

Quasi-Judicial Boards (includes Public Hearings)

Agenda September 14, 2021 @ 12:00 pm Virtual

welcome

Agendas and all backup material supporting each agenda item are accessible via the city's website at <u>cityofwinterpark.org/bpm</u> and include virtual meeting instructions.

assistance & appeals

Persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Office (407-599-3277) at least 48 hours in advance of the meeting.

"If a person decides to appeal any decision made by the Board with respect to any matter considered at this hearing, a record of the proceedings is needed to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based." (F.S. 286.0105).

please note

Times are projected and subject to change.

- 1. Call to Order
- 2. Consent Agenda
 - a. Approve Minutes for 0810.21

3. Staff Updates

- a. Lakes Management
 Stormwater Management
 Winter Park Police Department
 Sustainability
- 4. Citizen Comments (for items not on the agenda): Three minutes allowed for each speaker
- 5. Action Items
- 6. Public Hearings
- 7. Board Comments
- 8. Adjournment

5 minutes

20 minutes

Lakes and Waterways Advisory**agenda item** Board

approved by

item type Consent Agenda

meeting date September 14, 2021

prepared by Melissa Meade

board approval

strategic objective

subject Approve Minutes for 0810.21

motion / recommendation

background

alternatives / other considerations

fiscal impact

ATTACHMENTS: Board Meeting Minutes 0810.21.pdf



Lakes and Waterways Board Minutes

August 10, 2021 at 12p.m.

Commission Chambers 401 S. Park Ave | Winter Park, Florida

Present

Debbie Cunningham, Paul Missigman, Chase Heavener, Ed Webman, Lindsay Eriksson Siddiqui (Virtual)

Absent

Robert Bendick Warren Bloom

Call to order

Meeting called to order by Chairwoman Debbie Cunningham at 12:03pm

Consent Agenda

Approve Minutes 0713.21 - Motion made by Paul Messigman to approve the minutes seconded by Ed Webman motion carries unanimously.

Public Hearings

• BLDR-2021-1211 Request by Luan Nguyen rebuild of boathouse for 1737 Alabama Drive

Staff provided details of the application, answered questions and recommends approval. After discussion; motion made by Chase Heavener to approve the application as presented; seconded by Ed Webman. Motion passed unanimously.

Staff Updates

• Lakes Management - Megan Johansson

Boat permit update - system is going through an overhaul currently but staff plans to work out a formula to make it accessible online after October 1st. Resident letter was read by Debbie Cunningham regarding possible removal of boathouse and dock applications that comply with City code be moved straight to Building and Permitting for approval. As well as an email received from a Planning and Zoning board member stating it was his opinion that the Lakes and Waterways Board continue to review all docks and boathouse applications. Upon completion of the letter and email it was discussed by staff and board. Motion to keep approvals as is by Debbie Cunningham, seconded by Lindsay Siddiqui (virtual). Motion passed unanimously. Powerpoint presentation by Troy Attaway discussing what is being done within lakes management and the lake health of City lakes.

• Stormwater Management - Don Marcotte

Don presented CIP project update. Winter Park Rd Project has been paused due to questions regarding St. Johns river management permit, staff is working to reconcile with St. Johns and confirm everything being done is good then the job will be completed.

August 10, 2021 Page 2

• Sustainability - Vanessa Balta Cook

Vanessa presented cleanup brochure. Staff also presented July's CleanSwell Stats showing 40 pounds of litter collected with top 3 items collected being food wrappers, bottle caps and plastic grocery bags.

Adjournment

Meeting adjourned at 1:26pm

Next meeting scheduled for September 14th, 2021 at 12pm.

Lakes and Waterways Advisory**agenda item** Board

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Lakes Management Stormwater Management Winter Park Police Department Sustainability

motion / recommendation

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ATTACHMENTS: Letter for Winter Park - Mark Hoyer UF.pdf

ATTACHMENTS: 20210914 LWAB Meeting SAP Update Agenda Item.pdf

ATTACHMENTS: Sustainability Action Plan Update - Draft.pdf



UF/IFAS School of Forest, Fisheries & Geomatics Sciences Fisheries and Aquatic Sciences Program



7922 NW 71st Street Gainesville, FL 32653-3071

August 18, 2021

To Whom It May Concern:

Troy Attaway invited me to come down to Winter Park and visit several local lakes that are managed by Winter Park staff and give to my general assessment of these lakes. On August 17, 2021 Troy, Meagan Johannsen and myself circumvented Lakes Maitland, Osceola, Virginia and Mizell in the morning and Lakes Killarney and Baldwin after lunch. I was especially interested in Lakes Killarney and Baldwin as I actually worked on these lakes in the 1980's as they were two of the first lakes stocked with grass carp to control the invasive exotic submersed aquatic plant called hydrilla. After the grass carp eliminated all aquatic vegetation these two lakes were quite green and prone to algal blooms without the presence of a good aquatic plant littoral zone.

Currently, all of the lakes look to be in excellent shape supporting textbook littoral zones of approximately 10% to 25% aquatic plants composed of a diverse group of emergent, floating leaved and submersed native aquatic plants. This type of littoral zone is excellent fish and wildlife habitat and helping to maintain stable water chemistry. I was also impressed at the limited presence of the major three invasive aquatic plants, water hyacinth, water lettuce, and hydrilla, that are so detrimental to other lakes in Florida. This definitely suggests that the management strategies the Winter Park staff are using to control these invasive plants is working well.

Troy also share some historical water chemistry data with me for Lakes Maitland, Osceola, Virginia and Mizell. Geologically, these lakes all are located on the Orlando Ridge, where the geology is dominated by phosphatic sand, silty sand, and clay of the Hawthorne Formation and they lay in the Orlando Promontory division of the Central Lake District. The lakes that are located in this geology are all generally rich in nutrients. The water chemistry data for the Winter Park Lakes Troy shared with me show that the lakes are functioning normally for the geology they are located in and with no sign of anthropogenic nutrient enrichment. This is another impressive management accomplishment with all of the stormwater from extensive surrounding urban development that has to be managed as it enters the lake systems.

From my perspective the lakes are in great shape, but I have a few suggestions that may help address concerns I picked up while visiting with Troy and Meagan:

1) I believe a general management plan should be outlined for each individual lake to set targets for management objectives. These plans should include monitoring activities (water quality, aquatic plants, stormwater etc.) along with targets for management activities. While the core of the plans will be similar, each lake may be a little different as some have unique characteristics. These management plans should also be living documents as more ecological information, management tools and stakeholder input becomes available. In the

future these documents will be valuable for governing boards, lake managers and stakeholders as a yardstick to evaluate lake status in relation to current management activities.

2) During our lake tour, Troy had concerns about a few areas of tussock accumulation in floating leaved areas. These tussocks are natural and generally sink and dissipate on their own over time, however, they can obstruct boat traffic, water flow and generally impact aesthetics. Additionally, there are sediment/aquatic vegetation accumulation areas in the lakes and canals that can cause similar issues. I suggest, that the purchase or lease of a small aquatic plant harvester to remove this type of organic accumulation from the lake might help with these issues. I have seen them work very well with similar issues in many other Florida lakes. An alternative may be to utilize contractor help to remove these tussocks as necessary.

In conclusion, I believe Winter Park residents should be happy not only with the quality of lakes in their area but also with the quality of the folks charged with managing them.

