



PAUL SMITH
PUBLIC SERVICES DIRECTOR

Public Services Department

Memorandum

Date: June 27, 2023
To: Honorable Mayor and Board of Commissioners
Through: Mark LeCouris, City Manager
Paul Smith, Public Services Director *PS*
From: Robin Rives, Sustainability Coordinator
Subject: Presentation: Overview of the Sustainability Plan

Summary

The final draft of the City's first Sustainability Plan will be presented to the Mayor and Board of Commissioners and the public. Input and feedback received will be reviewed with the Sustainability Committee and utilized to finalize the plan for adoption.

Background

A team composed of the Sustainability Coordinator, the Sustainability Advisory Committee, and City staff have been developing the City's first Sustainability Plan for over 2 years. This process has been intensive, including researching other City plans and approaches, reviewing frameworks for organizing the plan, gathering community input and City staff input through various channels, and developing and prioritizing recommended actions with an implementation schedule.

This plan has been aligned with overall City planning (Strategic Plan and Comprehensive Plan) and will serve to help formalize the City's commitment toward sustainability, guide the City's actions toward advancing sustainability for the next 10 years, and serve to improve the environmental, economic, and social wellbeing of the City of Tarpon Springs.

The plan recommends 50 actions that are divided among three main sections:

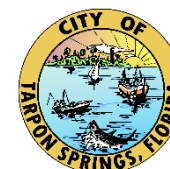
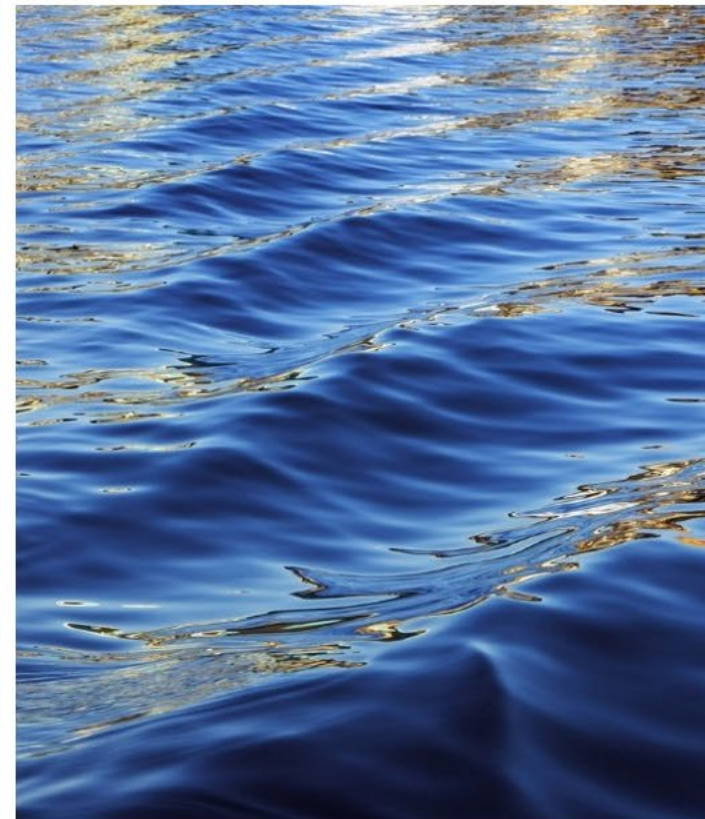
- Section 1: Environment (Planet)
- Section 2: Economy (Profit)
- Section 3: Social (People)

The plan includes an **Implementation Schedule** for the actions by timeline and cost. Actions are grouped in phases over the next 10 years. Actions aligned with the City's Strategic Plan are prioritized within the first 5 years. A progress update will be completed annually and a major revision is anticipated at Year 5.



Overview of the Sustainability Plan

City of Tarpon Springs
June 2023





Presentation Overview

- Three Pillars of Sustainability
- Key Definitions
- Purpose of the Plan
- Highlights of the Plan
- Layout of the Plan
- Progress to Date
- Community Engagement Summary
- Summary of Main Sections and Plan Actions
- Implementation Plan
- Contributors
- Questions?

Key Definitions

Sustainability

Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs.

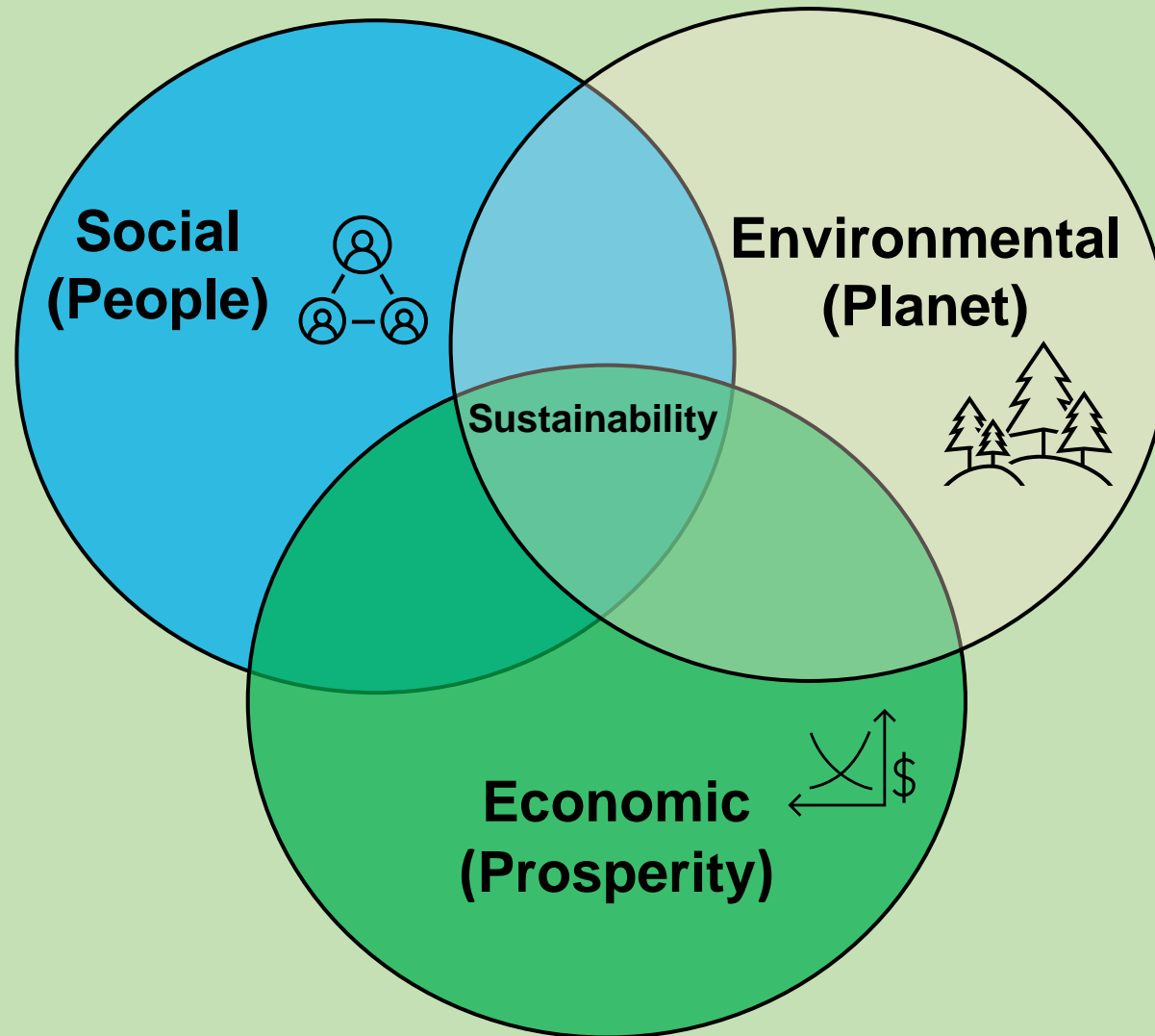
Resilience

Considers a system's ability to prepare for threats or impacts from a stressful or disruptive event, such as a hurricane, and be able to recover and adapt afterwards

Environmental Justice

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies

Three Pillars of Sustainability



Relationship Between City Plans



Sustainability Plan at a Glance

To learn more!

The full-length version of the Sustainability Plan and the Executive Summary can be found on the City of Tarpon Springs website.

Key metrics

The actions in the Sustainability Plan include planning, outreach, land development code changes, policies and regulations for internal operations, incentive programs, determining funding strategies, developing partnerships, goal setting, and facility and infrastructure improvements.



Several of the actions will result in key metrics for tracking sustainability outcomes.



EXAMPLES:
Setting a greenhouse gas emission reduction target.



Work toward a solid waste recycling rate to a goal of 40% or greater.



Check out our website!
www.ctsfl.us/sustainability

GOAL

To improve the environmental, social, and economic vitality of the City of Tarpon Springs to allow for a more sustainable future.

METHOD

The City of Tarpon Springs has created a Sustainability Plan to guide the actions of the City toward a sustainable future. Actions in the plan relate to the three pillars of sustainability: Environment (planet), Economy (profit), and Social (people). The plan includes 50 actions, focusing on City operations, which will be implemented in phases over the next 10 years. The actions are divided into the following categories:

ACTION CATEGORIES



Built Environment

These actions address community development and livability.



Natural Environment

These actions relate to improving the health of natural systems throughout the City.



Climate & Energy

These actions relate to addressing climate change and improving energy efficiency.



Local Economy

This action category focuses on equitable access to quality jobs and fostering a prosperous community.



Equity & Community

These actions promote equitable access to City resources and infrastructure.



Health & Safety

These actions further the health and safety of the community.

Purpose of the Plan

- This plan will:
 - ✓ Help to formalize the City's commitment toward sustainability
 - ✓ Guide the City's actions toward advancing sustainability for the next 10 years
 - ✓ Help to improve the environmental, economic, and social wellbeing of the City of Tarpon Springs which will benefit the residents of the City

Executive Summary

PAGE 7

Plan Overview

The City of Tarpon Springs supports a sustainable future for the health and wellbeing of its residents and natural environment. The Sustainability Plan is a 10-year plan geared toward city operations that will improve the environmental, economic, and social wellbeing of the City. The plan outlines 50 critical actions across three pillars of sustainability that will be implemented over the lifespan of the plan. The majority of the actions will commence within the first 5 years of the plan and are multi-year actions that require several years for implementation.

- Short-term actions are estimated to take 1-3 years
- Medium-term actions are estimated to take 4-6 years
- Long-term actions are estimated to take greater than 6 years

Actions were clustered strategically based on cost, timeline, alignment with the City's Strategic Plan or other city plans or ongoing city initiatives. Costs for actions may range from as low as below \$10,000 to as much as \$1 million, depending on the scope of the action. Funding for these actions can be accomplished from a variety of sources including potential grant funding, operations & maintenance funding, capital improvement funding, or a combination thereof.

Organization

This plan is divided into three main sections in accordance with the three pillars of sustainability: Environment (planet), Economy (profit), and Social (people). The actions within each section are further categorized by the following sections: Natural Environment, Climate & Energy, Built Environment, Local Economy, Equity & Community, and Health & Safety.

Summary of Actions

The Sustainability Plan is a comprehensive framework to:

- Protect biodiversity
- Reduce the urban heat island effect
- Improve connectivity to wildlife corridors
- Transition the city towards clean energy goals
- Reduce greenhouse gas emissions
- Increase energy and water efficiency
- Improve the city's resiliency
- Encourage the use of green infrastructure
- Preserve and increase the urban canopy and green space
- Improve pedestrian safety and access to public transit
- Encourages sustainable development
- Support social equity through greater engagement with low-income and minority neighborhoods, and support for vulnerable populations.
- Improve the City's food system
- Encourage sustainable procurement guidelines
- Promote Health in all Policies, family-friendly workplace policies, and living wages.

Some actions in the plan are community-facing including incentive programs and education & outreach actions.

Highlights of the Plan

- This plan focuses on city operations but does contain several community scale actions such as public outreach and community incentive programs
- This actions in this plan are citywide in impact and will require cross-departmental collaboration
- Several actions in the plan tie into the Strategic Plan goals
- The key timeframes:
 - A progress update will be completed annually
 - A major revision will take place at Year 5
 - This plan has a 10-year planning horizon

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Layout of the Plan

- Summary pages
- City Leadership
- Introductory pages
- Progress to Date
- Community Engagement
- Main Sections & Implementation Plan
- Appendices

Sustainability Progress to Date

PAGE 15

SPOTLIGHT

Solar:

- Phase 1 of the RO installation comprised of 162kW of DC solar power installed and operational since May 2020. This system provides 25% of the power required by the facility during low demand operations.
- Solar co-ops enable community members to make informed decisions regarding the purchase of solar power. The city has partnered with Florida SUN to assist residents with transitioning to solar and expanding rooftop systems within the community.

Duke Programs:

- The Duke Plug & Park Program incorporates level 2 chargers in public areas throughout Tarpon Springs to expand access and development of EV market.
- The Duke Clean Energy Connection Program enables qualified business and residential customers to participate in a community solar program and directly fund the development of several utility-scale solar projects.

GHG Inventories:

- Greenhouse Gas Inventory reports serve to quantify greenhouse gas emissions from various activities and infrastructure of City government. Quantifying these emissions will assist the city with setting and achieving emission reduction targets.



Progress to Date

- The plan features a Progress to Date section
 - Outlines some of the actions which the city has taken within the recent years to advance environmental, economic, and social sustainability
- The section is organized by the categories of
 - Clean Energy, Water Conservation, Natural Environment, and Economic/Social
- Contains both summary pages and Spotlight pages to highlight specific projects and initiatives

2022

Survey Opens

February 24

Goal: To determine priorities & concerns of residents regarding sustainability & resiliency



Workshop 1

May 21

Goal of workshops: To determine public interest in sustainability initiatives & actions



Workshop 2

May 23

All workshops conducted according to STAR framework. Topics from all 3 pillars of Sustainability



Workshop 3

May 26

Most important topics to residents resulting from the 3 workshops (in order):

- Economic Development
- Improved Access to Community Services
- Natural Resource Protection



Survey Closes

June 1

170 responses were received. Results were sorted by:

- Demographics
- Climate & Community
- Personal Actions & Experiences

Community Engagement Summary

- Sustainability staff hosted 3 public workshops and administered a survey between February- June 2022 to collect public feedback for inclusion in the Sustainability Plan
- The public feedback collected from the workshops and survey was considered when prioritizing actions for the Sustainability Plan

Guide for Reading This Document

1.1 Organization of the Document

This document is divided by 3 main sections inspired by the three pillars of sustainability: Environment (planet), Economy (profit), and Social (people).

The City of Tarpon Springs will implement the actions within the plan to advance sustainability and resiliency practices in the City.

The actions are categorized by 6 main categories: Natural Environment, Climate and Energy, Built Environment, Local Economy, Equity and Community, and Health and Safety.

The action categories are grouped together within the 3 main sections as such:

Section 1: Environment (Planet)

Subsection 1: Natural Environment

Subsection 2: Climate & Energy

Section 2: Economy (Profit)

Subsection 1: Built Environment

Subsection 2: Local Economy

Section 3: Social (People)

Subsection 1: Equity & Community

Subsection 2: Health & Safety

Actions are listed within their respective categories and are numbered from 1-50. The number value of the action does not indicate the importance of the action nor dictate the order in which actions will be implemented.


Sections of Plan

- The 50 actions are divided among three main sections.
 - Section 1: Environment (Planet)
 - Section 2: Economy (Profit)
 - Section 3: Social (People)
- These sections are further subdivided into subsections or categories to better organize the actions.
- The number of the action does not indicate importance of the action or relate to the year of implementation for the action.

Summary of Section 1: Environment

ACTIONS LIST

PAGE 27

 Natural Environment

Action 1: Develop a **net zero canopy loss** policy through the **Land Development Code** and preserve habitat areas for threatened animal and plant species.

Action 2: Conduct an analysis of the City's **urban heat island** to identify priority areas for heat **mitigation**. Reduce the urban heat island citywide through actions including increasing the urban tree canopy and green space, lining thoroughfares with shade trees, installing awnings and arcades or water features such as mist devices, and using reflective or permeable surfaces where appropriate.

Action 3: Adopt a city guideline with required break times coinciding with the **heat index** to ensure the wellbeing of city employees who work outdoors.

*Bolded terms have a definition included in the List of Definitions on Page 49.

ACTIONS LIST

PAGE 28

 Natural Environment

Action 4: Adopt an ordinance requiring control of invasive species, and create a preferred plant ordinance for private landscaping, to maintain **biodiversity** and habitat. Create a program with incentives to remove **invasive** plants and replace with native and/or site-appropriate plants in landscaping.


Action 5: Adopt and enforce an ordinance requiring control of invasive species and use of sustainable landscaping practices on all City properties. Use **Integrated Pest Management** to limit the use of pesticides on City property and provide pesticide reduction awareness for community members and property owners.

Action 6: Review regulations that establish wetland, stream, and shoreline buffer widths and adjacent land uses, and achieve no net loss of wetlands, streams, and shoreline buffers.

Summary of Section 1: Environment

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ACTIONS LIST

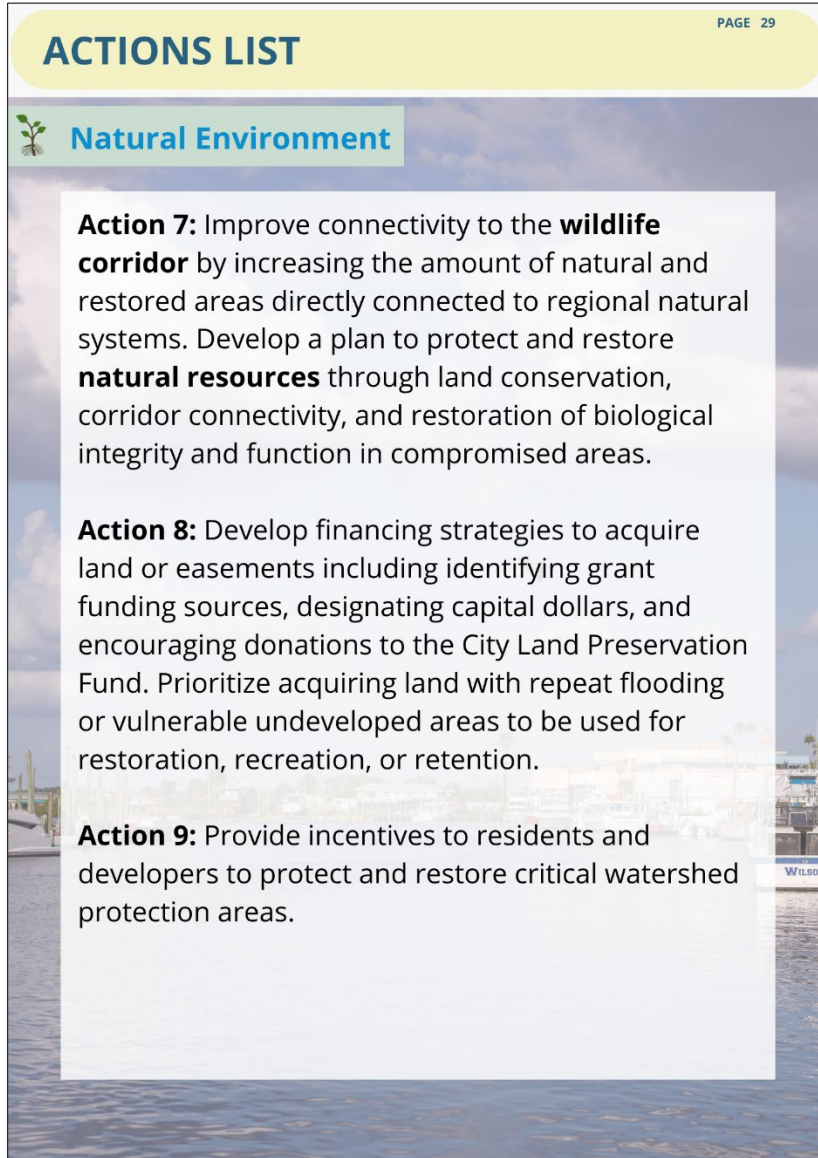


Natural Environment

Action 7: Improve connectivity to the **wildlife corridor** by increasing the amount of natural and restored areas directly connected to regional natural systems. Develop a plan to protect and restore **natural resources** through land conservation, corridor connectivity, and restoration of biological integrity and function in compromised areas.


