- SBA provided a report of the Lee County region loan distribution figures containing:
 - Current Status Snapshot
 - Overall Breakdown of Loan Status
 - Breakdown of Funds Pending to Disbursed
 - Classification of Pending Loans
 - Reasons for Application Denials and Withdrawals



U.S. Small Business
Administration

Municipal & Unincorporated Permitting Dashboard Data Request

The Permitting Dashboard was designed to provide an understanding of the permitting processing times within the municipalities of Lee County and unincorporated areas of Lee County related to Hurricane Ian (if isolated data is available) from October 1, 2022 – May 31, 2023.

Data Request:

- The number of permits in each permitting phase for residential repairs (over the counter reviews versus technical reviews), commercial repairs (over the counter reviews versus technical reviews), and new development (not Hurricane Ian related);
- The number of permit staff who are full-time staff in office, full-time inspectors, contracted and temporary in office staff, and contracted and temporary inspectors; and
- The overall process for obtaining residential and/or commercial permits.



Next Steps & Questions

Next Steps

- Review Initiative/Project Matrices
- Identify availability for One – on – One Briefings:
 - Thank you to RTF Members who have confirmed a meeting with the ResilientLee Support Team.
 - If you haven't already, please coordinate with info@resilientlee.org to confirm an opportunity.
 - Subject matter experts and technical advisors for jurisdictions are strongly encouraged to attend.
 - Read-ahead materials, including draft Initiative documents spotlighting projects and funding sources, will be delivered in advance of the meetings for review.

Recovery Task Force Meeting Schedule

The RTF will meet the **4th Friday** of every month from **10:00 a.m. – 12:00 p.m.**

- ~~Monday, February 27th **~~
- ~~Friday, March 24th~~
- ~~Friday, April 28th~~
- ~~Friday, May 26th~~
- ~~Friday, June 23rd~~
- ~~Friday, July 28th~~
- Friday, August 25th
- Friday, September 15th **
- Friday, September 29th **
- Friday, October 27th
- Thursday, November 16th **
- Tuesday, December 5th **
- Friday, December 15th **

**** Indicates a date different than the 4th Friday schedule**

Discussion and Questions

Discussion to close after final member questions and next steps, before opening to Public Comment.



Public Comment

Adjourn

Recovery Task Force Meeting | July 28, 2023

Email: info@resilientlee.org

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Small Business Administration (SBA) Data Update – Version 2

July 10, 2023

Introduction

This document shows the Lee County figures that the SBA compiled as of July 10, 2023, containing breakdowns of funds that have already been disbursed in Lee County, as well as how much is left to be disbursed. This is further broken down by loans that are already partially disbursed and those that have no disbursement yet. Additionally, a snapshot was provided of the various statuses/reasons that the undisbursed files are still pending disbursement.

A number of the undisbursed files in Lee County are condominium, association, or multi-property loans. These typically require more documentation and take a little more time to close. Also, the SBA is experiencing delays with the delivery of manufactured homes in the south Florida area, with borrowers reporting that is taking 6-9 months for the manufacturing and delivery of new homes. Those loans are being held open and working with the borrowers until such time as their unit may be delivered.

Additional items impacting disbursements include challenges borrowers may be having purchasing flood insurance and/or hazard (including windstorm) insurance.

Data Summaries

Summary

Below is a high-level summary of the status for Lee County, FL (Hurricane Ian), including data for application processing and accounts.

Accounts	Data
Applications Received	31,084
Applications Approved	11,200
Applications Approved (Dollar Amount)	\$1,021,729,647
Applications Declined	13,563
Applications Withdrawn	6,092

Application Processing Data	Data
Total Number of Disbursements Completed to Date	6,993
Total Dollars Disbursed to Date	\$212,372,576.38
Loans Pending	1,535
Total Dollars Remaining to be Disbursed	\$210,563,349.73

Reasons for Decline of Application

Below is a breakdown of the reasons applications were declined.

Decline Reasons – Hurricane Ian (Lee County)	Percentage
Applicant's income below minimum income level for the family size	42.65%
Unsatisfactory credit history	15.25%
Lack of repayment ability	20.10%
Ineligible real property	9.35%
Not a qualified business	1.09%
Unsatisfactory history on an existing or previous SBA loan	1.03%
Unsatisfactory history on a federal obligation	0.84%
Not eligible due to policy (non-citizen, NOT a qualified alien)	1.55%
Not eligible due to recoveries from other sources	0.42%
Other	7.72%

Reasons for Withdraw of Application

Below is a breakdown of the reasons applications were withdrawn.

Withdraw Reasons – Hurricane Ian (Lee County)	Percentage
IRS has no record	42.19%
Applicant's Request – A change in plans	16.36%
Requested information was not furnished	13.37%
Unable to verify property	10.86%
Consolidation of multiple applications	0.88%

Character Eligibility Determination – Withdrawal of an otherwise approvable application	0.80%
Character Eligibility Determination – Withdrawal	0.26%
Consolidation of related applications	0.28%
Applicant's Request – Due to availability of insurance or other recovery	0.36%
Applicant's Request Due to market rate	0.21%
Other	14.41%

Overall Breakdown of Loan Status

Below is a breakdown of loan status for loans resolved and loans pending with a breakdown between business and home loans.

Category	Resolved (Fully Disbursed or Cancelled)	Total Pending	Partially Disbursed	Undisbursed
Business	792	357	150	207
Home	8,873	1,178	726	452
Total	9,665	1,535	876	659

Breakdown of Funds Pending to be Disbursed

Below is a breakdown of dollars pending to disbursed between business and home loans.

Category	Total Pending	Partially Loans (pending subsequent final disbursement)	Undisbursed
Business	\$117,105,600	\$30,489,300	\$86,616,300
Home	\$93,457,749.73	\$41,541,549.73	\$51,916,200
Total	\$210,563,349.73	\$72,030,849.73	\$138,532,500

Classification of Pending Loans

Below is a breakdown of classification and the percentage in each classification for Lee County for loans pending full disbursement.

Classification	Percentage
Loan Closing Documents have not been returned by the Borrower	28.79%
Loan is in Loan Modification (under review for changes to the loan)	25.45%
Escrow Loan – Pending Purchase Contract or Escrow Documents returned from the closing. (Escrow documents include recorded mortgages and titles to mobile homes)	18.64%
Flood Insurance	6.67%
Modified Documents – There was a loan modification which amended the terms of the loan. Additional documents must be signed and returned from the Borrower.	4.85%
Commitments Items – Prior to the preparation of documents, items may be required (Underlying Deed, Trusts, Marriage Certificates, Death Certificates).	3.79%
Partial Loan Closing Documents still pending (Contract, Note, Enrollment for deposit, Photo ID, Other required documentation).	2.42%
Collateral Documents (Including but not limited to: Collateral for companion loans, Mortgages, UCC Filings, Collateral for Associations)	1.97%
Borrower has indicated they are not ready for a disbursement	1.36%
Receipts and Progress Inspection	0.30%
Other miscellaneous items or additional reviews	5.76%

Health & Social Services Initiative Matrix

Priority	Initiative	Project Title	Community
Access through mobile services and for special needs environments that includes necessary services and accessibility to facilities built to provide services, pharmacy services, and mental health services.	Provide accessible care through telehealth and mobile clinics.	Establish a mobile health fleet with capability to provide key post-storm services to residents.	Unknown
		Develop some mobile health fleet vehicles with the capacity for providing full medical services.	County-wide
		Increase access to telehealth options.	Unknown
Coordination provided by a resilience hub with dependable and real time information and based on prior mapping of critical care infrastructure.	Inventory health and social service assets to create a map of critical care infrastructure, and codify a network of resilience hubs that can be called upon during or after an emergency.	Conduct a needs assessment to determine how Resilience Hubs can augment existing services.	Unknown
		Identify a central Resilience Hub to promote coordination of non-profit sector resources.	Unknown
		Identify, repair and support critical social service facilities.	Unknown
		Develop a program to identify suitable community and/or non-profit infrastructure that could support the expansion of a Resilience Hub network.	Unknown
		Establish program to provide resources for hardening and facility improvement to support resilience hub designation.	Unknown
		Leverage pre-existing public infrastructure to pilot a Lee County area approach to Resilience Hubs - multi-use facilities that can support residents before and after a disaster.	County-wide
Mental health response in real time and especially through one- year anniversary with support for staff and considerations for workforce retention and well-being, including communication strategies and outreach to the public, ensuring visibility of resources available.	Destigmatize mental health disorders and provide accessible mental health resources to the community.	Utilize the Whole Family Approach model to establish education for families on issues ranging from behavioral health problem prevention to intervention.	County-wide
		Conduct a study of mental health service access in the Lee County area to identify gaps and barriers.	Unknown
		Increase funding for mental health services.	Unknown
		Identify and implement approaches to providing connections to mental health and mental health screening at more service sites.	Unknown
		Develop a campaign to destigmatize mental health services and provide access.	Unknown
		Work with DOH to identify mental health resources.	Unknown
	Establish a Crisis Intervention Center.	Establish a Crisis Intervention Center to provide region-wide behavioral health support.	Lee, Hendry, Glades counties

Regulatory requirements for special services, supportive living centers, options for providers, overall support for families and persons with disabilities.	Address sheltering needs for vulnerable populations, such as the developmentally disabled (e.g., autism, intellectually disabled).	Develop a program to identify and implement new accommodations at shelters for those with special and functional needs.	Unknown
		Develop stronger partnerships between social service organizations and shelter planners, designers and operators.	Unknown
	Harden healthcare buildings to the standards of shelters.	Evaluate and improve the ability of Lee County area senior centers and senior-serving facilities to maintain operations and support seniors before, during and after a disaster.	Unknown
		Establish policies to increase the number of new facilities that could be used as shelters.	Unknown
		Improve healthcare services provided at shelters by establishing partnerships with a variety of partners.	Unknown
	Identify and change policies to designate group homes as critical facilities.	Establish a "Non-Profit Capital Program" to support hardening, repair and resilience-building projects.	Cape Coral
		Protect and harden Feeding America network sites as critical facilities.	Charlotte, Collier, Glades, Hendry, and Lee Counties

Cultural Resources Initiative Matrix

Priority	Initiative	Project Title	Community
Identify short-term recovery strategy to stabilize the arts community.	Secure short term capital funds to rehabilitate and maintain physical cultural and historic centers to help cultural resources continue operations after a disaster and assist in providing social services to community members.	Harden arts and culture facilities that provide social services (Resilience Hubs).	Unknown
		Short-term funding for disaster response and rebuild.	Unknown
		Create a multisector fund.	Unknown
	Rehabilitate and maintain existing cultural, artistic, and local university networks and facilities to create new opportunities for the community to connect, promote local arts and culture, and use in resilience hub development.	Partner with universities to enhance advertising.	Unknown
		Partner with universities to involve young people in arts and culture.	County-Wide
		Revitalize Belle Theatre.	Unknown
		Partner with non-profits to fundraise.	Unknown
		Collaboration opportunities with organizations and businesses.	County-wide
		Codify coordination among arts and culture sites.	Unknown
		Conduct an annual arts and culture assessment.	County-wide
		Conduct a management plan for community asset planning.	County-wide
		Development of a centralized space for arts and culture stakeholders to convene.	County-wide
		Venue Inventory and Asset Mapping.	County-wide
		Identification of community needs and resources.	County-wide
	Revive and repair parks and public recreation.	Revival of Newton Park in Fort Myers Beach.	Fort Myers Beach
		Repair of public pools in Fort Myers Beach.	Fort Myers Beach
		Improvements to the Riverside Park Bandshell, including upgrades to parking and access to the Lee County Transit System.	Bonita Springs
		Construction of soccer fields at Mayhood Park in Bonita Springs.	Bonita Springs
Convening of the arts community supporting cultural facilities and individual artists	Develop a cultural and artistic mixed use space where artists could live, educate, create, display and have retail space for their artistic endeavors.	Renovation of fire house or police station to house artists and provide an art studio space.	Unknown
		Development of Artists Village.	Bonita Springs
		Use existing facilities for pre-Broadway programs.	County-Wide
		Develop performance spaces in mixed-use areas.	Unknown
		Subsidize housing for arts and culture workforce.	Unknown
	Integrate art into infrastructure rebuild and incorporate art and culture planning into the transportation sector strategy.	Installation of sculptures and art in downtown Bonita Springs.	Bonita Springs/ Downtown
		Implementation of accessible arts and culture spaces and programs.	Unknown

Identify regional cultural planning and county-level representation of the arts	Plan for long term recovery and resilience within the cultural community by securing funding, rehabilitating infrastructure, and increasing access for all (e.g. transportation, ADA compliance etc.)	Venue Inventory and Asset Mapping.	Unknown
		Accessible Cultural Center.	Unknown
		Preservation of historical buildings.	Cape Coral
		Update to the Bed Tax Allocation to include arts and culture.	Unknown
		Investment of capital into underserved communities.	Unknown
	Develop a sector strategy for economic and workforce development to diversify tourism industry, creating a more resilient economy.	Development of a Continuity Plan.	County-wide
	Create a Cultural and Arts working group that includes branches focused on and advising the individual municipalities in addition to County activities.	Development of an Arts Group Advisory Committee.	County-wide
		Implementation of an Arts and Culture working group.	County-wide
		Appointment of an Arts and Culture Czar.	County-wide

Infrastructure Initiative Matrix

Priority	Initiative	Project Title	Community
	Diversify and harden communication infrastructure to enable continued operations with new technologies, private sector contracts, and enhanced infrastructure to reduce service disruptions.	Connectivity of critical city and utility assets.	Cape Coral
		Construct broadband connectivity using underground conduits.	City of Fort Myers
		Conduct a study on Low Earth Orbit (LEO) communications technology.	County-wide
		Colocation of cell and radio towers in optimal locations.	County-wide
		Expansion of the County 911 system.	County-wide
		Development of data software to track wellness check information in a centralized place that is accessible by 911 operators.	County-wide
		Initiation of a proof-of-concept project for solar powered cell towers.	County-wide
		Implementation of a drone reconnaissance program that would expedite disaster damage assessments and streamline needed resources and reports to service providers.	County-wide
		Development of a highspeed broadband fiber network plan for Sanibel.	Sanibel
		Generator installation and upgrades for critical facilities in the City of Cape Coral.	Cape Coral
		Development of a Starlink deployment plan.	County-wide
		Completion of a full assessment and analysis of communication infrastructure to provide to critical infrastructure agencies and organizations.	County-wide
		Construction of a backup communications tower in the City of Cape Coral.	Cape Coral
		Expansion of cell tower network to support communication, internet availability, and speed in Bonita Springs' low-income communities.	Bonita Springs
		Acquirement of 30 Starlink industrial-sized devices for deployment in areas of greatest need for access to internet connectivity.	Lee Health
		Extension of North 1 West Utilities, including construction of irrigation, storm drain replacement, and road improvements.	County-wide
		Extension of reuse water mains throughout the Village of Estero.	Estero
		Installation of culverts for improved water circulation and quality.	Cape Coral
		Fortify Bridge Structures and re-enforce approaches to those structures. Determine a method to protect signal cabinets.	County-wide

Improve the capability of potable water delivery and distribution systems.

Installation of water wells for the Lee Health acute care hospitals to support the infrastructure as a secondary water source.	Lee Health
Repairment of pumping stations and support buildings damaged in Fort Myers Beach.	Fort Myers Beach
Upgrading of the potable water treatment process in Sanibel and Captiva.	Sanibel and Captiva
Replacement of water main lines in Cape Coral.	Cape Coral
Hardening of the water distribution system in Sanibel and Captiva.	Sanibel and Captiva
Installation of resilient water wells for Lee Health.	County-wide
Construction and installation of two water wells at the Cape Coral Hospital.	Cape Coral
Installation of fiber communications line in Bonita Springs to allow for reliable communication affecting the water distribution system to customers.	Bonita Springs
Construction of new plant drinking water facility to replace damaged facility.	Cape Coral
Completion of a risk assessment of the water distribution system in the City of Fort Myers.	City of Fort Myers
Rehabilitation of lift station and sanitary sewer and replacement of water main in Bonita Springs/Estero.	Bonita Springs/Estero
Rehabilitation and upgrade of water main and sanitary sewer for low-income community.	Bonita Springs/Estero
Design and construct injection well for wastewater treatment plant.	City of Fort Myers
Expansion and upgrades of the North RO Plant.	County-wide
Installation of supplemental wells to increase source water supply to the Water Treatment Plant.	City of Fort Myers
Installation of a Deep Injection Well in Bonita Springs.	Bonita Springs
Extension of water and sewer utilities for neighborhoods in Estero.	Estero
Design and construction of elevated concrete pads for generators at lift stations in Fort Myers.	City of Fort Myers
Installation of stationary generators at 270 duplex wastewater lift station sites.	Cape Coral
Hardening of wastewater lift stations in Fort Myers.	City of Fort Myers

Preserving, hardening, and integrating redundant systems into critical infrastructure, such as water, power, transportation, communications, medical facilities, and sanitary infrastructure systems, while including a holistic approach to both public and private providers of services.

Improve operational capability of wastewater infrastructure.

Relocation and rebuild of Master Pump Station 103 in Cape Coral.	Cape Coral
Purchase and installation of prefabricated RO unit at water treatment plant in Fort Myers.	City of Fort Myers
Design, construction, testing, acceptance, and placing into service of a new 5 MGD Expansion and Regional Force Main extension serving the Southwest Water Reclamation Facility in Cape Coral.	Cape Coral
Design and construct permanent improvements to the RO Water Treatment Plant in Fort Myers.	City of Fort Myers
Install interconnecting pipeline between Water Treatment Plant and East Water Reclamation Facility in Bonita Springs.	Bonita Springs
Combine buildings part of the West Water Reclamation Facility.	Bonita Springs
Replace and Upgrade Elevation of 14 Wastewater Lift Station panels and electric service along Hickory Blvd in Bonita Springs.	Bonita Springs
Central sewer connections for the neighborhoods of Sun Village Estates and Lakes of San Souci in Bonita. Springs.	Bonita Springs
Replace and Upgrade the Elevation of 53 Wastewater Lift Station panels and electric services in Bonita Springs.	Bonita Springs
Replacement of vulnerable wastewater mains along Spring Creek US 41 in Bonita Springs.	Bonita Springs
Extension of reuse water mains throughout the Village of Estero.	Estero
Install interconnecting pipeline between Water Treatment Plant and East Water Reclamation Facility.	Bonita Springs/Estero
Design and construct a soil berm between Billy Creek and the City of Fort Myers Central Advanced Wastewater Treatment Plant.	City of Fort Myers
Purchase approximately 1,000 acres of land for the Northeast Reservoir in Cape Coral that was previously an aggregate mining operation.	Cape Coral
Replacements of catch basins in the Southeast Quadrant of Lee County.	County-wide
Conduct research on integrated stormwater management improvements.	Commercial and residential of entire island
Industrial parks streetscapes and stormwater improvements, including incorporating transit hotspots and improving water quality.	County-wide

Improve operational capability of stormwater infrastructure.

Obtain easements or purchase the ditches along the Seminole Gulf Railway tracks to allow for regular maintenance and improvements to drainage.	Communities/Neighborhoods: Belle Lago, The Reserve, The Cascades, North Point
Purchase of spider mower to maintain canals and prevent storm water issues.	City of Fort Myers
Implementation of tier one storm water improvements for streets in Fort Myers Beach.	Fort Myers Beach
Construction of a regional stormwater pond in Estero.	Estero
Upgrade City's North-South Freshwater Canal Pump Station to transfer more freshwater from the canals North of Pine Island Road to freshwater canals located South of Pine Island Road in Cape Coral.	Cape Coral
Extension of North 1 East Utilities, including construction of irrigation, storm drain replacement, and road improvements.	County-wide
Extension of North 3 Utilities, including construction of irrigation, storm drain replacement, and road improvements.	County-wide
Extension of North 4 Utilities, including construction of irrigation, storm drain replacement, and road improvements.	County-wide
Extension of North 5 Utilities, including construction of irrigation, storm drain replacement, and road improvements.	County-wide
Rehabilitation, upgrade, or replace of the City of Cape Coral's weirs.	Cape Coral
Conduct an assessment of problematic piping along King's Bridge in Unincorporated Lee County.	Unincorporated Lee County
Upgrade Old 41 Road from the Terry Street roundabout north to Rosemary Drive in Bonita Springs.	Bonita Springs
Resurfacing of public roads in Fort Myers.	City of Fort Myers
Extension of Andalusia Boulevard from the existing terminus just north of Kismet Parkway to Jacaranda Parkway in Cape Coral.	Cape Coral
Replacement and repairs to the street lighting in Fort Myers Beach to conform with mandated turtle lighting ordinances.	Fort Myers Beach
Repaving of the shared use path in Sanibel.	Sanibel

Improve operational capability of transportation infrastructure hardening existing structures (roadways, rails and freight, road surfaces, street lighting, traffic lights, multi-use paths, curbs, etc.) to increase overall resilience.

	Repaving approximately 60 miles of roadway in Sanibel.	Sanibel
	Upgrade of traffic signals in Cape Coral.	Cape Coral
	Replacement of streetlights in Fort Myers.	City of Fort Myers
	Program to rehabilitate 140 bridges in Cape Coral.	Cape Coral
	Adoption and implementation of the Traffic Signal Priority & Preemption Project.	
	Incentivize invention of traffic box salt/water intrusion protection.	
Acquire additional resources (grapple trucks, tree trimmers, street sweepers, etc.), and redesign transportation in areas creating community challenges.	Resurfacing of public roads in Fort Myers.	City of Fort Myers
	Installation of bicycle/pedestrian lane along Broadway Ave. East from US 41 to Sandy Lane in Estero.	Estero
	Prepare an inventory of submerged motor vehicles (cars, trucks, boats, etc.) in Pine Island Sound and Estero Bay.	Estero
	Construction of roadway improvements on Broadway West in Estero, including drainage and bicycle/pedestrian improvements.	Estero
	Plan and construct permanent barge landing facilities on Sanibel and the mainland that could be used to serve Sanibel, Captiva, and Pine Island.	Sanibel, Captiva, Pine Island, Lee County.
	Purchase of tree cutter attachment for loaders to safely remove problem trees from roadways and water canals.	City of Fort Myers
	Extension and improvement of traffic flow for Edison Corridor in Fort Myers.	City of Fort Myers
	Street improvements for the Ragsdale/Pennsylvania/Arroyal Corridor in Bonita Springs, including enclosing open drainage swales, street lighting, and traffic improvements.	Bonita Springs
Identify and develop a variety of viable transportation options (including different modalities) to support economic development, tourism, workforce, and access to services.	Improvements to and construction of additional parking in downtown Bonita Springs.	Bonita Springs
	Develop Third-party partnerships (such as UBER and LYFT) to provide morning and afternoon Vans or shuttle services from distant residential centers (e.g., Lehigh Acres) to employment centers and create a multi-county mobility coalition.	Estero
	South Cape Core Connect Mobility Hub Planning, Design, and Construction Project.	Cape Coral
	Install sources of renewable energy (solar panels) on public buildings to improve resiliency.	Sanibel

	Improve resilience and reliability of energy infrastructure and reduce outages and operating costs for energy use.	Provide incentives to have backup generators for fueling stations.	County-wide
		Power utility company incentives for renewable energy on government buildings and facilities.	County-wide
		Install a loop electric system to Pine Island, Sanibel and Captiva Islands.	Pine Island, Sanibel, and Captiva
		Bonita Beach Road Power Underground Project - The project entails burying the Florida Power and Light overhead lines underground.	Bonita Springs
		Conduct a cost/benefit and feasibility analysis to evaluate the short and long-term costs and feasibility of converting overhead powerlines in coastal areas to underground power lines.	County-wide
		E Terry St Wellfield Electrical Buildings and Power Resiliency for 12 wells.	Bonita Springs/ Estero
	Rehabilitate canals, seawalls, and other watercraft supporting infrastructure to improve flood water management and mitigate future impacts.	Replace and install 22 new adjustable canal weirs and risers with automated SCADA system for efficient reclaimed water storage.	Cape Coral
		Repair damage to the mooring field cause by Hurricane Ian.	Fort Myers Beach
		San Carlos Estates Water Control District (SCEWCD)- Canal Hardening & Mitigation Project.	San Carlos Estates
		Acquire and/or construct upland facility for mooring field.	Fort Myers Beach
Hardening critical facilities such as potable water systems, Emergency Operations Centers, emergency shelters, fire stations, and hospitals to ensure the first line of defense in an emergency is operational.	Improve first response and critical facility capabilities by hardening existing facilities and providing additional resources to response organizations.	Reconstruction of the Yacht Club Seawalls raising the seawall cap height by 2 feet.	Cape Coral
		Relocation, mitigation, and resiliency upgrades necessary for Fire Station 14 to promote public safety and resiliency.	City of Fort Myers
		Retrofit HVAC systems to critical and essential buildings with direct connect outlets.	County-wide
		Construct Fire Station 18 in Ward 6.	City of Fort Myers
		Purchase Hazardous Materials Response Vehicle for the mitigation of Hazmat events.	City of Fort Myers
		Rebuild Sanibel Fire Station 172.	Sanibel
		Define Critical Infrastructure in accordance with the Florida Building Code to designate certain facilities.	County-wide
		Construct a Village Hall on property currently owned by the Village of Estero located along US 41.	Estero
		Construction of the Fort Myers Beach Fire Department and the Chapel By the Sea.	Fort Myers Beach
		Construct new Utilities Administration Building to be used as a Base Camp for housing first responders and Utilities Department staff.	Cape Coral

		Conduct survey and analysis of critical facilities needing generators and purchase generators when then are gaps.	City of Fort Myers
		Construct or make necessary improvements to existing operations room at the Central and South Advanced Wastewater Treatment Plants.	City of Fort Myers
		Develop City-owned first responder housing.	City of Fort Myers
		Construct dedicated 12-inch diameter Emergency Water Supply Main from the North RO Plant to 5 critical community facilities (City Hall, EOC, Police Station, City Hall Annex, and Cape Coral Hospital).	Cape Coral
Pre-disaster planning for supplies, evacuation, fuel, and shelter, especially for special needs during emergencies, and cascading points of failure of weak links, including reducing bottlenecks on evacuation routes during an emergency.	Identify, map and classify (hubs) locations currently in use to provide supplies, fuel and shelter-along with related supply chains, and methods of distribution, then develop an After Action Report (AAR) that captures best practices for use in future operations.	North Water Reclamation Facility - Construct new Membrane Bioreactor (MBR) Water Reclamation Facility that will North Water Reclamation Facility.	Cape Coral
		Include supply chain prioritization in pre-disaster planning for: O2, O2 supplies, reverse osmosis, pharmaceuticals, and transport/fuel for critical response workforce	County-wide
	Identify and map evacuation routes currently in use and develop an After Action Report (AAR) that captures best practices for use in future operations.	Include stockpiling locations and warehousing of critical recovery and rebuild supplies. in pre-disaster planning.	County-wide
		Complete an After Action Review of Hurricane Ian distribution plan and update plan for future events.	County-wide
Addressing increased shelter needs and return to normal operations for schools.	Improve sheltering facilities and operations for community members and first response partners by expanding capacity and hardening existing shelter facilities (i.e., schools) and utilities to meet the needs of increasing populations.	Complete an After-Action Review of Hurricane Ian evacuation plan and update plan for future events.	County-wide
		Construct Community Recreation Center/ Shelter in City of Cape Coral to provide support for evacuations without impacting schools.	Cape Coral
		Emergency Shelter Improvements - harden existing school shelters and to create new ones to meet the increasing demand and population.	County-wide
		Purchase and install generators throughout the School District of Lee County, including on school campuses, the District's Central Office, and the Transportation Departments' compounds/offices.	County-wide
		HVAC Hardening at Oasis Charter Schools.	Cape Coral
		School and Central Office Resiliency - Funding is being requested for the hardening of schools/shelters.	County-wide
		City of Fort Myers EOC - The development and construction of a dedicated EOC for City Use and Sheltering.	City of Fort Myers
		Install High impact windows in schools that do not currently have these types of windows.	County-wide