Sincerely

Mark Hoyer Director Florida LAKEWATCH Email: <u>mvhoyer@ufl.edu</u> Web site: https://lakewatch.ifas.ufl.edu/



Sustainability Action Plan Update

- Revises baselines, where necessary, for more complete and accurate data collection and analysis, includes new category on Climate Resiliency, and includes actions related to racial equity.
- Integrates discussion and feedback from
 - Joint virtual KWPB&S Advisory Board work sessions
 - City staff follow-up discussions
 - Public comments and Community online survey responses from over 200 respondents (over two-thirds of which identified as residents)
 - Input from Community Organizations (Hannibal Square Heritage Center, Ideas for Us Orlando, League of Women Voters Orange County, The Nature Conservancy, WP Garden Club, WP History Museum and WP Public Library)





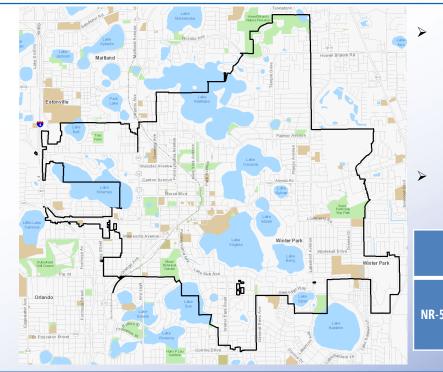
Winter Park Sustainability Action Plan 2021 Update

Presented by Vanessa Balta, M.S., Urban and Regional Planning, Sustainability Program Manage Agnieszka Tarnawska, M.E., Environmental Protection, Sustainability Program Specifica Keep Winter Park Beautiful & Sustainable Advisory Boare



Sustainability Action Plan Update Lakes & Waterways Advisory Board





Sets long-term objectives

- Increase the city's resiliency to the impacts of climate change, ensuring a healthy, livable and sustainable community for present and future generations
- Maintain percentage of lakes meeting good water quality standard
- Increase residents' and businesses' knowledge of best practices for urban tree canopy maintenance and expansion and pollution prevention of natural water resources, including impacts of stormwater runoff and over-fertilizing

Tracks and sets targets

 Percentage of City of Winter Park's Main Lakes meeting Good Water Quality Standard

Indicator Description	2012 Baseline	2025 Target	2035 Target
Percentage of City of Winter Park's Main Lakes ¹ meeting Good Water Quality Standard [Average Annual Trophic State Index (TSI) below 60]	100%	Maintain	Maintain

¹Lakes Baldwin, Berry, Killarney, Maitland, Mizell, Osceola, Sue and Virginia



Sustainability Action Plan Update Lakes & Waterways Advisory Board



 Provides action items through 2025 to help meet long-term objectives

All City Departments	
LGO - Local Government Operations	
□ 2024	
 Utilize racial equity lens to assess city policies, initiatives, programs, and budget issues 	
Lakes Division	
CEGE - Community Engagement & Green Economy	
Continue Annually	
 Provide volunteer opportunities for litter cleanups of city's lakes and rights-of-way 	
NR - Natural Resources	
Continue Annually	
 Administer integrated aquatic plant management program 	
·· 2022	
 Provide education on pollution prevention of natural water resources (e.g., impacts of stormwater runoff and over-fertilizing) to residents and businesses through on-line and prir 	nt



Winter Park Sustainability Action Plan 2021 Update

Presented by: Vanessa Balta, M.S., Urban and Regional Planning, Sustainability Program Manager Agnieszka Tarnawska, M.E., Environmental Protection, Sustainability Program Specialist Keep Winter Park Beautiful & Sustainable Advisory Board

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Background

Vision and Purpose

The 2021 Sustainability Action Plan (SAP) updates and expands upon the City of Winter Park's 2015 SAP. The purpose of the SAP remains the same, to create a roadmap depicting where the city is today and where it would like to be in the future, in regard to sustainability.

The city defines sustainability as responsible and proactive decision-making that minimizes negative impact and maintains balance between social, environmental, and economic growth to ensure a desirable planet for all species now and in the future.

By integrating elements of this plan, the will:

- Increase quality of life while improving individual and community health
- Become more energy independent
- Protect and enhance air quality, water quality, and natural systems
- Save money
- Increase economic value

It is the intention of this document to provide high level objectives that are conceptually approved by the City Commission and leadership. The actions listed under each category are put forth as possible avenues for achievement of the approved goals, and do not represent required or prescriptive measures. The plan is a living document intended to evolve over time as the city experiences both progress and challenges.

A progress report will be presented to the City Commission on an annual basis. This annual report will include:

- Summary of progress made toward the previous year's indicators and actions
- Proposed project/action list
- Estimated project costs
- City Staff and budget allocations
- Outside funding opportunities

History

On January 14, 2008 the Winter Park City Commission passed a resolution stating the City would pursue measures to become a certified Green Local Government through the Florida Green Building Coalition (FGBC). In 2009 Public Works Director Troy Attaway hired Tim Maslow to coordinate the city's sustainability efforts and to develop a plan for achieving the certification. In 2011, after working with each department on a multitude of new projects, policies and programs, the city was officially certified as a Green Local Government at the Gold

level, also earning the highest score for a local government that year. The Sustainability Action Plan was originally drafted based upon the structure provided by the Green Local Government certification.

In 2012 the city's Environmental Review and Keep Winter Park Beautiful (Keep America Beautiful affiliate since 1993) boards merged with a shared focus of improving community sustainability and achieving the Green Local Government Platinum certification. The new Keep Winter Park Beautiful and Sustainable (KWPB&S) Advisory Board held monthly workshops in addition to their regularly scheduled monthly board meetings in an effort to develop and refine the Sustainability Action Plan with community involvement. The 2015 SAP, presented by Kris Stenger, Assistant Director of Building, Permitting & Sustainability and Abby Gulden, Sustainability and Permitting Coordinator, was accepted by unanimous vote of the City Commission on February 9, 2015.

2012-2013 KWPB&	5 Board Members	2014-2015 KWPB&S	Board Members		
Mary Dipboye, Chair	James (Bob) Robinson	Michael Poole, Chair	Mark Roush		
Stephen Pategas, V. Chair	Pat Schoknecht	Stephen Pategas, V. Chair	Bruce Thomas		
Michele Hipp	Julia Tensfeldt	Michele Hipp	Steven DiClemente		
Michael Poole	Kent Tse	Raymond Randall	Mary Dipboye		
Raymond Randall	Laura Walda	Pat Schoknecht	John Tapp		
John Rife	Carol Kostick	Julia Tensfeldt	Fred Kosiewski		
Lucy Roberts	Mark Roush	Laura Walda	Cathy Blanton		
Joseph Robillard		Carol Shenck (Kostick)			

About the 2021 SAP Update

Overview

The year 2020 was the first target goal year for many of the 2015 SAP Metrics. Due to the COVID-19 Pandemic, data from 2020, in many cases, is not comparable to previous years. For this reason, many of the metrics' trend data in this document are expressed through the year 2019 (pre-COVID-19 pandemic). The City's progress toward 2015 SAP Objectives, Indicators and Actions through 2020 is provided in the 2020 Annual Report available at cityofwinterpark.org/sap.

The 2021 SAP revises baselines, where necessary, for more complete and accurate data collection and analysis. It also includes a new category, Climate Resiliency, to help the better understand and withstand weather and climate-related risks and vulnerabilities. The update also includes actions to assist the city in learning how to apply a racial equity lens to ensure a future where race can no longer be used to predict life outcomes and outcomes for all groups are improved.

2021 SAP Update Community Engagement Process

The 2021 SAP integrates discussion and feedback from joint virtual KWPB&S Advisory Board work sessions, which allowed for public comments, with the following city advisory boards and

respective staff liaisons: Economic Development, Lakes, Parks and Recreation, Tree Preservation, Planning & Zoning, Transportation and Utilities. Additional community input on SAP priorities were gathered using an online survey that had over 200 respondents (over twothirds of which identified as residents). Community input was also gathered from community organizations via an online survey from Hannibal Square Heritage Center, Ideas for Us Orlando, League of Women Voters Orange County, The Nature Conservancy, WP Garden Club, WP History Museum and WP Public Library.