Action 8: Develop financing strategies to acquire land or easements including identifying grant funding sources, designating capital dollars, and encouraging donations to the City Land Preservation Fund. Prioritize acquiring land with repeat flooding or vulnerable undeveloped areas to be used for restoration, recreation, or retention.

Action 9: Provide incentives to residents and developers to protect and restore critical watershed protection areas.



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ACTIONS LIST

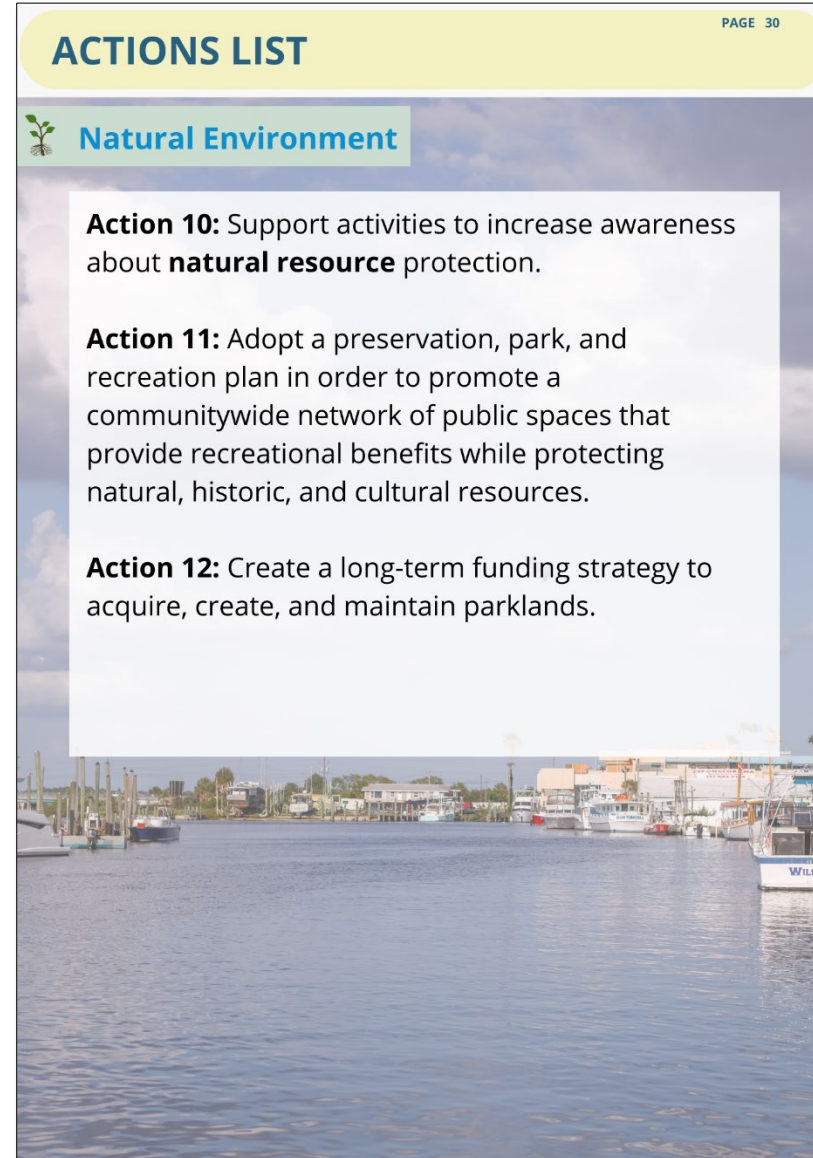


Natural Environment

Action 10: Support activities to increase awareness about **natural resource** protection.

Action 11: Adopt a preservation, park, and recreation plan in order to promote a communitywide network of public spaces that provide recreational benefits while protecting natural, historic, and cultural resources.


Action 12: Create a long-term funding strategy to acquire, create, and maintain parklands.



Summary of Section 1: Environment

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ACTIONS LIST

 **Climate & Energy**

Action 13: Demonstrate a measurable reduction in vulnerability and increase in **resiliency** to communitywide risks such as **sea-level rise** flooding, storm-event flooding, and heat, and prioritize improvements for at-risk population groups.


Action 14: Review and revise the seawall ordinance to require all newly installed or renovated seawalls to meet a minimum height based on current base flood projections. Evaluate potential use of **living seawalls** in City seawall improvements.

Action 15: Improve facilities and infrastructure throughout the community to be better prepared for **climate change** threats.

Action 16: Draft a Climate Action Plan with actions to transition the city toward clean energy goals including increasing on-site **renewable energy** production and the use of electric vehicles and alternative fuels. Create staff incentives to encourage the use of alternatives modes of transportation and the transition to electric vehicles.

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ACTIONS LIST

 **Climate & Energy**

Action 17: Create incentives to encourage community members to utilize alternative modes of transportation and low-emission vehicles.

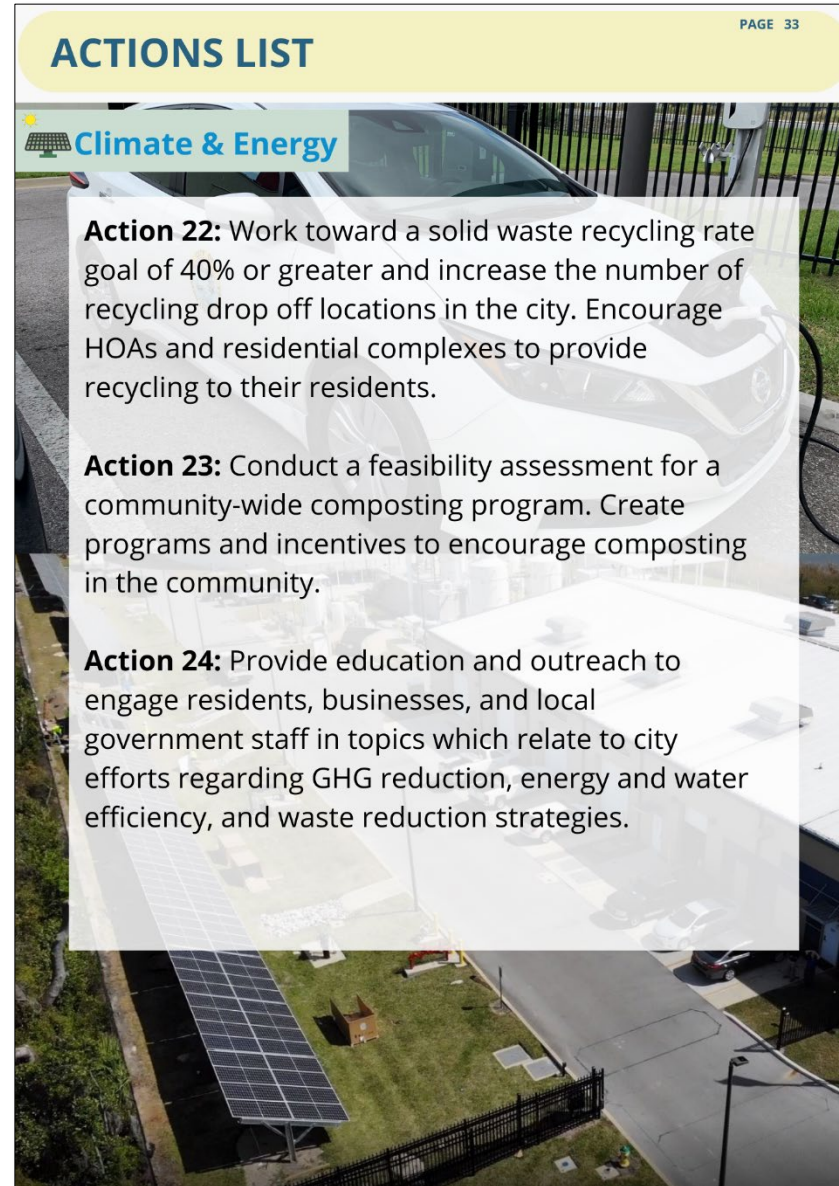
Action 18: Adopt an official **greenhouse gas** emissions (GHG) reduction target, such as a 30% reduction by 2030 and an 80% reduction by 2050, in local government GHG emissions.

Action 19: Conduct a local government GHG Inventory at least every 5 years.


Action 20: Conduct a solar feasibility study for City facilities. Create a policy to encourage the City to progressively source its energy consumption from **renewable energy** sources.

Action 21: Make retrofits and upgrades to local government buildings and/or infrastructure systems that will increase energy and water efficiency.

Summary of Section 1: Environment



ACTIONS LIST PAGE 33

 **Climate & Energy**


Action 22: Work toward a solid waste recycling rate goal of 40% or greater and increase the number of recycling drop off locations in the city. Encourage HOAs and residential complexes to provide recycling to their residents.

Action 23: Conduct a feasibility assessment for a community-wide composting program. Create programs and incentives to encourage composting in the community.

Action 24: Provide education and outreach to engage residents, businesses, and local government staff in topics which relate to city efforts regarding GHG reduction, energy and water efficiency, and waste reduction strategies.

Summary of Section 2: Economy

ACTIONS LIST


 Built Environment

Action 25: Adopt a multimodal master plan that prioritizes future projects to improve bicycle and pedestrian safety and access to public transit and increase the mileage of sidewalks and bicycle lanes or paths. Pursue accreditations such as Bicycle-Friendly Community or Walk-Friendly Community. Adopt land development regulations that promote walkability and evaluate the feasibility of a communitywide public bike share program.

Action 26: Make **green stormwater infrastructure** a core goal of the City's Infrastructure Master Plan. Encourage the use of green stormwater infrastructure in private development.

Action 27: Assess city-owned coastal properties to determine application of **living shorelines** and **living seawalls**. When feasible, utilize living shoreline and natural system strategies to strengthen coastal **resilience** and mitigate coastal flooding damage.

ACTIONS LIST

 Built Environment

Action 28: Make **green infrastructure** a core goal of the City's Infrastructure Master Plan. Create green building standards and sustainability practices for City facilities that include considerations for improved energy efficiency, GHG emissions reduction, and which promote sustainable landscapes as well as public health and safety. Require new City facilities to meet elevated standards and encourage the use of green building certification programs such as LEED.

Action 29: Adopt local design criteria and land development codes that require proactive green infrastructure practices for new developments to encourage sustainable development and the use of green building certification programs such as LEED.

Action 30: Seek funding sources to help reduce costs for residents and business owners to implement green building practices.

Summary of Section 2: Economy

ACTIONS LISTPAGE 38

 **Local Economy**

Action 31: Amend existing local economic plans and strategies to focus market demand for green jobs, technology, products, and services.

Action 32: Work with community partners to amend existing local economic plans and strategies to sustain existing and attract new cultural and artistic creatives to the Tarpon Springs community.

Action 33: Create a sustainable procurement policy for City purchases to encourage the use of safe, healthy, and environmentally responsible products.


Action 34: Implement a City program to acknowledge and promote local green businesses.

Action 35: Evaluate family-friendly workplace policies for local government employees including paid family leave, flexible scheduling, teleworking, job sharing, and easily available childcare. Limit contractual services to Equal Opportunity Employers and ensure that all City employees earn a **living wage** according to applicable standards.

Summary of Section 3: Social

ACTIONS LIST

PAGE 41

 **Equity & Community**

Action 36: Demonstrate progress in appointing local advisory board members that reflect the gender, racial, and ethnic diversity of the community.

Action 37: Partner with community organizations to maintain an inventory of civic organizations, neighborhood associations, and local service providers which can be used to address neighborhood-specific needs.

Action 38: Conduct an outreach program to obtain input for the Sustainability Plan major revision. Obtain diversified input by reaching out to a variety of stakeholders to further community engagement in local decision-making.

Action 39: Utilize the existing Cops & Kids programs to provide young people with opportunities to participate in civic activities and programs that support the development of strong youth leaders. Increase engagement among individuals from low-income and/or minority neighborhoods.

ACTIONS LIST

PAGE 42

 **Equity & Community**

Action 40: Demonstrate progress in reducing the risks and exposure to **environmental justice** conditions such as aging infrastructure, adequate access to critical services, health of the natural environment, and exposure to the impacts of **climate change** for low-income and/or minority neighborhoods.

Action 41: Adopt an environmental justice or social equity plan and policy to reduce negative impacts, increase access to community facilities and services among low-income populations and racial and ethnic minorities, and commit to equity in local government decision-making, activities, and investments.

Action 42: Provide equity, inclusion, cultural disparity, diversity or cultural competence training for local government staff.

Action 43: Provide information about community resources and services in multiple languages and formats to make this information more widely accessible.

Summary of Section 3: Social



ACTIONS LIST PAGE 43

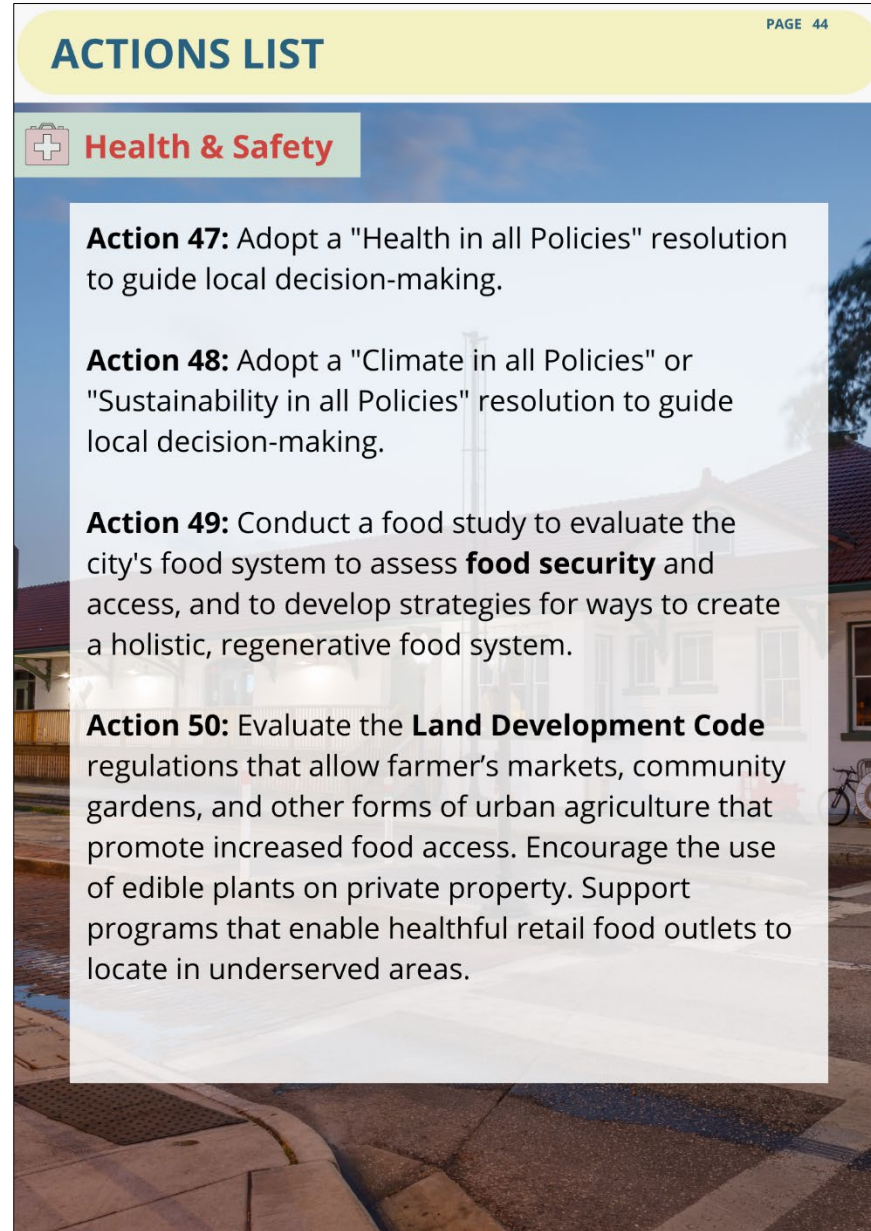
 **Equity & Community**

Action 44: Conduct a community needs assessment to identify priority service needs, including the needs of vulnerable populations. Conduct a survey of aging community members to assess how well they feel that present and future needs are being met.


Action 45: Partner with community organizations to support and promote programming and events that inform residents of available human services and connect vulnerable community members to these programs and services.

Action 46: Adopt a communitywide plan to reduce poverty and guarantee that basic human needs are met in the community.

Summary of Section 3: Social



ACTIONS LIST PAGE 44

 **Health & Safety**

Action 47: Adopt a "Health in all Policies" resolution to guide local decision-making.

Action 48: Adopt a "Climate in all Policies" or "Sustainability in all Policies" resolution to guide local decision-making.

Action 49: Conduct a food study to evaluate the city's food system to assess **food security** and access, and to develop strategies for ways to create a holistic, regenerative food system.

Action 50: Evaluate the **Land Development Code** regulations that allow farmer's markets, community gardens, and other forms of urban agriculture that promote increased food access. Encourage the use of edible plants on private property. Support programs that enable healthful retail food outlets to locate in underserved areas.