	Streamline the post disaster permitting process to repair critical facilities.	School and Central Office Resiliency - Funding is being requested for the hardening of schools/shelters.	County-wide
	Diversify sheltering strategy to enable school operations to normalize as soon as possible after a disaster.		
Redundancy in infrastructure, systems, and partnerships, and sharing assets among jurisdictions and outside areas.	Analyze countywide infrastructure needs to inventory existing critical structures, document key issues experienced during and immediately after Hurricane Ian and develop solution plans for identified gaps.	Develop public school sheltering plan that enables return to normal school operations as soon as possible.	County-wide
		Drainage study Ward 1 & 2 - Drainage study and project development to mitigate problems with nature-based solutions as appropriate.	City of Fort Myers
		Stormwater and seawall planning to document the current inventory of seawalls within the City to develop masterplan to upkeep and infill seawalls as appropriate.	City of Fort Myers
		Complete critical infrastructure assessment to identify vulnerabilities in systems by meeting with main providers.	County-wide
		Establish operational leases to create a system of redundancy in infrastructure.	County-wide
Long-term improvements for livability.	Increase essential service operations capabilities, post-disaster, by developing and hardening facilities through new design, relocation, and utility redundancy.	Form interconnected reciprocal relationships with existing local businesses outside of Lee County in the fishing and shrimping industries, or restaurants with marina's for prestorm movement of ships and boats.	County-wide
		Interim Town Hall 6000 estero - Acquire and convert underutilized office building for an interim town hall.	Fort Myers Beach
		Master Plan/Relocate/Build a new Public Works complex.	City of Fort Myers
		Replace Town Hall - Permanent replacement for destroyed Town Hall in Fort Myers Beach.	Fort Myers Beach
	Assess community transportation needs, accounting for projected growth, to improve livability.	Construct Four temporary structures to establish emergency services at various locations to meet critical needs, including a self-contained bathroom.	Cape Coral
		Construct Kennedy Center Parking Garage, Safe Room and SunSplash Commercial Kitchen/Restaurant.	Cape Coral
		Incorporate railways in freight transportation.	County-wide
		Develop multimodal transportation solutions to make streets safer for pedestrians and cyclists. Assess community transportation needs, accounting for projected growth, to improve livability.	County-wide

	Improve sewer systems and implement septic-to-sewer conversions where applicable.	Septic to sewer conversions - Complete neighborhood improvements to abandon existing septic systems and connect to City sanitary sewer.	City of Fort Myers
		Imperial Bonita Estates Watermain Replacement and Sanitary Sewer and Lift Station rehabilitation.	Bonita Springs
		Hacienda Village Watermain Replacement/Upgrade and Sanitary Sewer rehabilitation.	Bonita Springs
		Extend water and sewer to Estero River Heights, Quarterdeck Cover and Cranbrook Harbor.	Estero
		Pine Island Road Corridor Water, Sewer and Reclaimed Water utilities construction between Burnt Store Rd and Chiquita on both sides of Pine Island Road.	Cape Coral

Natural Resources Initiative Matrix

Priority	Initiative	Project Title	Community
Determine regulatory actions and incentives to address impacts of natural resources, including identifying mixed-use spaces that can be used for future debris staging with minimal to no impact to the environment.	Identify regulatory actions, including policies and incentives, to reduce impacts on natural resources and the environment.	Use the Resilience Overlay to identify and integrate policy recommendations that support and preserve natural resources.	County-wide
		Develop the Conservation 20/20 program as its own department with specific funding.	Unknown
		Identify areas to prioritize low impact development concepts.	Unknown
		Require natural resource enhancements in DR/GR development and redevelopment activities.	Unknown
		Provide more resources for septic-to-sewer projects.	Unknown
		Develop policies that support the direct connection between water quality and green infrastructure.	County-wide
		Establish storm water drainage design criteria and process to significantly reduce flooding and improve water quality.	Bonita Springs
		Prioritize and support projects conserving potable water in growth areas.	County-wide
		Develop a cross-jurisdiction working group to support coordination and collaboration.	County-wide
		Leverage the Coastal Advisory Council to address bay and gulf waters resiliency issues.	Unknown
		Identify and acquire coastal wetlands to protect from coastal development and reduce impact of future storm events.	Unknown
		Yellow Fever Creek land acquisition for preservation and flood-risk reduction.	Cape Coral
		Region-wide tree planting plan.	Unknown
		Develop a Debris Management Plan using FEMA assistance, identifying temporary debris removal staging and storage sites.	Estero
		Integrate trail network with multi-modal transportation planning.	Unknown
		Acquire Seminole Gulf Railway property to develop and enhance trails.	Bonita Springs
		Improve and expand parks and trails.	County-wide
		Establish a regional multi-use trail network.	County-wide
		Replace and repair town streetlights to conform with wildlife supporting measures.	Fort Myers Beach
		Debris removal project for island canals.	Fort Myers Beach
		Implement Estero River regional stormwater improvements, including improving the flow around the Village at Country Creek.	Communities located along the north branch of the Estero River, including, Villages at Country Creek, Rookery Point, Village, Copper Oaks, Tidewater, Grandeza, Miramar Lakes and University Village.

Direct actions to improve hydrological and ecological conditions.	Identify direct actions to improve hydrological and ecological conditions.	Reuse water extension to provide non-potable water for irrigation needs.	Estero
		Following is a list of potential locations to extend reuse water mains. • Estero Parkway • Broadway Ave. • Via Coconut Point • US 41 (north of Corkscrew Rd) • River Ranch Road • Williams Road • Coconut Road	
		Develop comprehensive lakes management plan to identify dredging and recontouring needs.	Sanibel
		Create waterscapes in open canals and basins for improved water quality, habitat for fish and fisheries resources, recreation, and quality of life.	County-wide
		Develop land acquisition plan for the installation of natural resiliency supporting features.	Sanibel
		Flood plain property acquisition to support restoration, flood-risk reduction.	Estero Bay Village and the Estero River
		Purchase repetitive damaged beachfront properties to convert to green space.	Fort Myers Beach
		Develop policies on re-use and conservation of potable water.	County-wide
		Mangrove planting incentive program.	Unknown
		Develop and implement holistic Beach Renourishment program with cost sharing among towns sharing the benefits.	Fort Myers Beach
		Identify and implement agreed upon nutrient reduction best practices to address red tide and harmful algal blooms (HABs).	County-wide
		Pursue the acquisition of public dock space for the commercial fishing industry.	County-wide
		Study and improve beach access to promote tourism, resident use.	Unknown
Create public education and awareness campaigns to reduce the impact on natural resources.	Create public education and awareness campaigns to reduce the impact on natural resources.	Implement improvement plan for stormwater canals and reclaimed water storage systems.	Cape Coral
		Policy review to identify unintended consequences on natural resources.	Unknown
		Develop the Estuary Research Center.	Unknown
		Promote potable water conservation through community outreach.	County-wide

Education & Workforce Initiative Matrix

Priority	Initiative	Project Title	Community
Improve workforce participation by increasing skilled and credentialed workers to fill jobs in Lee County with an emphasis on making technical certifications available, drawing new populations to the area and incentivizing younger generations to stay in Lee County.	Support inclusive skills-based hiring through identified tools, resources, and potential policy modifications to fill jobs within the region to create a more resilient workforce.	Technology solutions for employers to assess transferable skills.	County-wide
		Create shared updated interviewing process guide for employers.	County-wide
		Increase access to degree and non-degree training programs.	County-wide
		Support employers' workforce hiring and retention needs.	County-wide
	Ensure all businesses (especially those with less than 25 employees) have access to needed education, tools, and training resources to grow and sustain their businesses for a more resilient economy.	Create a small business education portal.	County-wide
		Integrate remote workers into workforce development surveys.	County-wide
	Support policies and practices that create opportunities for lifelong learning that aligns with the changing needs of the economy.	Increase access to degree and non-degree training programs.	County-wide
		Create resources to assess transferrable skills.	County-wide
		Develop a construction sector strategy to increase whole system workforce pipeline.	County-wide
		Build a Graduate Medical Education Center for students to practice medicine locally after their training is complete.	County-wide
		Create scholarship funding to increase access to Cape Coral Technical College.	Cape Coral
		Promote on the job restaurant training through Feed Thy Neighbor.	Bonita Springs
		Build the East Lee County Technical College.	County-wide
		Support employers' workforce hiring and retention needs.	County-wide
		Develop technology solutions for employers and employees to enhance skills.	County-wide
Create ways to partner and leverage resources to increase shared ownership of education, to improve outcomes and opportunities from	Early childhood programs, daycare, and increasing accessibility to high quality Pre-K education and Student funding vouchers for Pre-K	Create a Children's Services Council.	County-wide
		Expand the Bonita Springs YMCA to increase access to childcare.	Bonita Springs
		Build a multi-purpose facility to provide wellness, daycare, and sheltering.	City of Fort Myers
		Increase the amount of high quality programs for children and families.	County-wide
		Free Out of School Programming for Lee County public schools.	All of Lee County
	Support before and after school programs.	Increase access and investment into before and after school care programs.	County-wide
		Pilot year-round schooling.	County-wide
		Increase volunteer coordination and opportunities for all residents.	County-wide

early childhood education to career.	Increase student performance and provide stable summer programming for at-risk youth.	Increase college and career readiness for Lee County students.	County-wide
		Develop year-round programs and resources for neighborhoods with students performing below grade level.	County-wide
	Increasing programs embedded in the K-12 System for exposure to career opportunities.	Develop technology solutions for career exploration and project-based learning.	County-wide
	Enhance existing High School career Academies	Redesign High School Career Academies to align with current and projected workforce.	County-wide
	Establish a Children's Services Council with long-term dedicated funding.	Create a Children's Services Council.	Countywide
	Provide literacy programs to enhance literacy amongst youth and students in the region, including non-English speakers.	Develop year-round programs and resources for neighborhoods with students performing below grade level.	County-wide
		Invest in Lee County Imagination Library to provide families with access to books for each child registered from birth through age five on a monthly basis.	County-wide
		Increase volunteer coordination and opportunities for all residents.	County-wide
		Increase kindergarten readiness and reading proficiency.	County-wide
		Develop technology solutions for career exploration and project-based learning.	County-wide
Address outside variables (housing, transportation, mental health, childcare, etc.) that hinder education and workforce.	Increase education programs and capacity to train mental health providers and increase capacity to identify mental health issues and make appropriate referrals.		Unknown
	Increase education programs and capacity to develop professionals entering the construction industry at all levels (e.g., engineering, trade credentialing).		Unknown
	Develop an overall workforce development sector strategy and sustain existing sector workforce strategies including manufacturing, logistics, pre-k to 12 education, and healthcare.	Increase services provided to individuals who need to reconnect with education in order to get into well-paying jobs or advance a career.	County-wide
	Implement needed micro-credential and training programs (e.g., budgeting and business administration) for non-profit service providers to maximize efficiency and increase capacity with existing resources.		Unknown

Economic Recovery Initiative Matrix

Priority	Initiative	Project Title	Community
Identify partnerships and incentives supporting the workforce, such as affordable housing near jobs and availability of technical certifications, to draw new populations to the area and encourage the generations raised in Lee County to stay here.	Create mechanism to support lowering property and liability insurance rates.		Unknown
	Ensure all businesses (especially those with less than 25 employees) have access to needed education, tools, and training resources (including pre-disaster planning tools and mechanisms to communicate during times of disaster) to grow and sustain their businesses for a more resilient economy.	Develop a Small Business Incubator/Accelerator that can assist small businesses grow and expand.	County-wide
		Business Emergency Communications Center and Small Business Communications Hub - To create a Business Emergency Communications Center (BECC) and Small Business Communications Hub at the Chamber of Commerce of Cape Coral.	Cape Coral
		Increase workforce participation in education and training programs that are aligned with employer-identified skills gaps.	County-wide
		Create an office for businesses to interact with students and provide access to programs and services to connect to career pathways.	County-wide
		Develop a joint purchasing collaborative and supplier diversity program for largest employers and purchasers.	County-wide
	Support and incentivize mixed use zoning and facilities to increase business development.	Develop neighborhood mixed use plans.	County-wide
		Banyan Tree Community Facilities Improvement Conceptual Study - Conceptual design study for the former downtown Bonita Springs community center.	Bonita Springs
		Develop neighborhood plans.	County-wide
		Downtown Parking Garage Study to explore the possibility of constructing a parking garage. The study would determine if the community could support a parking garage and if it could the cost and size of the facility.	Bonita Springs
	Identify economic areas in need of technology and connectivity advancements to increase resilience and partner with technology industry experts to implement best practices.	Increase broadband and technology access in LMI Areas.	County-wide
	Improve transportation systems that directly impact or create challenges for growth in the economic development sector.	Increase capacity and size of RSW Airport.	County-wide
Identify short-term actions that support the rapid recovery of businesses, including access to financing, and marketing the tourism-based economy.	Utilization of a Disaster Focused Loan Fund and Grants to help ease the recovery process and enable business growth including pre-disaster planning and pre-enrollment.	Create short-term disruption loan/grant fund to support quicker business recovery post disruption.	County-wide
		Create public sector business funding programs for startups.	County-wide
		Hire a grant writer specifically for the small businesses community.	County-wide
	Develop a sector strategy to grow sectors to diversify the economy and attract businesses to the area by leveraging the tourism industry.	Develop sector strategies for construction industry, arts & culture, nonprofits, and emerging industries while continuing investment into current sector strategies (Healthcare, Logistics, Manufacturing, Education).	County-wide

Rebuild more public access to natural resources.	Incentivize permanent access to natural resources and other public amenities throughout the county as a way of boosting tourism and invigorating a more resilient economy.	Riverside Park Bandshell Improvements to allow for more patrons during special events. The improvements will also increase the bathroom facilities and dressing rooms within the bandshell.	Bonita Springs
		Reconstruction of Times Square.	Fort Myers Beach
Prioritize industry-sector growth to build a resilient economy.	Connect targeted industry employers with workforce training and education programs to grow a talented pipeline.	Widen Corkscrew and Alico Roads and complete the extension of Alico Road.	County-wide
		Skatium Industry Advancement - Industry investment opportunity. Numerous proposals are under consideration for ways to bring additional revenue into the City.	City of Fort Myers

Housing Initiative Matrix

Priority	Initiative	Project Title	Community
Consideration to reduce costs of housing and consistency of codes and permitting for efficiency.	Expedite permitting process by allowing for remote permitting, using up to date technology, and providing training tools to reduce re-submittals.	Use AI software for plan review.	County-wide
		Create strategy to provide remote plan review.	County-wide
		Work with local and state officials to improve permitting process.	County-wide
		Provide permitting training to reduce re-submittals.	County-wide
	Work with HUD and community partners to plan usage of CDBG-DR funds effectively and to reduce the requirements for the CDBG-DR grant.	Seek HUD Waivers based on regulations of CDBG-DR funding.	County-wide
Zoning changes to comprehensive planning that increases density and redevelopment.	Identify policy requirements for inclusion in the Planning & Capacity Branch Resilience Overlay.	Create policy changes to provide developers with conditional approvals earlier in process.	County-wide
		Create a strategy for a Countywide Affordable Housing Development Program.	County-wide
		Develop a land trust.	County-wide
		Use GIS mapping software for all projects to avoid conflicts and promote synergies.	County-wide
		Implement Form-Based Code.	County-wide
		Create a Countywide Mixed-Use Overlay.	County-wide
		Incentivize the development of Mixed Income Neighborhoods	County-wide
		Maintain existing affordable housing stock.	County-wide
		Create shared multi-use stormwater facilities that also include recreational facilities.	County-wide
		Comprehensive Countywide policy review and updates to identify opportunities for increasing stock of affordable housing units.	County-wide
		Create a commercial development housing fund for investment into affordable housing projects.	County-wide
		Develop a land trust.	County-wide
		Create financial and policy incentives to increased infill and redevelopment.	County-wide
		Incentivize the development of Mixed Income Neighborhoods.	County-wide
		Create shared multi-use stormwater facilities that also include recreational facilities.	County-wide
		Increase policy and financial incentives for affordable housing.	County-wide
		Create a commercial development housing fund for investment into affordable housing projects.	County-wide
		Develop a land trust.	County-wide
		Create programs and policies that incentivize infill and redevelopment.	County-wide
		Promote economic value of mixed-use development.	County-wide
		Implement Form-Based Code.	County-wide
		Provide transportation choices.	County-wide

		Develop shared parking policies and infrastructure.	County-wide
		Revise Home Owner Association policies.	County-wide
	Create a mixed-use development overlay that provides land to developers to create an LMI housing neighborhood that also incorporates stormwater storage, greenspace and other public amenities.	Create an Attainable Homeownership Program for development of compact mixed-use development.	Cape Coral
	Create an elevation and/or buyout program.	Create a voluntary buyout program to reduce future flooding.	County-wide
		Home elevation program for ground level single family homes to mitigate flooding from future flooding events.	County-wide
	Create a special assessment program for income qualified households for utility expansion.	Program to offset special assessments for only low-mod households within North 1, 3, 4, and 5 utility expansion areas.	Cape Coral
		Wind retrofit hardening and generator for the STARS complex in the Dunbar neighborhood to benefit LMI residents.	Fort Myers
		Leverage the federal Hazard Mitigation Grant Program to provide matching funds for rebuilding more resilient homes on Fort Myers Beach.	Fort Myers Beach
		Create Emergency Roof Repair Program available to LMI residents to repair roofs damaged from Hurricane Ian.	County-wide
		Create a Reconstruction Program available to LMI single family residents to replace homes damaged by Hurricane Ian.	County-wide
		Funding is needed to restore Community Housing and Resources (CHR) Housing.	Sanibel
		Develop a Home Repair and Hardening Program for owner-occupied homes impacted by Hurricane Ian in Cape Coral.	Cape Coral
		Create a Rental Stock Rehab Program to increase the supply of safe, decent, and affordable housing.	County-wide
		Expand the Countywide Home Hardening Program.	County-wide
	Create construction programs for repairing, reconstructing, and hardening homes to updated codes, with a focus on LMI communities.	Repair Reimbursement Program available to LMI residents who used their own funds for Hurricane Ian repairs.	County-wide

Address workforce housing issues and development incentives for vulnerable populations and communities, particularly in regard to homeless individuals.	Create a construction program to develop and maintain affordable housing for LMI homeowners and renters, as providing additional affordable housing has been identified as a critical need by the Florida Legislature.	Develop single-family affordable housing construction program.	County-wide
		Implement a County Road Housing Initiative that would assemble property north of County Road and South of the Estero Church to create a larger parcel for affordable housing along US 41.	Estero
		Rosemary Park Place - Twenty-two (22), 3-bedroom, 2-bath new duplex affordable rental homes to be constructed in eleven single-story buildings.	Bonita Springs
		Estero Springs Housing Initiative - Assemble properties within Estero Springs under single ownership to create affordable housing.	Estero
		Rosemary Park Place - Twenty-two (22), 3-bedroom, 2-bath new duplex affordable rental homes to be constructed in eleven single-story buildings.	Bonita Springs
		Estero Springs Housing Initiative - Assemble properties within Estero Springs under single ownership to create affordable housing.	Estero
		Attainable Homeownership Program - include the acquisition of land, construction of units, and disposition of properties and will include long-term affordability mechanisms.	Cape Coral
		Attainable and Senior Rental Program - The development of multi-family rental housing for LMI households. These developments will incorporate green building principles and FBC required hardening.	Cape Coral
	Develop financing programs to allow for affordable homebuyers assistance, expand existing down payment assistance, interest rate buydowns and develop affordable housing, for LMI homeowners and renters.	Develop Countywide Homebuyer Assistance program to expand and increase homeownership.	County-wide
		Develop a stacked capital model to make development of affordable housing more fundable.	County-wide
		Expands the City's existing down payment assistance program for LMI households.	Cape Coral
		Develop Countywide Housing Assistance Program to assist eligible homeowners with special assessments and foreclosure prevention programs to ensure eligible homeowners ability to stay in the home.	County-wide
		Work Force Housing Town Hall - Integrate Work Force Housing on Town owned land with reconstruction of Town Hall.	Fort Myers Beach
		Work Force Housing development at 6000 estero - Acquire and convert space in underutilized office building to Work Force Housing.	Fort Myers Beach
		Develop workforce housing in downtown Fort Myers Beach.	Fort Myers Beach

	Develop and maintain affordable and attainable workforce housing, as well as housing for vulnerable populations (specifically individuals suffering from homelessness), located near places of employment.	Acquire land and develop Workforce Housing San on Carlos Island.	San Carlos Island and Fort Myers Beach
		Create a program and funding building new affordable housing for School District of Lee County's employees.	County-wide
		Develop City-owned First Responder Housing.	Fort Myers
		Create a program and funding for the reconstruction and repairs for School District of Lee County's employees.	County-wide
		Increase funding for Workforce Housing Assistance programs.	County-wide
		Acquire properties adjacent to Town Hall to build work force housing.	Fort Myers Beach
		Purchase land and build affordable/workforce housing near barrier islands and employment centers.	County-wide
Address immediate and long-term issues related to insurance that individual homeowners and others are facing: > Develop solutions to support individual homeowners and residences in navigating the insurance claim process related to Hurricane Ian; > Identify potential solutions to address difficulties for individual homeowners and others in securing insurance coverage or significantly increased rates becoming a barrier to homeownership.	Develop and implement a strategy to increase flood insurance access and effectiveness.	Convene insurance providers and create a local strategy to increase funding for programs.	County-wide
Increase communication and overall improve information available for community education regarding available federal and state programs and the requirements for those programs.	Develop/rejoin a Regional Planning Council to promote information sharing on housing programs throughout municipalities.	Join the SWFL Regional Planning Council.	County-wide
		All area planning departments join or rejoin the SWFL Regional Planning Council to enhance collaboration.	County-wide
	For all public communication use simple language to explain plans, reasons, options and processes. Develop a common language for the community to understand. Aim for a wide audience and remember people learn differently so visuals or text may supplement verbal communication. Coordinate communication for consistency. Also ensure outreach to all audiences, including the displaced, underserved and vulnerable populations, as well as those with access and functional needs	Develop public facing outreach tools including GIS maps and other graphics to develop a common understanding of redevelopment.	County-wide
	Combat NIMBYism with outreach to the community.	Develop communication strategy for increased public understanding about housing developments.	County-wide
	Increase Homeownership Counseling service and scope.	Develop communication strategy for increased public understanding about housing developments.	County-wide

Planning & Capacity Initiative Matrix

Priority	Initiative	Project Title	Community
	Assess emergency logistical resource needs of critical services and identify funding streams to acquire resources that fill these gaps.	Develop local plan incorporating Smithsonian Disaster Response resources, recommendations and the FEMA Guide to Expanding Recovery Mitigation to include Arts & Culture.	Unknown
		Build a hardened fleet maintenance and storage facility.	Cape Coral
	Develop and maintain pre-existing recovery and distribution centers to streamline recovery operations after a disaster.	Construct a newly hardened building with secure parking and space to accommodate 350 staff.	County-wide
		Design and construct new Local Staging Area (LSA) at Utilities Collection and Distribution Administration and LSA/Warehouse Buildings with paved parking for trucks and equipment.	County-wide
		Develop a central logistics hub for all emergency activity before, during, and after a disaster.	Cape Coral
		Develop formal plan to leverage Volunteer Florida resources in a cross-sector approach for distribution and deployment of supports available.	Unknown
		Develop business recovery centers; consider alignment within resilience hubs.	Unknown
		Development of a Volunteer Program Manual for the Cape Coral Fire Department (CCFD) Community Services program will help the City of Cape Coral identify roles and responsibilities for volunteers during day-to-day operations and in disaster-related operations.	Cape Coral
	Incorporate cost recovery planning into preparedness efforts to increase municipal resilience.	Develop a comprehensive inventory of funding sources and project mgmt. support with navigation for comprehensive application processes (e.g., FEMA, DOE, ESG, EDA).	Unknown
		Development of a cost recovery plan to structure the financial recovery from disasters and outline how to effectively utilize resources to make Cape Coral more resilient.	Cape Coral
	Address gaps in communication capabilities in immediate post- disaster operations.	Increase coordination in outreach before, during, and after disasters with pre scripted messaging among jurisdictions and engage a variety of stakeholders.	County-wide
		Review and improve existing communication policies and protocols to enhance coordinated outreach.	County-wide
		Review and revise the Bonita Springs Comprehensive Plan to ensure land use plans support resilience.	Bonita Springs
		Expand the scope of roles and responsibilities for the Disaster Advisory Council.	
		Develop a climate adaptation plan.	Cape Coral
		Complete run time and inflow and infiltration (I/I) analysis of sewer lines in identified areas with clay sewer pipes and extensive damage to surface-level vegetation.	City of Fort Myers

Increase inter-governmental coordination for long-term planning for resiliency factoring in growth

Perform community assessments on identified sector vulnerabilities and existing infrastructure to prioritize needs in future planning efforts, including the Disaster Advisory Council's Local Mitigation Strategy, to ensure future funding is prioritized for the projects that create the most resilience factoring in growth.	Conduct a parking study to inform future plans supporting economic development.	County-wide
	Conduct a risk assessment to help understand our community's risks and how to address them.	City of Fort Myers
	Development of a disaster recovery plan to help the City of Cape Coral recover from disasters and build resilience to effectively respond to future hazard events.	Cape Coral
	Develop a "Community Risk Reduction Plan" that will aid the region in identifying and prioritizing local risks, followed by the integrated and strategic investment of resources to reduce their occurrence and impact.	County-wide.
	Review and integrate practices from the Florida Housing Coalition "Pinellas Plan" to connect integrated housing to transit; transit oriented development.	Unknown
	Establish and prioritize water quality improvement projects such as large drainage	Cape Coral
Develop a resilience overlay (maps and policies) that increases intergovernmental coordination and hazard mitigation in planning efforts.	Develop an asset map with cultural priorities as part of the Resilience Overlay (accounting for growth, identifying needs and potential.)	Unknown
	Develop a senior center to operate on a year- round basis that can also serve as a shelter in the event of a disaster.	Unknown
	Determine the location of all senior centers to determine gaps in service and explore ways to leverage these sites for resilience.	Unknown
	Develop policies that ensure resilient practices are integrated into all new infrastructure.	Unknown
	Identify policy recommendation across all branches that can be supported by the Resilience Overlay.	County-wide
Develop neighborhood plans in identified communities.	Analyze stormwater, retention, detention, and conveyance along Cape Coral Parkway to identify deficiencies and potential solutions. The stormwater system analysis may extend beyond the 2.5-miles of the corridor to allow flexibility in finding solutions.	Cape Coral
	Implement the "OLDE ESTERO DISTRICT"- Resiliency planning proposal.	Estero
	Economic development plans focus on leveraging assets and strengths rather than overcoming challenges, and are characterized by a sharp focus on the community's unique economic role, key clusters of opportunity, workforce characteristics, quality of life and other economic and demographic differentiators.	City of Fort Myers
	Utilize community master plans to include healthcare and consider leveraging key sites as community resiliency hubs.	Unknown
	Re-design and redevelop the "Time square" area in Fort Myers Beach to increase economic benefits.	Fort Myers Beach

	Expand Joint Local Mitigation Plan to include identified vulnerabilities.	Review capacity, plans and processes for special needs sheltering, preparation, response and recovery; Harden the facilities used by LARC - an agency that supports families.	Unknown
		Develop a coordinated assisted living and skilled nursing/long term care plan and capacity review in conjunction with overall healthcare industry post-disaster response effort.	Unknown
		Establish a new, centralized debris management site close to the areas most impacted by Hurricane Ian in Estero.	Estero
		Develop plan to build mental and behavioral health capacity to include CSU, health professional advancement, cross-training, attraction, retention efforts.	Unknown
		Conduct pre and post disaster planning to assess logistics bottlenecks in vulnerable communities.	County-wide
		Develop intergovernmental group to initiate regional resilience projects.	County-wide
Propose planning community priorities based on those hardest hit	[Need branches to identify initiative to address priority]		Unknown

1. **Requested Motion:**

Meeting Date: August 10, 2023

The Town Attorney will provide a briefing and an overview of the definitions and appropriate uses of "special exceptions", "variances", "CPDs" and "amendments to the Comprehensive Plan". The Town Attorney will also discuss another tool available to the Town which is included in the Town's current land development code - "Development Agreements".

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

5. **Background:**

Attachments:

1. CPDs
2. Variances - Special Exceptions - Amend Comp Plan
3. ARTICLE_III.____DEVELOPMENT_AGREEMENTS

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

Gretchen R.H. Vose, Town Attorney

Date: August 04, 2023

Amy Baker, Town Clerk

Date: August 04, 2023

Andy Hyatt, Town Manager

Date: August 04, 2023

Sec. 34-931. - Purpose and effect.

- (a) *Purpose.* The general purpose of planned development zoning districts is to provide a degree of flexibility for a landowner to propose the development of land in a manner that differs from the specific provisions of this code, and to allow the town council the ability to evaluate such a proposal relative to specific conditions on and around the site and as to its compliance with the Fort Myers Beach Comprehensive Plan.
- (b) *Effect.* A planned development, once approved through the rezoning process, can only be developed in accordance with the specific master concept plan and special conditions that are contained in the zoning resolution approving the planned development. See §§ 34-217—34-220 of this chapter for details on the effect of planned development zoning.

Sec. 34-932. - Regulation of land use in planned developments.