Keep Winter Park Beautiful & Sustainable Advisory Board

The mission of Keep Winter Park Beautiful and Sustainable (KWPB&S) is to improve the quality, sustainability and aesthetics of our environment in order to create a healthier, more beautiful place to live, work, and play.

2021 Board Members	Appointed By	End of Term
Ben Ellis, Chair	Mayor Anderson	2024
Danielle Flipse, Vice Chair	Commissioner Sullivan	2023
Carey Bond	Commissioner DeCiccio	2022
Lynne Bachrach	Mayor Anderson	2024
Kay Hudson	Mayor Anderson	2024
Stephen Pategas	Commissioner Weaver	2022
Rosemary Salow	Commissioner Cooper	2022

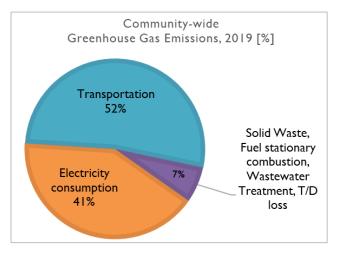
Highlights and Accomplishments

- > East Central Florida Regional Resilience Collaborative Partner
- > America In Bloom's 2020 Outstanding Achievement Award for Environmental Efforts
- SolSmart Gold Designee
- > EV Charging Infrastructure Readiness Ordinances (<u>3203-21</u>, <u>3204-21</u>)
- Backyard Chicken Permit Pilot Program Ordinance (3182-20)
- > Single-use Products Policy for City Facilities Pilot Program Resolution (2238-20)
- > Electrified the Building & Permitting Department's entire fleet
- > Purchased 20MWof utility-scale solar, expanding the city's renewable portfolio
- Launched Green Business Recognition Program
- Collaborations with UCF and Rollins College students on energy benchmarking and Green Business recruitment
- <u>Rollins College Bonner Leaders Program</u> Partner
- Awarded over \$100,000 in Florida Department of Transportation Keep America Beautiful Florida Affiliates Grants
- Single-stream Residential Recycling Program including <u>Schedule Reminding and Waste</u> <u>Lookup Tool Digital Service</u>
- > Electric Vehicle Charging Stations available to the public throughout the city at no cost
- > Residential audit and rebate programs encouraging <u>energy</u> and <u>water conservation</u>

Climate Resiliency

The Climate Resiliency category outlines long-term objectives and short-term actions focused on improving the city's capacity to cope with climate change impacts, respond or reorganize in ways that allow the city to maintain its essential functions while also maintaining the capacity for adaptation, learning and transformation. The 2019 Intergovernmental Panel on Climate Change (IPCC) <u>Special Report on Global Warming of 1.5°</u> asserts that human activities are estimated to have caused approximately 1°C of global warming and human-induced global warming will likely reach 1.5°C (2.7°F) between 2030 and 2052. Warming at this level is projected to increase the mean temperature of most land and ocean regions, increase hot extremes in most inhabited regions, and increase climate-related risks to health, livelihoods, food security, water supply, human security and economic growth.

The city's Community-wide Greenhouse Gas (GHG) Emissions Inventory consists of all major direct and indirect GHG emissions generated and occurring within the City of Winter Park's administrative boundary. Transportation-related (52%) and electricity consumption-related (41%) activities contribute the largest proportion of greenhouse gases emissions in the city. As a municipally owned-utility, the Electric Utility is uniquely situated to increase the percentage of its energy portfolio coming



from renewable and clean alternative sources. Transitioning to 100% renewable energy, for electricity by 2035 and for transportation by 2050 may be more feasible and accessible for the city of Winter Park than many of its neighbors given that it has purchasing power over its electricity and is implementing policies that will *ready* future developments for a transition to electric vehicles.

OBJECTIVES

- 1. Increase the city's resiliency to the impacts of climate change, ensuring a healthy, livable and sustainable community for present and future generations
- 2. Increase proportion of renewable energy in Winter Park Electric Utility's Energy portfolio
- 3. Reduce community wide greenhouse gas emissions
- 4. Encourage on-site renewable energy generation for residential and commercial buildings
- 5. Ensure access to affordable, healthy food options (community gardens, grocery stores or farmers markets)

INDICATORS

	Indicator Description	Baseline	2025 Target	2035 Target
CR-I	Proportion of renewable energy in Winter Park Electric Utility's Energy portfolio ¹ – Baseline Year: 2012	4%	60%	100%
CR-2	Community wide greenhouse gas emissions [Tons of carbon dioxide equivalent] ² – Baseline Year: 2018	398,919	14% less than baseline year	41% less than baseline year
CR-3	WP Electric Utility Customers with Solar ³ - – Baseline Year: 2012	7	Upward trend	Upward trend
CR-4	Proportion of Residents within 1/2 mile of affordable, healthy food options ⁴ – Baseline Year: 2012	-	50%	maintain

¹In 2020, the proportion was 20%; in 2024, 20MW bulk solar purchase will come online, raising the proportion to 40%; the 2025 target assumes an additional 10MW of renewables being added to the portfolio.

²2018 is the earliest year of available transportation emissions data using Google EIE tool

³By the end of 2020, there were 79 WP Electric Utility Customers with Solar

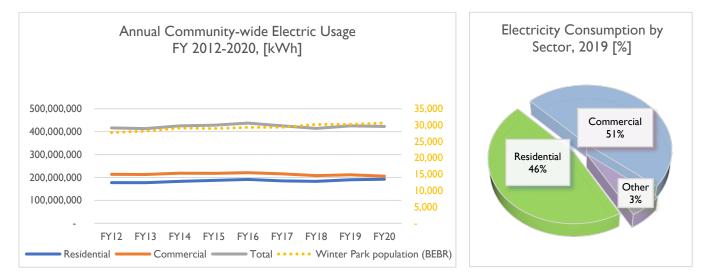
⁴The baseline for this updated indicator will be calculated in 2022, previous indicator did not include "affordable" identifier

Projected Implementation Year	Action	Action Type	Responsible Department(s)
Continue Annually	Evaluate potential for increasing proportion of Winter Park Electric Utility's Energy Portfolio coming from renewable resources (e.g., wind, solar)	/inter Park Electric Utility's Energy folio coming from renewable resources Policy	
Continue Annually	Conduct Community-wide Greenhouse Gas		Sustainability Program
Continue Annually	Participate in Regional Sustainability and Resilience Professional Networks (Urban/Southeast/Florida Sustainability Directors Networks, East Central Florida Regional Resilience Collaborative, Good Food Central Florida Regional Policy Council, etc.)	Collaboration	Sustainability Program
Continue Annually	Provide community wide education and outreach on reducing consumption of carbon-intensive foods	Program	Sustainability Program
Continue Annually	Provide green building best practices education to building professionals and residents	Program	Building & Permitting
2022	Pass resolution committing the City to 100% of all electricity consumed in the City to come from renewable energy resources by 2035 and to 100% of all energy (electricity,	Policy	Sustainability Program, WP Electric Utility