Implementation Plan
























Action Number	Action	Action Category	Estimated Costs		Timeframe	Strategic Plan Aligns with Strategic Plan Goals?	Implementation Year
			Cost Estimate	Potential Funding Source			
1	Net Zero Canopy Loss Policy		\$	O&M	SHORT		2024
5	Ordinance requiring control of invasive species on City property		\$	O&M	SHORT		2024
6	Land Use Regulations that establish appropriate wetland, stream and shoreline buffer widths		\$	O&M	SHORT		2024
14	Seawall Ordinance		\$	O&M, Grant, Capital	SHORT		2024
15	Improve facilities and infrastructure		\$\$\$\$	O&M, Grant, Capital	LONG		2024
16	Climate Action Plan		\$\$\$	O&M, Grant	SHORT		2024
18	GHG Reduction Target		\$	O&M	SHORT		2024
20	Solar feasibility study for City facilities		\$\$\$	O&M, Grant	SHORT		2024
29	Proactive green infrastructure practices for new developments		\$	O&M	SHORT		2024
35	Evaluate family-friendly workplace policies for local government employees		\$\$	O&M	MEDIUM		2024

- Implementation Schedule analyzes actions by timeline and cost.
- Actions are grouped in phases over the next 10 years. These actions are organized according to the year of implementation, starting with the first year of the plan, 2024.
- Potential funding sources are suggested for each action.
- Actions aligned with the city's Strategic Plan are prioritized within the first 5 years
- The plan starts with more actions per year in Years 1-5 and fewer in Years 6-10, with a major update in Year 5.
- A general first step for actions will be to establish benchmarks to help measure progress

Implementation Plan

KEY


























\$	Less than \$10k	Short Medium Long	0-3 Years		O & M	Operations & Maintenance Capital project Grants
\$\$	\$10k - \$100k		4-6 Years		Capital	
\$\$\$	\$100k - \$500k		6-10 Years		Grant	
\$\$\$\$	\$500k - \$1M					
\$\$\$\$\$	Over \$1M					
	Natural Environment					
	Climate & Energy					
	Built Environment					
	Local Economy					
	Equity and Community					
	Health and Safety					

Action Number	Action	Action Category	Estimated Costs		Strategic Plan		Implementation Year
			Cost Estimate	Potential Funding Source	Timeframe	Aligns with Strategic Plan Goals?	
1	Net Zero Canopy Loss Policy		\$	O&M	SHORT	✓	2024
5	Ordinance requiring control of invasive species on City property		\$	O&M	SHORT	✓	2024
6	Land Use Regulations that establish appropriate wetland, stream and shoreline buffer widths		\$	O&M	SHORT	✓	2024
14	Seawall Ordinance		\$	O&M, Grant, Capital	SHORT		2024
15	Improve facilities and infrastructure		\$\$\$\$	O&M, Grant, Capital	LONG	✓	2024
16	Climate Action Plan		\$\$\$	O&M, Grant	SHORT	✓	2024
18	GHG Reduction Target		\$	O&M	SHORT		2024
20	Solar feasibility study for City facilities		\$\$\$	O&M, Grant	SHORT	✓	2024
29	Proactive green infrastructure practices for new developments		\$	O&M	SHORT	✓	2024
35	Evaluate family-friendly workplace policies for local government employees		\$\$	O&M	MEDIUM	✓	2024
3	Guideline with required break times		\$	O&M	SHORT		2025
7	Connectivity to wildlife corridor		\$\$\$	O&M, Grant	LONG		2025
11	Park and/or Open Space Plan		\$\$	O&M, Grant	SHORT		2025
12	Funding strategy to acquire, create and maintain parklands		\$	O&M, Grant, Capital	SHORT	✓	2025
21	Retrofits and upgrades to local government buildings		\$\$\$	O&M, Grant, Capital	MEDIUM	✓	2025
27	Determine suitable application of living shorelines and living seawalls		\$\$\$	O&M, Grant, Capital	LONG		2025
31	Focus market demand for green jobs, technology, products, and services.		\$	O&M	SHORT	✓	2025
48	Adopt a "Climate in All Policies" or "Sustainability in All Policies" statement		\$	O&M	SHORT		2025
8	Financing strategies to acquire land or easements		\$	O&M, Grant, Capital	SHORT		2026
19	GHG inventory at least every 5 years		\$	O&M	SHORT		2026
22	Solid waste recycling rate to a goal of 40% or greater		\$\$	O&M	MEDIUM		2026
24	Education and outreach		\$	O&M	SHORT		2026
28	Create green infrastructure plan		\$\$\$	O&M, Grant	SHORT	✓	2026
33	Create sustainable procurement policy		\$	O&M	SHORT		2026
37	Inventory of civic organizations, neighborhood associations, and local service providers		\$	O&M	SHORT	✓	2026

Implementation Plan

KEY

\$	Less than \$10k	Short	0-3 Years	O & M	Operations & Maintenance
\$\$	\$10k - \$100k	Medium	4-6 Years	Capital	Capital project
\$\$\$	\$100k - \$500k	Long	6-10 Years	Grant	Grants
\$\$\$\$	\$500k - \$1M				
\$\$\$\$\$	Over \$1M				
	Natural Environment				
	Climate & Energy				
	Built Environment				
	Local Economy				
	Equity and Community				
	Health and Safety				

Action Number	Action	Action Category	Estimated Costs		Timeframe	Aligns with Strategic Plan Goals?	Implementation Year
			Cost Estimate	Potential Funding Source			
4	Ordinance requiring control of invasive species		\$	O&M	SHORT	✓	2027
25	Bicycle and/or pedestrian master plan		\$\$\$	O&M, Grant, Capital	LONG	✓	2027
39	Provide young people with opportunities to participate in civic activities and programs		\$	O&M	SHORT		2027
46	Adopt a communitywide plan to reduce poverty		\$\$	O&M, Grant	SHORT	✓	2027
17	Incentives to encourage community members to utilize alternative modes of transportation		\$\$	Grant	SHORT		2028
34	Acknowledge and promote local green businesses		\$	O&M	SHORT		2028
38	Further community engagement in local decision-making and planning for increased equitable access and proximity to facilities, services, and infrastructure.		\$	O&M	SHORT		2028
42	Provide equity, inclusion, cultural disparity, diversity or cultural competence training for local government staff.		\$\$	O&M	SHORT	✓	2028
2	Urban Heat Island		\$\$\$	O&M, Grant	MEDIUM	✓	2029
26	Consider the use of green stormwater infrastructure		\$	O&M	SHORT	✓	2029
41	Adopt an environmental justice or social equity plan		\$\$\$	O&M, Grant	SHORT	✓	2029
44	Conduct a community needs assessment		\$\$	O&M, Grant	SHORT	✓	2029
10	Increase awareness about natural resource protection		\$\$	O&M, Grant	SHORT		2030
30	Create incentive programs to encourage landowners to adopt green infrastructure practices		\$	Grant	SHORT	✓	2030
36	Local advisory board members that reflect the gender, racial, and ethnic diversity		\$	O&M	MEDIUM		2030
43	Provide information about community resources and services in multiple languages and formats		\$	O&M	SHORT		2030
45	Support and promote programming and events that inform residents of available human services		\$	O&M, Grant	SHORT		2030
47	Adopt a "Health in All Policies" statement		\$	O&M	SHORT		2030
9	Incentives to residents and developers to protect and restore critical watershed protection areas		\$\$	O&M, Grant	SHORT		2031
49	Conduct a food study		\$\$	O&M, Grant	SHORT		2031
50	Promote increased food access in priority areas.		\$	O&M, Grant	SHORT		2031
32	Sustain existing and attract new cultural and artistic creatives		\$	O&M	SHORT		2032
13	Demonstrate a measurable reduction in vulnerability and increase in resiliency		\$\$\$\$	O&M, Grant, Capital	LONG		2033
23	Feasibility assessment for a community-wide composting program		\$\$\$	O&M, Grant	SHORT		2033
40	Demonstrate progress in reducing the risks and exposure to environmental justice conditions		\$\$\$\$	O&M, Grant, Capital	LONG		2034

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PAGE 5

Special Recognition to the institutions who provided inspiration for this Plan:

City of Dunedin

City of Largo

City of St. Petersburg

City of West Palm Beach

Pinellas Sustainability &
Resiliency Network

Florida Sustainability
Directors Network

Southeast Sustainability
Directors Network

Tampa Bay Regional
Planning Council

STAR

Contributors

Thank you to all who contributed
to the development of the
Sustainability Plan!

An aerial photograph of a coastal landscape during sunset. The sun is low on the horizon, casting a golden glow over the sky and reflecting on the water. A large, dense forest of green trees occupies the foreground and middle ground. A body of water, possibly a bay or inlet, is visible, with a small peninsula or island in the distance. A road or path is visible in the lower right corner, winding through the trees.

Questions?

CITY OF TARPON SPRINGS
SUSTAINABILITY PLAN

THIRD DRAFT

SUSTAINABLE TARPON SPRINGS

2023



Sustainability Plan at a Glance

To learn more!

The full-length version of the Sustainability Plan and the Executive Summary can be found on the City of Tarpon Springs website.

Key metrics

The actions in the Sustainability Plan include planning, outreach, land development code changes, policies and regulations for internal operations, incentive programs, determining funding strategies, developing partnerships, goal setting, and facility and infrastructure improvements.



Several of the actions will result in key metrics for tracking sustainability outcomes.



EXAMPLES:

Setting a greenhouse gas emission reduction target.



Work toward a solid waste recycling rate to a goal of 40% or greater.

GOAL



To improve the environmental, social, and economic vitality of the City of Tarpon Springs to allow for a more sustainable future.

METHOD



The City of Tarpon Springs has created a Sustainability Plan to guide the actions of the City toward a sustainable future. Actions in the plan relate to the three pillars of sustainability: Environment (planet), Economy (profit), and Social (people). The plan includes 50 actions, focusing on City operations, which will be implemented in phases over the next 10 years. The actions are divided into the following categories:

ACTION CATEGORIES



Built Environment

These actions address community development and livability.



Natural Environment

These actions relate to improving the health of natural systems throughout the City.



Climate & Energy

These actions relate to addressing climate change and improving energy efficiency.



Local Economy

This action category focuses on equitable access to quality jobs and fostering a prosperous community.



Equity & Community

These actions promote equitable access to City resources and infrastructure.



Health & Safety

These actions further the health and safety of the community.



Check out our website!
www.ctsfl.us/sustainability

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Letter from the City Manager



City of Tarpon Springs, Florida

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TARPON SPRINGS, FLORIDA 34688-5004
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OFFICE OF
CITY MANAGER

Dear Tarpon Springs residents,

As your City Manager, I am proud to announce our Sustainability Plan. This plan is designed to ensure that our city is taking steps to reduce its environmental impact while also providing economic and social benefits to our community. Our Sustainability Plan focuses on six key areas: built environment, natural environment, climate and energy, local economy, equity and community, and health and safety.

In the energy sector, we are exploring ways to increase the use of renewable energy sources, such as solar power, and pursuing fleet electrification. We are also looking into energy efficient technologies to reduce our energy consumption.

We plan to improve the built environment through strategies including adopting green building standards, improving pedestrian safety, and evaluating the potential for living shorelines. We are also planning to increase demand for green jobs, promote green local businesses, and implement sustainable procurement policies.

To promote equity in the community, we plan to work with community organizations to address neighborhood-specific needs, provide expanded services to youth in the community, and adopt a social equity plan and communitywide plan to reduce poverty. For improved health and safety in the community, we aim to adopt policies to promote health and sustainability in local decision-making.

Finally, we are planning to better utilize our land resources by promoting green spaces, expanding the urban tree canopy, improving connectivity to the wildlife corridor, protecting critical watershed areas, removing invasive plant species, and improving biodiversity, and promoting local food production. This will help to improve air quality and public health, and reduce the urban heat island, while also providing economic and social benefits to our community.

These are just a few of the measures we are taking to make our city more sustainable. I encourage you to get involved and help us reach our sustainability goals. Thank you for helping to make our city a better place.

Sincerely,

Mark G. LeCouris
City Manager

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STAR



Costa Vatikiotis
Mayor



Craig Lunt
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John Koulianos
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727 938-3711
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Executive Summary

The City of Tarpon Springs supports a sustainable future for the health and wellbeing of its residents and natural environment. The Sustainability Plan is a 10-year plan geared toward city operations that will improve the environmental, economic, and social wellbeing of the City. The plan outlines 50 critical actions across three pillars of sustainability that will be implemented over the lifespan of the plan. The majority of the actions will commence within the first 5 years of the plan and are multi-year actions that require several years for implementation.

- Short-term actions are estimated to take 1-3 years
- Medium-term actions are estimated to take 4-6 years
- Long-term actions are estimated to take greater than 6 years

Actions were clustered strategically based on cost, timeline, alignment with the City's Strategic Plan or other city plans or ongoing city initiatives. Costs for actions may range from as low as below \$10,000 to as much as \$1 million, depending on the scope of the action. Funding for these actions can be accomplished from a variety of sources including potential grant funding, operations & maintenance funding, capital improvement funding, or a combination thereof.

This plan is divided into three main sections in accordance with the three pillars of sustainability: Environment (planet), Economy (profit), and Social (people). The actions within each section are further categorized by the following sections: Natural Environment, Climate & Energy, Built Environment, Local Economy, Equity & Community, and Health & Safety.

The Sustainability Plan is a comprehensive framework to:

- Protect biodiversity
- Reduce the urban heat island effect
- Improve connectivity to wildlife corridors
- Transition the city towards clean energy goals
- Reduce greenhouse gas emissions
- Increase energy and water efficiency
- Improve the city's resiliency
- Encourage the use of green infrastructure
- Preserve and increase the urban canopy and green space
- Improve pedestrian safety and access to public transit
- Encourages sustainable development
- Support social equity through greater engagement with low-income and minority neighborhoods, and support for vulnerable populations.
- Improve the City's food system
- Encourage sustainable procurement guidelines
- Promote Health in all Policies, family-friendly workplace policies, and living wages.

Some actions in the plan are community-facing including incentive programs and education & outreach actions.

Executive Summary

Assessment

Every year, the City Sustainability division will complete an annual report to share progress toward completing the actions in the plan. This document will be a living document. At the Year 5 mark, a major revision to the Sustainability Plan will be conducted. During this time, the actions list will be re-assessed based on factors including community priorities and feedback, progress made to date, Strategic Plan and Comprehensive Plan priorities, and an assessment of the ongoing actions and remaining actions to be completed.

Community feedback was integral to the development of this plan. The City's Sustainability Citizen Advisory Committee, comprised of citizen volunteers, has collaborated with City staff throughout the planning process and will be involved in the implementation of the Sustainability Plan. The City also hosted three public workshops and a citywide sustainability survey to collect public feedback to develop the Sustainability Plan actions list.

Planning

Aligning with the City's Strategic Plan was also an important part of the planning process. The City's Strategic Plan contains key themes including: Infrastructure, Community Engagement, Quality of Life; Smart Growth & Redevelopment; Culture, Heritage & Preservation; and Good Governance. The Sustainability Plan will advance the goals and objectives outlined in the Strategic Plan. Collaboration among the City's Sustainability Staff Team allowed for integration of concepts from the Sustainability Plan into the Strategic and Comprehensive Planning processes and vice versa to allow for cohesivity and consideration of sustainability in Citywide planning efforts.

This is the first Sustainability Plan for the City, but it is not the City's first steps toward a sustainable future. The Sustainability Progress to Date section highlights some of the many projects that the City has completed in recent years to advance clean energy, promote water conservation, protect the natural environment, and promote the development of economic/social programs. The Project Spotlight sections further explain a few of these special projects which have helped to make the City more sustainable, such as:

- Solar installations on the City's Reverse Osmosis facility
- Completion of a Stormwater Action Plan and Watershed Management Plans
- A grant-funded Vulnerability Assessment & Action Plan
- A grant-funded tree inventory and Urban Forestry Management Plan
- Development of a Community Redevelopment Area and Qualified Opportunity Zone
- Florida Green Building Council (FGBC) Green Local Government Silver designation in 2013 and 2018

The City is excited to continue its progress and commitment to sustainability through formally establishing this Sustainability Plan.

Progress to Date

Introduction



The City of Tarpon Springs is excited to present the first Sustainability Plan for the City. The plan will guide the City's actions toward sustainability for the next 10 years. This report focuses on City operations, rather than community-scale actions. Although, there are several actions in the report which are community-scale, such as potential incentive programs. The community has been involved throughout the planning process of the Sustainability Plan, especially through the work of the City's Sustainability Citizen Advisory Committee, comprised of citizen volunteers. The Committee worked with City staff to begin discussing the idea of a City Sustainability Plan shortly after their establishment in 2019. The plan is a collaborative effort among all City departments to integrate sustainability into City operations. The City's internal Sustainability Staff Team also played a large role in the development of the plan.

Sustainability concepts can be seen throughout the City's Strategic Plan through the plan's Goal Areas of Infrastructure, Quality of Life, Cultural Heritage & Preservation, Smart Growth & Redevelopment, and Community Engagement. Furthermore, the Sustainability Plan will tie into the City's Comprehensive Plan to allow for cohesivity among the City's guiding frameworks and to allow for sustainability to be more effectively integrated into City operations. The Sustainability Plan will have a 10-year planning horizon, with a major revision to take place at Year 5. An annual progress report will be submitted each year to show progress toward the actions outlined in the plan. This plan formalizes the City's existing commitment toward sustainability for the wellbeing of the residents of the City of Tarpon Springs.

Strategic Plan

The City Sustainability Plan works in tandem with and closely ties into the Strategic Plan. Many of the themes, goals, and objectives closely align between the two plans. This Sustainability Plan can be viewed as an extension of the Strategic Plan, and shares the same core values and guiding principles. The 6 overarching themes of the Strategic Plan also play an important role in the creation and development of action items for this Sustainability Plan.

The key themes of the Strategic Plan are:



INFRASTRUCTURE



COMMUNITY ENGAGEMENT



QUALITY OF LIFE



**SMART GROWTH
&
REDEVELOPMENT**



**CULTURE,
HERITAGE &
PRESERVATION**



GOOD GOVERNANCE

LIST OF ABBREVIATIONS

AWWTP	Advanced Wastewater Treatment Plant
CAP	Citizens Alliance for Progress
CEC	Clean Energy Connection
CHSJS	Clearwater Harbor and Saint Joseph Sound
CRA	Community Redevelopment Area
CRS	Community Rating System
CTS	City of Tarpon Springs
DEP	Department of Environmental Protection
EV	Electric Vehicle
FDEP	Florida Department of Environmental Protection
FEMA	Federal Emergency Management Agency
FGBC	Florida Green Building Council
GHG	Greenhouse Gas
HOA	Homeowner's Association
ICLEI	International Council for Local Environmental Initiatives
IPM	Integrated Pest Management
LEED	Leadership in Energy and Environmental Design
QOZ	Qualified Opportunity Zone
PPLC	Pinellas Public Library Cooperative
RO	Reverse Osmosis
TBRPC	Tampa Bay Regional Planning Council
SLR	Sea Level Rise
STAR	Sustainability Tools for Assessing & Rating Communities
SUN	Solar United Neighbors
SWFMMD	Southwest Florida Water Management District
USGBC	U.S. Green Building Council

Guide for Reading This Document

1.1 Organization of the Document

This document is divided by 3 main sections inspired by the three pillars of sustainability: Environment (planet), Economy (profit), and Social (people).

The City of Tarpon Springs will implement the actions within the plan to advance sustainability and resiliency practices in the City.

The actions are categorized by 6 main categories: Natural Environment, Climate and Energy, Built Environment, Local Economy, Equity and Community, and Health and Safety.

The action categories are grouped together within the 3 main sections as such:

Section 1: Environment (Planet)

Subsection 1: Natural Environment

Subsection 2: Climate & Energy

Section 2: Economy (Profit)

Subsection 1: Built Environment

Subsection 2: Local Economy

Section 3: Social (People)

Subsection 1: Equity & Community

Subsection 2: Health & Safety

Actions are listed within their respective categories and are numbered from 1-50. The number value of the action does not indicate the importance of the action nor dictate the order in which actions will be implemented.

1.2 Description of Action Categories

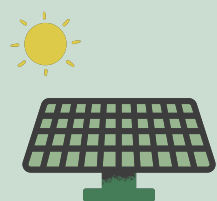
*Bolded terms have a definition included in the List of Definitions on Page 49.

Natural Environment



The Natural Environment goal area addresses improving the natural environment throughout the City by protecting and improving natural system health and, subsequently, improving **ecosystem services**. Actions within this category include developing a **net zero canopy loss** policy, conducting an analysis of the City's **urban heat island**, controlling the spread of **invasive** species and promoting site-appropriate and Florida native species in landscaping, improving **wildlife corridor** connectivity, supporting **natural resources** protection, and obtaining additional parklands.

Climate & Energy



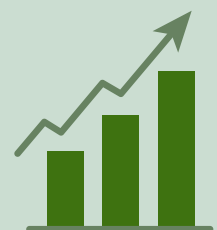
The Climate & Energy goal area relates to efforts to address climate change and improve energy efficiency in the community. Actions within this category include increasing community resiliency through improvements to facilities and infrastructure, drafting a Climate Action Plan, adopting an official **GHG** reduction target, conducting a solar feasibility study for City facilities, improving energy and water efficiency of local government buildings, improving the City's recycling rate, and providing education and outreach to businesses and residents.

Built Environment



The Built Environment refers to man-made structures and conditions. The Built Environment is viewed as the environment in which people live and work. This action category addresses community development and livability. Actions within this category address pedestrian safety, **green infrastructure** and **green stormwater infrastructure**, green building criteria, **living shoreline** and **natural system** strategies.

Local Economy



The Local Economy goal area relates to the economic conditions of the City of Tarpon Springs geographic area. This action category focuses on equitable access to quality jobs and fostering a prosperous community. Actions within this category address creating demand for green jobs, promoting green local businesses, creating sustainable procurement practices and family-friendly workplace policies for the City, and attracting artistic creatives to the Tarpon Springs community.

Equity & Community



The Equity & Community goal area promotes equity and inclusion and ensuring equitable access to City services and infrastructure. Actions within this category address allowing for more active participation from diverse community members in local decision making. Additionally, this goal area addresses increasing engagement with community organizations, demonstrating a reduction in exposure to **environmental justice** conditions, establishing plans to for social equity and poverty, and making information about essential services more accessible.

Health & Safety



The Health & Safety goal area promotes healthy and safe communities through actions such as adopting a "Health in all Policies" statement and a Climate or Sustainability in all Policies statement to be considered in local decision making, conducting a food study to evaluate food security and access in the City's food system, and amending the **Land Development Code** to allow for urban agriculture which will increase food access in priority areas.