- (a) *General requirements and special conditions.* All uses of land, water, and structures permitted in a planned development shall be subject to:
 - (1) The general requirements for planned developments;
 - (2) All applicable regulations in this code, except where approval is granted to deviate from one or more of those regulations;
 - (3) An adopted master concept plan; and
 - (4) Various special conditions which may be formulated and applied to address unique aspects of the parcel in the protection of a bona fide public interest:
 - a. The source of such conditions may include good planning practice as well as those specifications set forth in the application documents, plus policies and standards set forth in the Fort Myers Beach Comprehensive Plan.
 - b. All special conditions shall be reasonably related to the proposed development and to any reasonably expected impacts on public services and facilities and the public safety, health and general welfare.
 - c. Special conditions shall be adopted as part of the zoning resolution approving the planned development.
- (b) *Deviations.* To allow design flexibility in developing land, deviations from specific provisions of this code may be permitted where it can be demonstrated that the planned development will be enhanced and that the intent of such regulations to protect health, safety and welfare will be served. Other portions of this code may provide additional criteria for certain deviations (for example, see § 34-992(e) of this chapter, regarding deviations from commercial design standards). No deviation may be granted that is inconsistent with the comprehensive plan.
 - (1) Requested deviations shall be set forth on the master concept plan or in the application and shall be accompanied by documentation including sample detail drawings.
 - (2) Approved deviations shall be adopted as part of the zoning resolution approving the planned development.
- (c) *Density or intensity of use.* Density or intensity of use permitted in any planned development shall be determined by the town council in the zoning resolution in accordance with the following:
 - (1) The density or intensity of the uses permitted or encouraged under the Fort Myers Beach Comprehensive Plan at that location; and
 - (2) The nature of and the density and intensity of existing or proposed development surrounding the project.
- (d) *Phasing.* The town council may specify a phasing plan in the resolution in accordance with § 34-220 of this chapter.

(e) *Other requirements for planned developments.*

- (1) Specific application requirements for planned development zoning districts are set forth in §§ 34-212—34-215 of this chapter.
- (2) Procedures to amend a planned development zoning district are set forth in § 34-214 and 34-219 of this chapter.
- (3) Other requirements for planned developments are found in §§ 34-211—34-410 of this chapter.

Sec. 34-933. - Allowable uses of land.

- (a) Proposed principal and accessory land uses must be listed on the proposed master concept plan, identifying such uses by citing the same uses allowed by a specific zoning district, or by citing the enumerated uses of one or more use groups or subgroups as found in Tables 34-1 and 34-2 of this article. Approved planned developments that used a different method for enumerating uses shall be interpreted in accordance with the use regulations in effect at the time of that approval.
- (b) Approved uses shall be adopted as part of the zoning resolution approving the planned development. Uses that are not specifically listed may also be permitted if, in the opinion of the director, the uses and their expected impacts are substantially similar to an approved use.

Subdivision III. - CPD (Commercial Planned Development) Zoning District

Sec. 34-951. - Intent of CPD (Commercial Planned Development) zoning district.

The intent of the CPD district is to allow a landowner the ability to submit a specific proposal for a land development that is primarily nonresidential or mixed-use in character and that complies with the Fort Myers Beach Comprehensive Plan, but which does not meet all of the specific requirements of a conventional or redevelopment zoning district.

Sec. 34-952. - Allowable uses of land.

Allowable principal and accessory land uses in a CPD zoning district shall be established in each zoning resolution in accordance with § 34-933 of this chapter.

Sec. 34-953. - Building placement, size, design, and other property development regulations.

Building placement, size, design, and all other property development regulations in a CPD zoning district shall be the same as for the CR zoning district for CPDs that are primarily lodging, or for the CB zoning district for all other CPDs, unless the zoning resolution specifies otherwise. Exceptions are as follows:

- (1) Compliance with the master concept plan and any special conditions may provide additional restrictions.
- (2) Approved deviations may modify or eliminate restrictions that would otherwise apply.

Sec. 34-954. - Commercial design standards.

The commercial design standards (§§ 34-991—34-1010 of this chapter) shall apply to all commercial and mixed-use buildings or portions thereof that are being newly built, and to "substantial improvements" to such buildings as defined in § 6-405 of this LDC, on properties that are zoned CPD (commercial planned development).

Secs. 34-955—34-960. - Reserved.

Sec. 34-87. - Variances.

- (a) *Function.* The town council shall hear and decide all requests for variances from the terms of the regulations or restrictions of this code (except for administrative setback variances as provided in § 34-268 of this chapter) and such other ordinances which assign this responsibility to the town council, except that no use variance or procedural variance as defined in this chapter shall be heard or considered.
- (b) *Considerations.* In reaching its decision, the town council shall consider the following criteria, recommendations and testimony:
 - (1) Whether the facts support the five required findings in subsection (c) below;
 - (2) Staff recommendations and local planning agency recommendations;
 - (3) Testimony from the applicant; and
 - (4) Testimony from the public.
- (c) *Findings.* Before granting any variance, the town council must find that all of the following exist:
 - (1) That there are exceptional or extraordinary conditions or circumstances that are inherent to the property in question, or that the request is for a *de minimis* variance under circumstances or conditions where rigid compliance is not essential to protect public policy;
 - (2) That the conditions justifying the variance are not the result of actions of the applicant taken after the adoption of the regulation in question;
 - (3) That the variance granted is the minimum variance that will relieve the applicant of an unreasonable burden caused by the application of the regulation in question to his property;
 - (4) That the granting of the variance will not be injurious to the neighborhood or otherwise detrimental to the public welfare; and
 - (5) That the conditions or circumstances on the specific piece of property for which the variance is sought are not of so general or recurrent a nature as to make it more reasonable and practical to amend the regulation in question.
- (d) *Authority.*
 - (1) The town council has the authority to grant or deny, or modify, any request for a variance from the regulations or restrictions of this code; provided, however, that no use variance as defined in this chapter, or any variance from definitions or procedures set forth in any ordinance, shall be granted.
 - (2) In reaching its decision, the town council has the authority to attach special conditions necessary for the protection of the health, safety, comfort, convenience, and welfare of the general public. Such special conditions shall be reasonably related to the variance requested.
- (e) *Existing buildings.* Setback, height, and similar variances granted to accommodate an existing building will expire when the building is removed. Redevelopment of the site must then comply with the setback and height regulations in effect at the time of redevelopment.

Sec. 34-88. - Special exceptions.

- (a) *Function.* The town council shall hear and decide all applications for special exceptions permitted by the district use regulations.
- (b) *Considerations.* In reaching its decision, the town council shall consider the following, whenever applicable:
 - (1) Whether there exist changed or changing conditions which make approval of the request appropriate.
 - (2) The testimony of any applicant.

- (3) The recommendation of staff and of the local planning agency.
 - (4) The testimony of the public.
 - (5) Whether the request is consistent with the goals, objectives, policies and intent of the Fort Myers Beach Comprehensive Plan.
 - (6) Whether the request meets or exceeds all performance and locational standards set forth for the proposed use.
 - (7) Whether the request will protect, conserve, or preserve environmentally critical areas and natural resources.
 - (8) Whether the request will be compatible with existing or planned uses and not cause damage, hazard, nuisance, or other detriment to persons or property.
 - (9) Whether a requested use will be in compliance with applicable general zoning provisions and supplemental regulations pertaining to the use set forth in this chapter.
- (c) *Findings.* Before granting any special exceptions, the town council must find that the applicant has demonstrated that the requested special exception complies with the standards in this section and with:
- (1) The Fort Myers Beach Comprehensive Plan;
 - (2) This chapter; and
 - (3) Any other applicable town ordinances or codes.
- (d) *Authority.*
- (1) The town council shall grant the special exception unless it finds that granting the special exception is contrary to the public interest and the health, safety, comfort, convenience, and welfare of the citizens of the town, or that the request is in conflict with the criteria in this section.
 - (2) In reaching its decision, the town council has the authority to attach special conditions necessary for the protection of the health, safety, comfort, convenience, or welfare of the general public. Such special conditions shall be reasonably related to the special exception requested.

Sec. 34-92. - Comprehensive plan amendments.

- (a) Amendments to any part of the Fort Myers Beach Comprehensive Plan may be proposed by private parties. All amendments requested during a calendar year will be considered simultaneously with any public amendment proposals put forth by the town council or local planning agency.
- (b) Private applications for amendments must be received at town hall by the last business day of the calendar year. Amendment proposals do not need to include all of the information required by § 34-201 of this chapter, but must be sufficient to identify the parties making the request and the exact nature of the request, and must provide adequate supporting material in support of the request.
- (c) Proposals to amend the Future Land Use Map must meet Comprehensive Plan Policy 4-C-10.

POLICY 4-C-10 MAP AMENDMENTS: The intensity and density levels allowed by the Future Land Use Map may be increased through formal amendments to this plan if such increases are clearly in the public interest, not just in the private interest of a petitioning landowner. Petitions from landowners will be accepted annually. The Town Council may accept applications more frequently at its sole discretion.

ARTICLE III. - DEVELOPMENT AGREEMENTS

Sec. 2-91. - Statutory authority.

The Town of Fort Myers Beach has the authority to adopt this article pursuant to article VIII, § 1(f), of the Constitution of the state and F.S. §§ 163.3220(5), 163.3223, and 166.021.

Sec. 2-92. - Applicability of article.

This article shall apply to the entire incorporated area of the town.

Sec. 2-93. - Intent of article.

This article is intended to enable the Town of Fort Myers Beach to invoke the provisions of the Florida Local Government Development Agreement Act while retaining all of the home rule authority given it pursuant to article VIII of the Constitution of the state and F.S. chs. 163, 166 and 380, to enter into other similar agreements beyond the provisions of the Florida Local Government Development Agreement Act, and to establish specific notice and hearing procedures when it makes certain such similar agreements pursuant to its home rule authority.

Sec. 2-94. - Purpose of article.

- (a) The purpose of this article is to invoke the authority recognized in the town by the state in F.S. § 163.3223, to enter into development agreements with any and all persons having legal or equitable interests in real property located in the incorporated area of the town pursuant to the provisions of the Florida Local Government Development Agreement Act. Vendees under a specifically enforceable contract for the sale of real property shall be recognized as having a sufficient equitable interest so as to have legal capacity to become a party to a development agreement made pursuant to the Florida Local Development Agreement Act, but persons having only a mere option to purchase real property shall not be so recognized.
- (b) It is also the purpose of this article to establish notice and hearing procedures similar to those set forth in the Florida Local Development Agreement Act when the town makes agreements pursuant to its home rule authority in those type of agreements which are defined in this article as home rule development agreements. Development agreements made pursuant to this article, whether they are home rule development agreements as defined in this article or agreements made pursuant to the Florida Local Government Development Agreement Act, are intended to protect and further the public health, safety and welfare by providing certain guarantees to land developers in exchange for their agreement to provide specified public facilities or services which are related to and consistent with the town's capital improvement planning and financing.

Sec. 2-95. - Definitions.

- (a) The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

Development agreement means either a home rule development agreement or a statutory development agreement.

Home rule development agreement means an agreement made by the town pursuant to its home rule powers, and not pursuant to the Florida Local Government Development Agreement Act, but only in those cases where development, as defined in F.S. § 163.3221(3), is to be undertaken by a person who is not a local government, as defined in F.S. § 163.3221(9), or an agency of the state or the United States of America. Moreover, home rule development agreements specifically do not mean agreements made between the town and other parties where the purpose of the agreement is exclusively to provide or pay for the construction, improvement, maintenance, or other alteration of land or personalty by third parties where the property in question is owned or is to be owned by the town or some other governmental agency.

Statutory development agreement means any agreement made specifically pursuant to the Florida Local Government Development Agreement Act.

- (b) All other terms which are used in any statutory development agreement made by the town pursuant to the Florida Local Government Development Agreement Act, as such act may be amended from time to time, shall be defined as set forth in F.S. § 163.3221, unless otherwise specifically defined in a particular statutory development agreement. Terms not so defined shall be given their ordinary and customary meanings.

Sec. 2-96. - Applications for development agreements.

No person shall have the right to apply for or receive development agreement approval, unless such right is so provided in an appropriate administrative code which establishes procedures for such applications. Should such an administrative code be adopted, then the town shall establish a schedule of fees and charges which shall be imposed for the filing and processing of each such application. Unless otherwise provided by administrative code, development agreements shall be considered by the town council only upon the recommendation of the town manager, who may submit a proposed development agreement, in written form, for consideration by the town council pursuant to the public hearing requirements of F.S. § 163.3225 and § 2-98 of this LDC. Each such proposed development agreement so submitted shall include the town manager's recommendation as to whether the council should become or decline to become a party to the agreement, or a modified form of the agreement, with such information as the town manager deems necessary to support his recommendation.

Sec. 2-97. - Minimum requirements of a statutory development agreement.

Statutory development agreements shall include, at a minimum, all of the items enumerated in F.S. § 163.3227, plus such conditions, terms, restrictions, or other requirements which the parties to the agreement may desire to include and which are not otherwise prohibited by law or which exceed the authority of the parties. If a statutory development agreement provides that any public facilities are to be designed or constructed by the developer, then the agreement shall require that the design and construction be in compliance with all applicable federal, state, and town standards and requirements, including but not to be limited to guarantees of performance and quality and project controls, including scheduling, quality, and quality assurance. When public facilities are to be designed or constructed by the developer, or when the developer agrees to dedicate land to the town, the statutory development agreement shall specifically state the extent to which such design or construction or dedication shall be eligible for impact fee credits pursuant to such impact fee ordinances as the town may have in effect at the time when the statutory development agreement is to become effective. Statutory development agreements also shall incorporate the administrative appeal process set forth in § 2-102 of this LDC.

Sec. 2-98. - Notices and hearings.

No statutory development agreement shall be made pursuant to this article unless and until all of the requirements of F.S. § 163.3225 relating to the agreement have been satisfied. To that end, an affected property owner, as the term is used in F.S. § 163.3225, means all owners of property, as reflected on the current year's tax roll, lying within 375 feet in every direction of the subject property. The town council, by adopting an appropriate administrative code, may prescribe more stringent notice requirements. In addition, if a statutory development agreement is intended to rezone property, grant variances, or accomplish any other approval which otherwise would be controlled by ch. 34 of this LDC, the notices required in ch. 34 also shall be given. The same notice and hearing requirements also should be observed when making home rule development agreements. However, failure to satisfy all of such notice and hearing requirements shall not be grounds to invalidate a home rule development agreement.

Sec. 2-99. - Amendment or cancellation of development agreement by mutual consent.

A statutory development agreement adopted pursuant to this article may be amended or canceled by mutual consent of the parties to the agreement or by their successors in interest utilizing the same public

hearing and notice requirements as are prescribed for the adoption of development agreements pursuant to this article and any administrative code authorized by § 2-98 of this LDC.

Sec. 2-100. - Reservation of home rule authority.

Nothing contained in this article shall be construed so as to prevent the town from entering into an agreement which is substantially similar to a development agreement adopted pursuant to the Florida Local Government Development Agreement Act, but which is based upon the home rule authority granted the town pursuant to article VIII, § 1(f), of the Constitution of the state and F.S. chs. 163, 166 and 380, and specifically recognized by the state legislature in F.S. § 163.3220(5).

Sec. 2-101. - Conflicts between development agreement and other land development regulations.

To the extent that this code may permit it and a development agreement purports to rezone land, grant **deviations or variances** from this code, including article II of this chapter, grant development orders or amendments to or extensions thereof equivalent to those which are available pursuant to ch. 10 of this LDC, implement development orders or amendments to development orders for developments of regional impact, or grant building permits or other permits which specifically allow the physical alteration or improvement of land, the development agreement must explicitly identify each instance of conflict with other ordinances and expressly provide for the development agreement to control, or else all of the provisions of such other ordinances shall control to the extent that the development agreement fails to expressly provide otherwise. Any ambiguity with respect to whether a development agreement or an ordinance is to control shall be interpreted to favor the ordinance.

Sec. 2-102. - Appeals.

No person may challenge the validity of a development agreement on the grounds that the agreement conflicts with the town's comprehensive plan except pursuant to the procedures set forth in F.S. § 163.3215. A party or a successor in interest to a party to a development agreement may bring suit to challenge the town's administration of a development agreement only after he has exhausted the administrative remedies prescribed in ch. 34 of this LDC for appeals from administrative actions.

Secs. 2-103—2-300. - Reserved.

1. **Requested Motion:**

Meeting Date: August 10, 2023

Discuss Updates to Tree Ordinance

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

5. **Background:**

Proposed changes to the Tree Protection Code include:

- defines exotic trees based on the Florida Exotic Plant List
- removing the exemption allowing homeowners to remove up to 3 protected trees annually
- providing a verification of exemption from permit required
- requires removal of exotic vegetation and trees when obtaining a tree removal permit
- creates a tree fund and defines a methodology for appraising tree values

Attachments:

1. MRTF Veg Tree Recommendations to TC
2. MRTF approved changes to Tree Ordinance
3. Private Property Rights to Prune 2022 Update to Tree Statute
4. 2019_Plant_List_ABSOLUTE_FINAL

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

Steve Poposki, Community Development Director

Date: August 01, 2023

Gretchen R.H. Vose, Town Attorney

Date: August 03, 2023

Amy Baker, Town Clerk

Date: August 03, 2023

Andy Hyatt, Town Manager

Date: August 03, 2023

MRTF Suggestions for the Town of Fort Myers Beach Vegetation Ordinances

1. Add Enforcement and Penalty sections to both Open Space, Buffering and Landscaping as well as Tree Protection divisions (similar to other FMB Town ordinances).
2. In Sec. 10-420 on Plant material standards the same list of invasive plants should be listed for removal as well as prohibited. Direct to the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) website <https://plants.ifas.ufl.edu/education/invasive-plants/> which has current resources on invasive plants including the Florida Exotic Pest Plant Councils (FLEPPC) list published for the state. (The rationale for not naming specific plants in the ordinance is due to the possible addition or delineation of various species.)
3. In Sec. 10 – 416 Landscaping standards, at the time of application for a permit for new construction, following the survey, irrigation and landscaping design should be submitted in a drawing to scale. (New construction will need to be clearly defined. Will it include new exterior decks, pools, etc.?)
4. Add the following terms and definitions to Article V on Tree Protection:
 - a) Crown – means the main mass of branching of a plant above the ground.
 - b) Drip line - means the outermost perimeter of the crown of a plant as projected vertically to the ground.
 - c) Girdling – a term also called ring-barking, is the complete removal of the bark around the entire circumference of a branch or tree. This results in the death of the area above the girdling. It is a prohibited method for removal of trees.
 - d) Hat-racking – a practice in which part or all of the top of a tree, known as the canopy, is removed, leaving vital branches exposed.
 - + e) Land-clearing stage - means a stage in the construction process in which trees and/or vegetation are removed from the land, i.e., proposed right-of-way excavation and paving, drainage systems excavation; utility clearings and prebuilding construction projects.
 - f) Landscape area or green space - means an area or areas including beautification strips, consisting of those materials, such as, but not limited to trees, hedges, planted ground cover, sodded and grassed areas and planted floral installations, all of which must be composed of natural plantings only, as distinguished from artificially manufactured planting reproductions.
 - g) Mangrove - means rooted trees and seedlings of the following species, but only when having a coastal or estuarine association: Red Mangrove (*Rhizophora mangle* L.), White Mangrove (*Laguncularia racemosa* Gaertn.), Black Mangrove (*Avicennia germinans*), Buttonwood Mangrove (*Conocarpus erecta*).

- h) Overall height (OH)- means the height, in feet, of a tree measured from the top of the root ball/system to the top of the uppermost foliage branches.
- i) Transplant - means the act of digging up a tree from one location and planting the same tree in another place.
- j) Tree, historic - means a tree which has been found by a professional forester, horticulturist or other professional plantsman to be of notable historic interest to the city and/or county, because of its age, type, size or historic association and has been so designated by resolution of the ~~city~~ commission of the city: *town*
- k) Tree protection zone - means a circular zone around each protected tree defined as follows:
 - (1) If the drip line is less than six feet from the trunk of the tree, the zone shall be that area within a radius of six feet around the tree.
 - (2) If the drip line is more than six feet from the trunk of the tree, but less than 20 feet, the zone shall be that area within a radius of the full drip line around the tree.
 - (3) If the drip line is 20 feet or more from the trunk of the tree, the zone shall be that area within a radius of 20 feet around the tree.
- l) Tree shade/canopy- means an evergreen or deciduous tree that can be maintained with a clear trunk of not less than six feet and with a spreading branching structure of at least 15 feet and opaque foliage habit such that a reasonably dense shade pattern is provided during peak daylight hours in the late spring, summer and early fall months of the year. For the purposes of this section, palms shall not be considered shade/canopy trees.

5. Add the following terms and definitions to Division 6- Open Space, Buffering and Landscaping
 - a) Buffer zone – means a combination of trees, hedges, shrubs, and ground covers.
 - b) Florida-friendly landscape – means Florida-friendly landscape practices are encouraged in all zoning districts. Landscape areas utilizing Florida-friendly designs are those that comply with the nine principals as designated by the University of Florida Institute of Food and Agricultural Science (UF/IFAS).
 - c) Hand removal - means removal of vegetation by use of hand tools.
 - d) Hand tools - means handheld and hand-operated tools such as axe, saw, chain saw, wheelbarrow, etc., not including self-propelled wheeled or track vehicles.
 - e) Hedge - means a dense row of shrubs or bushes forming a boundary.
 - f) Impervious surfaces – means any hard surface that prevents or hinders the absorption of water into the soil.
 - g) Invasive exotic vegetation – means a plant species introduced to Florida, purposely or accidentally, from a natural range outside of Florida, which is able to proliferate and aggressively alter or displace indigenous biological communities, and identified on the Florida Exotic Pest Plant Council's List: <http://www.fleppc.org>
 - h) Land-clearing stage - means a stage in the construction process in which trees and/or vegetation are removed from the land, i.e., proposed right-of-way excavation and paving, drainage systems excavation; utility clearings and prebuilding construction projects.
 - i) Mechanical removal - means using mechanical equipment (not hand tools) to remove vegetation from parcels of land, e.g., bulldozers, root rakes, backhoes, or hydro axe, etc.

- j) Native plants – means those plant species whose natural range included Florida at the time of European contact (1500 A.D.) as identified on the Atlas of Vascular Plants Website, which is located as follows: Atlas of Vascular Plants, University of South Florida Institute for Systematic Botany: <http://www.plantatlas.usf.edu/default.asp>
- k) New development - means the initial development of a principal structure on a vacant parcel of land.
- l) Pervious surfaces – means organic groundcover such as vegetation or mulch, bark, pine needles and yard clippings. It also may include non-organic material such as stone, gravel or pavers.
- m) Pruning/trimming - means removal of the leaf surface of any individual plant.
- n) Redevelopment- means the development of a principal structure on a parcel of land that was previously developed with a principal structure.
- o) Removal - means killing/destroying, i.e., cutting down, girdling, poisoning or up-rooting.
- p) Shrub - means a low-growing perennial, woody or evergreen plant with persistent stem.

Additionally – revise the definition of Open Space Sec. 10-412 - to include the following verbiage on points number 3 and 4

(3) Archaeological and historical sites, including any area that contains historic, cultural or socially significant evidence of past human activity ranging from large mound and midden

complexes to a group of artifacts, the boundary and extent of which is determined by a survey by a professional archaeologist.

(4) Protected trees are of historic, cultural, botanical or socially significant interest

6. Give an intent and purpose for Division 6 on Open Space, Buffering and Landscaping.
 - (a) It is the legislative intent of this section to protect and preserve the appearance, character, value and safety of the town's area and nearby properties and, by so doing, promote the general welfare of the community.
 - (b) The purpose is to improve the appearance of properties within the city through the protection, installation, and maintenance of trees and landscaping for screening and aesthetic effects, and to recognize the importance of such trees and landscaping, in the enhancement of property values, the improvement of air quality, and their contribution to the cooling of our environment. It is also recognized that native landscape species are most compatible with the city's climate and soil conditions, require less irrigation and fertilization than do exotic species, and therefore help to conserve water and reduce the pollution in stormwater runoff, which in turn helps to maintain the water quality of Estero Bay and the Gulf of Mexico. Therefore, the use of native landscape species, and removal of invasive exotic trees and vegetation, is strongly encouraged. The planting of exotic trees and vegetation is to be generally prohibited.
 - (c) Topography, flooding characteristics, soil conditions, and the existence of wetlands or other areas containing protected species or habitats are among the factors which make some areas environmentally sensitive. In order to protect environmentally sensitive lands, it may be necessary to prohibit development, or limit the allowable density and intensity of development, in these areas. Protection of environmentally sensitive land promotes the well-being of the

residents of the city because those areas perform vital functions, such as providing habitat for fish, birds, mammals, and reptiles. Protection of environmentally sensitive land also results in the protection of community recreation opportunities, such as fishing, nature observation and photography, as well as the protection of aesthetics and property values.

7. In Sec. 10 – 416 Landscaping standards, under Building edge plantings, add that Florida Friendly Landscape shrubs and groundcover plants must be used (in #4).
8. In Sec. 10 – 416 Landscaping standards, the description of Internal landscaping should limit in (f) the amount of impervious material to a certain percentage (TBD).
9. In Sec. 10 – 416 Landscaping standards, the notes describing the Buffer Types in Table 10-9 should include Trees and palms shall have mature canopy maintained a minimum of 15' above the ROW to avoid vehicular conflicts. (*this will limit the tree selection for these areas)
10. In Article V on Tree Protection, Sec. 14 - ³⁸⁰~~379~~ -- consider placing this list of protected trees in an Appendix.
11. Throughout documents, add after director or designee.
12. Create a tree fund - The Town of FMB shall establish a tree fund, which shall be used exclusively for plant replacement and to provide necessary maintenance of damaged trees. Penalties, fines and tree replacement payments, as provided for in this article, shall be deposited into the tree fund. The public may donate money to the town's tree fund to assist the town in its beautification efforts.

Respectfully submitted to MRTF by a sub-committee consisting of the following members:
Rose Larkin – Marine Resource Task Force member
Donn Davids – Master Gardener Volunteer of Lee County
Anita Parmer – Estero Island Garden Club member

The Marine Resource Task Force passed a motion to bring the language for the tree ordinance below to Town Council for Evaluation. **Changes are highlighted.**

ARTICLE V. - TREE PROTECTION^[16]

Footnotes:

--- (16) ---

Cross reference— Open space, buffering and landscaping, app. A, § 10-411 et seq.

Sec. 14-371. - Reserved.

Sec. 14-372. - Findings of fact.

The town council hereby finds and determines that trees promote the health and general welfare of the citizens of the town, specifically:

- (1) Trees transpire considerable amounts of water each day and assist in purifying the air;
- (2) Trees precipitate dust and other particulate airborne pollutants from the air;
- (3) Trees, through their root systems, stabilize soil and play an important and effective part in soil conservation, erosion control, and flood control;
- (4) Trees are an invaluable amenity, providing shade and cooling the air and land, and reducing noise levels and glare;
- (5) The protection of trees is not only desirable, but essential to the health, safety, and welfare of all the citizens, present and future, of the town;
- (6) Some trees are more beneficial than others as necessary contributions to the town's environment, and it is not necessary to protect each and every tree in order to attain the publicly beneficial results of tree protection; and
- (7) Invasive exotic trees crowd out native trees and other vegetation and do not warrant protection under this article.

Sec. 14-373. - Intent and purpose.

- (a) The intent of this article is to protect trees through the preservation and planting of protected trees in order to:
 - (1) Aid in the stabilization of soil by the prevention of erosion and sedimentation;
 - (2) Reduce stormwater runoff and costs associated therewith and maintain permeable land areas for surface water filtration;
 - (3) Aid in the removal of carbon dioxide and generation of oxygen in the atmosphere;
 - (4) Provide a buffer and screen against noise pollution;
 - (5) Promote energy conservation through the creation of shade, reducing heat gain in or on buildings or paved areas, and reducing the temperature of the microclimate through evapotranspiration;
 - (6) Provide protection against severe weather;

- (7) Aid in the control of drainage and restoration of denuded soil subsequent to construction or grading;
 - (8) Provide a haven for birds which in turn assist in the control of insects;
 - (9) Protect and increase property values;
 - (10) Conserve and enhance the town's physical and aesthetic environment; and
 - (11) Generally protect and enhance the quality of life and the general welfare of the town.
- (b) The purpose of this article is to protect trees from abuse and/or mutilation, and to regulate the removal and planting of protected trees in order to enhance and protect the environmental quality of the town.

Sec. 14-374. - Definitions.

- (a) The following words, terms and phrases, and their derivations, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. When not inconsistent with the context, words in the present tense include the future and words in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

Beneficial Use means a permitted activity in compliance with the Town's Code of Ordinances and Land Development Code.