	transportation and stationary combustion) used in the City to come from renewable resources by 2050		
2022	Solicit proposals to meet 100% Renewable Goals	Project	Sustainability Program, Procurement
2022	Develop a policy to replace gas-powered leaf blowers with alternatives that have fewer environmental and health impacts (e.g., air quality, noise pollution)	Policy	Sustainability Program
2022	Update Land Development Code, to allow food processing and handling in accordance with F.S. 500.80 (Cottage Food Operations) as a home occupation to encourage local food production	Policy	Planning & Transportation, Sustainability Program
2022	Revisit Backyard Chicken Pilot Program (exp. September 2022) to evaluate program outcomes and possibility of expanding and extending the program	Policy	Sustainability Program, Planning & Transportation
2022	Promote programs that expand access to seeds and increase the community's capacity to grow food locally	Program	Sustainability Program, Communications
2022	Provide community wide education and outreach that promotes growing edible gardens at home, community supported agriculture and local food consumption	Program	Sustainability Program
2023	Identify risks and vulnerabilities that climate change poses to the City of Winter Park by conducting a Climate Risk and Vulnerability Assessment	Project	Sustainability Program
2023	Work with Planning & Transportation Department to ensure Comprehensive Plan Update incorporates sustainability and resilience related goals, objectives and policies	Project	Planning & Transportation, Sustainability Program
2023	Research and design policies to increase green building standard requirements in residential & commercial developments	Policy	Sustainability Program, Planning & Transportation
2024	Research and explore opportunities to create resiliency hubs in the city	Project	Sustainability Program, Public Works
2025	Upon completion of Climate Risk and Vulnerability Assessment, create Climate Mitigation and Adaptation Plan (CMAP)	Project	Sustainability Program
2025	Ensure CMAP includes actions that will reduce the impacts of climate change on human health, especially for the most vulnerable communities	Project	Sustainability Program

Energy

The Energy category focuses on measures that can reduce the environmental consequences of the construction, reconstruction and operation of buildings and infrastructure with a focus on energy efficiency and energy conservation. With buildings' energy usage contributing to nearly half of all of the community-wide greenhouse gas (GHG) emissions in 2019, implementing the prescribed actions is critical to achieving a more sustainable city. Electricity is primarily being used to power buildings for commercial (51%) and residential (46%) activities, while a smaller fraction (3%) is being used to power city scale infrastructure such as streetlights and transporting water and waste water. Between 2012 and 2019, electric usage per capita remained generally stable.



All utility data is sourced from the city's Comprehensive Annual Financial Reports, which can be reviewed on the city's website.

OBJECTIVES

- I. Increase energy efficiency of residential and commercial buildings
- 2. Increase energy conservation in residential and commercial sectors
- 3. Increase residential and commercial customers knowledge of energy efficiency and conservation best practices and benchmarking tools

INDICATORS

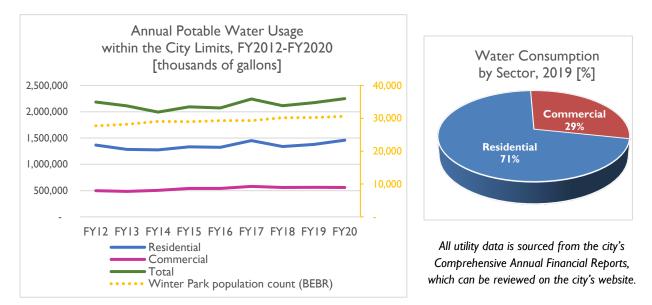
	Indicator Description	Baseline	2025 Target	2035 Target
E-I	Energy usage intensity in residential buildings [kWh/customer/year] ¹ – Baseline Year: 2012	15,263	TBD	TBD
E-2	Energy usage intensity in commercial buildings [kWh/customer/year] ¹ – Baseline Year: 2012	91,850	TBD	TBD
E-3	Residential building audits performed annually – Baseline: Average # of audits/yr between 2017-2020	63	75	100
E-4	Commercial buildings added to benchmarking portfolio per year– Baseline Year: 2012	0	10	25

¹Targets will be determined and baseline adjusted in 2022 to be in kWh/ square foot/year after GIS analysis project

Projected Implementation Year	Action	Action Type	Responsible Department(s)
Continue Annually	Promote existing Energy Conservation opportunities such as audits and rebates	Program	Sustainability Program, WP Electric Utility, Communications
Continue Annually	Provide energy conservation kits and solar feasibility reports for customers that undergo energy audits	Program	Sustainability Program, WP Electric Utility
Continue Annually	Continue Sustainability Education Program in Winter Park Schools that includes energy and water conservation education	Program	Sustainability Program, WP Electric Utility
Continue Annually	Provide technical assistance and education to commercial property owners and tenants on Energy Star Portfolio Manager	Program	Sustainability Program
2022	Identify methodology for expressing energy use intensity in kWh per square foot for residential and commercial customers	Project	GIS, Sustainability Program
2023	Explore incentive programs for commercial customers that encourage energy conservation	Program	Sustainability Program, WP Electric Utility
2025	Explore feasibility of residential energy and water benchmarking and disclosure	Project	Sustainability Program, WP Electric Utility, WP Water & Wastewater Utility
2025	Establish commercial building energy and water benchmarking and disclosure policy	Policy	Sustainability Program, WP Electric Utility, WP Water & Wastewater Utility

Water

The Water category focuses on measures that can increase water efficiency and water conservation in residential and commercial sectors. In the City of Winter Park, residential and commercial customers use potable water for indoor and outdoor (irrigation) purposes. Over the last decade, potable water has remained generally stable, reflecting the minimal change in population growth over that time. The majority of potable water consumed in the city is used by residential customers (71%), with nearly half of residential water usage being spent on irrigation.



OBJECTIVES

- 1. Increase water efficiency of residential and commercial buildings
- 2. Increase water conservation in residential and commercial sectors
- 3. Increase residential and commercial customers knowledge of water efficiency and conservation best practices and benchmarking tools

INDICATORS

	Indicator Description	2012 Baseline	2025 Target	2035 Target
W-I	Water usage intensity in residential buildings [gallons/customer/year] ¹	123,651	TBD	TBD
W-2	Water usage intensity in commercial buildings [gallons/customer/year] ¹	294,098	TBD	TBD
₩-3	Reclaimed water usage [gallons/year]	To be provided by WW	maintain	50% more

¹Targets will be determined (in per capita) upon the renewal of St. Johns River Water Management District Consumptive Use Permit in 2025

Projected Implementation Year	Action	Action Type	Responsible Department(s)
Continue Annually	Promote existing water conservation opportunities such as audits and rebates	Program	WP Water & Wastewater Utility, Sustainability Program, Communications
Continue Annually	Promote water conservation education to residential and commercial customers through on-line and print campaigns	Program	WP Water & Wastewater Utility, Sustainability Program, Communications
2022	Implement Advanced Metering Infrastructure (AMI) to allow for more effective monitoring of water usage, system efficiency, detecting malfunctions and recognizing irregularities	Project	WP Water & Wastewater Utility
2022	Implement Water/Sewer Impact Fee Deferral Program throughout the city to reduce customer upfront costs for connecting to the sewer system	Policy	WP Water & Wastewater Utility
2022	Explore grant opportunities for septic to sewer conversion projects	Project	WP Water & Wastewater Utility
2022	Increase public awareness of Florida-friendly landscaping and landscape irrigation regulations to residential and commercial customers	Program	WP Water & Wastewater Utility, Sustainability Program, Building & Permitting, Communications
2023	Explore the creation of an incentives program for commercial customers that encourages water conservation	Program	Sustainability Program, WP Water & Wastewater Utility
2023	Using AMI system to identify customers in non- compliance with SJRWMD irrigation policies and provide non-compliant customers with water conservation best practices	Program	WP Water & Wastewater Utility, Sustainability Program
2024	Identify methodology for expressing water use intensity in gallons per capita	Project	WP Water & Wastewater Utility, Sustainability Program

	upon renewal of SJRWMD Consumptive Use Permit		
2025	Explore feasibility of residential energy and water benchmarking and disclosure	Project	Sustainability Program, WP Electric Utility, WP Water & Wastewater Utility
2025	Establish commercial building energy and water benchmarking and disclosure policy	Policy	Sustainability Program, WP Electric Utility, WP Water & Wastewater Utility
2025	Upon renewal of SJRWMD Consumptive Use Permit, review water utility rate structure to increase water conservation	Project/Policy	WP Water & Wastewater Utility
2025	Upon renewal of SJRWMD Consumptive Use Permit, expand reclaimed water system	Project	WP Water & Wastewater Utility

Community Engagement & Green Economy

The Community Engagement and Green Economy category outlines long term objectives and actions focused on encouraging residents, business owners, schools and other organizations in the city of Winter Park to begin incorporating more sustainable solutions in their daily activities. To foster and build upon a culture that values health, environmental stewardship and financial wellbeing, the city will support public engagement campaigns to educate, inspire and offer some of the most cost effective, healthy and easy solutions. The campaign will seek to engage diverse partners and sectors of the community; create a shared community vision, goals and progress indicators of a low-carbon future; connect individuals and organizations to education, tools and resources; and celebrate positive changes and successes. A fully engaged community is the key to successfully making the city a more sustainable community.