Sustainability Progress to Date

Clean Energy

- Solar system installations on the AWWTP and RO Facilities
- Duke Plug & Park EV charging stations and two City-owned charging stations
- Duke Clean Energy Connection (CEC) Program
- Staff transition to EV and hybrid vehicles
- 2022 ICLEI/Audubon Greenhouse Gas Inventory Cohort
- Greenhouse gas inventories for 2019 and 2020
- LED and Lowflow upgrades throughout facilities and fleet offices
- Pinellas solar co-op with Florida Solar United Neighbors in 2017 and 2022



Duke CEC Solar Array Phase 1



Duke Park & Plug Level 2 EV chargers at City Hall

Sustainability Progress to Date

SPOTLIGHT

Solar:

- Phase 1 of the RO installation comprised of 162kW of DC solar power installed and operational since May 2020. This system provides 25% of the power required by the facility during low demand operations.
- Solar co-ops enable community members to make informed decisions regarding the purchase of solar power. The city has partnered with Florida SUN to assist residents with transitioning to solar and expanding rooftop systems within the community.

Duke Programs:

- The Duke Plug & Park Program incorporates level 2 chargers in public areas throughout Tarpon Springs to expand access and development of EV market.
- The Duke Clean Energy Connection Program enables qualified business and residential customers to participate in a community solar program and directly fund the development of several utility-scale solar projects.

GHG Inventories:

- Greenhouse Gas Inventory reports serve to quantify greenhouse gas emissions from various activities and infrastructure of City government. Quantifying these emissions will assist the city with setting and achieving emission reduction targets.



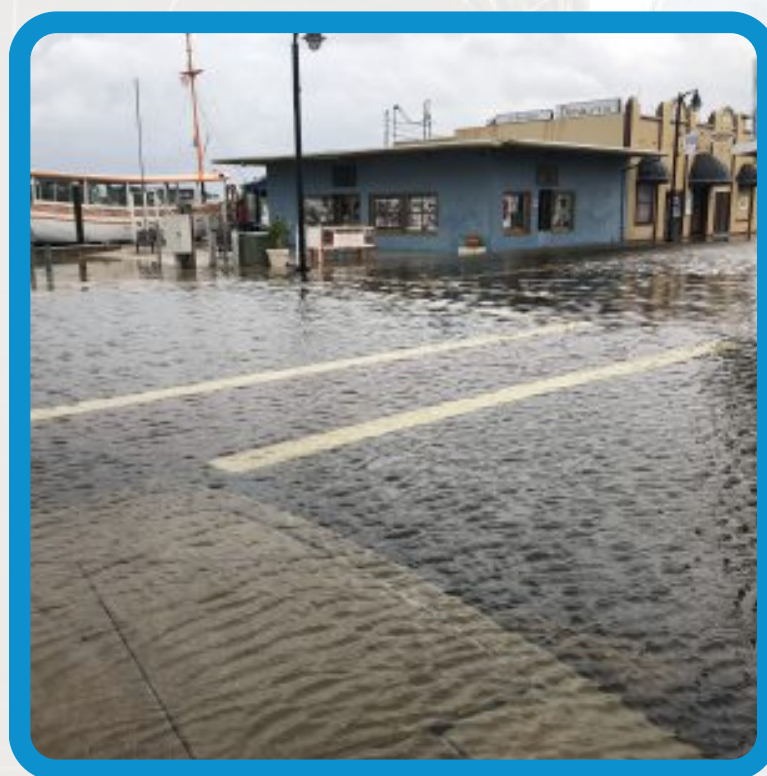
Sustainability Progress to Date

Water Conservation

- Multi-year toilet rebate and water conservation program, funded by SWFWMD grants
- Floodplain Management program including the completion of the FEMA CRS to help residents receive a discount on flood insurance premiums
- Stormwater Action Plan development and implementation
- Watershed Management plans for Lake Tarpon, Anclote River, Klosterman, and CHSJS
- Spring Bayou water quality sampling and evaluation
- Vulnerability Assessment & Action Plan, funded by FDEP Resilient Florida Program Grant
- CTS and Pinellas County Schools held Stormwater Pollution Prevention Poster Contest in March 2023



Anclote River dredge



Dodecanese Blvd stormwater flooding

Sustainability Progress to Date

SPOTLIGHT

Stormwater Action Plan:

- This plan provides solutions for flooding conditions at numerous locations, prepares an improvement plan for implementation, and enhances water quality through best management practices.

Watershed Management Plans:

- **Lake Tarpon:** guides implementation of Pinellas County Growth Management Plan for lake, wetland, and upland management issues.
- **Anclote:** addresses localized flooding situations, erosion, sedimentation, SLR, and stormwater pollution.
- **Klosterman:** focuses on water quality, flood control, and natural systems improvement.
- **CHSJS:** improves understanding of nutrient sources and propose management practices to reduce nutrients to the watershed.

Vulnerability Assessment & Action Plan:

- The project will evaluate City assets with respect to current and future coastal flooding and develop strategies to make the affected assets and areas more resilient.

Spring Bayou Water Quality Monitoring:

- This project will improve understanding of water quality, natural processes and factors influencing the Spring Bayou Complex. This will be accomplished through monthly water quality collections at 3 sites within the Spring Bayou Complex.



1st place for Stormwater Pollution Prevention Poster Contest

Sustainability Progress to Date

Natural Environment

- Tree City USA
- Grant-funded tree inventory and Urban Forestry Management Plan underway
- Parks Department utilizes Integrated Pest Management (IPM) practices
- Recycling and clean up projects throughout county
- Implementation of plants and trees throughout the urban landscape to improve natural harmony and expand green areas
- FGBC Green Local Government Certification Silver designation in 2013 and 2018
- RO facility received Environmental Stewardship Award in April 2023 from the DEP Southwest District



2022 Sunset Beach Cleanup



Our Sustainability Coordinator at Sunset Beach Cleanup

Sustainability Progress to Date

SPOTLIGHT

Tree City USA:

- This program assists communities with growing and maintaining their tree cover. The City of Tarpon Springs has been honored twice in 3 years for commitment to urban forest management.

Grant-Funded Tree Inventory and Urban Forestry Plan:

- 3-year grant from FDACS and Florida Forest Service for Urban Forestry Program
- Action plan will provide the city with information, recommendations and resources to effectively and proactively manage public trees.

Recycling & Clean-Up:

- Events include the citywide annual Spring Clean-up, as well as partnering with Keep Pinellas Beautiful for regular Sunset Beach clean ups.
- The City participated in the Pinellas Recyclable Composition Study which helped to identify the types of materials being recycled in the county. The City worked with Tarpon Springs High School to collect and dispose of chemicals and electronics.



Sustainability Progress to Date

Economic/Social

- City has two special investment zones – A CRA (Community Redevelopment Area) and Federal Qualified Opportunity Zone (QOZ)
- City offers a historic tax abatement program
- Library has many programs including PPLC Career Online High School, PPLC Museum Pass Program, free seed giveaways, and an annual Earth Day/Arbor Day Event
- Upgrades of public recreation areas such as parks, beaches, and various sport facilities
- Increased bicycle and pedestrian access along roadways



Free seed packs from Tarpon Springs Library



Resident enjoying bike ride through the city

Sustainability Progress to Date

SPOTLIGHT

Special Investment Zones:

- Both the Community Redevelopment Area and the Qualified Opportunity Zone provide incentives to support and encourage business revitalization and redevelopment.

Tax Abatement Program:

- This allows for exemption of city and county taxes on the value of improvements made to eligible historic structures.

Library Programs:

- The PPLC Career Online High School program provides adults the opportunity to earn an accredited high school diploma and career certificate online at no cost.
- The PPLC Museum Pass program allows library cardholders to check out museum passes for free admission to Tampa Bay area participating museums.
- You can also check out seeds for FREE from the Library for herbs, vegetables, and flowers.

Bicycle & Pedestrian Access:

- Through annual sidewalk construction and improvement projects, the city is able to improve connectivity for and safety for pedestrians. Features such as ramps, slopes, and crosswalks were installed where needed. For bikers, the city has constructed a safe and accessible bike lane on Meres Blvd.



Community Engagement

2022

Survey Opens

February 24

Goal: To determine priorities & concerns of residents regarding sustainability & resiliency



Workshop 1

May 21

Goal of workshops: To determine public interest in sustainability initiatives & actions



Workshop 2

May 23

All workshops conducted according to STAR framework. Topics from all 3 pillars of Sustainability



Workshop 3

May 26

Most important topics to residents resulting from the 3 workshops (in order):

- Economic Development
- Improved Access to Community Services
- Natural Resource Protection



Survey Closes

June 1

170 responses were received. Results were sorted by:

- Demographics
- Climate & Community
- Personal Actions & Experiences

Community Engagement

The purpose of the workshops and survey was to understand the public's thoughts and priorities with regards to sustainability. Public input was gathered to help determine which actions should be included in the Sustainability Plan.

This workshop series was organized by the goal areas within the STAR framework. These goals were then grouped into three categories: Social (people), Economic (profit), and Environment (place). The results from the survey were broken up into the following subsections: demographics, climate and community, and personal actions and experiences. Furthermore, all written comments submitted in the survey were compiled and reviewed by City staff and the City's Sustainability Citizen Advisory Committee.

More detailed information about the survey and workshops can be found in the Appendix.

Survey

After extensive community outreach, the main themes we heard from the public were:

- **environmental conservation**
- **public infrastructure protection**
- **livability**
- **smart growth**

Given this feedback, actions were chosen to protect and invest in public infrastructure, conserve the natural environment, and utilize smart growth to improve the livability of the city.

We generated a word cloud from feedback that illustrates the main themes that respondents wanted this plan to address. The larger a word appears in the cloud, the more votes that topic received.

Public Transportation Alternatives

Livability

Economic Opportunity

Financial Consideration in Decision Making

Public Infrastructure Protection

Environmental Conservation

Energy Performance & Efficiency

Public Health & Safety

Smart Growth

Diversity & Equity

Environmental & Resource Efficient Development

Resource Management & Recycling

An aerial photograph of a lush green mangrove forest. A winding body of water, likely a tidal creek, flows through the center of the forest. In the background, the ocean meets a dramatic sky at sunset, with the sun low on the horizon casting a golden glow across the clouds. The foreground is filled with the dense, rounded canopies of mangrove trees.

SECTION 1

ENVIRONMENT

ENVIRONMENT (PLANET)

This section is inspired by the Sustainability Pillar-Environment or Place.

This pillar focuses on protecting the environment and conserving resources. This includes reducing waste, using renewable energy sources, and protecting endangered species.



ACTIONS LIST



Natural Environment

Action 1: Develop a **net zero canopy loss** policy through the **Land Development Code** and preserve habitat areas for threatened animal and plant species.

Action 2: Conduct an analysis of the City's **urban heat island** to identify priority areas for heat **mitigation**. Reduce the urban heat island citywide through actions including increasing the urban tree canopy and green space, lining thoroughfares with shade trees, installing awnings and arcades or water features such as mist devices, and using reflective or permeable surfaces where appropriate.

Action 3: Adopt a city guideline with required break times coinciding with the **heat index** to ensure the wellbeing of city employees who work outdoors.

*Bolded terms have a definition included in the List of Definitions on Page 49.

ACTIONS LIST



Natural Environment

Action 4: Adopt an ordinance requiring control of invasive species, and create a preferred plant ordinance for private landscaping, to maintain **biodiversity** and habitat. Create a program with incentives to remove **invasive** plants and replace with native and/or site-appropriate plants in landscaping.

Action 5: Adopt and enforce an ordinance requiring control of invasive species and use of sustainable landscaping practices on all City properties. Use **Integrated Pest Management** to limit the use of pesticides on City property and provide pesticide reduction awareness for community members and property owners.

Action 6: Review regulations that establish wetland, stream, and shoreline buffer widths and adjacent land uses, and achieve no net loss of wetlands, streams, and shoreline buffers.

ACTIONS LIST



Natural Environment

Action 7: Improve connectivity to the **wildlife corridor** by increasing the amount of natural and restored areas directly connected to regional natural systems. Develop a plan to protect and restore **natural resources** through land conservation, corridor connectivity, and restoration of biological integrity and function in compromised areas.

Action 8: Develop financing strategies to acquire land or easements including identifying grant funding sources, designating capital dollars, and encouraging donations to the City Land Preservation Fund. Prioritize acquiring land with repeat flooding or vulnerable undeveloped areas to be used for restoration, recreation, or retention.

Action 9: Provide incentives to residents and developers to protect and restore critical watershed protection areas.

ACTIONS LIST



Natural Environment

Action 10: Support activities to increase awareness about **natural resource** protection.

Action 11: Adopt a preservation, park, and recreation plan in order to promote a communitywide network of public spaces that provide recreational benefits while protecting natural, historic, and cultural resources.

Action 12: Create a long-term funding strategy to acquire, create, and maintain parklands.



ACTIONS LIST



Climate & Energy

Action 13: Demonstrate a measurable reduction in vulnerability and increase in **resiliency** to communitywide risks such as **sea-level rise** flooding, storm-event flooding, and heat, and prioritize improvements for at-risk population groups.

Action 14: Review and revise the seawall ordinance to require all newly installed or renovated seawalls to meet a minimum height based on current base flood projections. Evaluate potential use of **living seawalls** in City seawall improvements.

Action 15: Improve facilities and infrastructure throughout the community to be better prepared for **climate change** threats.

Action 16: Draft a Climate Action Plan with actions to transition the city toward clean energy goals including increasing on-site **renewable energy** production and the use of electric vehicles and alternative fuels. Create staff incentives to encourage the use of alternatives modes of transportation and the transition to electric vehicles.

ACTIONS LIST



Climate & Energy

Action 17: Create incentives to encourage community members to utilize alternative modes of transportation and low-emission vehicles.

Action 18: Adopt an official **greenhouse gas** emissions (GHG) reduction target, such as a 30% reduction by 2030 and an 80% reduction by 2050, in local government GHG emissions.

Action 19: Conduct a local government GHG Inventory at least every 5 years.

Action 20: Conduct a solar feasibility study for City facilities. Create a policy to encourage the City to progressively source its energy consumption from **renewable energy** sources.

Action 21: Make retrofits and upgrades to local government buildings and/or infrastructure systems that will increase energy and water efficiency.

ACTIONS LIST



Climate & Energy

Action 22: Work toward a solid waste recycling rate goal of 40% or greater and increase the number of recycling drop off locations in the city. Encourage HOAs and residential complexes to provide recycling to their residents.

Action 23: Conduct a feasibility assessment for a community-wide composting program. Create programs and incentives to encourage composting in the community.

Action 24: Provide education and outreach to engage residents, businesses, and local government staff in topics which relate to city efforts regarding GHG reduction, energy and water efficiency, and waste reduction strategies.

SECTION 2 ECONOMY



ECONOMY (PROFIT)

This section is inspired by the Sustainability Pillar of Economy or Profit.

This pillar focuses on creating and maintaining long-term economic growth. This includes investing in infrastructure, job creation, and developing sustainable business models.



ACTIONS LIST



Built Environment

Action 25: Adopt a multimodal master plan that prioritizes future projects to improve bicycle and pedestrian safety and access to public transit and increase the mileage of sidewalks and bicycle lanes or paths. Pursue accreditations such as Bicycle-Friendly Community or Walk-Friendly Community. Adopt land development regulations that promote walkability and evaluate the feasibility of a communitywide public bike share program.

Action 26: Make **green stormwater infrastructure** a core goal of the City's Infrastructure Master Plan. Encourage the use of green stormwater infrastructure in private development.

Action 27: Assess city-owned coastal properties to determine application of **living shorelines** and **living seawalls**. When feasible, utilize living shoreline and natural system strategies to strengthen coastal **resilience** and mitigate coastal flooding damage.

ACTIONS LIST



Built Environment

Action 28: Make **green infrastructure** a core goal of the City's Infrastructure Master Plan. Create green building standards and sustainability practices for City facilities that include considerations for improved energy efficiency, GHG emissions reduction, and which promote sustainable landscapes as well as public health and safety. Require new City facilities to meet elevated standards and encourage the use of green building certification programs such as LEED.

Action 29: Adopt local design criteria and land development codes that require proactive green infrastructure practices for new developments to encourage sustainable development and the use of green building certification programs such as LEED.

Action 30: Seek funding sources to help reduce costs for residents and business owners to implement green building practices.

ACTIONS LIST



Local Economy

Action 31: Amend existing local economic plans and strategies to focus market demand for green jobs, technology, products, and services.

Action 32: Work with community partners to amend existing local economic plans and strategies to sustain existing and attract new cultural and artistic creatives to the Tarpon Springs community.

Action 33: Create a sustainable procurement policy for City purchases to encourage the use of safe, healthy, and environmentally responsible products.

Action 34: Implement a City program to acknowledge and promote local green businesses.

Action 35: Evaluate family-friendly workplace policies for local government employees including paid family leave, flexible scheduling, teleworking, job sharing, and easily available childcare. Limit contractual services to Equal Opportunity Employers and ensure that all City employees earn a **living wage** according to applicable standards.

A photograph of a diverse group of people walking on a paved sidewalk. In the foreground, a man in a grey t-shirt and blue cap walks with a young boy in a red Mario t-shirt. Next to them, a woman in a light blue blouse and jeans walks with a young girl in a pink dress. To the right, a woman in a black and orange dress walks. The background features palm trees and warm, bokeh-style lights, suggesting a tropical or coastal setting at dusk or dawn. A semi-transparent white rectangle is overlaid in the center, containing the section title.

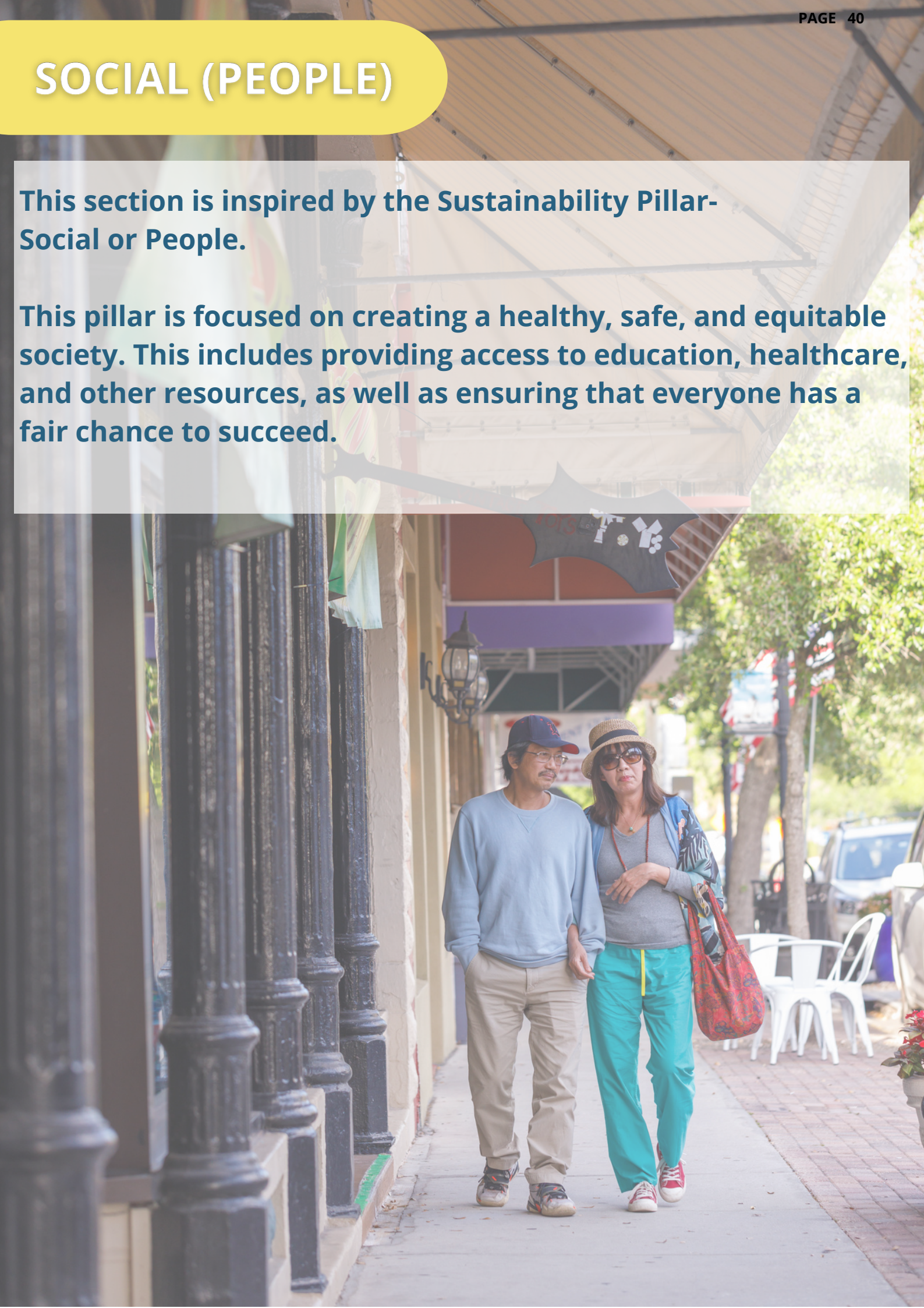
SECTION 3

SOCIAL

SOCIAL (PEOPLE)

This section is inspired by the Sustainability Pillar-Social or People.