Diameter at breast height (dbh) means the diameter, in inches, of a tree measured 54 inches above natural grade.

Director means the person to whom the town manager has delegated the authority to administer this article, or that person's designee.

Dripline means an imaginary vertical line running from the outermost branches or portion of the tree crown to the ground.

Indigenous vegetation means those plants which are characteristic of the major plant communities, as listed in § 10-413 of this LDC.

Invasive exotic tree and vegetation means any of the following tree species: *Melaleuca* (*Melaleuca quinquenervia*), Brazilian pepper (*Schinus terebinthifolius*), and Australian pine (*Casuarina spp.*), and all vegetation and tree species ranked as Category I on the Florida Exotic Pest Plant Council (FLEPPC) List of Invasive Plant Species as amended

Natural Waterbody means waterbodies that were created by natural geophysical forces, which include, but are not limited to the Gulf of Mexico, Matanzas Pass, Estero Bay, Ostego Bay, and Buccaneer Lagoon.

Person means any public or private individual, group, company, partnership, association, society or other combination of human beings whether legal or natural.

Protected tree means any tree listed in the protected tree list in § 14-380(c) of this chapter.

Protective barrier means a physical structure not less than three feet in height composed of lumber no less than one-inch by one-inch in size for shielding protected trees from the movement of equipment or the storage of equipment, material, debris or fill. Equivalent materials may be used to provide a protective barrier if first approved by the director.

Qualified Tree Professional means a Certified Forester, an International Society of Arboriculture (ISA) Certified Arborist® with Advanced Training in Roadside Vegetation, or an individual with equivalent credentials from a nationally recognized arboricultural organization, or a Landscape Architect registered pursuant to Chapter 481, Part II, Florida Statute.

Removal means the deliberate removal of a tree or causing the effective removal of a tree through damaging, poisoning or other direct or indirect actions resulting in the death of the tree.

Tree means a living, woody, self-supporting plant, ten feet or more in height, having one or more well-defined main stems or trunks, and any one stem or trunk four inches in diameter at breast height. Trees protected by this article are listed in § 14-380(c) of this chapter. For the purpose of this article, those palms listed in § 14-380(c) of this chapter are declared to be a tree and are protected by the provisions of this article.

Tree location map means a drawing or aerial photograph which provides the following information: location of all trees protected under the provisions of this article, plotted by ground truthing or any other accurate scientific techniques; common or scientific name of all trees; and diameter at breast height. Groups of trees in close proximity (five feet spacing or closer) may be designated as a clump of trees, with the predominant species, estimated number and average size listed.

Upland means land other than wetlands.

- (b) Unless specifically defined in this article, the words or phrases used in this article and not defined in subsection (a) of this section shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application.

Cross reference— Definitions and rules of construction generally, app. A, § 1-2.

Sec. 14-375. - Penalty for violation.

- (a) The director is authorized to pursue any one or combination of the enforcement mechanisms provided in this code (for example, § 1-5, or article V of ch. 2 of this LDC) for any violation of this article. See also the restoration standards in § 14-384 of this chapter.
- (b) In any prosecution under this article for the removal of a protected tree without a permit, each tree so removed will constitute a separate offense.

Sec. 14-376. - Exemptions.

- (a) This article shall not apply to the following:
 - (1) *Trees in rights-of-way*. The removal of trees on public rights-of-way conducted by or on behalf of a governmental agency in pursuance of its lawful activities or functions in the construction or improvement of public rights-of-way or in the performance of its official duties.
 - (2) *Damaged trees*. The removal of a protected tree that is dead or which has been destroyed or damaged by natural causes beyond saving or which is a hazard as the result of an act of God and constitutes an immediate peril to life and property.
 - (3) *Utility lines*. The removal of trees by duly constituted communication, water, sewer or electrical utility companies in or adjacent to a public easement or right-of-way, provided such removal is limited to those areas necessary for maintenance of existing lines or facilities or for construction of new lines or facilities in furtherance of providing utility service to its customers, and provided further that such removal is conducted so as to avoid any unnecessary damage or removal of trees.
 - (4) *Surveying activities*. The removal of trees protected by this article by a state-licensed land surveyor in the performance of his duties. The removal of trees protected by this article in a manner which requires clearing a swath of greater than three feet in width shall require approval of the director prior to such a removal and clearance.
 - (5) *Subdivided lots*. The removal of up to three protected trees during any one-year period on a lot that is being used lawfully as a single-family residence or mobile home. However, all other lots that are vacant or have a building that is being replaced are subject to the provisions of § 14-

~~382(c) of this chapter.~~ The removal of protected trees in accordance with Chapter 163.045, Florida Statutes.

- (b) However, exemptions (1), (3), (4) and (5) above, in the previous subsection, shall not apply to any tree cited in the Florida Champion Tree Register (Big Trees: The Florida Register, published by the Florida Native Plant Society, or successor publication).

Sec. 14-377. - Indigenous vegetation.

- (a) Indigenous vegetation shall not be cleared in areas that serve as listed species occupied habitat as defined in ch. 10, article III, division 8 of this LDC. The following shall apply:
- (1) The director shall determine the location of protected species to be preserved based on the criteria set forth in ch. 10, article III, division 8 of this LDC. This review shall not be substituted for surveys required under ch. 10, article III, division 8 of this LDC.
 - (2) The director, or the property owner with the director's approval, shall develop a management plan based on the criteria set forth in § 10-474 of this LDC. Preparation and review criteria for the plan may be subject to the provisions of an appropriate administrative code. Up to ten percent of the upland acreage shall be preserved in areas where listed species are present. No more than two separate areas shall be set aside on any given parcel. Any state-mandated upland listed species preserves shall be included within the referenced ten percent preservation area. Bald eagles (*Haliaeetus leucocephalus*) shall be protected pursuant to article III of this chapter.
- (b) Indigenous vegetation shall not be cleared within 25 feet of the mean high-water line of any natural waterway waterbody. Indigenous vegetation may be cleared selectively to allow the placement of docks, pipes, pumps and other similar structures pursuant to this code.

Sec. 14-378. - Suspension of article during emergency conditions.

Upon the declaration of a state of emergency pursuant to F.S. ch. 252, the director may suspend the enforcement of the requirements of this article for a period of 30 days in order to expedite the removal of damaged and destroyed trees in the interest of public safety, health and general welfare.

Sec. 14-379. - Nonliability of town.

Nothing in this article shall be deemed to impose any liability upon the town or upon any of its officers or employees, nor to relieve the owner and/or occupant of any duty to keep trees and shrubs upon private property or under his control in a safe condition.

Sec. 14-380. - List of protected trees.

- (a) Any tree delineated in subsection (c) of this section shall henceforth be a protected tree and shall thereby come under the provisions of this article, except where those trees are exempted from protection pursuant to § 14-376 of this article.
- (b) All other species of trees not named in subsection (c) of this section may be removed without a permit, but only in such a manner so as not to disturb or destroy surrounding protected trees or to disturb indigenous vegetation protected by § 14-377 of this article.
- (c) *Protected tree list.*

FAMILY NAME	
Scientific Name	Common Name
ACERACEAE (MAPLE FAMILY)	

Acer rubrum	Red Maple
ANACARDIACEAE (CASHEW FAMILY)	
Rhus copallina	Southern Sumac
ANNONACEAE (CUSTARD-APPLE FAMILY)	
Annona glabra	Pond Apple
AQUIFOLOIACEAE (HOLLY FAMILY)	
Ilex cassine	Dahoon Holly
AREACACEAE (PALM FAMILY)	
Coccothrinax argentata	Silver Palm
Cocos nucifera	Coconut Palm
Roystonea elata	Florida Royal Palm
Sabal palmetto	Cabbage Palm
AVICENNIACEAE (BLACK MANGROVE FAMILY)	
Avicennia germinans	Black Mangrove
BETULACEAE (BIRCH FAMILY)	
Carpinus caroliniana	Iron Wood
BORAGINACEAE (BORAGE FAMILY)	
Cordia sebestena	Geiger Tree
BURSERACEAE (TORCHWOOD FAMILY)	
Bursera simaruba	Gumbo Limbo
CAPPARACEAE (CAPER FAMILY)	
Capparis cynophallophora	Jamaica Caper

COMBRETACEAE (WHITE MANGROVE FAMILY)	
Bucida buceras	Black Olive
Conocarpus erecta	Buttonwood
Laguncularia racemosa	White Mangrove
CORNACEAE (DOGWOOD FAMILY)	
Cornus foemina	Swamp Dogwood
CUPRESSACEAE (CYPRESS FAMILY)	
Juniperus silicicola	Southern Red Cedar
EBENACEAE (EBONY FAMILY)	
Diospyros virginiana	Persimmon
FABACEAE (PEA FAMILY)	
Acacia farnesiana	Sweet Acacia
Lysiloma bahamensis	Wild Tamarind
Piscidia piscipula	Jamaica Dogwood
Pithecellobium unguis-cati	Cat Claw
FAGACEAE (OAK FAMILY)	
Quercus chapmani	Chapman Oak
Quercus incana	Bluejack Oak
Quercus laevis	Turkey Oak
Quercus laurifolia	Laurel Oak
Quercus myrtifolia	Myrtle Oak
Quercus nigra	Water Oak

Quercus virginiana	Live Oak
Quercus virginiana geminata	Sand Live Oak
HAMAMELIDACEAE (WITCH-HAZEL FAMILY)	
Liquidambar styraciflua	Sweet Gum
JUGLANDACEAE (WALNUT AND HICKORY FAMILY)	
Carya aquatica	Water Hickory
Carya glabra	Pignut Hickory
LAURACEAE (LAUREL FAMILY)	
Persea borbonia	Red Bay
Persea palustris	Swamp Bay
MAGNOLIACEAE (MAGNOLIA FAMILY)	
Magnolia grandiflora	Southern Magnolia
Magnolia virginiana	Sweetbay
MELIACEAE FAMILY (MAHOGANY FAMILY)	
Swietenia mahogoni	West Indian Mahogany
MORACEAE (MULBERRY FAMILY)	
Ficus aurea	Strangler Fig
Ficus citrifolia	Short-leaf Fig
Morus rubra	Red Mulberry
MYRTACEAE (MYRTLE FAMILY)	
Eugenia axillaris	White Snapper
Eugenia confusa	Ironwood

<i>Eugenia rhombea</i>	Red Stopper
<i>Eugenia myrtoides</i>	Spanish Stopper
<i>Myrcianthes fragans</i>	Simpson Stopper
NYSSACEAE (SOUR GUM FAMILY)	
<i>Nyssa sylvatica</i>	Black Gum/Black Tupelo
OLACACEAE (XIMENIA FAMILY)	
<i>Ximenia americana</i>	Tallowood
OLEACEAE (OLIVE FAMILY)	
<i>Forestiera segregata</i>	Florida Privet
<i>Fraxinus caroliniana</i>	Pop Ash
PINACEAE (PINE FAMILY)	
<i>Pinus elliotii</i> var. <i>densa</i>	South Florida Slash Pine
<i>Pinus palustris</i>	Long-leaf Pine
PLATANACEAE (SYCAMORE FAMILY)	
<i>Platanus occidentalis</i>	Sycamore
POLYGONACEAE (BUCKWHEAT FAMILY)	
<i>Coccoloba diversifolia</i>	Pigeon Plum
<i>Coccoloba uvifera</i>	Sea Grape
RHIZOPHORACEAE (RED MANGROVE FAMILY)	
<i>Rhizophora mangle</i>	Red Mangrove
ROSACEAE (ROSE FAMILY)	
<i>Prunus caroliniana</i>	Cherry Laurel

RUTACEAE (RUE FAMILY)	
Zanthoxylum clavaherculis	Hercules Club
SALICACEAE (WILLOW FAMILY)	
Salix caroliniana	Coastal-Plain Willow
SAPOTACEAE (SAPODILLA FAMILY)	
Bumelia celastrina	Buckthorn/Saffon Plum
Bumelia tenax	Buckthorn/Tough Bumelia
Chrysophyllum oliviforme	Satinleaf
Mastichodendron foetidissimum	Mastic
SIMAROUBACEAE (QUASSIA FAMILY)	
Simarouba glauca	Paradise Tree
TAXODIACEAE (BALD CYPRESS FAMILY)	
Taxodium ascendens	Pond Cypress
Taxodium distichum	Bald Cypress
THEACEAE (CAMELIA FAMILY)	
Gordonia lasianthus	Loblolly Bay
THEOPHRASTACEAE (JOEWOOD FAMILY)	
Jacquinia keyensis	Joewood
ULMACEAE (ELM FAMILY)	
Celtis laevigata	Hackberry
Ulmus americana	American Elm

Sec. 14-381. - Unlawful injury of trees.

It shall be a violation of this article for any person to remove, injure, disfigure, or destroy a protected tree in preparation for, in connection with, or in anticipation of development of land, except in accordance with the provisions of this article.

Sec. 14-382. - Removal of protected trees.

- (a) *Permit required.* Any protected tree, as defined ~~and protected~~ by this article, may be lawfully removed only after a permit ~~therefor~~ has been secured from the director. A verification of exemption from a permit in accordance with Section 14-376 of this article may be requested in writing to the Town at no charge. Failure to comply with the requirements of a tree removal permit shall be a violation of this article.
- (b) *Relocation to public property.* Where a protected tree is to be removed under the provisions of this article, the town may, with the owner's permission, relocate the tree (not being relocated within the property) at the town's expense to publicly owned property for replanting, either for permanent utilization at a new location or for future use at another location. If the town does not elect to relocate any such tree, it may give the county or any city within the county the ability to acquire such tree at its expense for relocation. The relocation shall be accomplished within 15 working days of the issuance of a permit, unless it is necessary to root prune the tree to ensure its survival, in which case the relocation shall be accomplished within 30 working days of the issuance of a permit or on another suitable schedule as agreed to by all parties.
- (c) *Subdivided lots.* For individual lots that are vacant or have a building that is being replaced, tree permits will be incorporated into the building permit for the site. For clearing prior to building permit issuance, a separate tree removal permit application must be submitted. Review of the proposed removal will follow the criteria listed in § 14-412(d) of this chapter, and will also assess the existing understory or subcanopy plants and protected species for retention or relocation within the site. However, no permit is required for the removal of up to three protected trees during any one-year period on a lot that is being used lawfully as a single-family residence or mobile home.

Sec. 14-383. - Tree protection during development of land.

- (a) Prior to the land clearing stage of development, the owner or developer shall clearly mark all protected trees for which a tree removal permit has not been issued and shall erect protective barriers for the protection of the trees according to the following:
 - (1) Around an area at or greater than a six-foot radius of all species of mangroves and protected cabbage palms;
 - (2) Around an area at or greater than the full dripline of all protected native pines; and
 - (3) Around an area at or greater than two-thirds of the dripline of all other protected species.
- (b) No person shall attach any sign, notice or other object to any protected tree or fasten any wires, cables, nails, or screws to any protected tree in any manner that could prove harmful to the protected tree, except as necessary in conjunction with activities in the public interest.
- (c) During the construction stage of development, the owner or developer shall not cause or permit the cleaning of equipment or material within the outside perimeter of the crown (dripline) or on the nearby ground of any protected tree or group of trees which is to be preserved. Within the outside perimeter of the crown (dripline) of any protected tree or on nearby ground, the owner or developer shall not cause or permit storage of building material and/or equipment, or disposal of waste material such as paints, oil, solvents, asphalt, concrete, mortar, or any other material harmful to the life of the tree.
- (d) No person shall permit any unnecessary fire or burning within 30 feet of the dripline of a protected tree.
- (e) Any landscaping activities within the protective barrier area shall be accomplished with hand labor.

- (f) Prior to the director issuing a certificate of occupancy or compliance for any development, building or structure, all protected trees designated to be preserved that were destroyed during construction shall be replaced by trees of equivalent diameter at breast height tree caliper and of the same species as specified by the director, before occupancy or use, unless approval for their removal has been granted under permit.
- (g) The director may conduct periodic inspections of the site during land clearance and construction.
- (h) If, in the opinion of the director, development activities will so severely stress slash pines or any other protected tree such that they are made susceptible to insect attack, preventative spraying of these trees may be required.

Sec. 14-384. - Restoration standards.

- (a) If a violation of this article has occurred and upon agreement of the director and the violator, or, if they cannot agree, then upon conviction by the court or order of the hearing examiner, a restoration plan shall be ordered in accordance with the following standards:
 - (1) The restoration plan shall include the following minimum planting standards:
 - a. The plan shall include a planting plan for all protected trees. Replacement stock shall be computed on a three for one basis according to the total number of unlawfully removed trees. The phrase "three for one" in this section refers to the requirement of replacing an illegally removed tree with three live trees according to the provisions of this article. Replacement trees shall be nursery grown, containerized, and no less than six feet in height. It shall be within the discretion of the director to allow a deviation from the ratio specified in this subsection. When such deviation is sought, the total of heights and calipers shall equal or exceed that specified in the standards set out in this subsection. An example of this might be one in which trees four feet in height might be planted in a ratio of five replacement trees to one illegally removed tree. Justification for such a deviation shall be provided to the director.
 - b. The plan shall include a planting plan for understory vegetation. Understory vegetation shall be restored to the area from which protected trees were unlawfully removed or mutilated. The plant selection shall be based on that characteristic of the Florida Land Use, Cover and Classification System (FLUCCS) Code. Shrubs, groundcover and grasses shall be restored as delineated in the Florida Land Use, Cover and Classification System Code. Up to seven species shall be utilized with relative proportions characteristic of those in the Florida Land Use, Cover and Classification System Code. The exact number and type of species required shall also be based upon the existing indigenous vegetation on adjacent property. Replacement stock shall be no less than one-gallon sized, nursery-grown containerized stock planted at no less than three feet on center in the area from which protected trees were unlawfully removed or mutilated. This area shall be defined by the dripline of the trees. The number of shrubs shall not exceed, but may be less than, 25 shrubs per tree unlawfully removed or mutilated. The understory of the restored site shall be protected for a period of no less than ten years, unless its removal is a provision of a development order which has been approved after the restoration of the site.
 - c. If the unlawful removal or mutilation of trees has caused any change in hydrology or surface water flows, then the hydrology or surface water flows shall be restored to pre-violation condition.
 - (2) Massing of replacement stock shall be subject to agreement of the parties or, if appropriate, then by approval of the court or the hearing examiner, as long as the minimum number of trees and/or seedlings are provided. Replacement stock, with the exception of palms, shall be Florida No. 1 or better grade. Replacement stock shall have a guaranteed 80 percent survivability for a period of no less than five years. A maintenance provision of no less than five years must be provided in the restoration plan to control invasion of exotic vegetation. Replacement stock shall not be located on any property line, or in any utility easement that prohibits such plantings. The director

may at his/her discretion allow the replacement stock to be planted off-site where approved development displaces areas to be restored. In these situations, off-site plantings shall be on lands under the control of a public agency. The off-site location is subject to the approval of the director.

- (3) In the event of impending development on property wherein protected trees were unlawfully removed, the restoration plan shall indicate the location of the replacement stock consistent with any approved plans for subsequent development. For the purposes of this article, impending development shall mean that a developer has made application for a development order or applied for a building permit.
 - (4) If identification of the species of trees is impossible for any reason on property wherein protected trees were unlawfully removed, then a presumption is raised that the trees illegally removed were of a similar species and mix as those found on adjacent properties.
 - (5) A monitoring report shall be submitted to the director on an annual basis for five years describing the conditions of the restored site. The monitoring report shall be submitted on or before each anniversary date of the effective date of the restoration plan. Mortality estimates per species planted, estimated causes for mortality, growth of the vegetation, and other factors which would indicate the functional health of the restored systems shall be included in the monitoring report. Failure to submit the report in a timely manner shall constitute a violation of this article. When mitigation is required pursuant to this article, monitoring reports are necessary to ensure that the mitigation efforts have been successful. In order to verify the success of the mitigation efforts and the accuracy of the monitoring reports, periodic inspections are necessary. In order that the town be compensated by the violator for the costs of these periodic inspections of the restored site, a schedule of inspection fees may be established by the town; if no such schedule exists, inspection fees shall be those charged for similar services by Lee County.
- (b) If a violation of this section occurs, then the restoration provisions contained within this section shall govern and supersede any other restoration provisions contained within this article.

Secs. 14-385—14-410. - Reserved.

Sec. 14-411. - Permit required.

No person, organization, society, association, corporation, or any agent or representative thereof, shall deliberately cut down, destroy, remove, relocate, defoliate through the use of chemicals or other methods, or otherwise damage any tree that is protected under this article without first obtaining a permit as provided in this article.

Sec. 14-412. - Issuance of permit.

- (a) *Submission of application.* Application for a permit to remove any protected tree defined in this article shall be submitted to the director, in writing, on a form provided by the director, accompanied by a written statement indicating the reasons for removal.
- (b) *Authority of director.* The director shall have the authority to issue the permit and to inspect all work performed under any permit issued under this article.
- (c) *Required information.* All applications to remove any protected tree defined in this article shall be on forms provided by the director. Where an application has been submitted to the director for the removal of more than five protected trees, no tree removal permit shall be issued by the director until a site plan for the lot or parcel has been reviewed and approved by the director, which shall include the following minimum information:
 - (1) The shape and dimensions of the lot or parcel, together with the existing and proposed locations of the structures and improvements, if any.

- (2) A tree location map for the lot or parcel, in a form acceptable to the director. For the removal of three protected trees or less, an on-site examination by the director's designee shall be made in lieu of the tree location map requirement.
 - (3) Any proposed grade changes that might adversely affect or endanger any protected trees on the lot or parcel, together with specifications reflecting how the trees can be safely maintained.
 - (4) Any proposed tree replacement plan.
- (d) *Criteria for granting.* The director shall approve a permit for issuance for the removal of any protected tree if the director finds one or more of the following conditions is present:
- (1) Trees which pose a safety hazard to pedestrian or vehicular traffic or threaten to cause disruption to public utility services.
 - (2) Trees which pose a safety hazard to existing buildings or structures.
 - (3) Trees which, if not removed, would preclude vehicular access to a lot or parcel.
 - (4) Diseased trees which are a hazard to people, buildings or other improvements on a lot or parcel or to other trees.
 - (5) Trees so weakened by age, storm, fire, or other injury as to, in the opinion of the director, jeopardize the life and limb of persons or cause a hazard to property.
 - (6) Trees which, if not removed, would allow a landowner no beneficial use of a lot or parcel or would place an inordinate burden on the landowner.

The director may require that a tree protected by this article be relocated on the same lot or parcel in lieu of removal. Permitting decisions of the director may be appealed through the procedure set forth in § 34-86 of this LDC.

- (e) *Submission of site plan when building permit not required.* Where a building permit issuance is not required because no structures are ready to be constructed and no other development of the lot is about to occur, any person seeking to remove a tree protected under this article shall first file a site plan with the director meeting the requirements of subsection (c) of this section prior to receiving a tree removal permit from the director.
- (f) *Inspection of site.* The director may conduct an on-site inspection to determine if any proposed tree removal conforms to the requirements of this article and what effect, if any, removal of the protected trees will have upon the natural resources of the affected area prior to the granting or denying of the application. A permit fee will be required for the removal or relocation of any tree protected under the provisions of this article and shall be paid at the time of issuance of the permit. The fees established must be paid to the director. Such fees are hereby declared to be necessary for the purpose of processing the application and making the necessary inspection for the administration and enforcement of this article.
- (g) *Approval or denial.* Based upon the information contained in the application and after investigation of the application, the director shall approve or deny the application, and, if approved, the director is the party so designated by the town to issue the permit for a period not to exceed one year and to collect the permit fee.
- (h) *Conditions.* The director **may shall** attach the **following** conditions to the permit relating to the method of identifying, designating and protecting those trees which are not to be removed in accordance with subsection (g) of this section. A violation of these conditions shall automatically invalidate the permit. **Special conditions which may be attached to the permit may include a requirement for successful replacement of trees permitted to be removed with trees of the same size, compatible species and same number.**

(1) Remove any and all invasive exotic vegetation and tree species.

(2) Replace trees permitted to be removed with protected tree species of the same size, compatible species and same number. If the size of replacement trees and/or the size of the property are

prohibitive to tree replacement, then the mitigation value of the removed trees shall be paid to the Town's Tree Fund. Where mitigation is necessary, an appraisal prepared by a qualified tree professional using the appropriate appraisal method found in Determining the Mitigation Value of Roadside Vegetation, Rev. 10/20, which is incorporated herein by reference at <http://www.flrules.org/Gateway/reference.asp?No=Ref-12210>. The appraised value of the protected tree removed will be the required mitigation subject to the Director's verification of the completeness and accuracy of mitigation calculations. The mitigation shall be paid as a fee equal to the amount of the appraisal to the Tree Fund. Mitigation fees must be paid to the Town's Tree Fund prior to approval of an Application.

Sec. 14-413. – Tree Fund

The Town shall establish a tree fund, which shall be used exclusively for plant replacement and to provide necessary maintenance of damaged trees. Penalties, fines and tree replacement payments, as provided for in this article, shall be deposited into the tree fund. The public may donate money to the Town's tree fund to assist the Town in its beautification efforts.

Secs. 14-413—14-450. - Reserved.

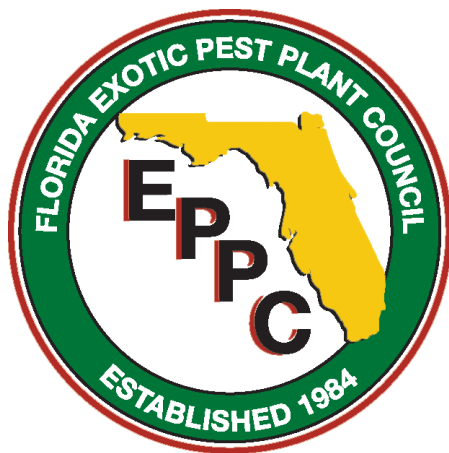
Private Property Rights to Prune, Trim, and Remove Trees

CS/SB 518 (Brodeur)

The bill clarifies section 163.045, Florida Statutes, which provides that a local government may not require a notice, application, permit, fee, or mitigation for pruning, trimming, or removing a tree on a residential property if the owner obtains documentation from an arborist or licensed landscape architect that the tree presents a danger to persons or property. The bill defines "documentation" as an onsite assessment performed in accordance with tree risk assessment procedures outlined in Best Management Practices - Tree Risk Assessment, Second Edition (2017) by an arborist certified by the International Society of Arboriculture (ISA) or a Florida licensed landscape architect, and signed by the arborist or landscape architect. It defines "residential property" as a single-family, detached building located on a lot actively used for single-family residential purposes and that is either a conforming use or a legally recognized non-conforming use. The bill removes reference to the term "danger" and replaces it with the phrase "unacceptable risk." It specifies a tree presents an unacceptable risk if removal is the only means of practically mitigating its risk before moderate, as determined by the tree risk assessment procedures outlined in the Best Management Practices - Tree Risk Assessment, Second Edition (2017).

Effective date: July 1, 2022.

Approved by Governor:



For more information on
invasive exotic plants
including links to related
web pages, visit:
www.fleppc.org

FLEPPC List Definitions:

Exotic—a species introduced to Florida, purposefully or accidentally, from a natural range outside of Florida. **Native**—a species whose natural range includes Florida. **Naturalized exotic**—an exotic that sustains itself outside cultivation (it is still exotic; it has not “become” native). **Invasive exotic**— an exotic that has not only naturalized, but is expanding on its own in Florida native plant communities.

Zone: N = north, **C** = central, **S** = south, Referring to each species’ general distribution in regions of Florida (not its potential range in the state). Please refer to the map below.



Citation example:

FLEPPC. 2019 List of Invasive Plant Species.
Florida Exotic Pest Plant Council. Internet: www.fleppc.org

**The 2019 list was prepared by
the FLEPPC Plant List Committee**

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**Florida Exotic Pest Plant
Council’s 2019 List of
Invasive Plant Species**

*The mission of the **Florida Exotic Pest Plant Council** is to reduce the impacts of invasive plants in Florida through the exchange of scientific, educational, and technical information.*

Note: The FLEPPC List of Invasive Plant Species is not a regulatory list. Only those plants listed as Federal Noxious Weeds, Florida Noxious Weeds, Florida Prohibited Aquatic Plants, or in local ordinances are regulated by law.

Purpose of the List

To provide a list of plants determined by the Florida Exotic Pest Plant Council to be invasive in natural areas of Florida and routinely update the list based upon information of newly identified occurrences and changes in distribution over time. Also, to focus attention on:

- The adverse effects exotic pest plants have on Florida’s biodiversity and native plant communities,
- The habitat losses in natural areas from exotic pest plant infestations,
- The impacts on endangered species via habitat loss and alteration,
- The need for pest plant management,
- The socio-economic impacts of these plants (e.g., increased wildfires or flooding in certain areas),
- Changes in the severity of different pest plant infestations over time,
- Providing information to help managers set priorities for research and control programs.

www.fleppc.org

CATEGORY I

Invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.