OBJECTIVES

- 1. Communicate, educate and motivate residents to begin incorporating more sustainable solutions in their daily actions to change their behaviors in ways that support the objectives of the Sustainability Action Plan
- 2. Engage businesses, offer sustainable solutions and recognition for greening their daily operations that support the objectives of the Sustainability Action Plan
- 3. Provide opportunities for schools to implement sustainable practices in their daily operations that support the objectives of the Sustainability Action Plan
- 4. Work collaboratively with community organizations to identify and implement sustainable solutions that support the objectives of the Sustainability Action Plan

INDICATORS

	Indicator Description	Baseline	2025 Target	2035 Target
CEGE-I	Community engagement events – Baseline Year: 2012	12	No less than 12	No less than 12
CEGE-2	Green Businesses Recognized per year – Baseline Year: 2012	0	10	25
CEGE-3	Green School Grant Funding ¹ – Baseline: Average amount of funding between 2017-2020	\$3,300	Equal or more than \$3,300/year	Equal or more than \$3,300/year

Projected Implementation Year	Action	Action Type	Responsible Department(s)
Continue Annually	Promote sustainability program initiatives through various social media platforms and traditional print media, at in-person events, and maintain and update	Project	Sustainability Program, Communications

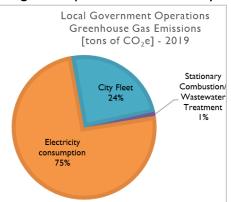
	Sustainability Program's website		
Continue Annually	Administer Green Business Recognition Program and promote Green Business initiatives	Program	Sustainability Program, Communications
Continue Annually	Administer Green School Grant Program and Green Education opportunities for educators	Program	Sustainability Program
Continue Annually	Partner with local universities (e.g., University of Central Florida, Rollins College) to provide educational trainings on sustainability- related subjects	Project	Sustainability Program
Continue Annually	Ensure all requirements are met for remaining a Keep America Beautiful affiliate	Program	Sustainability Program
Continue Annually	Provide volunteer opportunities for litter cleanups of city's lakes and rights-of-way	Project	Sustainability Program, Lakes Division
Continue Annually	Provide volunteer opportunities for beautification of city parks and greenspaces	Project	Sustainability Program, Parks & Recreation
Continue Annually	Provide education on Sustainability Program at Neighboring Community Events	Project	Sustainability Program
2022	Determine the feasibility of participating in America In Bloom's annual nationwide competition	Project	Sustainability Program
2022	Create and install Environmental Education opportunities at parks and city buildings (e.g., Howell Branch Creek)	Project	Sustainability Program, Parks & Recreation, Communications
2022	Facilitate Green Business networking events	Project	Sustainability Program
2023	Create Green Event Guide and Volunteer Program for city events	Project	Sustainability Program, Parks & Recreation, Communications

Local Government Operations

The Local Government Operations category outlines long term objectives and actions focused on reducing GHG emissions of municipal operations, increasing municipal facilities' resiliency to

the impacts of climate change, and encouraging resource protection and conservation. Creating healthier and more comfortable environments for employees and building occupants are also anticipated benefits from the city renovating existing buildings and building new city facilities to meet high performance, green building standards.

The city's Local Government Operations GHG Emissions Inventory consists of all major direct

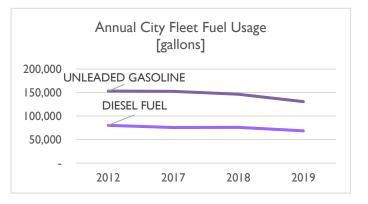


emissions from the burning of fossil fuels by the City's fleet and indirect GHG emissions associated with the electricity consumption for local government operations. City Fleet-related (24%) and electricity consumption-related (75%) activities contribute the largest proportion of greenhouse gases emissions in government operations. Energy usage has remained generally stable since the baseline year of 2012. Energy audits of city facilities would allow for the city to identify and select projects that will provide the greatest energy reduction at the best return on



investment. Recent potable water usage has declined from the baseline. Several city parks use reclaimed water, lake or well water, reducing the amount of high-quality potable water being used by the city to irrigate. Efforts to expand the use of lower-quality water for park irrigation are planned.

City fleet gasoline and diesel consumption has remained generally stable since the baseline year. Establishing a policy that creates a vehicle replacement and purchase tiered structure that prioritizes zero tail pipe emissions and high fuel efficiency vehicles would help further fleet electrification and fuel usage reduction.



OBJECTIVES

- I. Increase the city's municipal facilities resiliency to the impacts of climate change
- 2. Reduce Local Government Operations (LGO) greenhouse gas emissions
- 3. Increase energy and water efficiency of existing and new city-owned and city-operated facilities
- 4. Encourage on-site renewable energy generation at city-owned and city-operated facilities
- 5. Reduce fossil fuel consumption by city fleet vehicles
- 6. Communicate, educate and motivate city employees to incorporate more sustainable solutions in their daily actions to change their behaviors in ways that support the objectives of the Sustainability Action Plan
- 7. Reduce the amount of waste generated from local government operations
- 8. Encourage reuse and other means of disposal that divert generated waste away from the landfill

INDICATORS

	Indicator Description	2012 Baseline	2025 Target	2035 Target
LGO-I	Local Government Operations greenhouse gas emissions [Tons of carbon dioxide equivalent]	11,315	40% less than baseline year	80% less than baseline year
LGO-2	Energy usage for Local Government Operations [MWh/yr]	16,471	5% less	15% less
LGO-3	Installed renewable energy capacity [MW] ¹	0	TBD	TBD
LGO-4	City-owned and city-operated facilities audited	3	50%	100%
LGO-5	Potable water usage [million gallons] ²	49.5	50% less	TBD
LGO-6	City Fleet fuel usage [gallons of unleaded gasoline] ³	143,268	Downward trend	TBD
LGO-7	City Fleet fuel usage [gallons of diesel fuel] ³	80,235	Downward trend	TBD
LGO-8	Number of city-owned Electric Vehicles ⁴	0	Increase	Increase
LGO-9	Number of Electric Vehicle charging Stations available for city business use [ports] ⁴	I	Increase	Increase

¹By the end of 2020, the city had 266kW of installed solar capacity (City Fleet Building, Aloma Water Treatment Plant) ²Target will be determined upon the renewal of St. Johns River Water Management District Consumptive Use Permit in 2025

³Target will be determined after pathway to reach 100% Renewable Goals proposal is received

⁴By the end of 2020, the city had 6 electric vehicles (2% of total fleet) and 7 EV Charging Ports for Fleet Use