This pillar is focused on creating a healthy, safe, and equitable society. This includes providing access to education, healthcare, and other resources, as well as ensuring that everyone has a fair chance to succeed.



ACTIONS LIST



Equity & Community

Action 36: Demonstrate progress in appointing local advisory board members that reflect the gender, racial, and ethnic diversity of the community.

Action 37: Partner with community organizations to maintain an inventory of civic organizations, neighborhood associations, and local service providers which can be used to address neighborhood-specific needs.

Action 38: Conduct an outreach program to obtain input for the Sustainability Plan major revision. Obtain diversified input by reaching out to a variety of stakeholders to further community engagement in local decision-making.

Action 39: Utilize the existing Cops & Kids programs to provide young people with opportunities to participate in civic activities and programs that support the development of strong youth leaders. Increase engagement among individuals from low-income and/or minority neighborhoods.

ACTIONS LIST



Equity & Community

Action 40: Demonstrate progress in reducing the risks and exposure to **environmental justice** conditions such as aging infrastructure, adequate access to critical services, health of the natural environment, and exposure to the impacts of **climate change** for low-income and/or minority neighborhoods.

Action 41: Adopt an environmental justice or social equity plan and policy to reduce negative impacts, increase access to community facilities and services among low-income populations and racial and ethnic minorities, and commit to equity in local government decision-making, activities, and investments.

Action 42: Provide equity, inclusion, cultural disparity, diversity or cultural competence training for local government staff.

Action 43: Provide information about community resources and services in multiple languages and formats to make this information more widely accessible.

ACTIONS LIST



Equity & Community

Action 44: Conduct a community needs assessment to identify priority service needs, including the needs of vulnerable populations. Conduct a survey of aging community members to assess how well they feel that present and future needs are being met.

Action 45: Partner with community organizations to support and promote programming and events that inform residents of available human services and connect vulnerable community members to these programs and services.

Action 46: Adopt a communitywide plan to reduce poverty and guarantee that basic human needs are met in the community.

ACTIONS LIST



Health & Safety

Action 47: Adopt a "Health in all Policies" resolution to guide local decision-making.

Action 48: Adopt a "Climate in all Policies" or "Sustainability in all Policies" resolution to guide local decision-making.

Action 49: Conduct a food study to evaluate the city's food system to assess **food security** and access, and to develop strategies for ways to create a holistic, regenerative food system.

Action 50: Evaluate the **Land Development Code** regulations that allow farmer's markets, community gardens, and other forms of urban agriculture that promote increased food access. Encourage the use of edible plants on private property. Support programs that enable healthful retail food outlets to locate in underserved areas.

SUSTAINABILITY PLAN ACTIONS IMPLEMENTATION SCHEDULE

The Implementation Schedule section consists of a table which analyzes each action by criteria including timeline and cost to determine the complexity. This analysis was utilized to help determine the grouping of actions in phases over the next 10 years. The actions are organized according to the year of implementation starting with the first year of the plan, 2024.

The potential funding source column provides suggestions for potential funding sources that may be utilized for a given action based on the categories of Operations & Maintenance, Capital Project and Grants. It is important to note that for funding the actions in this plan, there will be a need for diversified funding streams. In many cases, a match is necessary to qualify for a grant, or it is necessary to fund the initial phases of a project or plan in order to qualify for a grant program. In situations where an existing grant program may be feasible to fund a project or initiative, it is important to provide the initial investment required to begin the process.

Grant may be indicated as a potential funding source in cases where an existing grant is known which addresses the action concept or similar subject matter. This does not ensure eligibility for a grant program. Medium and Long timeframe actions are multi-year, so funding may need to be designated over multiple years in phases.

Alignment with the city's Strategic Plan is a priority for Sustainability Plan actions. Actions which align with the city's Strategic Plan are indicated by a green check mark. The Strategic Plan was updated in 2023 and has a five-year planning horizon. Therefore, actions which further the objectives and goals of the Strategic Plan are prioritized and primarily set to take place within the first five years of the Sustainability Plan lifespan.

SUSTAINABILITY PLAN ACTIONS IMPLEMENTATION SCHEDULE

The plan begins with a greater amount of actions per year in Years 1-5 with the understanding that the actions build upon one another and most of the actions in the plan are multi-year actions which will continue into following years. Therefore, years 6-10 will take on fewer new actions per year.







































A major update of the plan will take place in Year 5. During the major update, actions may be modified or added for years 6-10, providing further rationale for designating fewer actions for years 6-10 at this time.

KEY



































\$	Less than \$10k	Short Medium Long	0-3 Years	O & M	Operations & Maintenance Capital project Grants
\$\$	\$10k - \$100k		4-6 Years	Capital	
\$\$\$	\$100k - \$500k		6-10 Years	Grant	
\$\$\$\$	\$500k - \$1M				
\$\$\$\$\$	Over \$1M				
	Natural Environment				
	Climate & Energy				
	Built Environment				
	Local Economy				
	Equity and Community				
	Health and Safety				

This key provides an explanation of the cost estimate and timeframe columns, and potential funding source abbreviations.

SUSTAINABILITY PLAN ACTIONS IMPLEMENTATION SCHEDULE

Action Number	Action	Action Category	Estimated Costs		Timeframe	Strategic Plan Aligns with Strategic Plan Goals?	Implementation Year
			Cost Estimate	Potential Funding Source			
1	Net Zero Canopy Loss Policy		\$	O&M	SHORT		2024
5	Ordinance requiring control of invasive species on City property		\$	O&M	SHORT		2024
6	Land Use Regulations that establish appropriate wetland, stream and shoreline buffer widths		\$	O&M	SHORT		2024
14	Seawall Ordinance		\$	O&M, Grant, Capital	SHORT		2024
15	Improve facilities and infrastructure		\$\$\$\$	O&M, Grant, Capital	LONG		2024
16	Climate Action Plan		\$\$\$	O&M, Grant	SHORT		2024
18	GHG Reduction Target		\$	O&M	SHORT		2024
20	Solar feasibility study for City facilities		\$\$\$	O&M, Grant	SHORT		2024
29	Proactive green infrastructure practices for new developments		\$	O&M	SHORT		2024
35	Evaluate family-friendly workplace policies for local government employees		\$\$	O&M	MEDIUM		2024
3	Guideline with required break times		\$	O&M	SHORT		2025
7	Connectivity to wildlife corridor		\$\$\$	O&M, Grant	LONG		2025
11	Park and/or Open Space Plan		\$\$	O&M, Grant	SHORT		2025
12	Funding strategy to acquire, create and maintain parklands		\$	O&M, Grant, Capital	SHORT		2025
21	Retrofits and upgrades to local government buildings		\$\$\$	O&M, Grant, Capital	MEDIUM		2025
27	Determine suitable application of living shorelines and living seawalls		\$\$\$	O&M, Grant, Capital	LONG		2025
31	Focus market demand for green jobs, technology, products, and services.		\$	O&M	SHORT		2025
48	Adopt a "Climate in All Policies" or "Sustainability in All Policies" statement		\$	O&M	SHORT		2025
8	Financing strategies to acquire land or easements		\$	O&M, Grant, Capital	SHORT		2026
19	GHG inventory at least every 5 years		\$	O&M	SHORT		2026
22	Solid waste recycling rate to a goal of 40% or greater		\$\$	O&M	MEDIUM		2026
24	Education and outreach		\$	O&M	SHORT		2026
28	Create green infrastructure plan		\$\$\$	O&M, Grant	SHORT		2026
33	Create sustainable procurement policy		\$	O&M	SHORT		2026
37	Inventory of civic organizations, neighborhood associations, and local service providers		\$	O&M	SHORT		2026

SUSTAINABILITY PLAN ACTIONS IMPLEMENTATION SCHEDULE

Action Number	Action	Action Category	Estimated Costs		Timeframe	Strategic Plan Aligns with Strategic Plan Goals?	Implementation Year
			Cost Estimate	Potential Funding Source			
4	Ordinance requiring control of invasive species		\$	O&M	SHORT		2027
25	Bicycle and/or pedestrian master plan		\$\$\$	O&M, Grant, Capital	LONG		2027
39	Provide young people with opportunities to participate in civic activities and programs		\$	O&M	SHORT		2027
46	Adopt a communitywide plan to reduce poverty		\$\$	O&M, Grant	SHORT		2027
17	Incentives to encourage community members to utilize alternative modes of transportation		\$\$	Grant	SHORT		2028
34	Acknowledge and promote local green businesses		\$	O&M	SHORT		2028
38	Further community engagement in local decision-making and planning for increased equitable access and proximity to facilities, services, and infrastructure.		\$	O&M	SHORT		2028
42	Provide equity, inclusion, cultural disparity, diversity or cultural competence training for local government staff.		\$\$	O&M	SHORT		2028
2	Urban Heat Island		\$\$\$	O&M, Grant	MEDIUM		2029
26	Consider the use of green stormwater infrastructure		\$	O&M	SHORT		2029
41	Adopt an environmental justice or social equity plan		\$\$\$	O&M, Grant	SHORT		2029
44	Conduct a community needs assessment		\$\$	O&M, Grant	SHORT		2029
10	Increase awareness about natural resource protection		\$\$	O&M, Grant	SHORT		2030
30	Create incentive programs to encourage landowners to adopt green infrastructure practices		\$	Grant	SHORT		2030
36	Local advisory board members that reflect the gender, racial, and ethnic diversity		\$	O&M	MEDIUM		2030
43	Provide information about community resources and services in multiple languages and formats		\$	O&M	SHORT		2030
45	Support and promote programming and events that inform residents of available human services		\$	O&M, Grant	SHORT		2030
47	Adopt a "Health in All Policies" statement		\$	O&M	SHORT		2030
9	Incentives to residents and developers to protect and restore critical watershed protection areas		\$\$	O&M, Grant	SHORT		2031
49	Conduct a food study		\$\$	O&M, Grant	SHORT		2031
50	Promote increased food access in priority areas.		\$	O&M, Grant	SHORT		2031
32	Sustain existing and attract new cultural and artistic creatives		\$	O&M	SHORT		2032
13	Demonstrate a measurable reduction in vulnerability and increase in resiliency		\$\$\$\$	O&M, Grant, Capital	LONG		2033
23	Feasibility assessment for a community-wide composting program		\$\$\$	O&M, Grant	SHORT		2033
40	Demonstrate progress in reducing the risks and exposure to environmental justice conditions		\$\$\$\$	O&M, Grant, Capital	LONG		2034

LIST OF DEFINITIONS

Adaptation

Adapting to life in a changing climate – involves adjusting to actual or expected future climate. The goal is to reduce our risks from the harmful effects of climate change (like sea-level rise, more intense extreme weather events, or food insecurity)

Biodiversity

Biodiversity is all the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world

Climate Change

A change in the average conditions, such as temperature and rainfall, in a region over a long period of time. Planet Earth is currently experiencing climate change with surface temperatures of the earth getting hotter than ever before.

Community Redevelopment Area

A dependent special district in which any future increases in property values are set aside to support economic development projects within that district

Ecosystem services

Any positive benefit that wildlife or ecosystems provide to people, directly or indirectly

Environmental Justice

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies

Food Security

Food security means having, at all times, both physical and economic access to sufficient food to meet dietary needs for a productive and healthy life. A family is food secure when its members do not live in hunger or fear of hunger

Greenhouse Gas

Gases that trap heat in the atmosphere such as carbon dioxide and methane.

LIST OF DEFINITIONS

Green infrastructure

The range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to sewer systems or to surface waters

Green stormwater infrastructure

A nature-based solution to water quality issues that urban stormwater runoff causes and provides greater benefits than conventional (or “Gray”) stormwater solutions

"Health in all Policies" statement

A collaborative approach that integrates and articulates health considerations into policymaking across sectors to improve the health of all communities and people

Heat Index

The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature.

Integrated Pest Management

An effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices

Invasive

An invasive species is an organism that causes ecological or economic harm in a new environment where it is not native.

Land Development Code (LDC)

The LDC contains all of the rules and regulations governing how you can use and develop the land

Living shoreline

A protected and stabilized shoreline that is made of natural materials such as plants, sand, or rock

LIST OF DEFINITIONS

Living seawall

A form of eco-engineering that 3D prints structures designed specifically to mimic local marine habitat to be attached to already existing structures such as seawalls and mining rigs

Living Wage

The term living wage refers to a theoretical income level that allows individuals or families to afford adequate shelter, food, and other necessities

Mitigation

Reducing climate change – involves reducing the flow of heat-trapping greenhouse gases into the atmosphere, either by reducing sources of these gases or enhancing the “sinks” that accumulate and store these gases

Natural Resource

Natural resources are materials from the Earth that are used to support life and meet people’s needs.

Natural Systems

A system that exists in nature, independent of any human involvement, and consists of all the physical and biological materials and their intertwined processes

Net Zero Canopy Loss

Urban tree canopy (UTC) is the layer of leaves, branches, and stems of trees that cover the ground when viewed from above. Net zero canopy loss refers to the state where the amount of trees removed is balanced by the planting of new trees or the preservation of existing ones. In other words, it means having no net loss of tree canopy cover.

Qualified Opportunity Zone

An economically distressed community where new investments, under certain conditions, may be eligible for preferential tax treatment

Renewable Energy

Renewable energy is energy produced from sources like the sun and wind that are naturally replenished and do not run out

LIST OF DEFINITIONS

Resiliency

Considers a system's ability to prepare for threats or impacts from a stressful or disruptive event, such as a hurricane, and be able to recover and adapt afterwards

Reverse Osmosis

A technology that is used to remove a large majority of contaminants from water by pushing the water under pressure through a semi-permeable membrane

Sea Level Rise

An increase in the level of the world's oceans due to the effects of global warming

Sustainability

Living in such a way that allows the current generation to meet their needs without compromising the ability of future generations to meet their needs

Wildlife Corridor

A strip of natural habitat connecting populations of wildlife otherwise separated by cultivated land, roads, etc.

Urban Heat Island

Urbanized areas that experience much higher temperatures than outlying rural areas. Human activities and a greater concentration of impervious surfaces contribute to the urban heat island effect.

* Words listed in bolded text indicates that a definition is included in this list.



APPENDICES

LIST OF APPENDICES

Appendix 1: Topics for Future Consideration

Appendix 2: Supplemental materials from the Survey and Public Workshops

Appendix 3: Public Engagement Log/Methodology Report

Appendix 4: City Sustainability Progress to Date Continued

Appendix 5: 2019 Greenhouse Gas Inventory Technical Report Executive Summary

Appendix 1:

Topics for Future Consideration

Natural Environment:

- 1) Assess new developments for the potential use of green infrastructure.
- 2) Coordinate with community stakeholders to assess feasibility of green infrastructure practices at applicable sites.
- 3) Evaluate areas with potentially high air pollutant levels in consideration of environmental justice and equity.

Climate & Energy:

- 4) Adopt building codes or land use ordinances that address specific climate impacts in the community.

Built Environment:

- 5) Adopt policy that grants the city the ability to enact water conservation tactics during droughts.
- 6) Create strategies to ensure sufficient water supply to low-income residents.
- 7) Improve facilities and infrastructure for water systems to reduce contamination and leakage.
- 8) Implement strategy that highlights appropriate areas for compact, mixed-use development in the future.
- 9) Create sustainability suggestions for the city technical review process for proposed new developments projects.
- 10) Create a living document which outlines city infrastructure and identifies which sites require rehabilitation or improvement.
- 11) Implement strategies that encourage infill and redevelopment in urban areas near public transit and a mix of housing types.
- 12) Enact enforcement procedures that maintain and improve the aesthetics of deteriorated or derelict lots.
- 13) Improve and encourage investment for infrastructure upgrades at derelict or redevelopment sites.
- 14) Adopt policies that promote the development and interconnection of public parks.
- 15) Adopt design guidelines for new public parklands and improvements to existing park facilities which provide benefits to the environment and enhance visitor amenities.

Topics for Future Consideration

16) Partner with community organizations to develop new parklands and improve existing parklands.

17) Partner with local volunteer organizations to help maintain public parks.

Local Economy

18) Adopt policy that promotes and supports local businesses in specified priority areas.

19) Create policies and incentives that encourage district-scale sustainability projects.

20) Partner with other municipalities and community partners to create a regional sustainable economic development strategy.

21) Encourage local government and large, non-profit organizations to use local suppliers for goods and services.

Health & Safety:

22) Adopt an ordinance that restricts smoking in enclosed public areas around the city. Grant landlords the legal authority to restrict smoking in rental properties.

23) Adopt a rental inspection program to perform health and safety inspections in rental properties, prior to occupancy.

24) Work with local health authorities to create and implement a plan to address and mitigate vector-borne diseases.

25) Participate in mutual aid response systems for emergency services.

26) Participate in regional emergency planning efforts and participate in a regional emergency planning commission.

27) Adopt an emergency response plan that assists with the evacuation of vulnerable residents such as disabled or low-income residents.

28) Adopt a land use ordinance that restricts development in areas of high hazard vulnerability.

29) Create a plan that addresses redevelopment after a disaster for long-term circumstances related to topics including infrastructure, environment, and economy.

30) Adopt building codes with heightened standards and which promote resiliency for buildings within areas of high hazard vulnerability.

Topics for Future Consideration

Equity & Community:

- 31)** Partner with local organizations to promote and facilitate access to arts
- 32)** Provide support for local arts programs.
- 33)** Hire local artists for public artwork and performances.
- 34)** Protect, maintain, and restore public artwork and cultural resources within the city.
- 35)** Support programs that provide academic tutoring and/or extended day programs for students after school.
- 36)** Partner with organizations to support local events and encourage tourism efforts which celebrate local cultural and historic resources.
- 37)** Adopt a plan that assists low- and moderate- income homeowners and businesses with maintenance costs related to historic preservation.
- 38)** Celebrate the city's social and cultural diversity through supporting a variety of events and programs.
- 39)** Consider environmental justice in the early stages of projects and incorporate this into land use planning.
- 40)** Partner with organizations to provide financial education to residents such as financial literacy and money management programs or services.