Scientific Name	Common Name	Zone	Scientific Name	Common Name	Zone
<i>Abrus precatorius</i>	rosary pea	C, S	<i>Melinis repens</i>	Natalgrass	C, S
<i>Acacia auriculiformis</i>	earleaf acacia	C, S	<i>Microsorum grossum</i> ⁴	serpent fern, wart fern	S
<i>Albizia julibrissin</i>	mimosa, silk tree	N, C	<i>Microstegium vimineum</i>	Japanese stiltgrass	N
<i>Albizia lebbbeck</i>	woman's tongue	C, S	<i>Mimosa pigra</i>	catclaw mimosa	C, S
<i>Ardisia crenata</i>	coral ardisia	N, C, S	<i>Nandina domestica</i>	heavenly bamboo, nandina	N, C
<i>Ardisia elliptica</i>	shoebutton ardisia	C, S	<i>Nephrolepis brownii</i>	Asian sword fern	C, S
<i>Asparagus aethiopicus</i>	asparagus fern	N, C, S	<i>Nephrolepis cordifolia</i>	sword fern	N, C, S
<i>Bauhinia variegata</i>	orchid tree	C, S	<i>Neyraudia reynaudiana</i>	Burma reed	S
<i>Bischofia javanica</i>	bishopwood	C, S	<i>Nymphoides cristata</i>	crested floatingheart	C, S
<i>Calophyllum antillanum</i>	Santa Maria	S	<i>Paederia cruddasiana</i>	sewer vine	S
<i>Casuarina equisetifolia</i>	Australian-pine	N, C, S	<i>Paederia foetida</i>	skunk vine	N, C, S
<i>Casuarina glauca</i>	suckering Australian-pine	C, S	<i>Panicum repens</i>	torpedograss	N, C, S
<i>Cenchrus purpureus</i> (<i>Pennisetum purpureum</i>)	elephantgrass, Napier grass	N, C, S	<i>Pistia stratiotes</i>	water-lettuce	N, C, S
<i>Cinnamomum camphora</i>	camphor-tree	N, C, S	<i>Psidium cattleianum</i>	stawberry guava	C, S
<i>Colocasia esculenta</i>	wild taro	N, C, S	<i>Psidium guajava</i>	guava	C, S
<i>Colubrina asiatica</i>	latherleaf	S	<i>Pueraria montana</i> var. <i>lobata</i>	kudzu	N, C, S
<i>Cupaniopsis anacardioides</i>	carrotwood	C, S	<i>Rhodomyrtus tomentosa</i>	downy rose-myrtle	C, S
<i>Deparia petersenii</i>	Japanese false spleenwort	N, C	<i>Ruellia simplex</i>	Mexican petunia	N, C, S
<i>Dioscorea alata</i>	winged yam	N, C, S	<i>Salvinia minima</i>	water spangles	N, C, S
<i>Dioscorea bulbifera</i>	air potato	N, C, S	<i>Scaevola taccada</i>	beach naupaka, half-flower	N, C, S
<i>Dolichandra unguis-cati</i> (<i>Macfadyena unguis-cati</i>)	cat's-claw vine	N, C, S	<i>Schefflera actinophylla</i>	schefflera, umbrella tree	C, S
<i>Eichhornia crassipes</i>	water-hyacinth	N, C, S	<i>Schinus terebinthifolia</i>	Brazilian pepper	N, C, S
<i>Eugenia uniflora</i>	Surinam cherry	C, S	<i>Scleria lacustris</i>	Wright's nutrush	C, S
<i>Ficus microcarpa</i> ¹	laurel fig	C, S	<i>Scleria microcarpa</i> [*]	tropical nutrush	C, S
<i>Hydrilla verticillata</i>	hydrilla	N, C, S	<i>Senna pendula</i> var. <i>glabrata</i>	Christmas senna, climbing cassia	C, S
<i>Hygrophila polysperma</i>	green hygro	N, C, S	<i>Solanum tampicense</i>	wetland night shade	C, S
<i>Hymenachne amplexicaulis</i>	West Indian marsh grass	N, C, S	<i>Solanum viarum</i>	tropical soda apple	N, C, S
<i>Imperata cylindrica</i>	cogongrass	N, C, S	<i>Sporobolus jacquemontii</i>	West Indian dropseed	C, S
<i>Ipomoea aquatica</i>	water-spinach	C	<i>Syngonium podophyllum</i>	arrowhead vine	N, C, S
<i>Jasminum dichotomum</i>	Gold Coast jasmine	C, S	<i>Syzygium cumini</i>	Java plum	C, S
<i>Jasminum fluminense</i>	Brazilian Jasmine	C, S	<i>Tectaria incisa</i>	incised halberd fern	S
<i>Lantana strigocamara</i> ²	lantana, shrub verbena	N, C, S	<i>Thelypteris opulenta</i>	jeweled maidenhair fern	S
<i>Ligustrum lucidum</i>	glossy privet	N, C	<i>Thespesia populnea</i>	seaside mahoe	C, S
<i>Ligustrum sinense</i>	Chinese privet	N, C, S	<i>Tradescantia fluminensis</i>	small-leaf spiderwort	N, C
<i>Lonicera japonica</i>	Japanese honeysuckle	N, C, S	<i>Tradescantia spathacea</i>	oyster plant	C, S
<i>Ludwigia peruviana</i>	Peruvian primrosewillow	N, C, S	<i>Triadica sebifera</i>	Chinese tallow-tree	N, C, S
<i>Lumnitzera racemosa</i>	black mangrove	S	<i>(Sapium sebiferum)</i>		
<i>Luziola subintegra</i>	Tropical American watergrass	S	<i>Urena lobata</i>	Caesar's weed	N, C, S
<i>Lygodium japonicum</i>	Japanese climbing fern	N, C, S	<i>Urochloa mutica</i>	paragrass	N, C, S
<i>Lygodium microphyllum</i>	Old World climbing fern	N, C, S	<i>Vitex rotundifolia</i>	beach vitex	N
<i>Manilkara zapota</i>	sapodilla	S			
<i>Melaleuca quinquenervia</i>	melaleuca, paper bark	C, S			

¹ Does not include *Ficus microcarpa* var. *fuyuensis*, which is sold as “green island ficus”.

² Historically this non-native has been referred to as *Lantana camara*, a species not known to occur in Florida.

³ Does not include the native endemic *Spermacoce neoterminalis*.

⁴ *Microsorum grossum* has been previously misidentified as *Microsorum scolopendria*.

^{*} Added to the FLEPPC List of Invasive Species in 2019.

Plant names are those published in the Atlas of Florida Plants (<http://www.florida.plantatlas.usf.edu>). For historical species nomenclature see “Guide to Vascular Plants of Florida Third Edition.” Wunderlin and Hansen, University of Florida Press. 2011.

CATEGORY II

Invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category 1 species. These species may become Category 1 if ecological damage is demonstrated.

Scientific Name	Common Name	Zone	Scientific Name	Common Name	Zone
<i>Adenanthera pavonina</i>	red sandalwood	S	<i>Koeleruteria elegans</i> subsp. <i>formosana</i>	flamegold tree	C, S
<i>Agave sisalana</i>	sisal hemp	C, S	<i>Landoltia punctata</i>	spotted duckweed	N, C, S
<i>Alstonia macrophylla</i>	devil tree	S	<i>Leucaena leucocephala</i>	leadtree	N, C, S
<i>Alternanthera philoxeroides</i>	alligatorweed	N, C, S	<i>Limnophila sessiliflora</i>	Asian marshweed	N,C, S
<i>Antigonon leptopus</i>	coral vine	N, C, S	<i>Livistona chinensis</i>	Chinese fan palm	C, S
<i>Ardisia japonica</i>	Japanese ardisia	N	<i>Macroptilium lathyroides</i>	wild bushbean	N, C, S
<i>Aristolochia elegans</i> (<i>Aristolochia littoralis</i>)	calico flower	N, C, S	<i>Melaleuca viminalis</i> (<i>Callistemon viminalis</i>)	bottlebrush	C, S
<i>Asystasia gangetica</i>	Ganges primrose	C, S	<i>Melia azedarach</i>	Chinaberry	N, C, S
<i>Begonia cucullata</i>	wax begonia	N, C, S	<i>Melinis minutiflora</i>	molasses grass	C S
<i>Broussonetia papyrifera</i>	paper mulberry	N, C, S	<i>Mikania micrantha</i>	mile-a-minute vine	S
<i>Bruguiera gymnorhiza</i>	large-leafed mangrove	S	<i>Momordica charantia</i>	balsam-apple	N, C, S
<i>Callisia fragrans</i>	Inch plant	C, S	<i>Murraya paniculata</i>	orange-jessamine	S
<i>Casuarina cunninghamiana</i>	river sheoak	C, S	<i>Myriophyllum spicatum</i>	Eurasian water-milfoil	N, C, S
<i>Cecropia palmata</i>	trumpet tree	S	<i>Passiflora biflora</i>	twin-flowered passion vine	S
<i>Cenchrus polystachios</i> (<i>Pennisetum polystachios</i>)	mission grass	S	<i>Phoenix reclinata</i>	Senegal date palm	C, S
<i>Cenchrus setaceus</i> (<i>Pennisetum setaceum</i>)	fountain grass	S	<i>Phyllostachys aurea</i>	golden bamboo	N, C
<i>Cestrum diurnum</i>	day jessamine	C, S	<i>Pittosporum pentandrum</i>	Taiwanese cheesewood	S
<i>Chamaedorea seifrizii</i>	bamboo palm	S	<i>Platycerium bifurcatum</i>	staghorn fern	S
<i>Clematis terniflora</i>	Japanese clematis	N, C	<i>Praxelis clematidea</i>	praxelis	C
<i>Cocos nucifera</i>	coconut palm	S	<i>Pteris vittata</i>	Chinese brake, ladder brake	N, C, S
<i>Crassocephalum crepidioides</i>	redflower ragleaf	C, S	<i>Ptychosperma elegans</i>	solitary palm	S
<i>Cryptostegia madagascariensis</i>	Madagascar rubbervine	C, S	<i>Richardia grandiflora</i>	largeflower Mexican clover	N, C, S
<i>Cyperus involucratus</i>	umbrella plant	C, S	<i>Ricinus communis</i>	castorbean	N, C, S
<i>Cyperus prolifer</i>	dwarf papyrus	C, S	<i>Rotala rotundifolia</i>	dwarf rotala, roundleaf toothcup	S
<i>Dactyloctenium aegyptium</i>	Durban crow's-foot grass	C, S	<i>Ruellia blechum</i>	green shrimp plant	N, C, S
<i>Dalbergia sissoo</i>	Indian rosewood, sissoo	C, S	<i>Sesbania punicea</i>	rattlebox	N, C, S
<i>Dalechampia scandens</i> [*]	spurge-creeper	S	<i>Sida planicaulis</i>	mata-pasto	C, S
<i>Distimake tuberosus</i> (<i>Merremia tuberosa</i>)	Spanish arbor vine, wood-rose	C, S	<i>Solanum diphyllum</i>	twingleaf nightshade	N, C, S
<i>Dracaena hyacinthoides</i> (<i>Sansevieria hyacinthoides</i>)	bowstring hemp	C, S	<i>Solanum torvum</i>	turkey berry	N, C, S
<i>Elaeagnus pungens</i>	silverthorn, thorny olive	N, C	<i>Spermacoce verticillata</i> ³	shrubby false buttonweed	C, S
<i>Elaeagnus umbellata</i>	autumn olive, silverberry	N	<i>Sphagneticola trilobata</i>	wedelia	N, C, S
<i>Epipremnum pinnatum</i> cv. ‘Aureum’	pothos	C, S	<i>Stachytarpheta cayennensis</i>	nettle-leaf porterweed	S
<i>Eulophia graminea</i>	Chinese crown orchid	C, S	<i>Syagrus romanzoffiana</i>	queen palm	C, S
<i>Ficus altissima</i>	council tree, false banyan	S	<i>Syzygium jambos</i>	Malabar plum, rose-apple	N, C, S
<i>Flacourtia indica</i>	governor's plum	S	<i>Talipariti tiliaceum</i>	mahoe, sea hibiscus	C, S
<i>Hemarthria altissima</i>	limpograss	C, S	<i>Terminalia catappa</i>	tropical-almond	C, S
<i>Heteropterys brachiata</i>	redwing	S	<i>Terminalia muelleri</i>	Australian-almond	C, S
<i>Hyparrhenia rufa</i>	jaragua	N, C, S	<i>Tribulus cistoides</i>	puncture vine, burr-nut	N, C, S
<i>Ipomoea carnea</i> subsp <i>fistulosa</i>	shrub morning-glory	C, S	<i>Urochloa maxima</i> (<i>Panicum maximum</i>)	Guineagrass	N, C, S
<i>Kalanchoe x houghtonii</i>	mother of millions	N, C, S	<i>Vernicia fordii</i>	tung-oil tree	N, C, S
<i>Kalanchoe pinnata</i>	life plant	C, S	<i>Vitex trifolia</i>	simple-leaf chastetree	C, S
			<i>Washingtonia robusta</i>	Washington fan palm	C, S
			<i>Wisteria sinensis</i>	Chinese wisteria	N, C
			<i>Xanthosoma sagittifolium</i>	malanga, elephant ear	N, C, S

1. **Requested Motion:**

Meeting Date: August 10, 2023

Discuss Vegetation and Tree Requirements for Single Family Homes

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

5. **Background:**

There are currently no vegetation or tree requirements for single family home construction.

Staff is seeking direction from Town Council with regards to tree and vegetation requirements for single family home construction including:

- trees
 - based on lot size / setbacks
 - canopy vs palm
 - native vs exotic
- requiring removal of exotic invasive species
- drought resistant ground cover
- artificial plastic grass cover
- dune vegetation
- wetland vegetation (mangroves planters on seawalls, wetland forbs)

Attachments:

1. MRTF Veg Tree Recommendations to TC
2. reducing_urban_heat_islands_ch_2

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

Steve Poposki, Community Development Director

Date: August 02, 2023

Gretchen R.H. Vose, Town Attorney

Date: August 03, 2023

Amy Baker, Town Clerk

Date: August 03, 2023

Andy Hyatt, Town Manager

Date: August 03, 2023

MRTF Suggestions for the Town of Fort Myers Beach Vegetation Ordinances

1. Add Enforcement and Penalty sections to both Open Space, Buffering and Landscaping as well as Tree Protection divisions (similar to other FMB Town ordinances).
2. In Sec. 10-420 on Plant material standards the same list of invasive plants should be listed for removal as well as prohibited. Direct to the University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) website <https://plants.ifas.ufl.edu/education/invasive-plants/> which has current resources on invasive plants including the Florida Exotic Pest Plant Councils (FLEPPC) list published for the state. (The rationale for not naming specific plants in the ordinance is due to the possible addition or delineation of various species.)
3. In Sec. 10 – 416 Landscaping standards, at the time of application for a permit for new construction, following the survey, irrigation and landscaping design should be submitted in a drawing to scale. (New construction will need to be clearly defined. Will it include new exterior decks, pools, etc.?)
4. Add the following terms and definitions to Article V on Tree Protection:
 - a) Crown – means the main mass of branching of a plant above the ground.
 - b) Drip line - means the outermost perimeter of the crown of a plant as projected vertically to the ground.
 - c) Girdling – a term also called ring-barking, is the complete removal of the bark around the entire circumference of a branch or tree. This results in the death of the area above the girdling. It is a prohibited method for removal of trees.
 - d) Hat-racking – a practice in which part or all of the top of a tree, known as the canopy, is removed, leaving vital branches exposed.
 - + e) Land-clearing stage - means a stage in the construction process in which trees and/or vegetation are removed from the land, i.e., proposed right-of-way excavation and paving, drainage systems excavation; utility clearings and prebuilding construction projects.
 - f) Landscape area or green space - means an area or areas including beautification strips, consisting of those materials, such as, but not limited to trees, hedges, planted ground cover, sodded and grassed areas and planted floral installations, all of which must be composed of natural plantings only, as distinguished from artificially manufactured planting reproductions.
 - g) Mangrove - means rooted trees and seedlings of the following species, but only when having a coastal or estuarine association: Red Mangrove (*Rhizophora mangle* L.), White Mangrove (*Laguncularia racemosa* Gaertn.), Black Mangrove (*Avicennia germinans*), Buttonwood Mangrove (*Conocarpus erecta*).

- h) Overall height (OH)- means the height, in feet, of a tree measured from the top of the root ball/system to the top of the uppermost foliage branches.
- i) Transplant - means the act of digging up a tree from one location and planting the same tree in another place.
- j) Tree, historic - means a tree which has been found by a professional forester, horticulturist or other professional plantsman to be of notable historic interest to the city and/or county, because of its age, type, size or historic association and has been so designated by resolution of the ~~city~~ commission of the city: *town*
- k) Tree protection zone - means a circular zone around each protected tree defined as follows:
 - (1) If the drip line is less than six feet from the trunk of the tree, the zone shall be that area within a radius of six feet around the tree.
 - (2) If the drip line is more than six feet from the trunk of the tree, but less than 20 feet, the zone shall be that area within a radius of the full drip line around the tree.
 - (3) If the drip line is 20 feet or more from the trunk of the tree, the zone shall be that area within a radius of 20 feet around the tree.
- l) Tree shade/canopy- means an evergreen or deciduous tree that can be maintained with a clear trunk of not less than six feet and with a spreading branching structure of at least 15 feet and opaque foliage habit such that a reasonably dense shade pattern is provided during peak daylight hours in the late spring, summer and early fall months of the year. For the purposes of this section, palms shall not be considered shade/canopy trees.

5. Add the following terms and definitions to Division 6- Open Space, Buffering and Landscaping
 - a) Buffer zone – means a combination of trees, hedges, shrubs, and ground covers.
 - b) Florida-friendly landscape – means Florida-friendly landscape practices are encouraged in all zoning districts. Landscape areas utilizing Florida-friendly designs are those that comply with the nine principals as designated by the University of Florida Institute of Food and Agricultural Science (UF/IFAS).
 - c) Hand removal - means removal of vegetation by use of hand tools.
 - d) Hand tools - means handheld and hand-operated tools such as axe, saw, chain saw, wheelbarrow, etc., not including self-propelled wheeled or track vehicles.
 - e) Hedge - means a dense row of shrubs or bushes forming a boundary.
 - f) Impervious surfaces – means any hard surface that prevents or hinders the absorption of water into the soil.
 - g) Invasive exotic vegetation – means a plant species introduced to Florida, purposely or accidentally, from a natural range outside of Florida, which is able to proliferate and aggressively alter or displace indigenous biological communities, and identified on the Florida Exotic Pest Plant Council's List: <http://www.fleppc.org>
 - h) Land-clearing stage - means a stage in the construction process in which trees and/or vegetation are removed from the land, i.e., proposed right-of-way excavation and paving, drainage systems excavation; utility clearings and prebuilding construction projects.
 - i) Mechanical removal - means using mechanical equipment (not hand tools) to remove vegetation from parcels of land, e.g., bulldozers, root rakes, backhoes, or hydro axe, etc.

- j) Native plants – means those plant species whose natural range included Florida at the time of European contact (1500 A.D.) as identified on the Atlas of Vascular Plants Website, which is located as follows: Atlas of Vascular Plants, University of South Florida Institute for Systematic Botany: <http://www.plantatlas.usf.edu/default.asp>
- k) New development - means the initial development of a principal structure on a vacant parcel of land.
- l) Pervious surfaces – means organic groundcover such as vegetation or mulch, bark, pine needles and yard clippings. It also may include non-organic material such as stone, gravel or pavers.
- m) Pruning/trimming - means removal of the leaf surface of any individual plant.
- n) Redevelopment- means the development of a principal structure on a parcel of land that was previously developed with a principal structure.
- o) Removal - means killing/destroying, i.e., cutting down, girdling, poisoning or up-rooting.
- p) Shrub - means a low-growing perennial, woody or evergreen plant with persistent stem.

Additionally – revise the definition of Open Space Sec. 10-412 - to include the following verbiage on points number 3 and 4

(3) Archaeological and historical sites, including any area that contains historic, cultural or socially significant evidence of past human activity ranging from large mound and midden

complexes to a group of artifacts, the boundary and extent of which is determined by a survey by a professional archaeologist.

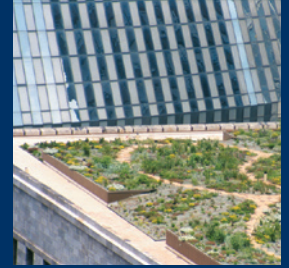
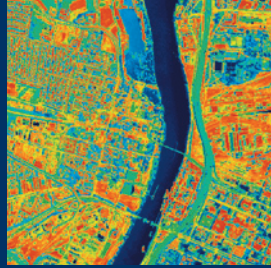
(4) Protected trees are of historic, cultural, botanical or socially significant interest

6. Give an intent and purpose for Division 6 on Open Space, Buffering and Landscaping.
 - (a) It is the legislative intent of this section to protect and preserve the appearance, character, value and safety of the town's area and nearby properties and, by so doing, promote the general welfare of the community.
 - (b) The purpose is to improve the appearance of properties within the city through the protection, installation, and maintenance of trees and landscaping for screening and aesthetic effects, and to recognize the importance of such trees and landscaping, in the enhancement of property values, the improvement of air quality, and their contribution to the cooling of our environment. It is also recognized that native landscape species are most compatible with the city's climate and soil conditions, require less irrigation and fertilization than do exotic species, and therefore help to conserve water and reduce the pollution in stormwater runoff, which in turn helps to maintain the water quality of Estero Bay and the Gulf of Mexico. Therefore, the use of native landscape species, and removal of invasive exotic trees and vegetation, is strongly encouraged. The planting of exotic trees and vegetation is to be generally prohibited.
 - (c) Topography, flooding characteristics, soil conditions, and the existence of wetlands or other areas containing protected species or habitats are among the factors which make some areas environmentally sensitive. In order to protect environmentally sensitive lands, it may be necessary to prohibit development, or limit the allowable density and intensity of development, in these areas. Protection of environmentally sensitive land promotes the well-being of the

residents of the city because those areas perform vital functions, such as providing habitat for fish, birds, mammals, and reptiles. Protection of environmentally sensitive land also results in the protection of community recreation opportunities, such as fishing, nature observation and photography, as well as the protection of aesthetics and property values.

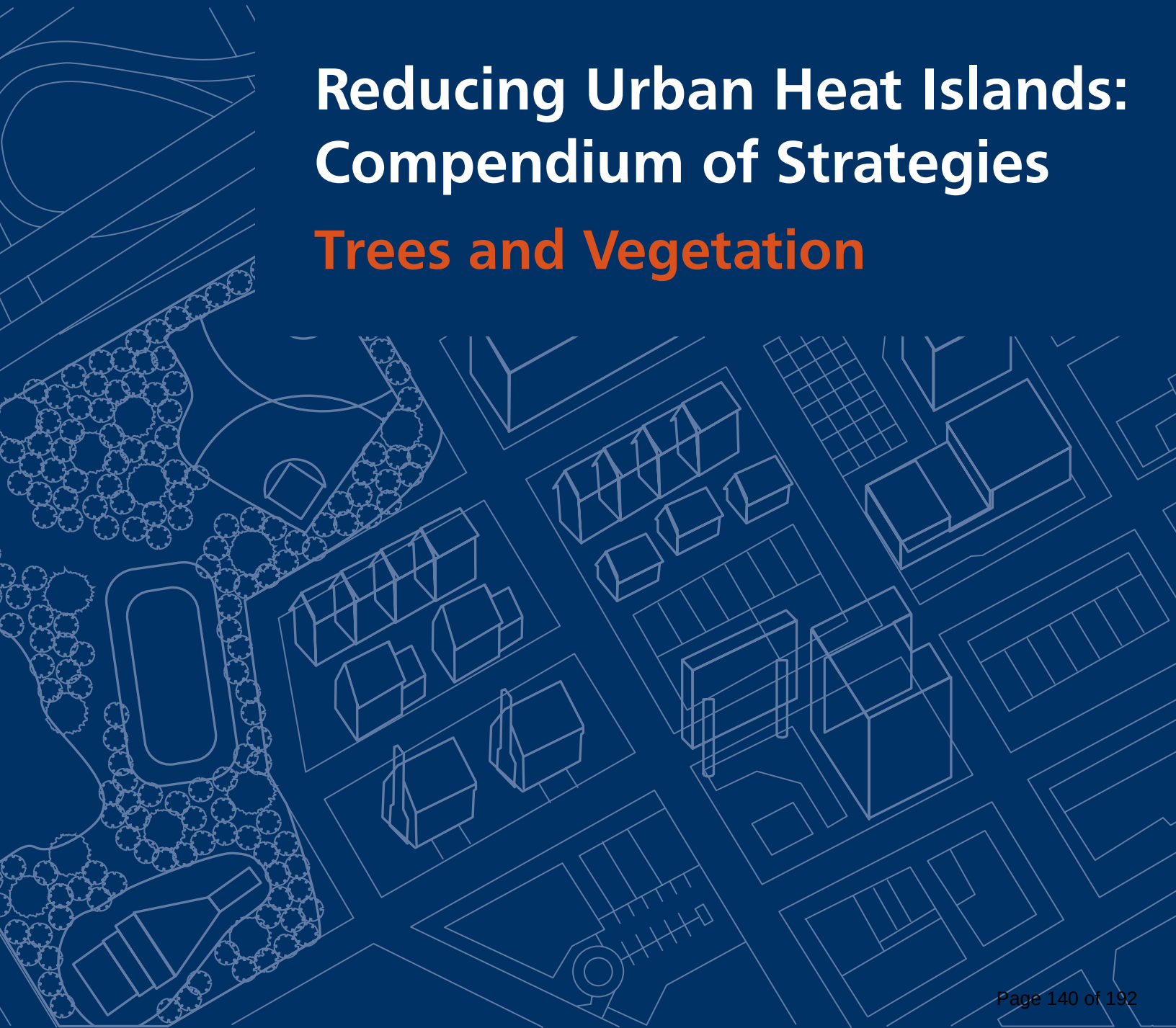
7. In Sec. 10 – 416 Landscaping standards, under Building edge plantings, add that Florida Friendly Landscape shrubs and groundcover plants must be used (in #4).
8. In Sec. 10 – 416 Landscaping standards, the description of Internal landscaping should limit in (f) the amount of impervious material to a certain percentage (TBD).
9. In Sec. 10 – 416 Landscaping standards, the notes describing the Buffer Types in Table 10-9 should include Trees and palms shall have mature canopy maintained a minimum of 15' above the ROW to avoid vehicular conflicts. (*this will limit the tree selection for these areas)
10. In Article V on Tree Protection, Sec. 14 - ³⁸⁰~~379~~ -- consider placing this list of protected trees in an Appendix.
11. Throughout documents, add after director or designee.
12. Create a tree fund - The Town of FMB shall establish a tree fund, which shall be used exclusively for plant replacement and to provide necessary maintenance of damaged trees. Penalties, fines and tree replacement payments, as provided for in this article, shall be deposited into the tree fund. The public may donate money to the town's tree fund to assist the town in its beautification efforts.

Respectfully submitted to MRTF by a sub-committee consisting of the following members:
Rose Larkin – Marine Resource Task Force member
Donn Davids – Master Gardener Volunteer of Lee County
Anita Parmer – Estero Island Garden Club member



Reducing Urban Heat Islands: Compendium of Strategies

Trees and Vegetation



Acknowledgements

Reducing Urban Heat Islands: Compendium of Strategies describes the causes and impacts of summertime urban heat islands and promotes strategies for lowering temperatures in U.S. communities. This compendium was developed by the Climate Protection Partnership Division in the U.S. Environmental Protection Agency's Office of Atmospheric Programs. Eva Wong managed its overall development. Kathleen Hogan, Julie Rosenberg, and Andrea Denny provided editorial support. Numerous EPA staff in offices throughout the Agency contributed content and provided reviews. Subject area experts from other organizations around the United States and Canada also committed their time to provide technical feedback.

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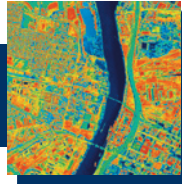
Experts who helped shape this chapter include:

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Trees and Vegetation

Shade trees and smaller plants such as shrubs, vines, grasses, and ground cover, help cool the urban environment. Yet, many U.S. communities have lost trees and green space as they have grown. This change is not inevitable. Many communities can take advantage of existing space, such as grassy or barren areas, to increase their vegetative cover and reap multiple benefits.