Projected Implementation Year	Action	Action Type	Responsible Department(s)
Continue Annually	Monitor city buildings' energy and water usage through ENERGY STAR PortfolioProgramManagerImage: Image:		Sustainability Program
Continue Annually	Conduct Local Government Operations Greenhouse Gas Emissions Inventory	Project	Sustainability Program
Continue Annually	Shift from potable water to lower-quality water resources (e.g., well or lake water) for		Parks & Recreation, WP Water & Wastewater Utility Utilities
Continue Annually	Ensure that all new, significantly renovated, occupied, city- owned and city-operated buildings will be designed and built to incorporate measures that would allow them to be FGBC certified or certified at a minimum of LEED "Silver Certification" level or a comparable performance criterion	Policy	Public Works, Sustainability Program
Continue Annually	Shift from fossil-fuel powered landscaping equipment to electric powered equipment as equipment is being replaced	Policy	Parks & Recreation
Continue Annually	Continue to partner with FDOT's reThink Your Commute program to encourage employees' use of SunRail, Lynx, vanpools and bike and walking to work	Program	Human Resources, Sustainability Program
2022	Solicit proposals for energy conservation audits for all city facilities	Project	Public Works, Procurement, Sustainability Program, WP Electric Utility
2022	Establish sustainable & resilient fleet policy that creates a vehicle replacement and purchase tiered structure that prioritizes zero tail pipe	Policy	Fleet, Sustainability Program

	emissions and high fuel		
	efficiency vehicles		
2022	Develop educational workshop for city employees that cover best practices for workplace energy & water conservation, sustainable transportation modes and waste management	Program	Sustainability Program, Human Resources
2022	Revisit Single Use Product Policy Pilot Program (exp. May 11, 2022) to evaluate program outcomes and possibility of expanding and extending the program	Policy	Sustainability Program, City Administration
2022	Review Best Workplaces for Commuters criteria and apply for designation	Project	Human Resources, Sustainability Program
2023	Explore establishing a Revolving Energy Efficiency Loan Fund for city owned buildings and infrastructure.	Program	Finance, Public Works, Sustainability Program
2023	Solicit proposals for solar feasibility study for all city facilities	Project	Public Works, Sustainability Program, Procurement, WP Electric Utility
2023	Research energy and water management software capable of identifying low-efficiency city facilities and early detection of usage anomalies	Project	Sustainability Program, Public Works
2023	Update Personnel Policy Manual to reduce idling time by city fleet users and create educational campaign to inform city employees.	Policy/Program	Fleet, Sustainability Program
2023	Identify funding opportunities and training provider for racial equity training for all elected officials and department heads	Program	City Administration, Sustainability Program
2023	Pilot food scrap collection program at City Hall	Project	Sustainability Program
2024	Explore opportunities to install dishwashing machines and water bottle filling stations at city facilities to facilitate the reuse of dishware for city- business meetings and gatherings	Program	Public Works, Sustainability Program

2024	Utilize racial equity lens to assess city policies, initiatives, programs, and budget issues	Program	All City Departments
2024	Design and implement sustainable procurement policy that is fiscally responsible, promotes work health, conserves natural resources, prevents pollution, and aligns with the city's sustainability goals	Program	Procurement, Sustainability Program
2024	Explore ways to quantify waste generated from city offices	Project	Sustainability Program
2025	Upon renewal of SJRWMD Consumptive Use Permit, assess and identify opportunities for water conservation measures for all city facilities	Project/Policy	WP Water & Wastewater Utility

Natural Resources

The Natural Resources category is focused on preserving and enhancing the City of Winter Park's valuable natural features that help make the city such a great place to live. The city is known for its lush tree canopy and pristine lakes. Both of these features provide a multitude of benefits including improved air quality, wildlife habitat, cooler temperatures through reduced urban heat island effect, beautification and increased property values. In recognition of a downward trend from 2012 to 2019, the target goals for tree canopy coverage and greenspace coverage reflect a commitment to reversing the trend.

In 2020, the city's Urban Forestry Division began using <u>i-Tree Canopy</u>. The online tool randomly lays points onto Google Earth imagery and then the user manually classifies what cover class (e.g., tree) each point falls upon. While 500-1,000 points are suggested, the Urban Forestry Division classified 2,000 points, increasing the accuracy of the estimates. Since the

aerial imagery from Google Earth is normally about 2 years old, the assessment presented goes only through 2019.

Using i-Tree Canopy, Urban Forestry was able to determine the city's tree canopy coverage (includes

/0% -						
.0% -	53.75%	52.70%	52.40%	51.25%	50.55%	49.75%
50% - 10% -	37.20%	36.80%	36.50%	35.05%	34.70%	33.10%
0%	•					
20% -	29.05%	30.20%	30.30%	31.50%	31.95%	32.70%
0% -						
0% -	2012	2015	2016	2017	2018	2019

trees and shrubs), greenspace coverage (includes trees, shrubs, grass and herbaceous cover) and greyspace coverage (includes impervious surfaces and buildings). A trend of gradual decline in tree canopy and greenspace coverage and gradual incline of greyspace coverage is evident during the reporting years. Tree canopy loss is most likely attributable to changes in land development use, rather than from extreme weather events. Land development regulations and city programs that protect and expand the existing canopy are critical to ensure tree canopy coverage does not continue to decline.

City parks play a crucial role in residents and visitors mental and physical well-being and stimulate social cohesion. The city's Parks and Recreation Division has consistently exceeded its goal of more than 10 park acres per 1,000 people. Maintaining the percentage of residents living within a half mile from park space will not only ensure that residents are within walking distance of places that are good for their mind and body, but these green areas also help mitigate localized air pollution and provide habitat for numerous animal and plant species.

In 2021, the city's Lakes Division will begin tracking the percentage of the city's Main Lakes meeting the "Good" Water Quality Standard [average annual trophic state index (TSI) below 60]. The city's Main Lakes include Lakes Baldwin, Berry, Killarney, Maitland, Mizell, Osceola, Sue and Virginia. TSI is a classification system designed to "rate" individual lakes, ponds and reservoirs based on the amount of biological productivity occurring in the water. Using the index, one can gain a quick idea about how productive a lake is.

OBJECTIVES

- I. Maintain and expand an equitable urban tree canopy
- 2. Increase overall greenspace
- 3. Reduce grey space (including paved parking lot, street, sidewalk, rooftop, impermeable)
- 4. Maintain percentage of residents living within a half mile from park space
- 5. Maintain number of lakes meeting good water quality standard
- 6. Increase residents' and businesses' knowledge of best practices for pollution prevention of natural water resources, including impacts of stormwater runoff and over-fertilizing.

INDICATORS

	Indicator Description	Baseline	2025 Target	2035 Target
NR-I	Tree Canopy Coverage - Baseline Year: 2019	33.10%	Maintain	5% more
NR-2	Greenspace Coverage - Baseline Year: 2019	49.75%	Maintain	5% more
NR-3	Greyspace Coverage - Baseline Year: 2019	32.70%	Maintain	5% less
NR-4	Residents living within ½ mile from park space- Baseline Year: 2012	95%	TBD	TBD
NR-5	Percentage of City of Winter Park's Main Lakes ² meeting Good Water Quality Standard [Average Annual Trophic State Index (TSI) below 60] – Baseline Year: 2012	100%	Maintain	Maintain

¹Includes Community Parks, Mini Parks, Neighborhood Parks, Open space/conservation, Special Purpose Parks

²Lakes Baldwin, Berry, Killarney, Maitland, Mizell, Osceola, Sue and Virginia

Projected Implementation Year	Action	Action Type	Responsible Department(s)
Continue Annually	Administer city's tree management program	Program	Urban Forestry
Continue Annually	Consider the usefulness and availability of state and federal grant programs for the acquisition of lands for conservation areas or passive recreation	Policy	City Administration, Parks & Recreation, Planning & Transportation