Appendix 2:

Supplemental Materials from the Survey and Public Workshops

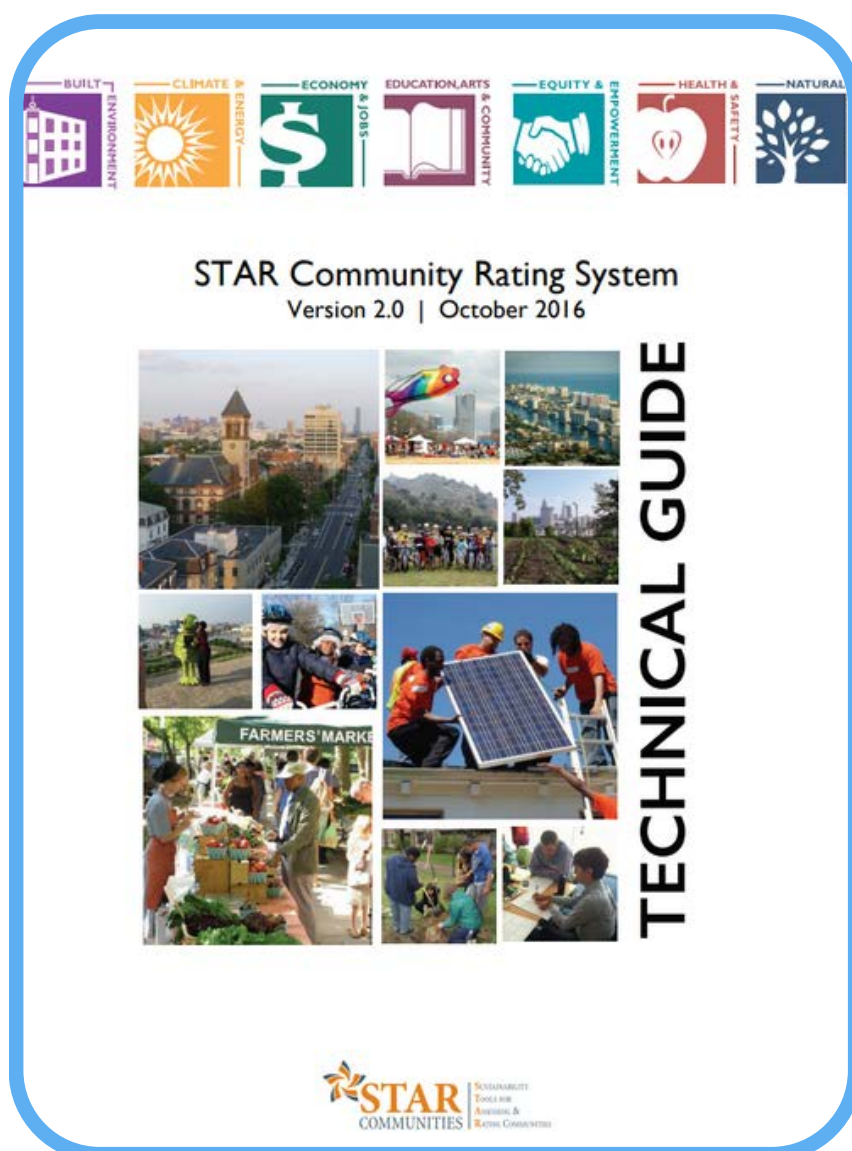
The City of Tarpon Springs hosted three sustainability workshops. The workshops were scheduled for various days of the week and various times of day to allow for greater participation. Food and drink were provided at each workshop and the workshops were conducted in a sustainable fashion with biodegradable utensils, plates, and cups. The packets provided for the activities were printed on recycled content paper and reused at each workshop then recycled. Childcare was also made available for this event and advertised in the flyers. The purpose of the workshops was to understand the public's thoughts and priorities with regards to sustainability. The public comment was gathered to help determine which actions should be included in the Sustainability Plan. The workshops had a total of 19 attendees.

Each workshop consisted of three 30-minute sessions and an optional 10-minute session to allow participants to attend a session at each round table and have a floating session to return to any table of particular interest. Participants were given breaks in between each session.

Each table was facilitated by a trained staff facilitator to allow for open dialogue on the topic at hand. The facilitators took note of the participants' comments on large note pads at each table. Toward the end of each round table session, all participants were given stickers to rank the criteria on the note pad at their table. Participants were given two of each color sticker to rank the topics they found to be of greatest importance. The red stickers were to be placed next to items the participants found to be of the most critical level of importance; the green stickers were to be placed next to items of medium importance; and the blue stickers were to be placed next to items of the lowest importance (but still important to a degree).

Public Workshops

Each workshop was conducted in a similar fashion to allow for greater consistency. The format of the workshop began with a brief presentation explaining the purpose of the Sustainability Plan and providing background information on sustainability and the concepts which would be discussed in the workshop. Each workshop had three themed tables which were centered around different principles from the STAR framework, referencing the STAR Community Rating System Technical Guide (v2). The STAR framework inspired the early efforts of the planning process for the Sustainability Plan.



The framework consists of 8 goal areas which are further broken up into categories. Within those categories, municipalities can pursue "outcomes" or "actions". **This workshop series focused on the goal-level of STAR** rather than on specific actions or outcomes to allow for more creative and open dialogue. The STAR goals were grouped together based on their relation to the three pillars of sustainability: social (people), economic (profit), and environment (place).

Public Workshops

A description of the themes discussed at each table is indicated below:

Table 1: **Built Environment** and **Education, Arts, & Community**.

The Built Environment concepts focus on community development and design, livability, pedestrian-scaled and mixed-use development, housing affordability, transportation availability and affordability, infrastructure and community water systems, infill and redevelopment, public parkland accessibility, and reducing ambient noise and light. The Education, Arts, & Community concepts focus on equitable access to education and opportunities, arts and culture, social and cultural diversity, emphasizing the importance of social connections within the community, historic preservation, and enhancing quality of life for community members as they age.

Table 2: **Economy & Jobs, Equity & Empowerment, and Health & Safety**.

The Economy & Jobs concepts focus on equitably shared prosperity and access to quality jobs, business retention & development, supporting the local economy, targeted industry development, green market development, quality jobs and living wages, and workforce readiness. The Equity & Empowerment concepts focus on equity, inclusion, and access to opportunity and community resources for all community members. Other concepts include civic engagement, civil and human rights, environmental justice, equitable access to infrastructure and services, availability of human services, and poverty prevention and alleviation. The Health & Safety concepts focus on the development of healthy, safe, and resilient communities by emphasizing active living, food access and nutrition, community health, health systems, hazard mitigation, emergency management and response, and improving community safety.

Public Workshops

Table 3: **Natural Systems** and **Climate & Energy**.

The Natural Systems concepts focus on helping communities to protect and restore places which provide resources to support life by focusing on **ecosystem services** which are provided by **natural systems**. These concepts include protecting water in the environment, improving outdoor air quality, achieving biodiversity and removing invasive species, **natural resource** protection at a regional scale, **green infrastructure**, and sustainable land management. The Climate & Energy concepts focus on reducing climate impacts and increasing resource efficiency to promote **community resiliency**. Other concepts include **climate adaptation**, greenhouse gas mitigation, energy and water efficiency, development of a green energy supply, and waste minimization.

Public Workshops

At each table, the workshop facilitators wrote down topics that were deemed important by the workshop participants. The participants were able to vote for the topics they found important with stickers provided.

The main themes from the workshops were generated by counting the number of stickers assigned to each comment and grouping the comments into their related STAR goal and topic areas. We generated a word cloud to demonstrate the main themes that were designated as important by Tarpon Springs community members. The larger a word appears, the more votes the topic received. All written comments were compiled and reviewed by City staff and the City's Sustainability Citizen Advisory Committee.



Survey

The City administered a 17 question Sustainability survey online through the City's Sustainability Connect Tarpon website. The survey was advertised in multiple forums from February- May 2022 and was closed during the first week of June 2022. The survey questions were inspired by a wider Pinellas County sustainability and resiliency survey administered in 2021. The Sustainability Committee and City staff customized the survey to the City of Tarpon Springs' unique needs. The survey was available in English, Spanish, and Greek for greater accessibility to the diverse members of the Tarpon Springs community. The survey was also available in City facilities including the Recreation Center and Library on paper for those without computer access. Those who completed the survey on paper could turn in the paper survey to any City facility to be compiled. The results of the survey helped to capture the priorities and concerns of Tarpon Springs residents regarding sustainability and resiliency, and the results were utilized in determining actions for inclusion in the Sustainability Plan. The survey received a total of 170 responses. The City's Sustainability Connect Tarpon page received a total of 532 views.



CITY OF TARPON SPRINGS

SUSTAINABLE TARPON SPRINGS

SURVEY NOW AVAILABLE

The Tarpon Springs Sustainability Committee is collaborating with City staff to draft a sustainability plan. This sustainability plan will guide current and future sustainability and resiliency initiatives for Tarpon Springs.

An **ONLINE SURVEY** is available for you to provide feedback to improve the plan. **SCAN** the QR code or visit the website below to complete the survey!



TO TAKE THE SURVEY, VISIT:
<https://connecttarponsprings.com/sustainability>

This flyer has been printed on recycled paper and is 100% recyclable.

Take a picture and scan the QR code/take the survey online to help to reduce paper usage.

Survey

"Is there something you would like to do to live more sustainably, but there are barriers to making that happen?"

This critical question was posed to participants in the survey in order to better understand some of the main drivers behind a shift to sustainability from the point of view of a resident in the community. This question also helps to demonstrate the barriers that community members face to living more sustainably.

Each participant in the survey was given the opportunity to vote on which specific topic they believed was the main obstacle for them to achieve a more sustainable life. A word cloud was generated to illustrate the main themes selected by community members. The three topics that received the most votes were as follows:

- **COSTS**
- **RECYCLING/COMPOSTING ACCESSIBILITY CONCERNS**
- **PUBLIC TRANSPORTATION CONCERNS**

To address community concerns, we included actions in the Sustainability Plan to create incentive programs for residents and a cost assistance program for implementing green building practices such as installing solar panels. Additionally, actions to increase the number of recycling drop off locations, encourage residential complexes to provide recycling to their residents, and to complete a communitywide composting feasibility study were created. In alignment with the City's Strategic Plan, we included an action to create a multimodal master plan to improve bicycle and pedestrian safety as well as access to public transit.



Summary of Survey Results

DEMOGRAPHICS

Most respondents were year-round residents and reported living near Craig Park and Fred Howard Park. Respondents were generally 25 and older, with most in the 45-65 age range. Most respondents reported earning over \$50,000 as gross annual household income. 79% of respondents were white, 11% preferred not to answer.

CLIMATE AND COMMUNITY

Aging infrastructure, followed by traffic and congestion and coastal water level rise were identified as the city's most concerning stresses. Environmental conservation and protection of local ecosystems was the most popular topic to be included in the city's Sustainability Plan. The majority of respondents indicated that the city should provide more of the following community services: funding opportunities for residents and businesses to improve communities, and renewable energy sources for the community .

PERSONAL ACTIONS AND EXPERIENCES

Most respondents have experienced deteriorating infrastructure in the community. The majority of respondents recycle, compost, or try to reduce their waste production, and use reusable products instead of single-use products. Additionally, most respondents would like to install and use renewable energy on their property (such as solar panels). Fred Howard Park, Sunset Beach, and Craig Park were noted as the most popular places in the city.

Survey

City of Tarpon Springs Sustainability Plan - Community Engagement Survey

This survey was created by the City of Tarpon Springs Sustainability Committee and City staff so that your input can help to guide the development of the City's first sustainability plan. This plan will help to guide the current and future sustainability and resiliency initiatives for Tarpon Springs. This survey takes approximately 5 minutes or less to complete. Your feedback is greatly valued. Please also help us to spread the word by sharing this survey with your friends, family, coworkers, and others in your network so that we can hear their vital feedback!

Pinellas County defines Sustainability as the ability to maintain or improve standards of living without damaging or depleting natural resources for present and future generations.

<https://pinellascounty.org/sustainability/default.htm>

This survey has been printed on recycled paper and is 100% recyclable.

1. Which option(s) below best defines you in the community?

Choose all that apply.

- Year-round resident
- Seasonal resident
- Own or operate a business in the City
- Work in Tarpon Springs but live in another city/county
- Local elected official
- Work or volunteer for an environmental organization
- Other _____

2. Climate change refers to significant changes in climate conditions and weather patterns — such as changes in global temperature, rainfall, wind patterns and sea levels — that occur over a long period of time and have been increasing due to human activity such as the burning of fossil fuels or cutting down forests. When do you think climate change will impact your life?

Choose one.

- Now
- Within the next five years
- Within the next 25 years
- All of the above
- Never
- Other _____

Survey

3. Communities may experience stresses over time. Stresses are long-term trends that weaken the ability of a community to function and succeed. Which of the following stresses are of most concern in the City?

Choose your top 5 in no particular order.

- Lack of safe access to public open spaces, especially for persons with disabilities
- Lack of job opportunities that support a living wage
- Poor air quality
- Poor water quality in lakes, rivers, Gulf, and bays
- Coastal water level rise
- High unemployment
- Homelessness
- Population growth and changing demographics
- Social conflict (e.g., political conflict or discrimination toward specific populations)
- Changing economic trends (e.g., material cost increases, inflation, or economic downturns)
- Poverty/inequity
- Aging infrastructure (e.g., roads, buildings, sewer systems, sea walls, storm drain systems and power grid)
- Transportation safety
- Traffic and congestion
- Needs of an aging population
- Energy and/or transportation costs
- Other _____

4. Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs. Which topics would you most like to see included in the City Sustainability Plan?

Choose your top 5 in no particular order.

- Livability (e.g., availability and quality of outdoor spaces, transportation, and other community characteristics that increase the well-being of people of all ages and abilities)
- Environmental conservation and protection of local ecosystems
- Financial considerations included in the decision-making processes for City programs and staffing
- Resource management and materials recovery (e.g., recycling)
- Diversity, inclusion, and social equity
- Smart growth (e.g., Balances the needs of economic development and jobs, strong neighborhoods, and healthy communities and natural areas)
- More public transportation alternatives
- Economic opportunity and job creation
- Protection of important public infrastructure (hospitals, water systems, etc.) from natural disasters and climate change
- Public health and safety
- Environmentally friendly and resource-efficient development
- Energy performance and efficiency
- Other _____

Survey

5. Which of the following community services do you think the City should be providing more of?
Choose your top 3 in no particular order.

Funding opportunities for residents and businesses to improve communities (energy upgrades, community gardens, flood proofing, etc.)

Publicly available information about future climate conditions

Updates to existing policies and regulations

Volunteer opportunities

Renewable energy sources for the community

Food assistance programs to provide affordable and health food options to communities

Health care services, including mental health services

Parks, recreation, and open space

Cultural resources

Financial help for low- to moderate-income households

Other _____

6. Which of the following have you experienced as a renter, homeowner, or business owner in the City?
Choose all that apply.

Flooding

Hurricane/tropical storm evacuation

Wind damage

Lightning damage

Deteriorating building structures

Failing major appliances (air conditioning unit, water heater, etc.)

Deteriorating infrastructure in my community (sidewalks, stormwater drains, etc.)

Changes to or loss of shade trees or other vegetation

Inadequate insurance coverage for disaster claim

I do not rent, own a home, or own a business in the City

None of the above

Other _____

Survey

7. Which of the following activities do you currently do or would like to begin doing to live more sustainably and reduce your impact on the environment?

Choose all that apply in the “currently doing” and “would like to do” columns.

Currently
Doing

Would Like
to Do

- Recycle, compost, or try to reduce my waste production
- Use reusable products instead of single-use products (water bottles, grocery bags, silverware, etc.)
- Limit my water consumption
- Limit my electric consumption
- Install and use renewable energy on my property (such as solar panels)
- Try to purchase local food products
- Limit or avoid consumption of meat and dairy
- Walk, bike, use public transportation, or carpool when possible rather than driving
- Drive an electric or hybrid vehicle
- Purchase second-hand clothing or goods
- Work from home
- Limit travel by airplane
- Minimize use of paper when possible
- Support environmental organizations
- Take political action
- Other
- I would not like to participate in these actions

8. Is there something you would like to do to live more sustainably, but there are barriers to making that happen (i.e. conditions not necessarily within your control which make it more difficult to adopt those sustainable behaviors in your life)? Please explain.

9. Please share the location of your favorite place in the City. Write your favorite place below.

10. Describe why you chose this location.

Survey

11. Which landmark in the City do you live closest to (or landmark closest to your business location or where you visit most if not a resident)?

Select one landmark which you believe is nearest to your location (see map below for reference).

Anclote River Park
 Tarpon Springs Aquarium and Animal Sanctuary
 Tarpon Springs Sponge Docks
 Tarpon Springs Elementary School
 Richard Ervin Park
 Lake Tarpon Sail and Tennis Club
 Tarpon Springs Recreation Department
 Al Anderson Park
 Craig Park
 Fred Howard Park
 Tarpon Springs Middle School
 Tarpon Springs High School
 AdventHealth North Pinellas
 West Klosterman Preserve
 St. Petersburg College Tarpon Springs Campus

12. What is your age?

Under 18
 18-24
 25-44
 45-64
 65 and older
 Prefer not to answer

13. What is your annual gross household income?

Less than \$25,000
 \$25,000 - \$49,999
 \$50,000 - \$100,000
 Over \$100,000
 Prefer not to answer

14. What is your race?

American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White
 More than one race
 Other
 Prefer not to answer

Survey

15. Is there a topic that you feel is related to sustainability or important for sustainability which has not been included among these survey topics? Please explain.

Highlights and Key Results from Survey

Demographics

- Most respondents were year-round residents.
- Most respondents reported living near Craig Park and Fred Howard Park, although there was representation from residents living near all listed city landmarks.
- Respondents were generally 25 and older, with most in the 45-65 age range.
- The majority of respondents reported earning over \$50,000 as gross annual household income.
- 79% of respondents were white, 11% preferred not to answer.

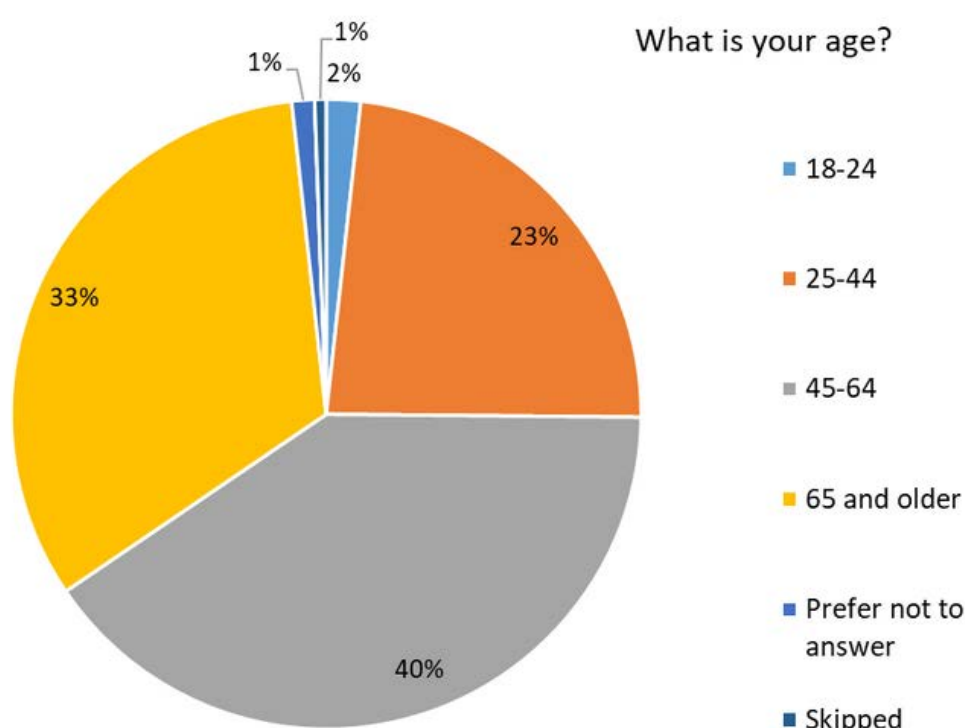


Figure A3.1: Ages of survey respondents

Survey

Climate and community

- Most respondents believe that climate change is impacting their lives now
- Aging infrastructure, followed by traffic and congestion and coastal water level rise were identified as the city's most concerning stresses
- Environmental conservation and protection of local ecosystems was the most popular topic to be included in the city's sustainability plan
- The majority of respondents indicated that the city should provide more of the following community services: funding opportunities for residents and businesses to improve communities, and renewable energy sources for the community

Stresses	#
Aging infrastructure (roads, buildings, sewer systems, sea walls, storm drain systems and power grid)	110
Traffic and congestion	96
Coastal water level rise	86
Poor water quality in lakes, rivers, Gulf, and bays	78
Homelessness	76
Population growth and changing demographics	71
Changing economic trends (material cost increases, inflation, or economic downturns)	61
Lack of job opportunities that support a living wage	38
Social conflict (political conflict or discrimination toward specific populations)	38
Poverty/inequity	29
Energy/transportation costs	24
Lack of safe access to public open spaces, especially for persons with disabilities	22
Poor air quality	18
Other	15
Needs of an aging population	13
Transportation safety	10
High unemployment	3

Table 1: Most concerning stresses for respondents

Personal actions and experiences

- Most respondents have experienced deteriorating infrastructure in the community
- Most respondents recycle, compost, or try to reduce their waste production, and use reusable products instead of single-use products
- Most respondents would like to install and use renewable energy on their property (such as solar panels)
- Fred Howard Park, Sunset Beach, and Craig Park were noted as the most popular places in the city

Which of the following activities would you like to BEGIN DOING to live more sustainably and reduce your impact on the environment?