Opportunities to Expand the Use of Urban Trees and Vegetation

Most U.S. communities have opportunities to increase the use of trees and vegetation. As part of the U.S. Environmental Protection Agency's (EPA's) Urban Heat Island Pilot Project, the Lawrence Berkeley National Laboratory conducted analyses to estimate baseline land use and tree cover information for the pilot program cities.¹ Figure 1 shows the percentage of vegetated and barren land cover in four of these urban areas. The high percentage of grass and barren land cover show the space potentially available for additional tree canopy cover. The statistics do not show the loss of dense vegetated cover as cities expand, however. For example, a 2005 report estimates that Houston lost 10 million trees per year from 1992 to 2000.²

Figure 1: Land Cover Statistics for Various U.S. Cities (Above Tree Canopy)

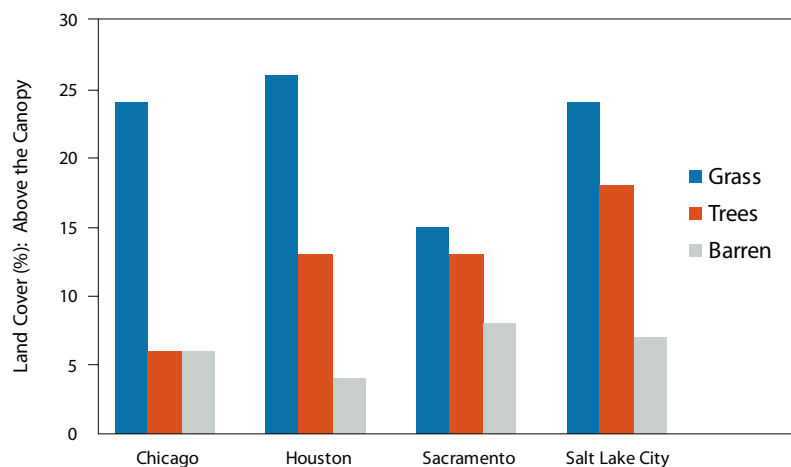


Figure 2: Vegetative Cover in New York City



New York City reveals how developed areas (gray and white in this image) can replace vegetation (green). Central Park is highlighted by the orange rectangle.

This chapter outlines some of the issues communities might consider in determining whether and how to expand the use of trees and vegetation so as to mitigate urban heat island conditions. Among the topics covered in this chapter are:

- How trees and vegetation reduce temperatures
- Some of the benefits and costs associated with trees and vegetation
- Other factors a mitigation program might consider
- Urban forestry initiatives
- Tools and resources for further information.

1. How It Works

Trees and vegetation help cool urban climates through shading and evapotranspiration.

Shading. Leaves and branches reduce the amount of solar radiation that reaches the area below the canopy of a tree or plant. The amount of sunlight transmitted through the canopy varies based on plant species. In the summertime, generally 10 to 30 percent of the sun's energy reaches the area below a tree, with the remainder being absorbed by leaves and used for photosynthesis, and some being reflected back into the atmosphere. In winter, the range of sunlight transmitted through a tree is much wider—10 to 80 percent—because evergreen and deciduous trees have different wintertime foliage, with deciduous trees losing their leaves and allowing more sunlight through.³

Figure 3: Trees Shade a Home



Tree canopies, such as the deciduous trees around this home in Virginia, can block much of the sunlight from reaching the ground or the building.

Shading reduces surface temperatures below the tree canopy. These cooler surfaces, in turn, reduce the heat transmitted into buildings and the atmosphere. For example, a multi-month study measured maximum surface temperature reductions ranging from 20 to 45°F (11-25°C) for walls and roofs at two buildings.⁴ Another study examined the effects of vines on wall temperatures and found reductions of up to 36°F (20°C).⁵ A third study found that tree shading reduces the temperatures inside parked cars by about 45°F (25°C).⁶

Evapotranspiration. Trees and vegetation absorb water through their roots and emit it through their leaves—this movement of water is called “transpiration.” A large oak tree, for example, can transpire 40,000 gallons of water per year; an acre of corn can transpire 3,000 to 4,000 gallons a day.⁷ Evaporation, the conversion of water from a liquid to a gas, also occurs from the soil around vegetation and from trees and vegetation as they intercept rainfall on leaves and other surfaces. Together, these

processes are referred to as evapotranspiration. Evapotranspiration cools the air by using heat from the air to evaporate water.

Evapotranspiration, alone or in combination with shading, can help reduce peak summer air temperatures. Various studies^{8,9} have measured the following reductions:

- Peak air temperatures in tree groves that are 9°F (5°C) cooler than over open terrain.
- Air temperatures over irrigated agricultural fields that are 6°F (3°C) cooler than air over bare ground.
- Suburban areas with mature trees that are 4 to 6°F (2 to 3°C) cooler than new suburbs without trees.
- Temperatures over grass sports fields that are 2 to 4°F (1 to 2°C) cooler than over bordering areas.

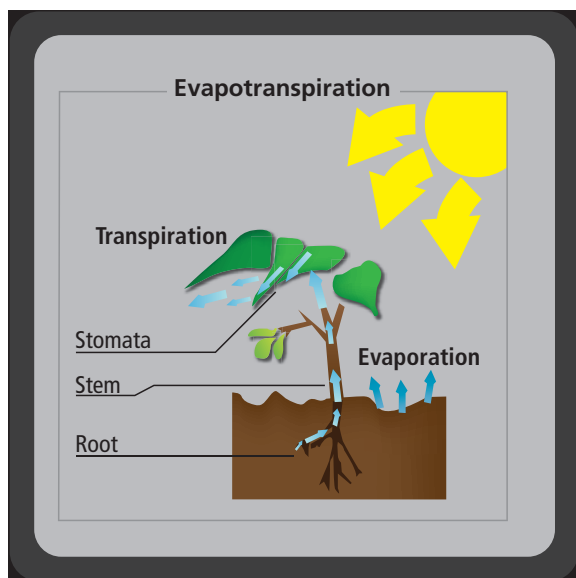
Trees and other large vegetation can also serve as windbreaks or wind shields to reduce the wind speed in the vicinity of buildings. In the summertime, the impacts can be positive and negative. In the wintertime, reducing wind speeds, particularly cold north winds, can provide substantial energy benefits.

2. Using Trees and Vegetation in the Urban Landscape

Trees and vegetation are most useful as a mitigation strategy when planted in strategic locations around buildings. Researchers have found that planting deciduous species to the west is typically most effective for cooling a building, especially if these trees shade windows and part of the building’s roof. Shading the east side of a structure also reduces air conditioning demand.^{10,11}

Planting trees to the south generally lowers summertime energy demand, but must be

Figure 4: Evapotranspiration



Plants take water from the ground through their roots and emit it through their leaves, a process known as transpiration. Water can also evaporate from tree surfaces, such as the stalk, or surrounding soil.

done carefully. Depending on the trees, the building's height, and the distance between the trees and a building, trees may be detrimental to an energy efficiency strategy if they block useful solar energy in the winter, when the sun is low in the sky, without providing much shade during the summer, when the sun is high in the sky.

Shading pavement in parking lots and on streets can be an effective way to help cool a community. Trees can be planted around perimeters and in medians inside parking lots or along the length of streets. Strategically placed shade trees also can benefit playgrounds, schoolyards, ball fields, and similar open spaces.

Trees are not the only vegetation option. There are many areas where trees either do not fit or grow too slowly to be effective over the short term, in which case vines may work better. Vines need less soil and

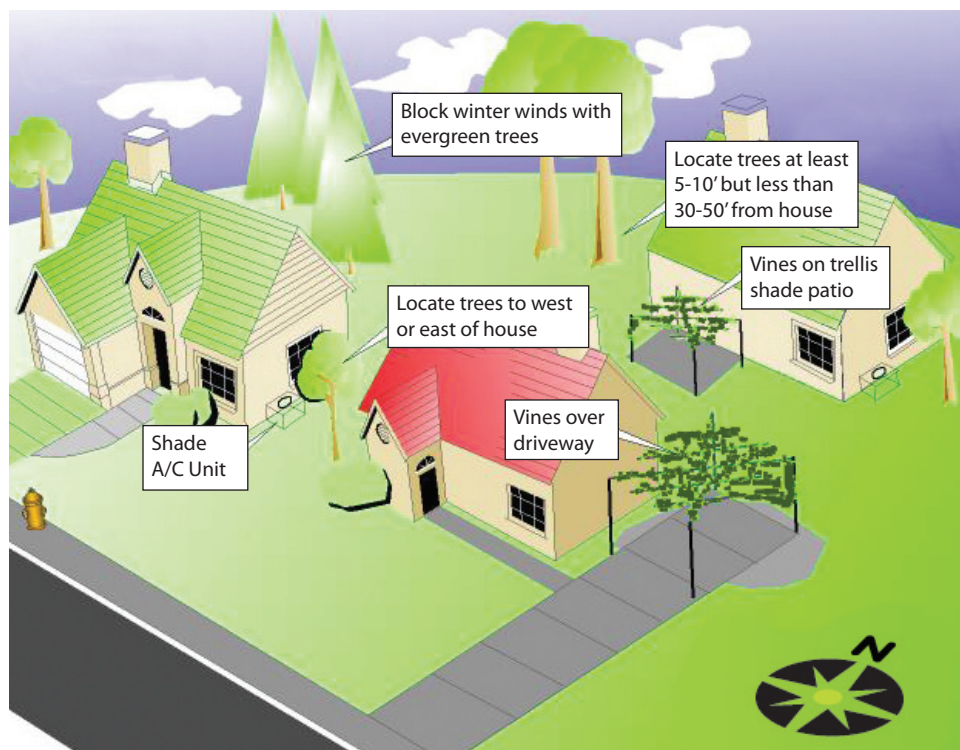
Figure 6: Vines to Shade a Wall



Vines grown on trellises can provide a quick, simple source of shade.

space and grow very quickly. Vines grown on the west side of a building, for example, will shade the exterior wall and reduce its surface temperature, thus reducing heat gain inside the building. The vines will provide some air cooling benefits through evapotranspiration as well.

Figure 5: Tree Placement to Maximize Energy Savings



Picking the right trees and putting them in the right location will maximize their ability to shade buildings and block winds throughout the year.

3. Benefits and Costs

The use of trees and vegetation in the urban environment brings many benefits, including lower energy use, reduced air pollution and greenhouse gas emissions, protection from harmful exposure to ultraviolet (UV) rays, decreased stormwater runoff, potential reduced pavement maintenance, and other quality-of-life benefits. At the same time, communities must also consider the costs of an urban forestry program and any potential negative impacts of increasing tree and vegetation cover. The following sections address these benefits and costs in more detail. Section 6 of this chapter summarizes software tools that calculate the range of potential benefits from urban tree and vegetation initiatives.

U.S. Department of Agriculture (USDA) Forest Service research centers offer links to publications about studies of trees and their benefits to urban areas. See <www.fs.fed.us/ne/syracuse/Pubs/pubs.htm> and <www.fs.fed.us/psw/programs/cufr/>.

3.1 Benefits

Reduced Energy Use. Trees and vegetation that provide direct shading reduce energy needed to cool buildings. Benefits vary based on the orientation and size of the plantings, as well as their distance from a building. Large trees planted close to the west side of a building will generally provide greater cooling energy savings than other plants.

The examples below from a variety of studies highlight cooling and year-round energy savings from trees and vegetation.

- Joint studies by the Lawrence Berkeley National Laboratory (LBNL) and the Sacramento Municipal Utility District (SMUD) placed varying numbers of trees around houses to shade windows and then measured the buildings' energy use.^{12,13} The cooling energy savings ranged between 7 and 47 percent and were greatest when trees were planted to the west and southwest of buildings.¹⁴
- A USDA Forest Service study investigated the energy savings resulting from SMUD's residential tree planting program. This study included over 250 program participants in the Sacramento, California, area, and estimated the effect of new shade trees planted around houses. An average of 3 new trees were planted within 10 feet (3 m) of each house.¹⁵ Annual cooling energy savings were 1 percent per tree, and annual heating energy use decreased by almost 2 percent per tree. The trees provided net wintertime benefits because the positive wind shielding effect outweighed the negative effect of added shade.
- Another LBNL study simulated the effects of trees on homes in various communities throughout the United States. Assuming one tree was planted to the west and another to the south of a house, the model predicted that a 20-percent tree canopy over the house would result in annual cooling savings of 8 to 18 percent and annual heating savings of 2 to 8 percent.¹⁶ Although this particular model included benefits from trees planted to the south of a building, experts generally suggest planting to the west and east of buildings, taking care when planting to the south to avoid blocking desired solar heat gain in the winter.¹⁷

Reduced Air Pollution and Greenhouse Gas Emissions. In addition to saving energy, the use of trees and vegetation as a mitigation strategy can provide air quality and greenhouse gas benefits:

- Leaves remove various pollutants from the air, referred to as “dry deposition”
- Shade trees reduce evaporative emissions from parked vehicles
- Trees and vegetation remove and store carbon
- Trees and vegetation reduce greenhouse gas emissions from power plants by reducing energy demand.

Researchers have investigated the potential for expanding urban tree and vegetative cover to address air quality concerns, such as ground-level ozone. One study predicted that increasing the urban canopy of New York City by 10 percent could lower ground-level ozone by about 3 percent, which is significant, particularly in places needing to decrease emissions to meet air quality standards for this pollutant.¹⁸

Pollutant Removal through Dry Deposition. Plants generally take up gaseous pollutants, primarily through leaf stomata, that then react with water inside the plant to form acids and other chemicals. Plants can also intercept particulate matter as wind currents blow particulates into contact with the plants’ surfaces. Some particulates are absorbed into the plant while others adhere to the surface, where they can be resuspended into the atmosphere by winds or washed off by rain to the soil beneath.¹⁹ These processes can reduce various pollutants found in the urban environment, including particulate matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), and ground-level ozone (O₃).

Various studies have documented how urban trees can reduce pollutants. A 2006 study estimated total annual air pollutant removal by urban trees in the United States at 784,000 tons, with a value of \$3.8 billion.²⁰ The study focused only on deposition of ground-level ozone, PM less than 10 microns in diameter (PM₁₀), nitrogen dioxide (NO₂), SO₂, and CO. Although the estimated changes in local ambient air quality were modest, typically less than 1 percent, the study noted that additional benefits would be gained if urban temperature and energy impacts from trees and vegetation were also included.

Reduced Evaporative Emissions. Tree shade can keep parked cars—particularly their gas tanks—cooler, which lowers evaporative emissions of volatile organic compounds (VOCs), a critical precursor pollutant in the formation of ground-level ozone. Most large urban areas have a wide range of control programs to reduce these emissions, and tree shading programs can be part of those strategies. For example, one analysis predicted that light-duty vehicle evaporative VOC emission rates throughout Sacramento County could be reduced by 2 percent per day if the community increased the tree canopy over parking lots from 8 to 50 percent.²¹

Carbon Storage and Sequestration. As trees grow, they remove carbon from the atmosphere and store, or sequester, it. As trees die or deposit litter and debris on the ground, carbon is released to the atmosphere or transferred to the soil. The net effect of this carbon cycle is a substantial level of carbon storage in trees, vegetation, and soils.

The net rate of carbon sequestered by urban trees in the continental United States in 2005 is estimated to have been around 24 million tons per year (88.5 million tons

Plants and Carbon: Storage versus Sequestration

Storage: Carbon currently held in plant tissue (tree bole, branches, and roots).

Sequestration: The estimated amount of carbon removed annually by plants, through the process of photosynthesis.

CO₂eq)²², while current total carbon storage in urban trees in the continental United States is approximately 700 million tons of carbon. The national average urban forest carbon storage density is just over 25 tons per hectare (100,000 square feet, or 9,300 m²), but varies widely from one community to another and corresponds generally to the percentage of land with tree cover and to tree size and health.²³ The California Air Resources Board recently approved guidelines that will allow carbon sequestered from forests to help meet the carbon emissions reductions stipulated by California's law AB32.²⁴

Reduction in Greenhouse Gas Emissions through Reduced Energy Demand.

As noted above, trees and vegetation can decrease energy demand. To the extent that reduced energy consumption decreases fossil fuel burning in power plants, trees and vegetation also contribute to lower carbon emissions from those power plants. One modeling study estimated that the direct energy savings from shading alone by trees and vegetation could reduce carbon emissions in various U.S. metropolitan areas by roughly 1.5 to 5 percent.²⁵ The study assumed that eight shade trees would be

placed strategically around residential and office buildings and four around retail stores. As urban forests also contribute to air temperature reductions, the study found that there would be additional reductions in energy use and carbon emissions from those indirect effects as well.

Full Life-cycle Carbon Reductions. In order to investigate the full life-cycle impact of urban trees on annual CO₂ emissions, researchers consider:

- Annual CO₂ carbon sequestration rates
- Annual CO₂ releases from decomposition
- Annual CO₂ releases from maintenance activities
- Annual CO₂ avoided emissions because of reduced energy use.

By combining these four variables, researchers can estimate the net CO₂ reductions from urban forest resources for a specific community and calculate the associated net monetary benefits. A 2006 field study found that about 15,000 inventoried street trees in Charleston, South Carolina, were responsible for an annual net reduction of over 1,500 tons of CO₂. These benefits were worth about \$1.50 per tree, based on average carbon credit prices.²⁶

Improved Human Health. By reducing air pollution, trees and vegetation lower the negative health consequences of poor air quality. Also, similar to the benefits of cool roofs discussed in the "Cool Roof" chapter, shade trees can reduce heat gain in buildings, which can help lower indoor air temperatures and minimize the health impacts from summertime heat waves.

A third health benefit from trees and vegetation involves reducing direct exposure to UV rays. The sun's UV rays can have adverse health effects on the skin and eyes.

High levels of long-term exposure to UV rays are linked to skin cancer. The shade provided by dense tree canopies can help to lower UV exposure, although this should not be considered a primary preventive measure (see text box below).^{27,28}

Enhanced Stormwater Management and Water Quality. Urban forests, vegetation, and soils can reduce stormwater runoff and adverse impacts to water resources. Trees and vegetation intercept rainfall, and the exposed soils associated with plants absorb water that will be returned to ground water systems or used by plants.

Rainfall interception works best during small rain events, which account for most precipitation. With large rainfalls that continue beyond a certain threshold, vegetation begins to lose its ability to intercept water. Stormwater retention further varies by the extent and nature of a community's urban forest. During the summer, with trees in full leaf, evergreens and conifers in

Sacramento were found to intercept over 35 percent of the rainfall that hit them.²⁹

Reduced Pavement Maintenance Costs. Tree shade can reduce the deterioration of street pavement. One field study compared pavement condition data based on different amounts of tree shade.³⁰ The study found that slurry resurfacing costs on a residential street could be reduced by approximately 15 to 60 percent, depending on the type of shade trees used. Although the specific costs and benefits will vary based on local conditions and paving practices, the study suggests that pavement maintenance benefits are another area to consider in evaluating the potential benefits of a street shade tree program.

Enhanced Quality of Life. Trees and vegetation can provide a range of quality-of-life benefits. Adding trees and vegetation to urban parks, streets, parking lots, or roofs can provide a habitat for birds, insects, and other living things. A well-placed row of

Reducing Exposure to UV Radiation

EPA's SunWise program <www.epa.gov/sunwise> promotes a variety of actions people can take to reduce exposure to harmful UV radiation; seeking shade is just one of them. To reduce the risk of skin cancer, cataracts, and other health effects, the program recommends:

- Wearing a hat with a wide brim
- Wearing sunglasses that block 99 to 100 percent of UV radiation
- Always using sunscreen of SPF 15 or higher
- Covering up with long-sleeve, tightly woven clothing
- Watching for the UV Index to help plan outdoor activities when UV intensity is lowest
- Avoiding sunlamps and tanning salons
- Limiting time in the midday sun (from 10:00 a.m. to 4:00 p.m.)
- Seeking shade whenever possible.

Trees and Property Value Benefits

Many studies show that trees and other vegetative landscaping can increase property values. For example, shopping centers with landscaping can be more prosperous than those without, because shoppers may linger longer and purchase more.^{36,37,38,39} Other studies have found general increases of about 3 to 10 percent in residential property values associated with the presence of trees and vegetation on a property.⁴⁰ The specific impacts on residential property values vary widely based on the property, the buyer's socioeconomic status, and other factors.

STRATUM, a USDA Forest Service tool that uses tree inventory data to evaluate the benefits and costs of street and park trees, assumes an increase in residential property values from tree planting measures. For an example, see the discussion on net benefits and Figure 9 later in this chapter, which summarize data from a study that used the STRATUM tool.⁴¹ In areas with high median residential sales prices, these are often among the largest single category of benefits for a community.

trees and shrubs can reduce urban noise by 3 to 5 decibels, while wide, dense belts of mature trees can reduce noise by twice that amount, which would be comparable to noise reduction from effective highway barriers.³¹ Urban trees and vegetation have been linked to reduced crime,³² increased property values,³³ and other psychological and social benefits that help decrease stress and aggressive behavior.^{34,35}

3.2 Potential Adverse Impacts

Before undertaking an urban forestry program, it is important to know which types of trees are likely to be most beneficial and to avoid those that could cause other problems. Evapotranspiration not only cools the air but also adds moisture to it, raising humidity levels. This increase may be problematic in already humid climates. However, there is little research on the human health and comfort trade-off between temperature reductions and humidity increases in different climates.

Although beneficial in limiting ground-level ozone production by lowering air temperature and filtering ground-level ozone and precursor pollutants from the air, trees and other plants also emit VOCs. These emissions are referred to as biogenic emissions. The biogenic emissions from urban vegetation might counteract some of the air quality benefits from trees. Biogenic VOC emission rates, however, are in part dependent on temperature. Thus, to the extent that the increased use of trees and vegetation contributes to reduced temperatures, the overall biogenic VOC emissions in an urban area might still be reduced.⁴²

Biogenic VOC emissions are affected by sunlight, temperature, and humidity. The emission rates of different tree species vary tremendously; even trees in the same

For more information on the **ozone-forming potential (OFP) of various trees**, see <www.fraqmd.org/Biogenics.htm>.

family and genus show wide variation in VOC emissions.^{43,44} Researchers calculate an ozone-forming potential (OFP) value to rate the potential effect a tree species can have on ground-level ozone formation in a given environment. To minimize the contribution to ground-level ozone, a mitigation program can consider low-OFP

species. Table 1 provides example OFP ranges for common tree species in the Los Angeles area. Communities can check with USDA Forest Service staff in their region to determine if there are additional resources to help select low-OFP tree species for a particular area and climate (see Table 5 for links to regional Forest Service web sites).

Figure 7: The Ozone-Forming Potential of Trees



Susan McDougal/USDA NRCS PLANTS database

Red maple, on the left, has a low ozone-forming potential, whereas Oregon scrub oak, above, has a high potential. Communities that want to plant trees may consider biogenic emissions as well as other properties of trees, such as their ability to survive in urban conditions.

Table 1: Examples of VOC Emissions from Trees in the Los Angeles Climate ⁴⁵

Common Name	Genus and Species	Ozone-Forming Potential		
		L	M	H
Oaks				
White Oak	<i>Quercus alba</i>		✓	
Oregon White Oak	<i>Quercus garryana</i>			✓
Scrub Oak	<i>Quercus laevis</i>		✓	
Valley Oak	<i>Quercus lobata</i>		✓	
Pines				
Sand Pine	<i>Pinus clausa</i>			✓
Red Pine	<i>Pinus densiflora</i>	✓		
Longleaf Pine	<i>Pinus palustris</i>		✓	
Maples				
Red Maple	<i>Acer rubrum</i>	✓		
Silver Maple	<i>Acer floridanum</i>	✓		
Citrus				
Lisbon Lemon	<i>Citrus limon</i>		✓	
Meyer Lemon	<i>Citrus limon</i> 'Meyer'	✓		
Valencia Orange	<i>Citrus sinensis</i> 'Valencia'	✓		

Other potential adverse effects include increased water demand, additional solid wastes from pruning and tree removal, and possible damage to sidewalks, power lines, and other infrastructure from roots or falling branches.

3.3 Costs

The primary costs associated with planting and maintaining trees or other vegetation include purchasing materials, initial planting, and ongoing maintenance such as pruning, pest and disease control, and irrigation. Other costs include program administration, lawsuits and liability, root damage, and tree stump removal. However, as the following section indicates, the benefits of urban trees almost always outweigh these costs.

3.4 Benefit-Cost Considerations

To help communities determine the value of investments in urban trees and vegetation, groups have developed tools to quantify the value of trees (see Section 6). These tools factor in the full range of urban forest benefits and costs, such as energy savings in buildings, air quality improvements, stormwater retention, property value increases, and the value of mulch or hardwood recovered during tree pruning and removal. Some tools also track greenhouse gas emissions or CO₂ reduction. The tools weigh these benefits against the costs of planting, pruning, watering, and other maintenance throughout a tree's life.

In calculating benefits, it is important to note that trees grow slowly, so it may take as long as five years for some benefits from trees, such as energy savings, to take effect. After 15 years, an average tree usually has matured enough to provide the full range of benefits.⁴⁶

Although the benefits can vary considerably by community and tree species, they

Figure 8: Tree-Stump Removal



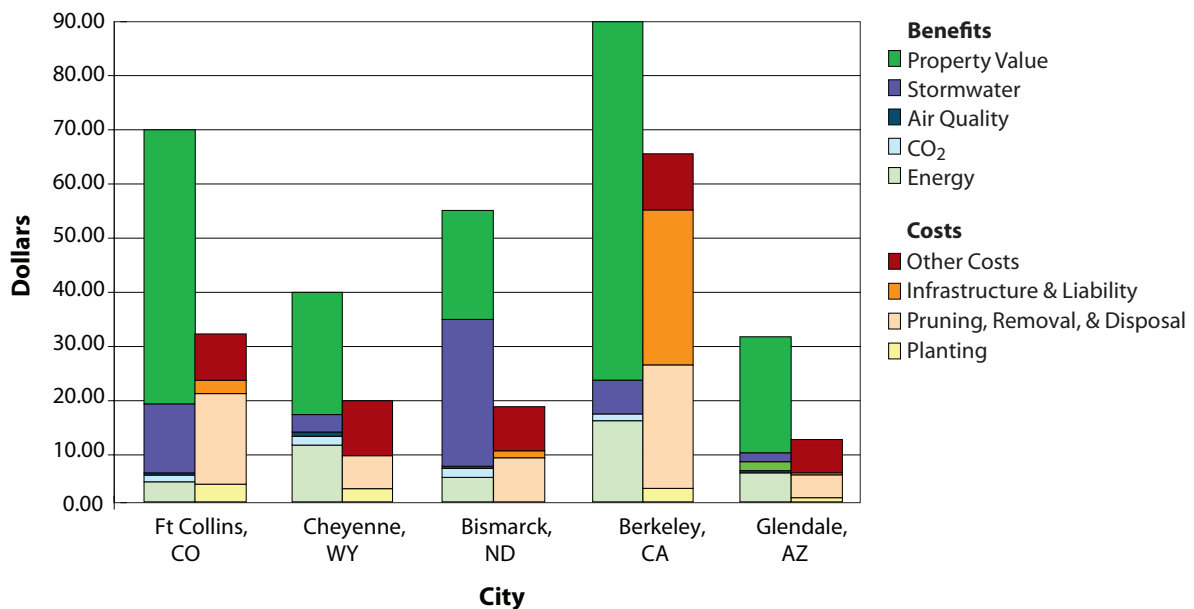
Tree programs will incur certain costs, such as tree removal.

almost always outweigh the expense of planting and maintaining trees. For example, one five-city study found that, on a per tree basis, cities accrued benefits ranging from roughly \$1.50 to \$3.00 for every dollar invested. These cities spent about \$15-65 annually per tree, with net benefits ranging from approximately \$30-90 per tree. In all five cities, the benefits outweighed the costs, as shown in Figure 9.⁴⁷ Figure 9 also compares how the categories of annual costs and benefits associated with trees varied between these cities.

Studies in California also have shown net annual benefits ranging from zero to about \$85 per tree.^{48,49,50} A community can develop similar analyses for its mitigation program. Places as diverse as Florence, Alabama;⁵¹ Cedar Rapids, Iowa;⁵² Portland, Oregon;⁵³ and Hyattsville, Maryland,⁵⁴ have all quantified the net benefits of their trees. See Section 6 for more resources on existing studies and tools that can aid this type of assessment.

For a simple, [online tree benefit calculator](http://usage.smud.org/treebenefit/), see <<http://usage.smud.org/treebenefit/>>.

Figure 9: Total Annual Benefits versus Costs (Per Tree)



Net benefits were positive for all five cities, ranging from \$21 per tree in Cheyenne to \$38 per tree in Ft. Collins. Blue and green categories indicate benefits; red, orange, and yellow indicate costs.