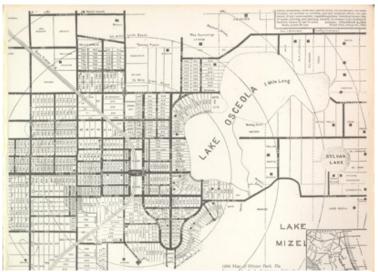
Continue Annually	Administer integrated aquatic plant management program	Program	Lakes Division
2022	Provide Tree Canopy Conservation education to residents and businesses through on- line and print campaigns	Program	Urban Forestry, Sustainability Program
2022	Provide education on pollution prevention of natural water resources (e.g., impacts of stormwater runoff and over-fertilizing) to residents and businesses through on-line and print campaigns	Program	Lakes Division, Sustainability Program
2023	Research establishing an Energy-Savings Tree Giveaway Program that delivers canopy and understory trees to residents	Program	Urban Forestry, Sustainability Program,
2023	Conduct tree equity study to determine if tree canopy cover is distributed in a way that all residents can experience the climate, health and other benefits that trees provide	Project	Urban Forestry
2023	Develop long term reforestation plan to increase tree canopy coverage	Policy	Urban Forestry
2023	Explore funding opportunities to build a green infrastructure (bio- swales, rain gardens, green roofs, etc.) demonstration project within the city limits	Project	Sustainability Program, Stormwater Division

Transportation and Urban Form

The Transportation and Urban Form category is focused on encouraging healthier, more active forms of transportation such as walking, bicycling and using mass transit such as LYNX bus and SunRail commuter rail. As the first planned community in Florida, the city was founded around the concept of walkability and human scaled urbanism. Since owning a car was a rarity in the 1880s, the city's founders designed the original plan around the Train Station which was the

town's first constructed building. Future development was patterned off quarter mile walks around the station.

As discussed in the Climate Resiliency category, transportation is a significant (52%) contributor to the city's community-wide GHG emissions. The category also emphasizes a more human scaled, compact, mixed use neighborhood pattern and design that makes it easier for people to choose these more sustainable transportation options.



The original Town Plan for Winter Park, FL placing the train station in the center with development planned around it. The circles represent quarter mile distances.

Common design elements of complete streets tend to be human scaled, narrow, with continuous sidewalks, bike lanes, landscaping and shade trees. These design characteristics combined with green infrastructure such as bio-swales and rain gardens also help reduce stormwater runoff, enhance lakes water quality and reduce the urban heat island effect.

OBJECTIVES

- 1. Improve pedestrian and bicyclist environments with sustainable and safe transportation infrastructure such as sidewalks, multimodal paths, and transit shelters
- 2. Encourage more human scaled, compact, mixed use land use development and planning
- 3. Create an environment that encourages residents, businesses and visitors to transition to electric and less carbon-intensive modes of transportation
- 4. Achieve a level of air quality that is healthy for all residents and the natural environment
- 5. Increase residents and businesses' knowledge of benefits and importance of sustainable transportation choices

INDICATORS

	Indicator Description	2012 Baseline	2025 Target	2035 Target
TUF-I	Sidewalk/Street improvements allowing for pedestrian and bicyclist use [Linear feet] ^{1,2} - <i>Starting year 2022</i>	-	l mile (cumulative)	3.5 miles (cumulative)
TUF-2	Pedestrian infrastructure improvements (enhanced crossings, benches, water bottle filling stations, sitting shelters) [improved site/year] ² - Starting year 2022	-	TBD	TBD
TUF-3	Bicyclist infrastructure improvements (enhanced crossings, bike racks, bike storage, bike repair stations) [improved site/year] ² - Starting year 2022	-	TBD	TBD
TUF-4	Improved transit stops (benches, transit shelters, waste receptacles, etc.) [improved transit stop/year] ² - Starting year 2022	-	TBD	TBD
TUF-5	Public EV Charging Stations [# of Ports]**	7	Maintain	Maintain

 $^{\rm I}{\rm E.g.}$, converting a sidewalk to a mixed use trail or adding a bike lane to an existing road

²Targets for TUF-1,TUF-2,TUF-3 and TUF-4 will be determined and baseline adjusted upon completion of Mobility Plan

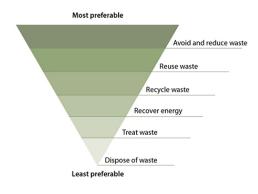
³As of 2020, the city has 14 EV Charging Ports for Public Use

Projected Implementation Year	Action	Action Type	Responsible Department(s)
Continue Annually	Encourage private developments to increase safety and ease of walking and cycling through site plan review process	Policy	Planning & Transportation
Continue Annually	Publicize affordable & workforce housing located within a quarter mile from major employers	Program	Economic Development, Planning & Transportation
Continue Annually	Maintain Electric Vehicle Charging Stations available to the public	Program	Sustainability Program
Continue Annually	Provide education on pedestrian and bicyclist safety, routes, and proximity to amenities to residents and businesses through on-line and print campaigns	Program	Planning & Transportation, Police Department
Continue Annually	Provide education on benefits and importance of sustainable transportation choices to residents and businesses	Program	Planning & Transportation, Sustainability Department

	through on-line, print campaigns, and in-person events		
Continue Annually	Evaluate bus stop infrastructure for accessibility and amenities	Program	Planning & Transportation
2022	Develop Mobility Plan, considering SunRail, Lynx, safe routes to schools, Complete Streets, and linkages of the City's trails with adjacent counties and municipalities	Policy	Planning & Transportation, Sustainability Program
2022	Consider waiving building permit fee for EV Charging Station installation in residential and commercial properties	Policy	Building & Permitting
2023	Explore opportunities to pilot an autonomous electric shuttle	Project	City Administration, Economic Development, Sustainability Program
2023	Improve bike storage at SunRail Station (e.g., bike shelter)	Project	Planning & Transportation
2023	Work with Sustainability Program to ensure Comprehensive Plan Update incorporates sustainability and resilience related goals, objectives and policies as it relates to transportation	Project	Planning & Transportation, Sustainability Program
2023	Work with regional transit agencies to expand Lynx and SunRail service in the city	Project	Economic Development, Planning & Transportation, Sustainability Program
2024	Research and implement a Complete Streets Project Design Checklist	Policy	Planning & Transportation

Waste Management

The Waste Management category is focused on reducing the amount of waste generated, encouraging the reuse and repair of products, and diverting waste from the landfill. The EPA developed the non-hazardous materials and waste management hierarchy in recognition that no single waste management approach is suitable for managing all materials and waste streams in all circumstances. The hierarchy ranks the various



management strategies from most to least environmentally preferred.

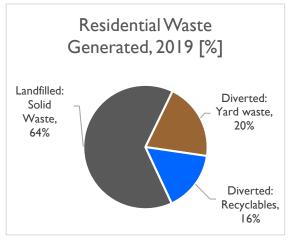


The City of Winter Park has a franchise agreement with WastePro for hauling of solid waste, yard waste and recyclables from residential properties. Under this contract, WastePro hauls solid waste and yard waste to the Seminole County Transfer Station. Solid waste is landfilled and yard

waste is used primarily as road cover at the landfill, allowing yard waste to be counted as diverted waste. WastePro hauls recyclables to the Orange County Transfer Station. There, recyclables are graded by Waste Management as being "acceptable" or "rejectable" based on the level of contamination. Acceptable loads are transported to Waste Management's sorting

facility in Cocoa for sorting, baling and compaction and then prepared for market. Unacceptable loads are landfilled. In recent years, the city has had very few rejected loads. Consistency in updating residents to what is acceptable and not acceptable in the recycling bin is key to keeping rejections low.