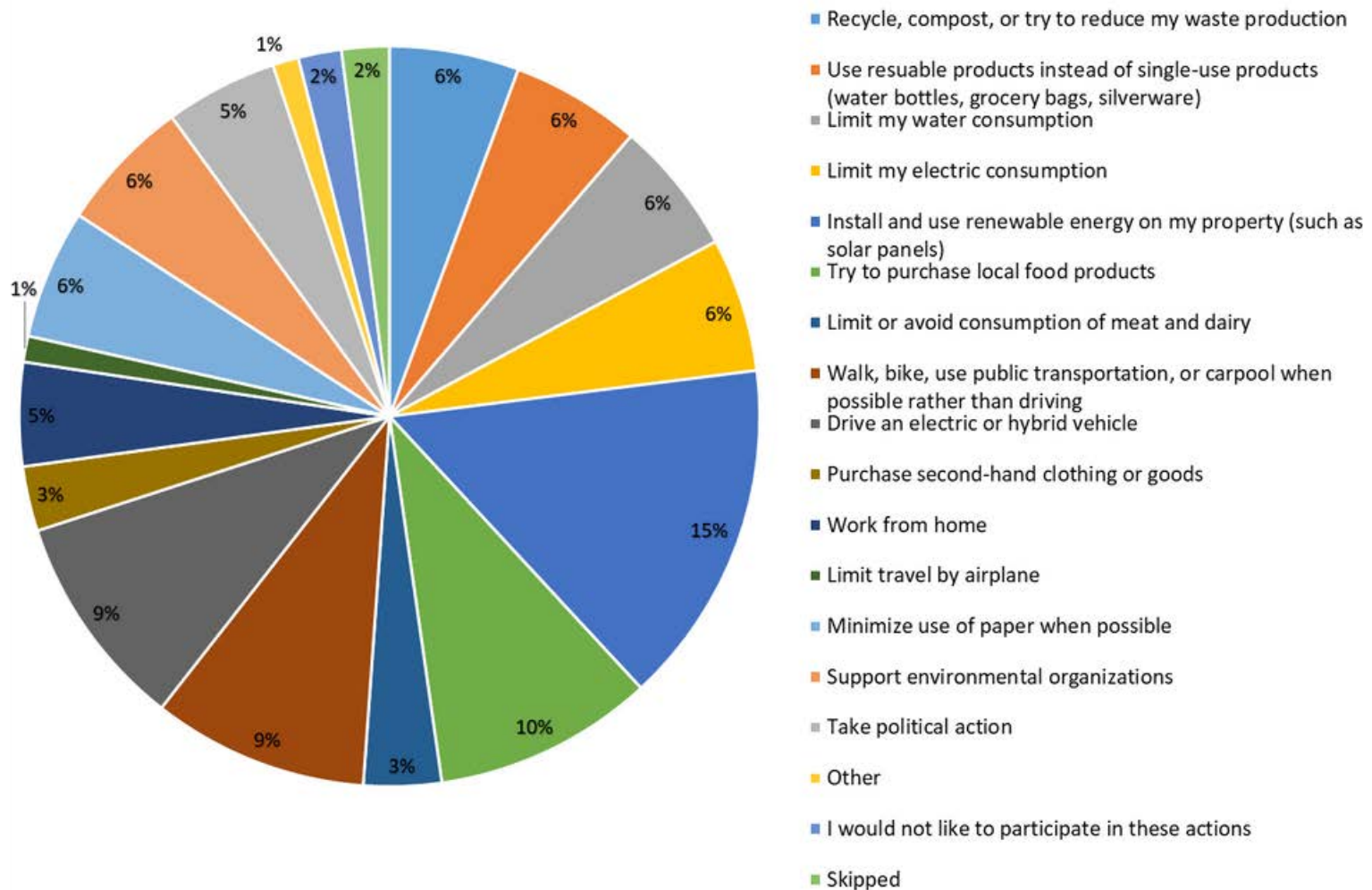


Figure A3.2: Sustainable activities respondents would like to begin doing

Appendix 3: Public Engagement

Log/Methodology Report

City staff and the Sustainability Committee created two videos to spread the word about the City's public engagement initiatives, which were posted on the City's YouTube channel and shared on the City's Sustainability website.

Several posts were made between February- May 2022 on the City's Facebook page and Connect Tarpon pages to advertise the survey and workshops. Other City departments including the Recreation Department and Library shared these Facebook posts as well. The flyers were posted on the Tarpon Arts and Explore Tarpon Springs websites and community Facebook pages such as the Turn the Tide for Tarpon Facebook page. Flyers for the workshops and survey were distributed in English, Spanish, and Greek for greater accessibility. The flyers were printed on recycled content paper and made available in City facilities. The flyers were further circulated online. The survey flyer contained a QR code to direct people to the online survey and reduce paper usage.

Flyers were distributed in City facilities and at the City's Earth Day/Arbor Day events. Sustainability staff tabled at several city events including the Sunset Beach Concert series, First Friday, Sunset Beach Cleanup, Knowledge & Nibbles, and Touch-a-Truck to advertise the survey and public workshops. Flyers were also distributed at the Easter Eggstravaganza event. Flyers were distributed to local businesses and an advertisement was placed in the News & Notices section of March and April 2022 utility bills. Information about the workshops were also displayed on the City's electronic messaging board. A newspaper article was published in the Beacon newspaper about the workshops and survey.

Sustainability staff reached out to community organizations to help distribute flyers to the wider community including the CAP Center/Union Academy, Advent Health, Peace4Tarpon, and the Hispanic Outreach Association. Sustainability staff reached out to Neighborhood Associations and Tarpon Springs Elementary School. After each workshop, sustainability staff encouraged participants to take survey flyers with them to help spread the word about the online survey and further public engagement opportunities.

Appendix 4:

City Sustainability Progress to Date (Additional Information)

Reverse Osmosis (RO) Facility

- Solar System Installations
- Transition to Hybrid Vehicles
- Implementation of portable generators
- DEP Environmental Stewardship Award

The city's RO facility continues with the second phase of solar system installation in 2023. From an extensive GHG inventory report, the RO facility has been shown to emit considerable carbon emissions due to the energy intensive nature of the RO process. The solar project will aid in mitigating these emissions through providing on-site energy production. The solar installed to date provides 15-30% of the facility's energy demand, with greater efficiency in times of lower intensity production. The Phase II solar installation will allow the facility to continue to generate on-site solar energy and reduce its carbon emissions.

The plant has also implemented portable generators with switch gears at the well field, that will allow the operation to remain online throughout any major event. Furthermore, in recognition of the significant emissions from petrol powered vehicles, the plant has begun transitioning its vehicle fleet to hybrid vehicles instead and purchased a Ford E-Transit electric van in 2022. The facility has been recognized for demonstrating significant sustainable practices that aim to protect, conserve, and directly benefit the natural environment. The innovation, achievements, and outreach showcased by the facility has earned it the DEP Environmental Stewardship Award in 2023.

Economic Development

- Stimulation of Local Economy (grants, tax incentives, forgivable loans)
- Historic Preservation
- Business Owners of Color North Pinellas

The Economic Development Department has completed over 100 CRA grants to date, for facades, restaurants, murals, and building codes. Furthermore, grants to over 150 businesses were provided in April 2020 for COVID relief. The city also provides tax incentives for investing in properties and land within opportunity zones. Historic districts and structures are preserved and protected through securing historic markers and programs, such as the Ad Valorem Tax Exemption program. The city is a proud participant in the Business Owners of Color organization which seeks equity and inclusion for business owners of color.

City Sustainability Progress to Date

(Additional Information)

Stormwater

- Stormwater Action Plan (SAP)
- Watershed Management Plans:
 - a. Lake Tarpon
 - b. Anclote River
 - c. Klosterman
 - d. CHSJS
- Spring Bayou Water Quality Sampling/Evaluation

One of the main and more long-term projects initiated by the Stormwater department is the SAP. The goal of the SAP is to provide potential conceptual solutions to abate flooding conditions, prepare a prioritized capital improvement plan for implementation, and enhance water quality by utilizing treatment systems and best management practices. Numerous local watersheds were also targeted for projects that will aim to improve water quality, flood control, natural systems and wetland and ecosystem protection. Resiliency of the watersheds will also be improved by tackling problematic circumstances such as sea level rise and shifting rainfall patterns. The Spring Bayou project will help the city to better understand the water quality, natural processes and system dynamics influencing the Spring Bayou Complex of the Anclote River. The SAP also contains a section for green stormwater considerations.

Trees

- Tree Giveaways
 - Eco Fest
 - Arbor Day
 - Touch-a-Truck
- Community Tree Talks

The City of Tarpon Springs hosts several annual events where various native trees are given away to members of the community. Around 100 trees are given away at the Eco Fest events, while between 200 to 300 trees are given away at both the Arbor Day and Touch-a-Truck events. Not only do these projects have the ability to significantly increase the total tree canopy of the city, but trees are also a powerful carbon sequestration tool. Trees also help with the urban heat island effect, soil stabilization, erosion control, runoff mitigation and much more. The city aims to spread awareness on such topics through Community Tree Talks events, which take place at various locations every year.

City Sustainability Progress to Date

(Additional Information)

Library

- Earth Day activities
- Programs:
 - a. Youth summer reading
 - b. Hurricane preparedness
 - c. Florida vegetable gardening
 - d. Bee
 - e. Water pollution story
- Sustainability Resource Guide
- Seed Library
- Kill-a-Watt meters

The City of Tarpon Springs' Library has conducted numerous educational programs and community engagement events throughout the past year. These programs and events involved several public presentations, as well as interactive activities that assist the community in improving local sustainability efforts. The PPLC also provides residents the opportunity to earn an accredited online high school diploma and career certificate, either from the convenience of their home or any participating library. The library further assists in smoothing residents' transition to a more sustainable life by distributing free seeds, meters to measure energy usage at home, and a guide to the sustainability materials available at the library.

Recreation

- Beach Clean up and Concerts
- Group Fitness and Wellness Classes
- Monthly Free Pop up Farmers Market
- GRO Group

The City's Recreation Department hosts and promotes a wide variety of ongoing community events that aim to improve the quality of life for all residents. At Sunset Beach, there are monthly beach concerts and clean ups with partners including Keep Pinellas Beautiful. At Craig Park and the Community Center, various types of group fitness and wellness classes are held for people of all ages and abilities that will aid in improving the physical and mental health of those involved. Fresh, locally grown fruits and vegetables are always available at the monthly Save Our Seniors pop up farmers market. Those with mental disabilities can enjoy arts and crafts, as well as valuable time outdoors in nature assisting with the GRO Group garden and nursery.

City Sustainability Progress to Date

(Additional Information)

Planning & Zoning

- Comprehensive Plan Update
- Strategic Plan
- Historic District Adaptation & Resiliency Plan
- Historic District Design Guidelines Review Manual (DRGM)

The Comprehensive Plan provides the principles, guidelines, standards, and strategies for the orderly and balanced future economic, social, physical, environmental, and fiscal development of the city and commitments to implement the plan. The plan establishes land use and development standards to guide the Land Development Code. The Strategic Plan will identify a few broad-reaching focus areas and will serve as a guide for city budgeting, capital project planning, and program development over the next 3-5 years. The Strategic Plan will be coordinated with the City's Comprehensive Plan. The DRGM addresses issues affecting historic district properties such as energy efficiency, sustainability, and adaptation to hazards. The Adaptation and Resiliency Plan was produced from collected data and the assessment of the vulnerability of historic resources.

Sustainability

- SUN Solar Co-Op
- Reduce Your Use campaign
- Whitcomb Bayou
- Vulnerability Assessment & Action Plan

The city joined the Pinellas 2022 SUN Solar Co-op as a Community Partner to assist with education to residents and local businesses through many different advertisements, promotions and provided materials. Likewise, the city also joined the Reduce Your Use campaign as a Community Partner with similar goals and methods. The Whitcomb Bayou is an area at risk for flooding and, as such, the Sustainability Division is involved in the effort to determine alternatives for flood control. The Sustainability Division is also leading the Vulnerability Assessment & Action Plan project, which is grant-funded by the FDEP Resilient Florida program. This will serve as the city's resiliency plan to address coastal flooding from sea level rise.

Appendix 5

Greenhouse Gas Inventory Technical Report Executive Summary

City of Tarpon Springs

First Annual Greenhouse Gas Emission Inventory - 2019

Final Technical Report



Prepared by:

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324 East Pine Street

Tarpon Springs, Florida

August 16, 2022

1 Executive Summary

Purpose

In 2020, at the direction of the City of Tarpon Springs Sustainability Committee, the City of Tarpon Springs Public Services Department began work on the first annual greenhouse gas inventory for the City of Tarpon Springs. The purpose of this effort is to quantify the estimated greenhouse gas emissions from the various activities and infrastructure of the City government. This information can be used by City management and policy makers to develop emissions goals, create policies and plans to manage greenhouse gas emissions over time, develop actionable practices to reduce energy consumption, and make smart financial investments in sustainability.

Scope

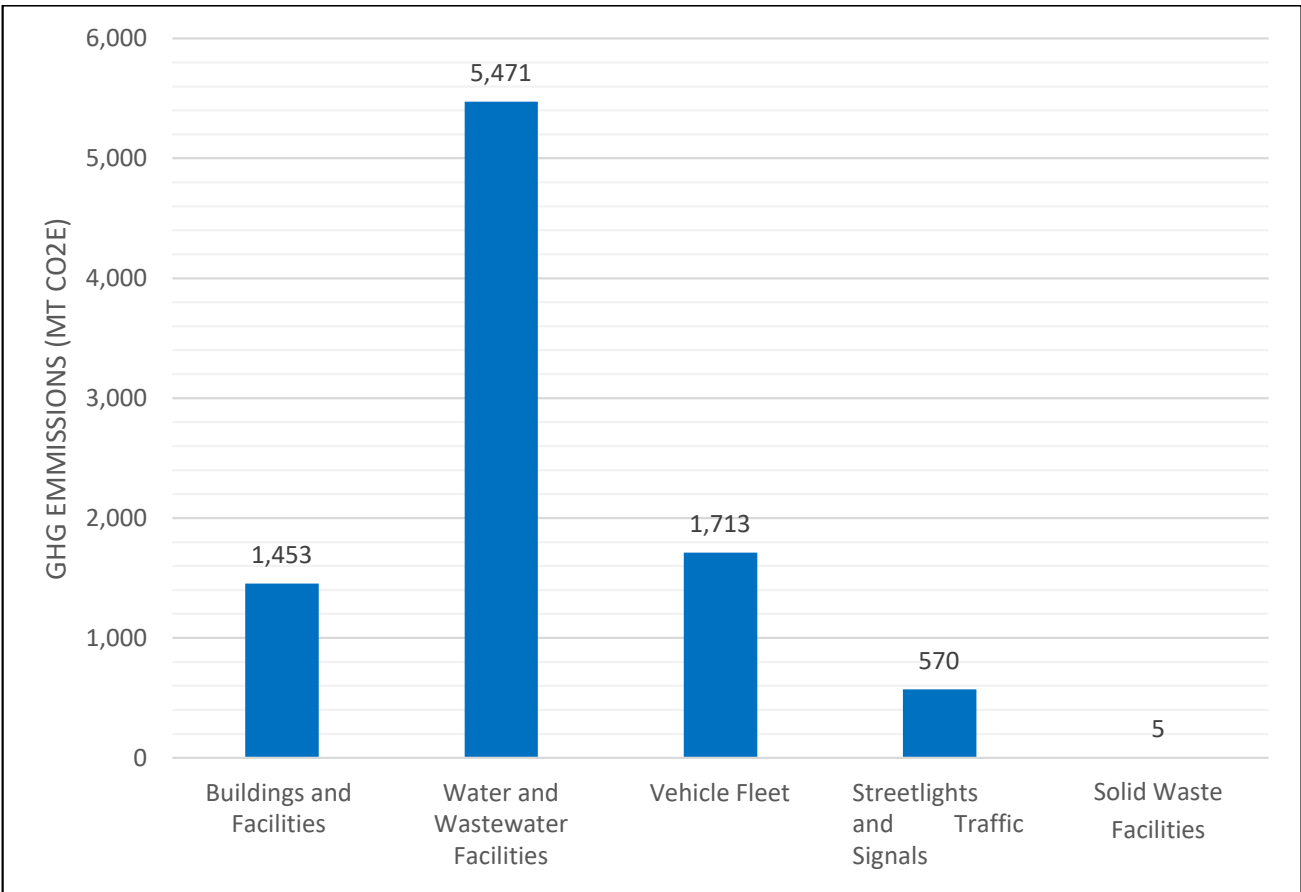
For this effort, the 2019 greenhouse gas emission inventory was created using the ICLEI (International Council for Local Environmental Initiatives) online inventory tool. This tool converts sources of energy consumption into CO₂ equivalents to allow for a comparison of the relative emissions from different vehicles, fuels, and energy sources that might be used by a municipality. Since this was the first year the City elected to conduct an inventory, the 2019 inventory is based on the government operations track. This means that the 2019 inventory estimates the emissions from City government activities such as water and sewer utilities, public facilities, the City vehicle fleet, and City-owned infrastructure. In technical terms, only Scope 1 and Scope 2 emissions were considered in this effort. The EPA defines Scope 1 emissions as direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization (e.g., with fuel combustion in boilers, furnaces, vehicles. etc). Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity from a third party. The City may consider examining broader community scale emissions in the future, but this effort was targeted to directly examine municipal government operations.

All values for greenhouse gas emission in this report are listed in metric tons (MT) of CO₂ equivalents. This is an international standard for comparison and is the basis for emissions reporting in the ICLEI tool. For reference, one metric ton of CO₂ is roughly equivalent to the emissions from driving an average passenger car 2500 miles, or the electrical use from 5.5 homes for one year.

1.1 Emissions Inventory Results and Discussion

Based on the results of this emissions inventory, the City of Tarpon Springs municipal government operations generated the equivalent of 9,212 tons of CO2 in 2019. These emissions were primarily created via purchased power from the local electric utility (Duke Energy), and consumption of fuels such as gasoline, diesel, and natural gas for various municipal activities.

Figure 1: City of Tarpon Springs Greenhouse Gas Emissions



The largest sector for municipal emissions was the operation of the water and wastewater treatment facilities at 5,471 tons of CO2e, or 59% of the City governments’ emissions. These emissions were created via the energy consumption required to treat and convey water and wastewater within the public utilities. The energy requirements for water and wastewater treatment are unique to each City, and are based on a variety of local factors, such as source water quality, treatment techniques, and the layout of the City utility system itself.