4. Other Factors to Consider

4.1 Planting Considerations

Buildings

To reduce temperatures and cooling energy needs, trees planted for summer shade should shelter western and eastern windows and walls and have branches high enough to maintain views or breezes around the windows. Trees in these locations block the sun when it is at its lowest angle: in the morning and afternoon. Planting trees at least 5 to 10 feet (1.5 to 3 m) away from the building allows room for growth, but shade trees should be no more than 30 to 50 feet (9 to 15 m) away. A building with deciduous trees for summer shade will also allow for winter heat gain to the building, especially if branches are pruned to maximize sun exposure.

It might also be beneficial to shade air conditioner condenser units and other building cooling equipment with trees, vines, or shrubbery, as these units work less efficiently when hot. It is important to follow manufacturer

guidelines for ensuring adequate space to allow for proper air flow around the equipment.

In an urban setting, neighboring buildings, driveways, fences, and other features can make it difficult to follow these guidelines for planting trees. The following are the best use of trees and vegetation:

- Optimize the shade coverage from trees planted in less favorable locations by pruning tree branches to a height that blocks the summer sun, yet lets the winter sun through.
- Use bushes, shrubs, or vines to shade windows and walls in places where

For overall energy efficiency, some communities might promote the use of **evergreens** to block winter winds and **reduce heating needs**. A row of evergreens might be planted perpendicular to the main wind direction, usually to the north or northwest of a home.

Figure 10: View of a Shaded Street



Placing trees next to the curb positions them well to shade the street, sidewalk, and any automobiles parked along the road.

trees will not fit. Shrubs and bushes can shade windows or walls without growing too large or tall. Vines grow very quickly on vertical or overhead trellises and can be used in places with little available space or soil.

- Consider a green or garden roof in addition to landscaping around a building (see the “Green Roofs” chapter).

Paved Surfaces

Trees and large shrubbery also can shade pavements to reduce their surface temperatures. Planting trees at regular intervals of 20 to 40 feet (6 to 12 meters) along both sides of a street (see Figure 10), as well as along medians is a common way to provide valuable shading.

Trees can also shade the perimeter and interior space of parking lots. Although end islands are often used for planting trees within parking lots,⁵⁵ planting strips that run the length of a parking bay can provide greater lot shading (see Figure 11). Some communities have ordinances that require a certain percentage of tree shade in parking lots. For example, Davis, California, and Sacramento each require 50 percent of the parking area to be shaded within 15 years after the lot is constructed.^{56,57}

Permeable grass pavers can also provide some of the heat reduction benefits of larger plantings without taking up space. Grass pavers can replace traditional pavements in low-traffic parking areas, pedestrian walkways, driveways, patios, fire lanes, and other paved areas that are seldom used for vehicular traffic. Pavers are usually prefabricated lattice structures made of concrete, plastic, or metal that are specifically designed to let water drain to the soil below while they support pedestrians and light traffic loads. The openings in the lattice blocks are filled with soil and planted with grass or ground cover, or topped with gravel or sand. See the “Cool Pavements” chapter for further discussion of alternative paving options.

Playgrounds, schoolyards, and sports fields are open spaces that often offer opportunities for increasing urban tree and vegetation coverage. In addition to their cooling benefits, trees in these areas can provide increased shade to protect people, especially children, from the sun’s UV rays. Shade trees are most beneficial in specific locations where people are likely to congregate, such as around team seating, spectator stands, jungle gyms, sandboxes, swings, and picnic tables. Because trees can take some time to mature, a project sponsor may wish to consider a quicker alternative, such as fast growing bushes or

Figure 11: Shaded Parking Lot



Shading in parking lot medians can provide extensive shading coverage.

Communities can consider the use of hardy, native trees and plants in **selecting landscaping options**. See <www.epa.gov/glnpo/greenacres> for further information.

vines on trellises over seating and other areas, either in place of trees or as a first phase of adding shade vegetation.

4.2 Maintenance

Education, skill, and commitment are necessary for planting and maintaining an aesthetically, environmentally, and structurally effective urban landscape. By adhering to good landscape design and maintenance practices, many common problems may be avoided. Local cooperative extension offices can provide additional information on soil conditions and other important considerations. Also, local planting guides are often available from urban forestry agencies, utility companies, arboricultural organizations, and plant nurseries. The following are steps to consider when maintaining trees in an urban area,^{58,59} helping vegetation grow faster and live a longer, healthier, and more productive life.

- *Choose the right plants.* Because trees and vegetation that are hardy enough to survive in a specific climate require little maintenance, communities might want to start by considering native species. Other characteristics to consider include:
 - The vegetation’s projected height and canopy spread
 - Size and growth habits of the roots
 - The plant’s sun, soil, water, and temperature requirements
 - The types of leaves, berries, and flowers it produces
- Allergens and biogenic emissions that can contribute to ground-level ozone formation.
- *Avoid maintenance problems.* Communities will want to avoid interference with utilities, sidewalks, and other infrastructure when planting trees to avoid future maintenance problems. Another important consideration is that trees must have adequate soil and access to water.
- *Make arrangements for regular care.* Especially in the early years after initial planting, trees require regular maintenance to survive. Maintenance requirements and costs generally decline after a tree becomes established.

Local nonprofit tree organizations, cooperative extension offices, urban foresters and arborists, garden clubs, landscape architects, landscaping contractors, and other groups can provide detailed information about the best trees for a specific community’s climate, along with advice about planting and maintaining them. See Section 6 for a list of plant selection resources.

Figure 12: Regular Tree Care



J. David Mattox/City of Manhattan, Kansas

Proper pruning and other regular care will help trees last longer and provide greater benefits to the community.

4.3 Safety

The use of trees and vegetation around buildings can increase fire risks. Communities, especially those in fire prone areas, can find information on tree selection and placement that minimizes those risks:

- The National Interagency Fire Center offers suggestions for tree placement and landscape maintenance to avoid losses to wildland fires. See <www.nifc.gov/preved/index.html>.
- The USDA Forest Service helps homeowners determine and minimize fire risk from landscaping via an interactive, graphical tool. See <www.ecosmart.gov/firewise>.

Project sponsors can also check with local fire departments or street tree agencies to evaluate and minimize fire risks for a specific tree and vegetation initiative.

5. Urban Forestry Initiatives

Communities can use various mechanisms to increase their vegetative cover. These efforts include forming public-private partnerships to encourage voluntary action in the private sector to enacting ordinances. As discussed in the chapter “Heat Island Reduction Activities,” communities already have developed a wide range of voluntary and policy approaches for using urban trees and vegetation. For public-sector projects, local governments and organizations have undertaken efforts to expand the use of trees and vegetation in public spaces and adopted minimum landscaping policies for public buildings. Tree planting programs, used throughout many communities, often involve collaboration with non-profit groups and electric utilities. Some states fund urban forestry program initiatives dedicated to addressing urban heat islands and other community concerns.

Figure 13: Urban Forestry Surveys and Plantings



USDA Center for Urban Forest Research

Urban forestry initiatives can take multiple forms, such as creating an inventory of existing trees or planting additional ones.

In addition, communities have enacted various ordinances to foster the urban forest, including those focused on:

- Tree protection
- Street trees
- Parking lot shade
- General landscaping.

The “Heat Island Reduction Activities” chapter provides a detailed description of these initiatives. Table 2 briefly summarizes them.

Table 2: Examples of Urban Forestry Initiatives

Type of Initiative	Description	Links to Examples
Research	USDA Forest Service programs	<www.fs.fed.us/research/> - USDA Forest Service operates research centers throughout the United States, including the Pacific Southwest Research Station, which specializes in urban forestry. USDA also collaborates with states and universities; for example, the Northeast Center for Urban and Community Forestry involves the Forest Service, the University of Massachusetts, and seven states.
	University programs	<www.cfr.washington.edu/research.envmind/index.html> - The University of Washington College of Forest Resources supports Human Dimensions of Urban Forestry and Urban Greening, a research program that focuses on the interaction of vegetation and humans in cities.
		<www.lhhl.uiuc.edu/> - A similar program at the University of Illinois, Landscape and Human Health Laboratory, studies the connections between greenery and human health and behavior.
Voluntary efforts	Demonstration projects	<www.arborday.org/takeaction/homedepot2007/> - Beginning in 2006, the Home Depot Foundation and the National Arbor Day Foundation partnered together to plant 1,000 trees in 10 cities across the country over a three-year period. This demonstration project is designed to increase awareness of the importance of urban trees and to create healthier communities in urban areas.
	Incentive programs	<www.ladwp.com/ladwp/cms/ladwp000744.jsp> - Trees for a Green LA provides Los Angeles residents with free shade trees if they participate in a tree planting and maintenance workshop and submit a program application that includes a site plan.
		<www.ci.seattle.wa.us/neighborhoods/nmf/treefund.htm> - The Tree Fund, a component of the Neighborhood Matching Fund, provides trees to neighborhood groups in Seattle to enhance the city's urban forest. The city government provides the trees, and neighbors share the work of planting and caring for them.
	Urban forestry programs	<www.treevitalize.net/> - TreeVitalize is a public-private partnership that uses regional collaboration to address the loss of tree cover in the five-county Southeastern Pennsylvania region. Goals include planting 20,000 shade trees; restoring 1,000 acres of forests along streams and water protection areas; and training 2,000 citizens to plant and care for trees.
		<www.groundworkelizabeth.com/> - Groundwork Elizabeth is a non-profit corporation created to “foster sustainable community regeneration” in Elizabeth, New Jersey. It is an outgrowth of a program developed by the National Park Service called Groundwork USA.
	Voluntary efforts	Urban forestry

Table 2: Examples of Urban Forestry Initiatives (continued)

Type of Initiative	Description	Links to Examples
	Outreach & education	www.epa.gov/heatisland/ - EPA's Heat Island Reduction Initiative provides information on the temperature, energy, and air quality impacts from urban forestry and other heat island mitigation strategies.
		http://cfpub.epa.gov/npdes/home.cfm?program_id=298 - EPA's Office of Water highlights design options, including trees and vegetation that reduce stormwater runoff and water pollution.
		www.treeutah.org/ - TreeUtah is a statewide, volunteer driven, non-profit organization dedicated to tree planting and education. Since 1989, TreeUtah has worked with over 100,000 volunteers to plant over 300,000 trees throughout Utah, providing training workshops for adults and teens, education for elementary students, service learning opportunities through the University of Utah, and alternative spring break for college students to plant trees in urban neighborhoods.
		www.ladwp.com/ladwp/cms/ladwp001087.jsp - The Los Angeles Cool Schools Program provides students with an educational curriculum about trees and the environment, in addition to planting trees around schools.
Policy efforts	Resolutions	www.ci.annapolis.md.us/upload/images/government/council/Adopted/R3806.pdf - The Annapolis, Maryland, City Council established an Energy Efficiency Task Force in 2005 to make recommendations on how the city could reduce energy costs, energy consumption, and its reliance upon foreign petroleum. One of the Task Force's recommendations was to increase the urban tree canopy to 50 percent of the city's land area by 2036. The recommendations were approved by the City Council in 2006.
		www.ci.austin.tx.us/trees/res_985.htm - The Austin, Texas, City Council adopted a resolution in 2001, acknowledging the urban heat island and available mitigation efforts. The resolution called on the City Manager to evaluate the fiscal impact and cost benefits of recommendations made by the City's Heat Island Working Group.

Table 2: Examples of Urban Forestry Initiatives (continued)

Type of Initiative	Description	Links to Examples
	Tree & landscape ordinances	www.cityofsacramento.org/parksandrecreation/urbanforest/ordinance.htm - Sacramento, California, has a performance-based parking lot shading ordinance with detailed design and maintenance guidelines to help owners with compliance.
		www.ci.austin.tx.us/trees/programs.htm - Austin's tree preservation ordinance specifies that new development projects are evaluated on a case by case basis to ensure tree preservation and planting of high quality native and adapted trees.
Policy efforts	State Implementation Plans (SIPs)	www.treescleanair.org - This web site, sponsored by the USDA Forest Service, evaluates options for including urban forest initiatives in a SIP, a federally-enforceable air quality management plan.
		www.houstonregionalforest.org/Events/SIPTreeWorkingSession - This link provides materials available from a working session on issues and ideas about incorporating urban forest initiatives into a SIP.
		www.fs.fed.us/ne/syracuse/Emerging%20Measures%20Summary.pdf - This paper provides a brief summary of relevant EPA SIP guidance and details actions to help facilitate the inclusion of urban tree canopy increases within SIPs to meet clean air standards.
		www.fs.fed.us/psw/programs/cufr/products/cufr_668_SacAirQualityInit6-21-06.pdf - This link profiles the Sacramento, California, area project that is evaluating tree planting as a SIP reduction strategy for ground-level ozone.

6. Resources

6.1 Plant Selection

One of the key factors in a successful tree or vegetation mitigation project is choosing the right plants. Various web-based plant selection guides are available, including those listed in Table 3. For local information on tree selection, communities can contact tree planting organizations, community arborists, horticultural organizations, or landscape design consultants. Also, the land development codes and guidelines in many communities include lists of recommended and prohibited species, along with guidance on planting methods and site selection.

Figure 14: Green Walls



In places where it may be difficult to plant more vegetation, green roofs and green walls, such as this one on a store in Huntsville, Alabama, offer an alternative. See the “Green Roofs” chapter.

Table 3: Web-Based Plant Selection Guides*

Name	Description	Web Link
General Information		
International Society of Arboriculture Tree Selection	Overview of variables to consider, including tree function, form, size, and site conditions.	< www.treesaregood.com/treecare/tree_selection.aspx >
Databases		
Tree Guide Advanced Search	Database of trees that can be searched by variables including sun exposure, hardiness zone, tree shape, and height.	< www.arborday.org/trees/treeguide/advancedsearch.cfm >
PLANTS Database	Database of information about U.S. plants, with an advance search by name, location, and environmental variables, such as soil type, fire tolerance, and flower color.	< http://plants.usda.gov >
SelecTree for California	Database of California trees that can be searched by name or environmental variable.	< http://selecttree.calpoly.edu/ >
Lists of Recommended Trees		
Tree Link	List of recommended trees by USDA hardiness zone; links to regional tree information.	< www.treelink.org/docs/zonemap.phtml >; < www.treelink.org/linx/?navSubCatRef=20 >
Recommended Urban Trees	Description of recommended urban trees for USDA hardiness zones 1-6, listed by tree size and planting conditions.	< www.hort.cornell.edu/uhi/outreach/recurbtree >
Cleaner Air, Tree by Tree: A Best Management Practices and Guide for Urban Trees in Southern Nevada	Handbook for cultivating recommended trees to mitigate urban heat islands in southern Nevada.	< www.forestry.nv.gov/docs/shades%20green_bmp_guide07.pdf >
Tree Selection Guide for South Carolina	List of trees recommended for South Carolina and tips on what to consider when selecting trees.	< www.state.sc.us/forest/refsel.htm >

* For information on the ozone-forming potential of various trees, see the list in *Estimating the Ozone-forming Potential of Urban Trees and Shrubs*.⁶⁰

6.2 Benefit-Cost and Other Tools

Mitigation programs can use existing research and tools to conduct benefit-cost analyses for urban forest projects. Some of these resources include:

Table 4: Urban Forestry Tools and Resources

Name	Description	Web Link
Tree Inventory, Benefit, and Cost Resources		
<i>i</i> -TREE software suite	Developed by the USDA Forest Service, the <i>i</i> -TREE software suite is available free-of-charge on CD-ROM by request. The software suite uses data gathered by the community to provide an understanding of urban forest structure, information on management concerns, cost-benefit information, and storm damage assessment. The software allows for analyses of a single street tree, a neighborhood, or an entire urban forest. <i>i</i> -Tree combines STRATUM and UFOREthe Mobile Community Tree Inventory (MCTI) (see below).	< www.itreetools.org/index.shtm >
Street Tree Resource Analysis Tool for Urban forest Managers (STRATUM)	STRATUM is a USDA Forest Service tool that uses tree inventory data to evaluate the benefits and costs of street and park trees and estimate management needs.	< www.itreetools.org/street_trees/introduction_step1.shtm >
Urban Forest Effects (UFORE)	UFORE is a USDA Forest Service tool that uses tree inventory data to model and quantify urban forest structure (e.g., species composition, tree density, tree health, leaf area, leaf and tree biomass, species diversity), environmental effects, and value to communities.	< www.ufore.org >
The Mobile Community Tree Inventory (MCTI)	MCTI is a USDA Forest Service tree inventory tool that can be customized to individual communities. Data can be collected either by paper tally sheet, or the Tree Inventory PDA Utility, which simplifies data input. Data collected can then be used with the STRATUM or UFORE applications.	< www.itreetools.org/applications/mcti.shtm >
ecoSmart	The Center for Urban Forest Research publishes a web-based software program designed to evaluate the economic trade-offs between different landscape practices on residential parcels. The program estimates the environmental and cost impacts of strategic tree placement, rainfall management, and fire prevention practices.	< www.ecosmart.gov/ >

Table 4: Urban Forestry Tools and Resources (continued)

Name	Description	Web Link
Tree Inventory, Benefit, and Cost Resources (continued)		
Municipal Forest Resource Analysis	The Center for Urban Forest Research publishes a series of reports on benefits and costs of tree programs in various U.S. regions and communities.	< www.fs.fed.us/psw/programs/cufr/products.shtml > See "Tree Guides" and "Municipal Forest Resource Analysis."
Urban Forestry Index (UFind)	Database of current and historic urban forestry and arboriculture publications and other media compiled by the USDA Forest Service, the University of Minnesota, and TreeLink with the goal of increasing access to urban forestry material and preventing duplication of products.	< www.urbanforestryindex.com/ >
A Practical Approach to Assessing Structure, Function, and Value of Street Tree Populations in Small Communities	This 14-page report gives step-by-step instructions for estimating benefits and costs of trees in a specific community, using Davis, California as a case study.	< www.fs.fed.us/psw/programs/cufr/products/cufr_128.pdf >
The Community and Urban Forest Inventory and Management Program (CUFIM)	Produced by the Urban Forest Ecosystems Institute of California Polytechnic State University, the Community and Urban Forest Inventory and Management Program (CUFIM) is a free Microsoft Excel-based program that helps to inventory urban trees and estimate an economic value of wood recovery.	User guide: < www.ufe.org/files/ufeipubs/CUFIM_Report.pdf > Program files: < www.ufe.org/files/ufeipubs/CUFIM.zip >
CITYgreen	American Forests developed CITYgreen, a graphical information system application based on the UFORE model that is available for purchase. The software calculates ecologic and economic benefits from urban trees, including energy savings, air quality, stormwater improvements, water quality, and carbon storage and sequestration. CITYgreen also models changes in land cover and can be used in planning green infrastructure.	< www.americanforests.org/productsandpubs/citygreen/ >
Comfort Tool		
OUTdoor COMfort Expert System (OUTCOMES)	The USDA Forest Service developed the OUTdoor COMfort Expert System (OUTCOMES), which calculates a human comfort index by considering weather variables, tree density and shade pattern, and other neighborhood features.	< www.fs.fed.us/ne/syracuse/Tools/tools.htm >

Table 4: Urban Forestry Tools and Resources (continued)

Name	Description	Web Link
Carbon Calculators		
Individual tree carbon calculators	The USDA Forest Service has developed spreadsheet programs to estimate the carbon storage and sequestration rates for a sugar maple and a white pine. These spreadsheets provide a rough approximation of tree carbon storage and sequestration rates based on user-inputs of tree growth rates.	< www.fs.fed.us/ne/syracuse/Tools/tools.htm >
Carbon dioxide calculators for urban forestry	The USDA Forest Service provides guidelines for urban foresters and arborists, municipalities, utilities, and others to determine the effects of urban forests on atmospheric CO ₂ reduction.	< www.fs.fed.us/psw/programs/cufr/products/cufr_43.pdf >
Method for Calculating Carbon Sequestration by Trees in Urban and Suburban Settings	The Department of Energy has developed guidance to calculate carbon sequestration by trees in urban and suburban settings. The guidance is intended for participants in the Voluntary Reporting of Greenhouse Gases Program and provides a methodology and worksheet for calculations.	< ftp://ftp.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/sequester.pdf >

6.3 General Information

Table 5 lists organizations and web sites that contain additional information and reference materials on urban forestry.

Table 5: Urban Forestry Organizations and Web Sites

Name	Description	Web Link
Center for Urban Forest Research, part of the USDA Forest Service's Pacific Southwest Research Station	Publishes research on the benefits and costs of urban trees, including urban heat island, energy, air quality, climate change, and water impacts. Is involved with developing the California urban forestry greenhouse gas reporting protocol and developed STRATUM and ecoSMART.	< www.fs.fed.us/psw/programs/cufr >
Urban Forest Research Unit, part of the USDA Forest Service's Northeastern Research Station	Provides research on urban forest structure and the quantification of urban forest benefits, particularly air quality. Developed the UFORE and COMFORT models and conducts national urban forest assessments.	< www.fs.fed.us/ne/syracuse >
Urban Natural Research Institute, part of the USDA Forest Service Northern Research Station	Provides monthly web casts and other online resources targeted to the science of urban forestry.	< www.unri.org >
Urban and Community Forestry Program, Northeastern Area, part of the USDA Forest Service's State and Private Forestry mission area	Resources on tree planting and care, urban forest management, and outreach and marketing. The Urban and Community Forestry Program provides technical, financial, educational, and research services to states, cities, and nonprofit groups so they can plant, protect, maintain, and utilize wood from community trees and forests to maximize environmental, social, and economic benefits.	< www.na.fs.fed.us/urban/index.shtm >
Urban Forestry South, part of the USDA Forest Service's Southern Research Station	Published the Urban Forestry manual, a 12-chapter guidebook including cost-benefit information, public policy strategies, and tree planting suggestions. Urban Forestry South also hosts the Tree Failure Database.	< www.urbanforestrysouth.org/ >
TreeLink	Provides a links database, listserves, web casts, advice on grant writing, and links to local community forestry groups.	< www.treelink.org >

Table 5: Urban Forestry Organizations and Web Sites (continued)

Name	Description	Web Link
National Alliance for Community Trees (ACT)	Operates the NeighborWoods Program, offering grants to community forestry groups. The web site also has links to local community forestry groups, public policy updates, case studies of tree planting programs, a media kit, and a bi-monthly e-newsletter, and monthly web casts.	<www.actrees.org>
National Arbor Day Foundation	Provides information about local tree planting programs and events and resources for environmental educators and parents.	<www.arborday.org/>
Sustainable Urban Landscape Information Series	Covers urban landscape design, plant selection, installation, and maintenance.	<www.sustland.umn.edu/>
American Society of Landscape Architects (ASLA)	Professional association for landscape architects. Includes a search tool to locate ASLA firms. ASLA is developing a sustainability rating system for landscaped sites, comparable to the USGBC LEED standard for buildings, as well as regional guides to best practices.	<www.asla.org>

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1. **Requested Motion:**

Meeting Date: August 10, 2023

Discuss Water Management District's request to update the Town Water Conservation and Water Shortage Ordinances.

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

ITEMS FOR DISCUSSION

3. **Requirement/Purpose:**

5. **Background:**

More than 50 percent of the water used by South Florida residents is for landscape irrigation. With billions of gallons of water used every day and projections for continued population growth, we all need to do our part to conserve water and ensure there is enough for all of us, including communities and the environment, to survive and thrive. In order to conserve water, the South Florida Water Management District (SFWMD) and most local counties and municipalities have permanent Landscape Irrigation Conservation measures in place. These measures limit landscape watering to either two days a week or three days a week depending on where the property is located. The rule applies to all water sources except reclaimed water.

The Year-Round Landscape Irrigation Rule (YRR) is a component of the South Florida Water Management District's Comprehensive Water Conservation Program, which was established to encourage more responsible use of water resources throughout South Florida. Local governments are encouraged to adopt an ordinance in accordance with Rule 40E-24.301, F.A.C.

Local governments are also strongly encouraged by the District to pass local ordinances containing provisions meant to assist the South Florida Water Management District in the implementation of its water shortage plan (Chapter 40E-21, F.A.C.) and enforce issued water shortage orders.

Because water shortage and water shortage emergency declarations are temporary, they should be presented separate and independent from year-round irrigation restrictions in codes. It is suggested that the YRR code appear in an Article, Division, or Chapter dedicated to water conservation, natural resources or environment, not with one outlining codes related to utility water and sewer use.

Attachments:

1. 1st Reading - Ordinance No. 20-11 re Water Shortage Regulations-C1
2. 1st Reading - Ordinance No. 20-10 re Irrigation Regulations-C1
3. factsheet_ProtectingOurWaterResources_2023_FINAL

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

Gretchen R.H. Vose, Town Attorney

Date: August 03, 2023

Amy Baker, Town Clerk

Date: August 03, 2023

Andy Hyatt, Town Manager

Date: August 03, 2023

ORDINANCE NO. 20-11

AN ORDINANCE OF THE TOWN OF FORT MYERS BEACH, FLORIDA; PROVIDING FOR THE INTENT AND PURPOSE; PROVIDING DEFINITIONS; PROVIDING FOR APPLICABILITY; PROVIDING FOR THE DECLARATION OF WATER SHORTAGE OR WATER SHORTAGE EMERGENCY; PROVIDING FOR VARIANCES; PROVIDING FOR ENFORCEMENT; PROVIDING FOR PENALTIES; PROVIDING FOR CODIFICATION; PROVIDING FOR THE REPEAL OF ALL CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the South Florida Water Management District (District) has the responsibility and exclusive authority under Chapter 373, Florida Statutes, for implementation of a water shortage plan; and

WHEREAS, the District has promulgated and amended Chapter 40E-21, Florida Administrative Code (F.A.C.), which comprises the District's water shortage plan required under subSection 373.246(1), Florida Statutes, the purpose of which is to protect the water resources of the District from serious harm; to ensure equitable distribution of available water resources among all water users during times of shortage consistent with the goals of minimizing adverse economic, social and health related impacts; to provide advance knowledge of the means by which water apportionments and reductions will be made during times of shortage; and to promote greater security for water use permittees; and

WHEREAS, Chapter 40E-21, F.A.C., applies to all users as defined in subSection 40E-21.051(3), F.A.C., including permitted and exempt users under Chapter 40E-2, F.A.C.; and

WHEREAS, Rule 40E-21.421, F.A.C., seeks the cooperation and assistance of state, county, and municipal governmental officials, law enforcement officials, and police officers in the enforcement of the water shortage plan or any issued water shortage orders; and

WHEREAS, Rule 40E-21.421, F.A.C., authorizes and encourages counties and municipalities throughout the District's jurisdiction to adopt ordinances which provide for local enforcement of the water shortage plan or any issued water shortage orders; and

WHEREAS, it is the desire of the Town Council of Town of Fort Myers Beach to adopt such an Ordinance in accordance with Rule 40E-21.421, F.A.C.; and

^{1/} Additions to existing text are shown by underline, changes to existing text on second reading are shown by double underline, and deletions are shown as ~~strikethrough~~.

WHEREAS, it is the desire of the Town Council of the Town of Fort Myers Beach to adopt such an Ordinance; and

WHEREAS, on August 17, 2020 the Town Council held a first reading of this proposed Ordinance; and

WHEREAS, on September 10, 2020 the Town Council held a second reading of this proposed Ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF TOWN OF FORT MYERS BEACH, FLORIDA:

Section 1. The above recitals are true and correct, and incorporated herein by this reference and are hereby adopted as the legislative and administrative findings of the Town Council.

Section 2. A new Division 3, Article II of Chapter 30 of the Code of Ordinances of the Town of Fort Myers Beach entitled “Water Shortage” is hereby adopted to read as follows:

CHAPTER 30 – UTILITIES
ARTICLE II – WATER
DIVISION 3. WATER SHORTAGE

Section ____. **ARTICLE PURPOSE AND OBJECTIVES**

The purpose of this Article is to protect the water resources of the Town of Fort Myers Beach from the harmful effects of overutilization during periods of water shortage by assisting the District in the implementation of its water shortage plan, or issued water shortage orders, under Chapter 40E-21, F.A.C.

Section ____. **APPLICABILITY**

The provisions of this Ordinance shall apply to each user using the water resource within the geographical areas subject to the water shortage condition or water shortage emergency as determined by the District, whether from publicly or privately-owned water utility systems, private wells, or private connections with surface water bodies. This Section shall not apply to users using reclaimed water or saltwater.

Section ____. **DEFINITIONS**

District means the South Florida Water Management District, a government entity created under Chapter 373, Florida Statutes.

Law Enforcement Officials means law enforcement officer, town code enforcement officer or town designee is authorized and empowered to make inspections at reasonable hours of all activities regulated by this article in order to ensure compliance with the provisions of this article.