It is important to recognize that at the top of the waste management hierarchy is avoidance and reduction of waste. The city is leading by example with its Single Use Product Policy Pilot program that prohibits plastic bags, plastic straws and



Styrofoam products at city facilities. The Green Business Recognition Program provides a way

for businesses to receive recognition for switching from single-use to reusable and compostable alternatives. It is critical to reinforce the message that most environmentally preferable choice an individual can make in regards to waste is to not create it in the first place.

OBJECTIVES

- I. Reduce the amount of waste generated
- 2. Increase repair, reuse and donation of materials
- 3. Divert waste generated away from the landfill

INDICATORS

_	Indicator Description	2012 Baseline	2025 Target	2035 Target
WM-I	Residential Waste Generated [tons] ¹	14,714	5% less	10% less
WM-2	Residential Solid Waste Landfilled [tons]	9,890	10% less	20% less
WM-3	Residential Waste Diverted from Landfill [tons] ²	4,824	5% less	10% less

¹Includes tonnage collected from residential households (solid waste, yard waste and recycling)

²Includes tonnage of waste diverted for other purposes (i.e., recyclables recycled and yard waste used for landfill cover)

Projected Implementation Year	Action	Action Type	Responsible Department(s)
Continue Annually	Provide in-person, online and print education on waste management hierarchy (reduce, reuse, recycle)	Program	Sustainability
Continue Annually	Hold Annual Household Hazardous Waste (HHW) and Electronics Waste Collection Event	Program	Sustainability Program
Continue Annually	Publicize Regional Partners' Waste Diversion Programs (HHW & E-Waste Collection Events, Food Scrap Collection, etc.) and Drop-Off Facilities	Project	Sustainability Program
Continue Annually	Provide composting education and backyard composters to residents	Program	Sustainability Program
Continue Annually	Provide residents with online waste management tool that provides collection	Program	Sustainability Program

Glossary

<u>Best Work Places for Commuters</u> is an innovative membership program that provides qualified employers with national recognition and an elite designation for offering outstanding commuter benefits such as offering at least \$30 per month towards a transit pass to employees, employee shuttle to transit stations, etc.

<u>Carbon-intensive foods</u> include beef (6.61 lbs. of CO_2e per serving), cheese (2.45 lbs. of CO_2e per serving), and other animal-based products.

<u>Climate change</u> refers to a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use.

<u>Climate Resilience</u> The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation.

<u>Complete Streets</u> are streets for everyone. They are designed and operated to prioritize safety, comfort, and access to destinations for all people who use the street, especially people who have experienced systemic underinvestment or whose needs have not been met through a traditional transportation approach, including older adults, people living with disabilities, people who cannot afford or do not have access to a car, and Black, Native, and Hispanic or Latino/a/x communities. Complete Streets make it easy to cross the street, walk to shops, jobs, and schools, bicycle to work, and move actively with assistive devices. They allow buses to run on time and make it safe for people to walk or move actively to and from train stations.

<u>Connectivity</u> reduces the distances traveled to reach destinations, increases the options for routes of travel, and can facilitate walking and bicycling. Well-connected, multimodal networks are characterized by seamless bicycle and pedestrian infrastructure, direct routing, accessibility, few dead-ends, and few physical barriers. Increased levels of connectivity are associated with higher levels of physical activity from transportation. Connectivity via transportation networks can also improve health by increasing access to health care, goods and services, etc.

<u>Florida Food Waste Prevention Week</u> raises awareness and inspires action to prevent food waste, save money, reduce hunger and protect the environment.

<u>Florida Green Building Coalition</u> has developed green certification programs that apply to construction projects and local government operations. Seeking FGBC certification demonstrates a commitment to providing your customers with products or services that are green and sustainable.

<u>Food Recovery</u> is the practice of collecting wholesome food that would otherwise go to waste and donating it to local food distribution agencies to help feed those in need.

<u>Google EIE</u> uses exclusive data sources and modeling capabilities in a freely available platform to help cities measure emission sources, run analyses, and identify strategies to reduce emissions — creating a foundation for effective action. Starting in 2021, the city's Greenhouse Gas emissions inventory uses Google EIE estimates for transportation emissions (baseline year 2018).

<u>Green Economy</u> is defined as an economy that is low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.

<u>Green Infrastructure</u> includes a 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 evapotranspirate stormwater and reduce flows to sewer systems or to surface waters.

<u>Greenhouse gases</u> are those gaseous constituents of the *atmosphere*, both natural and *anthropogenic*, that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the Earth's surface, the atmosphere itself and by clouds. This property causes the greenhouse effect. Water vapour (H₂O), *carbon dioxide* (CO_2), *nitrous oxide* (N_2O), *methane* (CH_4) and *ozone* (O_3) are the primary GHGs in the Earth's atmosphere.

<u>Integrated Plant Management Program</u>, established by the City of Winter Park, attempts to meet the challenges of maintaining beneficial plants while minimizing undesirable ones. The program includes chemical, biological and mechanical control methods.

<u>LEED</u> (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world. Available for virtually all building types, LEED provides a framework for healthy, highly efficient, and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement and leadership.

<u>Pay As You Throw</u> is a system in which residents pay for municipal solid waste (MSW) services per unit of waste discarded rather than solely through a fixed fee or property tax.

<u>Racial Equity</u> occurs when race can no longer be used to predict life outcomes and outcomes for all groups are improved.

<u>Reclaimed water</u> is wastewater that has been thoroughly treated to remove harmful organisms and substances, such as bacteria, viruses and heavy metals, so it can be reused.

<u>Renewable energy</u> is energy from sources that are naturally replenishing but flow-limited; renewable resources are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. The major types of renewable energy sources are: Biomass, Hydropower, Geothermal, Wind and Solar.

<u>Resilience Hubs</u> are community-serving facilities augmented to support residents, coordinate communication, distribute resources, and reduce carbon pollution while enhancing quality of life. Hubs provide an opportunity to effectively work at the nexus of community resilience, emergency management, climate change mitigation, and social equity while providing opportunities for communities to become more self-determining, socially connected, and successful before, during, and after disruptions.

<u>Urban Heat Islands</u> occur when cities replace natural land cover with dense concentrations of pavement, buildings, and other surfaces that absorb and retain heat. This effect increases energy costs (e.g., for air conditioning), air pollution levels, and heat-related illness and mortality.

<u>Tree Equity Score</u> is an indicator of whether an area has a sufficient amount of tree canopy cover distributed in a way that all residents can experience the climate, health and other benefits that trees provide.

<u>Tree Management Program</u>, established by the City of Winter Park, maintains existing vigorous trees, removes dead/diseased/dying trees, and replants with a diverse species. The Urban Forestry division is also responsible for maintaining trees in parks and around facilities, trees coexisting with electrical facilities, rights of way trees, and community outreach and education.

<u>Trophic State Index (TSI)</u> is a classification system designed to "rate" individual lakes, ponds and reservoirs based on the amount of biological productivity occurring in the water. Using the index, one can gain a quick idea about how productive a lake is.

Trophic State Index	Trophic State Classification	Water Quality
0-59	Oligotrophic through Mid-Eutrophic	Good
60-69	Mid-Eutrophic through Eutrophic	Fair
70-100	Hypereutrophic	Poor

<u>Waste Management Hierarchy</u>: EPA developed the non-hazardous materials and waste management hierarchy in recognition that no single waste management approach is suitable for managing all materials and waste streams in all circumstances. The hierarchy ranks the various management strategies from most to least environmentally preferred. The hierarchy places emphasis on reducing, reusing, and recycling as key to sustainable materials management.

<u>Wastewater</u> is used water. It includes substances such as human waste, food scraps, oils, soaps and chemicals. In homes, this includes water from sinks, showers, bathtubs, toilets, washing machines and dishwashers.