The second largest emissions sector was the City vehicle fleet, which contributed 19% of City government emissions. The third largest emissions sector was municipal buildings and facilities, a category that includes power consumption at various general government buildings, such as City Hall, fire stations, recreation facilities, and the public works facility. These buildings and facilities contributed approximately 16% of municipal emissions. Finally, City owned streetlights, traffic signals, and the City yard waste facility contributed the remaining 6% of City government

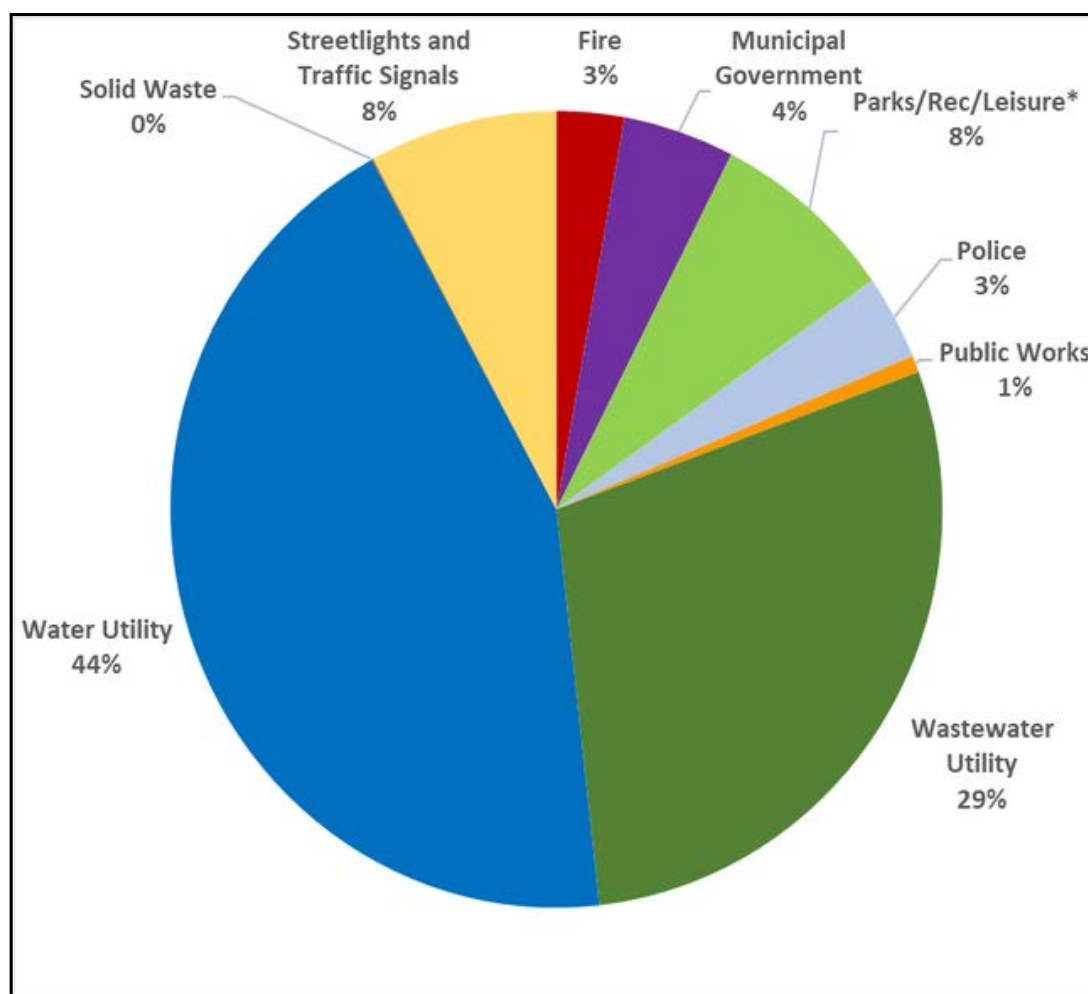
emissions. A summary of Tarpon Springs' government track emissions inventory is provided below.

Electrical Power Consumption

When many people think of emissions, they immediately think of the tailpipe of a car or truck. However, remote emissions from power generation plants can easily outweigh the local emission from vehicles in local government operations. That is the case in Tarpon Springs. The four emissions sectors dominated by electrical power consumption (municipal buildings, the water and wastewater utilities, streetlights, and the solid waste facility) account for 82% of City government emissions. In 2019, these emissions were largely generated via electrical consumption from the City's local power provider, Duke Energy. Grid electricity emission from City operations are almost entirely dependent on the total kilowatt-hours of electricity consumed by the City, and the relative emissions from the power generation mix provided by the electrical utility. The City has limited ability to influence the power generation mix of the electric utility, so any effort to lower emissions from these source must come from reductions in electrical power use from the grid. A good first step toward this goal is examining power use in the various municipal services. Table 1 and Figure 2 below provide a breakdown of the relative electrical power consumption of various components of the City government in 2019.

Table 1: City of Tarpon Springs Electrical Consumption

Category	Electrical Consumption (kWh)
Fire	447,001
Municipal Government	737,770
Parks/Rec/Leisure	1,228,901
Police	546,436
Public Works	108,983
Wastewater Utility	4,560,780
Water Utility	6,938,879
Solid Waste	11,027
Streetlights and Traffic Signals	1,244,979
Grand Total	15,824,756

Figure 2: City of Tarpon Springs Relative Electrical Consumption

*Parks/Rec/Leisure includes the golf course, parks, rec center, cemetery, and similar facilities regardless of department.

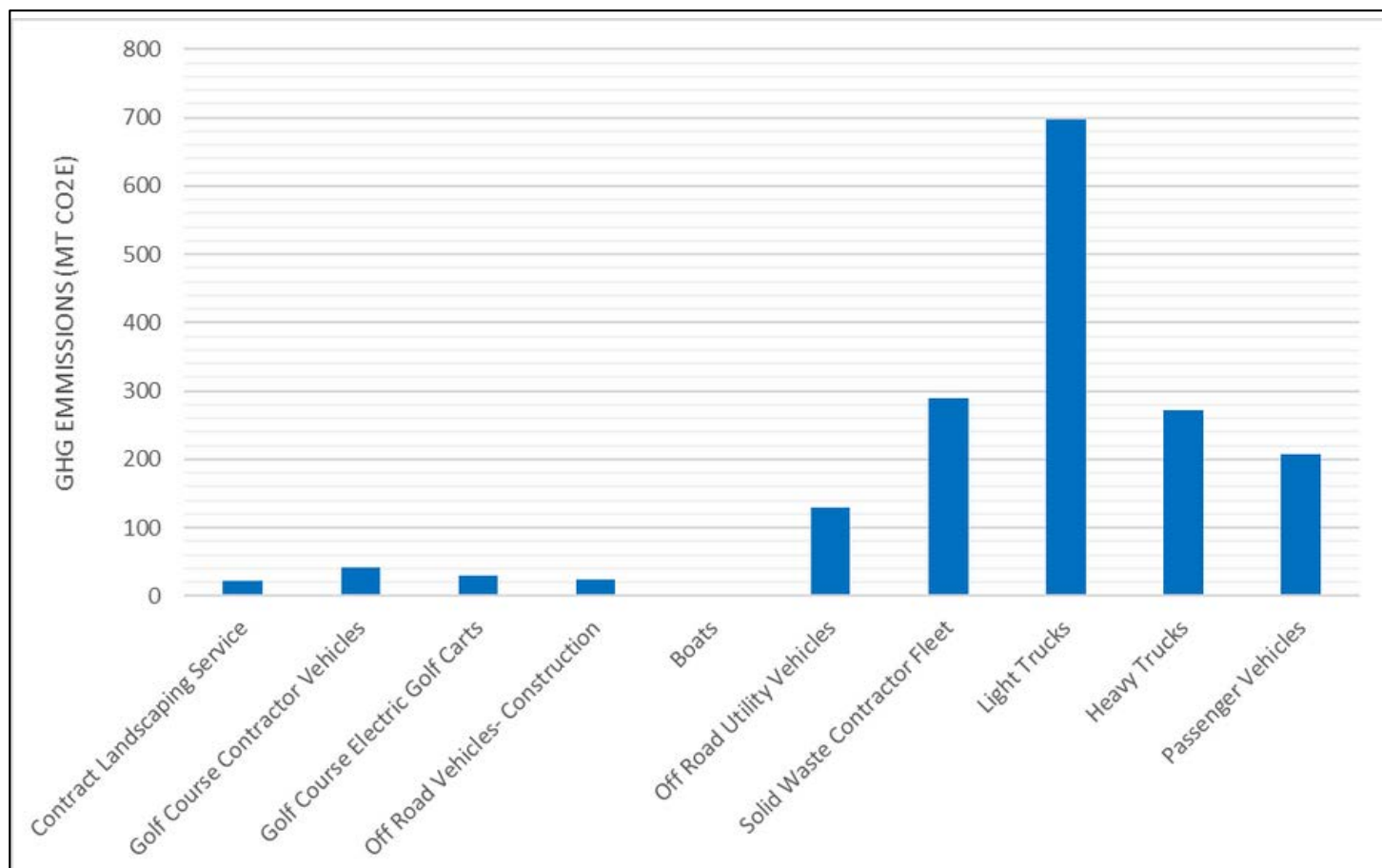
The water and wastewater utilities dominate the electrical demand in the City. The City operates a Reverse Osmosis Water Treatment Plant, which provides treated desalinated water from brackish groundwater sources. This is a relatively new facility, but RO treatment does typically have relatively high energy demands, which are largely dictated by the salinity of the source water. The City has already taken steps to provide renewable energy to this facility, with a large solar energy project coming online in 2020, and additional phases currently in design. In addition, the City wastewater utility also operates the City's Advanced Wastewater Treatment Plant (AWWTP). This is an older facility designed in the 1980s. It has been upgraded significantly, but there may be additional room for energy efficiency improvements as older equipment is replaced. Overall, tracking the energy use by the water and wastewater utilities over time will be important to any emissions reduction initiative at the City. It will also be important to normalize energy consumption at these facilities for the volumes of water treated, so that variation in rainfall or water demands from year to year can be accounted for.

Vehicle Fleet

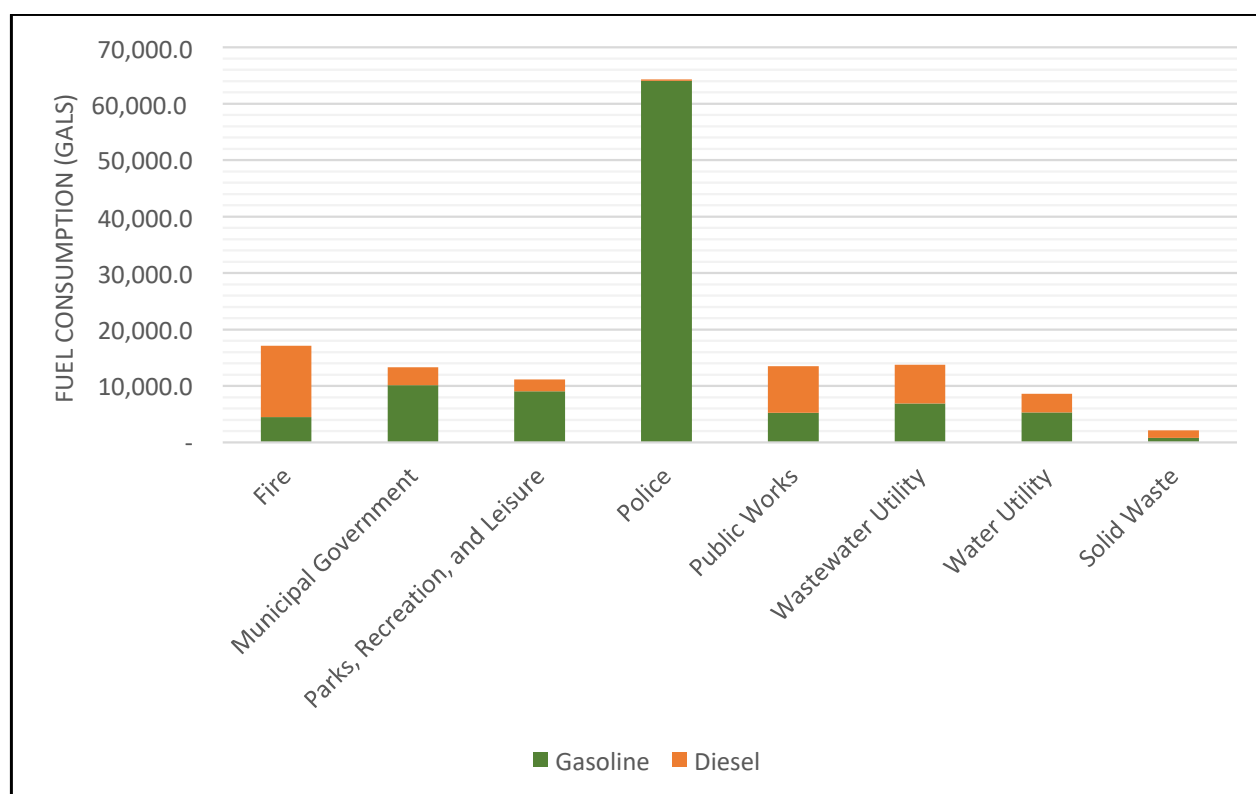
After electrical consumption, direct emissions by the City vehicle fleet represents the second largest source of emissions in City government operations, accounting for over 1700 MT of

CO₂e, or 19% of City emissions. Emissions from light trucks across all departments are the largest source of emissions within the City vehicle fleet, accounting for 41% of emissions. This category includes both traditional pickup trucks, but also light and heavy SUVs. Similarly, City-owned heavy trucks and passenger vehicles account for an additional 16% and 12% of fleet emissions respectively. Thus road-going City vehicles account for over 70% of fleet emissions, representing the largest potential area for emissions reductions.

Figure 3: City of Tarpon Springs Vehicle Fleet Emissions



The variety of roadgoing vehicles in the City is quite diverse, even within each vehicle category. For example, the light trucks category includes vehicles ranging from one-ton pickup trucks used for construction, to SUV police cruisers, to small SUVs that operate as passenger vehicles. Many of these vehicles serve specialized roles in the City, and potential for migration to higher-efficiency vehicles, hybrids, or electric vehicles will need to be examined within each department over time. Figure 4, below, provides a breakdown of vehicle fuel use within several government sectors in the City. The police department is the top fuel user in the City, with over 60,000 gallons of fuel use in 2019. The police department also operates the largest vehicle pool in the City, with 76 vehicles listed. Potential exists for fuel efficiency improvement over time, but hybrid and EV police vehicles are still an emerging technology, and any future police vehicle program would need to ensure there is no loss of function for critical public safety roles.

Figure 4: City of Tarpon Springs Vehicle Fleet Fuel Consumption

After the police department, the next largest sectors for fleet fuel consumption were the fire department, wastewater utility, public works (roads, streets, and stormwater only), and then general municipal government. It is noteworthy that with the exception of diesel consumption for the fire trucks (10,000 gal/yr), the vast majority of the fuel use in these activities is consumed by light trucks (over 14,000 gal/yr). Although some of these vehicles are specialized and have limited potential for higher efficiency alternatives (sewer vacuum truck, boom trucks for construction, etc), general use light trucks may represent an area of strong potential for improvement in efficiency over time. Light trucks are an emerging area for hybrid vehicle and EV development, and a long-term program to include EV trucks in the vehicle fleet could become feasible in the next several years as new EV truck options come to market and EV prices become more cost-competitive.

Conclusions and Recommendations

Based on the results of this baseline inventory, the water and wastewater utilities and the vehicle fleet represent the largest sources of City GHG emissions and thus have the largest potential for emission reduction over time. Other sectors of City government are also significant, and could provide opportunities for smaller scale changes that would reduce emissions as well. The following considerations and solutions are provided as a starting point for a potential GHG reduction program:

- **Evaluate potential for additional solar energy capacity at the RO Treatment Plant.**

The Public Services Department has made considerable strides to reduce grid electricity consumption by installing a solar energy system onsite in 2020. This will be evaluated in the 2020 GHG inventory and a second phase of solar installation is in progress currently. To further reduce grid electricity consumption, additional solar energy capacity can be considered along with other renewable energy options.

- **Evaluate the potential for electrical efficiency improvements and offsite solar energy production for the AWWTF.**

The AWWTF has been heavily upgraded with modern electrical drives and pumps over its lifetime, but due for upgrades to its electrical system in coming years, which may provide some energy savings. Additionally, the potential replacement of the original mechanical aeration system with a modern diffused air system could result in significant energy savings. Finally, offsite solar energy production could be considered to offset energy demand at this facility.

- **Consider a pilot program for testing and integrating EVs into the vehicle fleet.**

Small trucks, SUVs, and passenger vehicles combine to account for the majority of fuel consumption in the City. Options for new commercial EVs are rapidly coming to market, and developing a program to pilot new EVs and slowly phase in EVs to the fleet over time could result in large fuel and monetary savings.

- **Create a staff work team to develop and implement projects and programs to reduce electrical power and fuel use over time.**

There may be room for considerable improvements in areas of the City government with smaller GHG emissions footprints. The City is currently working to develop a staff level work team to develop ideas and projects for improvements in efficiency over time across the various departments.

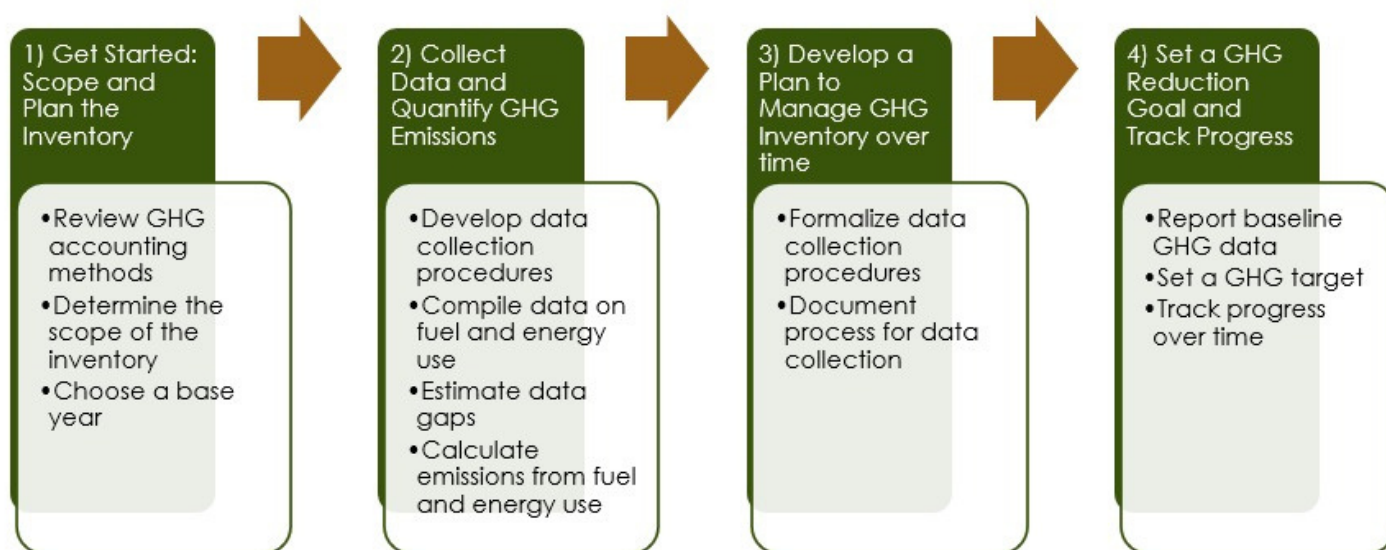
- **Develop a system to evaluate projects and programs for emissions reduction.**

- **Consider implementing procurement practices that include emissions reducing practices.**

- **Consider expanding upon the 2019 inventory to conduct a more in-depth evaluation of vehicle fuel consumption by department.**

Policy Development and Next Steps

This greenhouse gas emissions inventory represents a first step in quantifying the City's greenhouse gas emissions in an actionable way and provides a baseline for measuring emissions over time. The following steps adapted from EPA guidance provide a logical roadmap for the creation and implementation of a greenhouse gas reduction program:

Figure 5: The GHG Inventory Development Process

The broader task for the City at this time is to create a City GHG reduction target as a matter of policy and create a plan to achieve that target. The City is currently developing a Sustainability Action Plan, and establishing a GHG emission reduction goal is being considered as a component of this plan. Should the City elect to proceed with a GHG reduction program, the following steps provide a reasonable path forward:

1. Provide the results of the 2019 GHG Inventory to City management and staff for consideration.
2. Create a 2020 GHG Emissions inventory and report findings.
3. Create a long term GHG emission projection over several years based on future growth.
4. Set a GHG emissions target as a matter of policy with a specific level of reduction and a target year.
5. Work with the new staff sustainability team to develop specific projects and actions to reduce energy and fuel use to achieve the target.
6. Develop key performance indicators for certain major emissions reduction program components.
7. Continue to track progress via annual GHG inventory reports.

Historically, the City of Tarpon Springs has made considerable effort in improving the sustainability of City government operations and implemented many environmentally beneficial programs. The City has built out a reclaimed water system and developed the RO Water Treatment Plant to conserve local water resources, implemented large scale solar energy projects, and is now leading area municipalities in developing a government-scale GHG inventory. This 2019 inventory represents the first step for the City to expand its environmental initiatives toward energy and climate sustainability. The City can build on this step by setting goals for emission reductions, using data-based decision-making to improve efficiency and reduce energy use, and making smart investments to help build a more sustainable City over time and provide climate leadership to its citizens and the surrounding communities.