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User means any person, individual, firm, association, organization, partnership, business trust, corporation, company, agent, employee or other legal entity whether natural or artificial, the United States of America, and the State and all political subdivisions, regions, districts, municipalities, and public agencies thereof, which directly or indirectly takes water from the water resource, including uses from private or public utility systems, uses under water use permits issued pursuant to Chapter 40E-2, F.A.C., or uses from individual wells or pumps.

Water Resource means any and all water on or beneath the surface of the ground, including natural or artificial water courses, lakes, ponds, or diffused surface water, and water percolating, standing, or flowing beneath the surface of the ground.

Water Shortage means when the District determines there is the possibility that insufficient water will be available to meet the present and anticipated needs of the users, or when conditions are such as to require temporary reduction in total use within a particular area to protect water resources from serious harm.

Water Shortage Emergency means when the District has determined that the provisions listed in Part II of Chapter 40E-21, F.A.C., are not sufficient to protect the public health, safety, or welfare, the health of animals, fish, or aquatic life, a public water supply, or commercial, industrial, agricultural, recreational, or other reasonable beneficial uses.

Section ____. **DECLARATION OF WATER SHORTAGE OR WATER SHORTAGE EMERGENCY**

- (a) A declaration of a water shortage condition and/or water shortage emergency in accordance with Part II of Chapter 40E-21, F.A.C., within all or parts of the Town of Fort Myers Beach by the District's Governing Board or Executive Director, shall invoke the provisions of this Ordinance.
- (b) A water shortage or water shortage emergency order shall supersede mandatory year-round water irrigation measures until the more restrictive measure is rescinded by the District.
- (c) Upon the District issuing a water shortage order, all water use restrictions or other measures adopted by the District applicable to the Town of Fort Myers Beach, or any portion thereof, shall be subject to enforcement action by the Town of Fort Myers Beach officials pursuant to Section 6 of this Ordinance. Any violation of Chapter 40E-21, F.A.C., or any order issued pursuant thereto, shall be a violation of this Ordinance.

Section ____. **VARIANCES**

The Town of Fort Myers Beach recognizes all variances issued by the District pursuant to Rule 40E-21.275, F.A.C.

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Section ____. **ENFORCEMENT**

The Town of Fort Myers Beach authorizes law enforcement officials having jurisdiction in the area governed by this Ordinance to enforce the provisions of this Ordinance. In addition, the Town Manager may delegate this Ordinance's enforcement responsibility to agencies and departments within the Town of Fort Myers Beach government.

Section. ____ - PENALTIES

- (a) Any violation of this article may be prosecuted in accordance with the provisions set out in section 1-5 and Chapter 2, Article V of the Fort Myers Beach Land Development Code. Each day in violation of this article shall constitute a separate offense.
- (b) This article may be enforced by any duly authorized enforcement officer, town code enforcement officer or town designee.
- (c) The enforcement officer, town code enforcement officer or town designee is authorized and empowered to make inspections at reasonable hours of all activities regulated by this article in order to ensure compliance with the provisions of this article. Any person who violates any provision of this chapter, or of any regulation or guideline that implements this chapter, shall be ordered immediately to stop all work.
- (d) Any person who takes any action or omission in violation of any provision of this article and fails to cure such violation after proper notice is provided shall be subject to a fine of up to \$250 per day per violation for initial violations, and \$500 per day per violation for repeat violations. All penalties incurred because of violations of this article shall continue to accrue until such violations are cured.
- (d) Nothing contained herein will prevent the town from taking such other lawful action in any court of competent jurisdiction as is necessary to prevent or remedy any refusal to comply with, or violation of, this article. Such other lawful action will include, but will not be limited to, an equitable action for injunctive relief or an action at law for damages.

Section 3. The Town Council intends that the provisions of this ordinance be made a part of the Fort Myers Beach Code of Ordinances, and that sections herein may be renumbered or re-lettered and the words or phrases herein may be changed to accomplish codification; regardless, typographical errors that do not affect intent may be corrected with notice to and authorization of the Town Manager without further process.

Section 4. Whenever the requirements or provisions of this ordinance are in conflict with the requirements or provisions of any other lawfully adopted ordinance or statute, the most restrictive shall apply.

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Section 5. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason, declared by a court of competent jurisdiction to be unconstitutional or invalid, such decision will not affect the validity of the ordinance as a whole, or any part thereof, other than the part so declared.

Section 6. This ordinance shall become effective upon adoption by the Town Council.

The foregoing Ordinance was adopted by the Town Council upon a motion by Councilmember _____ and seconded by _____ and upon being put to a roll call vote, the result was as follows:

Raymond P. Murphy, Mayor	_____
Rexann Hosafros, Vice Mayor	_____
Dan Allers, Council Member	_____
Jim Atterholt, Council Member	_____
Bill Veach, Council Member	_____

ADOPTED this _____ day of _____, 2020 by the Town Council of the Town of Fort Myers Beach, Florida.

TOWN OF FORT MYERS BEACH

Raymond P. Murphy, Mayor

ATTEST:

Michelle D. Mayher, Town Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE
AND RELIANCE OF THE TOWN OF FORT MYERS BEACH SOLELY:

John R. Herin, Jr., Town Attorney

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ORDINANCE NO. 20-10

AN ORDINANCE OF THE TOWN OF FORT MYERS BEACH, FLORIDA REPEALING DIVISION 2, ARTICLE II OF CHAPTER 30 OF THE CODE OF ORDINANCES OF FORT MYERS BEACH ENTITLED “WATER SHORTAGE PLAN” AND ADOPTING A NEW DIVISION 2, ARTICLE II OF CHAPTER 30 OF THE CODE OF ORDINANCES OF THE TOWN OF FORT MYERS BEACH ENTITLED “WATER CONSERVATION FOR LANDSCAPE IRRIGATION”, PROVIDING FOR SEVERABILITY; CODIFICATION; SCRIVENER’S ERRORS; CONFLICTS OF LAW AND AN EFFECTIVE DATE

WHEREAS, Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions, and render municipal service, and exercise any power for municipal purposes, except when expressly prohibited by law; and

WHEREAS, Article X of the Town Charter of the Town of Fort Myers Beach (“Town”) empowers the Town to adopt, amend, or repeal such ordinances and resolutions as may be required for the proper governing of the Town; and

WHEREAS, the South Florida Water Management District (“District”) has the responsibility and exclusive authority under Chapter 373, *Florida Statutes*, for regulating the consumptive use of water; and

WHEREAS, the District has promulgated Chapter 40E-2, Florida Administrative Code (“F.A.C.”), for the consumptive use of water which includes Rule 40E-2.061, F.A.C., “General Consumptive Use Permits by Rule”, regulating landscape irrigation at a single family dwelling or duplex, and Rule 40E-2.071, F.A.C., “Noticed General and Individual Permits”, regulating larger landscape irrigation users; and

WHEREAS, the District promulgated and amended Chapter 40E-24, F.A.C., requiring year-round irrigation conservation measures; and

WHEREAS, Chapter 40E-24, F.A.C., applies to all “users” as defined in subsection 40E-24.101(14), F.A.C., including permitted and exempt users under Chapter 40E-2, F.A.C.; and

WHEREAS, Chapter 40E-24, F.A.C., calls for year-round and permanent landscape irrigation restrictions, separate and independent from water shortage declarations, in accordance with Chapter 40E-21, F.A.C.; and

WHEREAS, Chapter 40E-24, F.A.C., applies to all landscape irrigation regardless of whether the water comes from ground or surface water, from a private well or pump, or from a public or private utility; and

WHEREAS, Rule 40E-24.301, F.A.C., provides that local governments may adopt a landscape irrigation ordinance that achieves water conservation consistent with Rule 40E-24.201, F.A.C., including variance and enforcement procedures; and

WHEREAS, the District strongly encourages local governments to adopt an ordinance in accordance with Rules 40E-24.201 and 40E-24.301, F.A.C.; and

WHEREAS, it is the desire of the Town Council of the Town of Fort Myers Beach to adopt such an Ordinance; and

WHEREAS, on August 17, 2020 the Town Council held a first reading of this proposed Ordinance; and

WHEREAS, on September 10, 2020 the Town Council held a second reading of this proposed Ordinance.

NOW THEREFORE BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF FORT MYERS BEACH, FLORIDA:¹

Section 1. The above recitals are true and correct, and incorporated herein by this reference and are hereby adopted as the legislative and administrative findings of the Town Council.

Section 2. Division 2, Article II of Chapter 30 of the Code of Ordinances of 14 of the Town of Fort Myers Beach, a copy of which is attached hereto as Exhibit “A” is hereby repealed.

Section 3. A new Division 2, Article II of Chapter 30 of the Code of Ordinances of the Town of Fort Myers Beach entitled “Water Conservation for Landscape Irrigation” s hereby adopted to read as follows:

CHAPTER 30 – UTILITIES
ARTICLE II – WATER
DIVISION 2. WATER CONSERVATION FOR LANDSCAPE
IRRIGATION

Section ____. Article Purpose and Objectives

The purpose of this Article is to implement procedures that promote water conservation through the efficient use of landscape irrigation.

^{1/} Additions to existing text are shown by underline, changes to existing text on second reading are shown by double underline, and deletions are shown as ~~striketrough~~.

Section ____ . Applicability

The provisions of this Article shall apply to each user providing landscape irrigation from all water resources within the boundaries of the Town of Fort Myers Beach with the following exceptions:

- (a) The use of reclaimed water, which may or may not be supplemented from another source;
- (b) Irrigation at agricultural and nursery operations; and
- (c) Irrigation of athletic play areas.

Section ____ . Definitions

Address means the “house number” (a numeric or alphanumeric designation) that, together with the street name, describes the physical location of a specific property. This includes “rural route” numbers, but excludes post office box numbers. If a lot number in a mobile home park or similar community is used by the U.S. Postal Service to determine a delivery location, the lot number shall be the property’s address. If a lot number in a mobile home park or similar residential community is not used by the U.S. Postal Service (e.g., the park manager sorts incoming mail delivered to the community’s address), then the community’s main address shall be the property’s address. If a property has no address, it shall be considered “even-numbered”.

Athletic Play Area means all golf course fairways, tees, roughs, greens, and other athletic play surfaces; including, football, baseball, soccer, polo, tennis, and lawn bowling fields, and rodeo, equestrian, and livestock arenas

Consumptive Use Permit (CUP) means a permit issued pursuant to Chapter 40E-2, F.A.C., authorizing the consumptive use of water.

District means the South Florida Water Management District, a government entity created under Chapter 373, Florida Statutes.

Enforcement Officials means law enforcement officer, town code enforcement officer, or town designee that is authorized and empowered to make inspections at reasonable hours of all activities regulated by this article in order to ensure compliance with the provisions of this article.

Even Numbered Address means an address ending in the numbers 0, 2, 4, 6, 8, or rights-of-way or other locations with no address, or the letters A-M.

Existing landscaping means any landscaping which has been planted and in the ground for more than ninety (90) days.

Landscaping means shrubbery, trees, lawns, sod, grass, ground covers, plants, vines, ornamental gardens, and such other flora not intended for resale, which are situated in such diverse locations as residential landscapes, recreation areas, cemeteries, public, commercial, and industrial establishments, public medians, and rights-of-way, except athletic play areas.

Landscape Irrigation means the outside watering of shrubbery, trees, lawns, sod, grass, ground covers, plants, vines, ornamental gardens, and such other flora not intended for resale, which are planted and situated in such diverse locations as residential landscapes, recreation areas, cemeteries, public, commercial, and industrial establishments, public medians, and rights-of-way, except athletic play areas.

Low Volume Hand Watering means the watering of landscape by one (1) person, with one (1) hose, fitted with a self-canceling or automatic shutoff nozzle.

Low Volume Irrigation means the use of equipment and devices specifically designed to allow the volume of water delivered to be limited to a level consistent with the water requirement of the plant being irrigated, and to allow that water to be placed with a high degree of efficiency in the root zone of the plant. The term also includes water used in mist houses and similar establishments for plant propagation. Overhead irrigation and flood irrigation are not included.

Micro-irrigation means the application of small quantities of water on or below the soil surface as drops or tiny streams of spray through emitter or applicators placed along a water delivery line. Micro-irrigation includes a number of methods or concepts, such as bubbler, drip, trickle, mist or micro-spray, and subsurface irrigation.

New landscaping means any landscaping, which has been planted in the ground for ninety (90) days or less.

Odd Numbered Address means an address ending in the numbers 1, 3, 5, 7, 9, or the letters N-Z.

Reclaimed Water means wastewater that has received at least secondary treatment and basic disinfection, and is reused after flowing out of a wastewater treatment facility as defined by Rule 62-40.210, F.A.C.

User means any person, individual, firm, association, organization, partnership, business trust, corporation, company, agent, employee, or other legal entity whether natural or artificial, the United States of America, and the State and all political subdivisions, regions, districts, municipalities, and public agencies thereof, which directly or indirectly takes water from the water resource, including uses from private or public utility systems, uses under water use permits issued pursuant to Chapter 40E-2, F.A.C., or uses from individual wells or pumps.

Wasteful and Unnecessary means allowing water to be dispersed without any practical purpose to the water use; for example, excessive landscape irrigation, leaving an unattended hose on a driveway with water flowing, allowing water to be dispersed in a grossly inefficient manner regardless of the type of water use; for example, allowing landscape irrigation water to unnecessarily fall onto pavement, sidewalks, and other impervious surfaces; or allowing water flow through a broken or malfunctioning water delivery or landscape irrigation system.

Water Resource means all water on or beneath the surface of the ground, including natural or artificial watercourses, lakes, ponds, or diffused surface water, and water percolating, standing, or flowing beneath the surface of the ground.

Water Shortage means when the District determines there is the possibility that insufficient water will be available to meet the present and anticipated needs of the users, or when conditions are such as to require a temporary reduction in total use within a particular area to protect water resources from serious harm. A water shortage usually occurs due to drought.

Water Shortage Emergency means when the District determines the provisions listed in Part II of Chapter 40E-21, F.A.C., are not sufficient to protect the public health, safety, or welfare, the health of animals, fish, or aquatic life, a public water supply, or commercial, industrial, agricultural, recreational, or other reasonable-beneficial uses.

Section ____ . Year-Round Landscape Irrigation Conservation Measures

The Town of Fort Myers Beach adopts the rules of the District, listed in Subsection 40E-24.201 (1)-(6), F.A.C., including subsequent additions or corrections, which are set out as follows:

- (a) The year-round landscape irrigation conservation measures contained in this article are applicable to all users including permitted and exempt users under Chapter 40E-2, F.A.C., unless otherwise indicated. These conservation measures apply to all water resources, unless otherwise indicated. In addition to the requirements of this Section, all permitted users under Chapter 40E-2, F.A.C., are required to maintain compliance with all CUP conditions and terms, including requirements to implement water conservation practices.
- (b) It shall be the duty of each user to keep informed as to the landscape irrigation conservation measures within this article, which affects each particular water use.
- (c) In addition to the specific conservation measures, all wasteful and unnecessary water use is prohibited.

- (d) The following requirements shall apply to all users, unless specified as an exception or granted waiver.
- (1) Landscape irrigation between the hours of 9:00 a.m. and 5:00 p.m. is prohibited, except as otherwise provided.
 - (2) Irrigation of existing landscaping shall comply with the following provisions:
 - i. Even addresses, installations with irrigation systems that irrigate both even and odd addresses within the same zones, such as multi-family units and homeowners' associations, and rights-of-way or other locations with no address shall have the opportunity to accomplish necessary landscape irrigation two (2) days a week, only on Thursday and/or Sunday.
 - ii. Odd addresses shall have the opportunity to accomplish necessary landscape irrigation two (2) days a week, only on Wednesday and/or Saturday.
- (c) Irrigation of new landscaping shall comply with the following provisions:
- (1) New landscaping may be irrigated once on the day it is installed without regard to the listed watering days and times. Irrigation of the soil immediately prior to the installation of the new landscaping is allowed without regard to the normal watering days and times.
 - (2) A ninety (90) day establishment period begins on the day the new landscaping is installed. The new landscaping shall be installed within a reasonable time from the date of purchase, which may be demonstrated with a dated receipt or invoice.
 - (3) Irrigation of new landscaping which has been in place for thirty (30) days or less may be accomplished on Monday, Tuesday, Wednesday, Thursday, Saturday, and/or Sunday.
 - (4) Irrigation of new landscaping which has been in place for thirty-one (31) to ninety (90) days may be accomplished on Monday, Wednesday, Thursday, and/or Saturday.
- (d). Irrigation of new landscaping is limited to areas only containing the new landscaping. An entire zone of an irrigation system shall only

be utilized for landscape irrigation under this subsection if the zone contains at least 50% new landscaping. If a zone contains less than 50% new landscaping, or if the new landscaping is in an area that will not typically be irrigated by an irrigation system, only the individual new plantings are eligible for additional irrigation. Targeted watering may be accomplished by low volume hand watering or any appropriate method, which isolates and waters only the new landscaping.

- (e). Any water shortage restrictions or other measures declared pursuant to Chapter 40E-21, F.A.C., or related District orders which are more restrictive than a measure contained within this article, shall supersede this article for the duration of the applicable water shortage declaration.

Section ____ . Exceptions to the Landscape Irrigation Schedules

- (a) Landscape irrigation scheduling shall be subject to the following exceptions:
 - (1) Landscape irrigation systems may be operated during restricted days and/or times for cleaning, maintenance, and repair purposes with an attendant on site in the area being tested. Landscape irrigation systems may routinely be operated for such purposes no more than once per week, and the run time for any one (1) test should not exceed ten (10) minutes per zone.
 - (2) Landscape irrigation for watering-in fertilizers, insecticides, pesticides, fungicides and herbicides, where such watering-in is recommended by the manufacturer, or by federal, state or local law, or best management practices, shall be allowed under the following conditions:
 - (b) Such watering-in shall be limited to one (1) application, unless the need for more than one (1) application is stated in the directions for application specified by the manufacturer; and
 - (c) Such watering-in shall be accomplished during normally allowable watering days and times set forth in this Ordinance, unless a professional licensed applicator has posted a temporary sign containing the date of application and the date(s) of needed watering-in activity.
 - (d) Any plant material may be watered using low volume irrigation micro-irrigation low volume hand watering method, rain barrels, cisterns, or other similar rain-harvesting devices without regard to the watering days or times allowed pursuant to this article.

Section ____ . Additional Requirements

Any user who purchases and installs an automatic landscape irrigation system shall properly install, maintain, and operate technology that inhibits or interrupts operation of the system during periods of sufficient moisture in accordance with Section 373.62, Florida Statutes.

Section ____ . Administrative Waivers

- (a) An administrative waiver from the specific day or days identified in this article may be granted by the town manager or designee if strict application of the restrictions herein would lead to an unreasonable or unfair result; provided the applicant demonstrates with particularity that:
 - (1) Compliance with the irrigation schedule will result in substantial economic, health, or other hardship on the applicant or those served by the applicant. If granted, the applicant shall be required to post a notice at each parcel to which the variance pertains.
- (b) Relief may be granted only upon a demonstration that such hardship exists, is peculiar to the person or the affected property, is not self-imposed, and further demonstrates that granting the variance would be consistent with the general intent and purpose of this article.
- (c) The town recognizes all irrigation variances or waivers issued by the District under Rule 40E-24.501, F.A.C.

Section ____ . Declaration of Water Shortage or Water Shortage Emergency

Declaration of a water shortage condition and/or water shortage emergency within all or parts of the Town of Fort Myers Beach by the District shall supersede this article for the duration of the applicable water shortage declaration.

Section. ____ - Penalties

- (a) Any violation of this article may be prosecuted in accordance with the provisions set out in section 1-5 and Chapter 2, Article V of the Fort Myers Beach Land Development Code. Each day in violation of this article shall constitute a separate offense.
- (b) This article may be enforced by any duly authorized enforcement officer, town code enforcement officer or town designee.

- (c) The enforcement officer, town code enforcement officer or town designee is authorized and empowered to make inspections at reasonable hours of all activities regulated by this article in order to ensure compliance with the provisions of this article. Any person who violates any provision of this chapter, or of any regulation or guideline that implements this chapter, shall be ordered immediately to stop all work.
- (d) Any person who takes any action or omission in violation of any provision of this article and fails to cure such violation after proper notice is provided shall be subject to a fine of up to \$250 per day per violation for initial violations, and \$500 per day per violation for repeat violations. All penalties incurred because of violations of this article shall continue to accrue until such violations are cured.
- (e) Nothing contained herein will prevent the town from taking such other lawful action in any court of competent jurisdiction as is necessary to prevent or remedy any refusal to comply with, or violation of, this article. Such other lawful action will include, but will not be limited to, an equitable action for injunctive relief or an action at law for damages.

Section 4. The Town Council intends that the provisions of this ordinance be made a part of the Fort Myers Beach Code of Ordinances, and that sections herein may be renumbered or re-lettered and the words or phrases herein may be changed to accomplish codification; regardless, typographical errors that do not affect intent may be corrected with notice to and authorization of the Town Manager without further process.

Section 5. Whenever the requirements or provisions of this ordinance are in conflict with the requirements or provisions of any other lawfully adopted ordinance or statute, the most restrictive shall apply.

Section 6. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason, declared by a court of competent jurisdiction to be unconstitutional or invalid, such decision will not affect the validity of the ordinance as a whole, or any part thereof, other than the part so declared.

Section 7. This ordinance shall become effective upon adoption by the Town Council.

The foregoing Ordinance was adopted by the Town Council upon a motion by Councilmember _____ and seconded by _____ and upon being put to a roll call vote, the result was as follows:

Raymond P. Murphy, Mayor	_____
Rexann Hosafros, Vice Mayor	_____
Dan Allers, Council Member	_____

Jim Atterholt, Council Member _____
Bill Veach, Council Member _____

ADOPTED this ____ day of ____, 2020 by the Town Council of the Town of Fort Myers Beach, Florida.

TOWN OF FORT MYERS BEACH

Raymond P. Murphy, Mayor

ATTEST:

Michelle D. Mayher, Town Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE
AND RELIANCE OF THE TOWN OF FORT MYERS BEACH SOLELY:

John R. Herin, Jr., Town Attorney



The South Florida Water Management District (SFWMD) is a regional governmental agency that oversees the water resources in 16 counties – from Orlando to the Florida Keys.

OUR MISSION

To **SAFEGUARD** and **RESTORE** South Florida's water resources and ecosystems, **PROTECT** our communities from flooding, and **MEET** the region's water needs while **CONNECTING** with the public and stakeholders

Ron DeSantis, Governor

SFWMD Governing Board

Chauncey Goss, Chairman

Scott Wagner, Vice Chairman

Ron Bergeron Sr.

Ben Butler

Charlie E. Martinez

Cheryl Meads

Charlette Roman

Jay Steinle

Jacqui Thurlow-Lippisch

Drew Bartlett, SFWMD Executive Director

3301 Gun Club Road
West Palm Beach, FL 33406
561-686-8800
sfwmd.gov

Protecting Our Water Resources Through Water Conservation



More than 50 percent of the water used by South Florida residents is for landscape irrigation. With billions of gallons of water used every day and projections for continued population growth, we all need to do our part to conserve water and ensure there is enough for all of us, including communities and the environment, to survive and thrive.

In order to conserve water, the South Florida Water Management District (SFWMD) and most local counties and municipalities have permanent Landscape Irrigation Conservation measures in place. These measures limit landscape watering to either two days a week or three days a week depending on where the property is located. The rule applies to all water sources except reclaimed water.

SFWMD Rules

2 Day-A-Week Watering

- ▶ No watering between 10 a.m. and 4 p.m.
- ▶ Residents and businesses with an odd-numbered street address may water lawns and landscapes on Wednesdays and/or Saturdays.
- ▶ Residents and businesses with an even-numbered street address, no street address or those that have both even and odd addresses within the same zones, which may include multi-family units and homeowner associations, may water lawns and landscapes on Thursdays and/or Sundays.



3 Day-A-Week Watering

- ▶ No watering between 10 a.m. and 4 p.m.
- ▶ Residents and businesses with an odd-numbered street address may water lawns and landscapes on Mondays, Wednesdays and/or Saturdays
- ▶ Residents and businesses with an even-numbered street address, no street address or those that have both even and odd addresses within the same zones, which may include multi-family units and homeowners associations, may water lawns and landscapes on Tuesdays, Thursdays and/or Sundays.

(Always check your local ordinances for more specific restrictions that may pertain to your community).



More Details About Irrigation Restrictions



New Landscapes

The Landscape Irrigation Rule allows additional watering for up to 90 days following the installation of new lawns and landscaping.

- ▶ On the day new landscaping is installed, new plantings and the soil may be irrigated once without regard to the normally allowable watering days and times. Soil irrigation is also allowed immediately prior to planting.
- ▶ New plantings that have been in place for 30 days or less may be watered on Mondays, Tuesdays, Wednesdays, Thursdays, Saturdays and/or Sundays.
- ▶ New plantings that have been in place from 31 to 90 days may be watered on Mondays, Wednesdays, Thursdays and/or Saturdays.
- ▶ ***Irrigation is limited to the areas containing new landscaping only.***
An entire irrigation zone may be watered only if new landscaping is planted on at least 50 percent of that zone. If new landscaping is planted on less than 50 percent of an irrigation zone, only the new plantings may be watered.

Exclusions to the SFWMD Year-Round Rule

- ▶ The use of low-volume irrigation methods – including micro-irrigation, container watering and hand-watering with a hose (with an automatic shut-off nozzle) – is allowed anytime.
- ▶ The use of reclaimed water and harvested rainwater for irrigation purposes is allowed anytime.

Alternative Irrigation Schedule

If unique circumstances prohibit adherence to the mandatory landscape irrigation conservation measures, individuals and businesses/organizations may seek an alternative schedule that still meets the intent of the rule. Email conservation@sfwmd.gov with questions about requests for alternative irrigation schedules and the approval process.

Questions

For more information on the rule, including watering days and times by county or municipality, visit SFWMD.gov/LandscapeIrrigation or email a water conservation expert at conservation@sfwmd.gov.



1. **Requested Motion:**

August 2023

Meeting Date: August 10, 2023

Why the action is necessary:

What the action accomplishes:

2. **Agenda:**

AGENDA MANAGEMENT

3. **Requirement/Purpose:**

5. **Background:**

Attachments:

1. Agenda Management 8.10.23

Financial Impact:

6. **Alternative Action**

7. **Staff Recommendations:**

8. **Recommended Approval:**

AGENDA MANAGEMENT

	Subject	Dept		Mtg Date
116	Presentation: How Communities Succeed and Fail (JK)	Council	added 06.21.2023	08.21.2023
118	Sand landward of ECL on un-signed easement properties (from 6.20 mtg)	Environmental	added 06.20.2023	08.21.2023
122	Presentation: Beach Renourishment (CEC)	Environmental	added 07.18.2023	08.21.2023
45	Classification and Compensation Study	HR	added 02.23.2023	08.21.2023
114	Insurance Renewal	HR	added 07.07.2023	08.21.2023
96	Approval of 2023 CEMP	Public Works	added 05.17.2023	08.21.2023
107	Recommendation of Award: Tier 1 Side Streets	Utilities	added 07.03.2023	08.21.2023
91	Angie Brewer amendments to SRF loan(s)	Utilities	added 05.03.2023	08.21.2023
93	Proposed: FY24 Millage	Finance		09.11.2023 5:01 PM
95	Proposed: FY24 Budget	Finance		09.11.2023 5:01 PM
98	Adoption: Public Communications Plan	Clerk	added 05.27.2023	09.25.2023 9:00 AM
124	Presentation: Corradino Group -LDC/Comp Plan updates	P&Z	added 07.19.2023	09.25.2023 9:00 AM
93	Final: FY24 Millage	Finance		09.25.2023 5:01 PM
95	Final: FY24 Budget	Finance		09.25.2023 5:01 PM
109	LDC/Comp Plan transmittal hearing	P&Z	added 06.22.2023	10.16.2023
82	Presentation: Urban Land Institute (ULI)	Council	added 04.17.2023	TBD M&P
110	Downtown District Analysis (what are can/cannot do's?)	P&Z	added 06.22.2023	TBD M&P
66	Rebuilding Options (SEZ, VAR, CPD, etc.)	Atty/P&Z	added 04.06.2023	TBD M&P
119	Resilient Lee hub (BV)	Council	added 06.21.2023	TBD M&P
70	What is Workforce Housing? (BV)	Council	added 04.06.2023	TBD M&P
81	Sewer inspection with home rebuilds (BV)	P&Z	added 04.17.2023	TBD M&P
5	Beach school: partnering w/Chamber, employers, PTA to enroll children	Council	added 11.21.2022	TBD M&P
6	Veteran's Tribute at Bayside Park (JA)	Council	added 09.08.2022	TBD M&P