



# City of Hollywood SUSTAINABILITY ACTION PLAN



# City of Hollywood

## Sustainability Action Plan

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The Sustainable Hollywood Task Force met throughout 2016 to create this Sustainability Action Plan. Input was received from multiple departments, including Public Affairs, Public Works, Public Utilities, Parks and Recreation, Development Services, and the Community Redevelopment Agency. Together, the staff on the Task Force developed the following 99 actions that the City can take to meet 32 identified goals within seven focus areas. Progress towards meeting these goals will be tracked and measured using 22 identified quantitative metrics.

Implementation of the Action Plan will take coordinated effort across multiple departments. Each action has been assigned one or more lead departments. Some of the goals are long term, but many can be implemented right away with minimal investment. The plan is meant to be a living and evolving document which will change as the City's needs change and the knowledge and technologies mentioned within advance and improve.

### Timeline:

- Obtain feedback and comments from department directors on the goals and actions. – January 2017
- Present the Action Plan to the City Commission - March 2017
- Conduct public outreach on the Plan – Winter/Spring 2017
- Begin implementation of Action Plan – Spring 2017



## Sustainable Hollywood Action Plan

### *What is Sustainability?*

Sustainability, in the environmental context, has been articulated several ways. The United Nations defines sustainable development as “development that meets the needs of the present without compromising future generations’ ability to meet their own needs.” The concept of the Triple Bottom Line of sustainability illustrates that, to be sustainable, the three areas in which humans exist must be balanced – our societies, economies, and environment.

For anything to be *sustainable* it must be able to last, continue, or function for a long period of time or indefinitely, generally without any added inputs. A process can only be sustained if the outputs of the process do not reduce or degrade the inputs. When this is applied to human societies and our physical environment, *sustainability* requires that we minimize degradation and damage to our natural resources in order to sustain outputs of society.

### *What is Resiliency?*

Resiliency is the ability to return to an original form after being impacted or the ability to recover quickly from an adverse impact. In nature, it is considered a system’s ability to tolerate disturbances without collapsing. We use the word resiliency to discuss cities because our cities are facing, and will continue to face, impacts related to a rapidly changing climate and sea level rise. Resiliency in the context of the City of Hollywood means creating the physical infrastructure and cultural practices that allow us to hold the form of our City while adapting to changing environmental conditions, such as higher tides. Resiliency means that while the physical environment changes, the City remains a viable and attractive place to live, work, and play.

### *What does Sustainability mean in practice?*

In practice **sustainability** means maximizing social equity and economic well-being while minimizing environmental impact. It is finding ways to achieve our development and growth goals that provide opportunities and access for the greatest number of people while both enhancing the positive and reducing the negative impact on the environment. Sustainability is separating economic growth and community development from environmentally damaging resource use and practices.

### *Why should a City strive to be Sustainable and Resilient?*

According to the United Nations Environmental Program, cities, while taking up only 3% of the Earth's surface, are responsible for a majority of waste production and energy use. Approximately half of all solid waste, 60-80% of greenhouse gasses and 75% of consumption of natural resources, can be attributed to cities. As much as 80 percent of the world's population is expected to reside in urban areas by 2050. Because cities are responsible for so much consumption and waste production, actions taken at the city level have a huge impact. Current technology and minimum investments can lead to reductions of waste production, energy, and water use which, taken cumulatively, can reduce global environmental impact.

Cities are poised to have an incredible impact and make progress towards sustainability and resiliency. Many goals of sustainability include broader national and international goals, such as the agreements decided in Paris in 2015 for global carbon emission reduction. Achieving national and international targets requires adding up actions at smaller scales. Cities are able to contribute to meeting these goals through actions within their jurisdictions.

Large-scale resiliency and environmental goals such as clean air, clean water, reduced emissions, increased mobility, reduced hunger and poverty, and greater biodiversity have global appeal. The individual strategies to achieve these goals may be different from community to community and tailored to meet the needs of the people, culture, and environment found locally. Cities are in the position to customize strategies for maximum success under their individual conditions. Cities also control many of the arenas that hold the largest challenges and opportunities for achieving resiliency goals. Cities control infrastructure, zoning, building codes, and utilities. In this way, cities can directly impact resiliency and sustainability through their own actions and indirectly impact it by creating a framework of guidelines, regulations, and incentives which allow individuals and businesses to achieve sustainability and resiliency goals.

Achieving resiliency goals benefits cities and their residents by:

- Improving efficiency of municipal buildings, fleet, and utilities means the municipality saves money, allowing tax dollars to be allocated to other initiatives.
- Creating urban density and mixed use developments, coupled with mobility improvements such as public transit and bike and pedestrian infrastructure, relieves traffic congestion, improves local air quality, and makes the City more accessible to a greater number of people.
- Increasing transit, walking, and biking stimulates the local economy. Less money spent on transportation means more money expended in the community.

Proximity to busy sidewalks and bike lanes has been shown to increase business revenues by as much as 60%. Neighborhoods with higher walkability scores or which are adjacent to bike lanes or trails have higher property values than comparable neighborhoods without those same amenities. ([source](#))

- Reducing vehicle use improves air quality and respiratory health as vehicles contribute approximately half of all urban air pollution.
- Vibrant and accessible downtowns created from sustainable practices are attractive to tourists, new residents, and businesses.
- Reducing energy and transportation costs for residents.
- Attraction of “green” businesses and creation of “green” jobs.
- Increased resiliency of built infrastructure and communities to changing environmental conditions such as sea level rise, storm surges, and weather extremes.

### *What are the unique challenges faced by Florida and Hollywood?*

A major reason to plan for resiliency at a local level is that all locations have different needs, challenges and opportunities. The state of Florida looks different than much of the rest of the country, both physically and demographically, and Hollywood is unique in Florida. The City of Hollywood’s plan for ensuring sustainability now, and in the future, will have different requirements than other places throughout the state and country.

South Florida faces a major challenge with tidal flooding and Hollywood is no exception. Globally, the average sea level has risen 3 inches since 1992. Sea level rise in South Florida has kept pace with global averages however it is projected to outpace the global average in the future. The rise has been a result of melting sea ice and thermal expansion caused by increased average global temperatures, which are in turn a result of an increase in the heat trapping greenhouse gases contained in the atmosphere. These gases are primarily a result of human activities such as fossil fuel combustion and land use change. The higher average sea levels result in higher tides which impact infrastructure through flooding during exceptionally high tide events and storm surges.

Sea level rise also pushes salt water into our aquifer, an underground area of water storage. South Florida gets its water from aquifers, primarily the Biscayne. As sea levels rise salt water pushes into the aquifer causing salt water intrusion and requiring well fields to move farther and farther west and increasing the cost of water treatment by requiring desalination.

The demographics of Florida are not the same as other parts of the country. South Florida has a dense, diverse urban population. In addition to its year-long residents

there is a large population of seasonal residents and tourists. Each of these groups has different needs and interests in the City and its infrastructure.

### *Sustainable Hollywood Action Plan*

The Sustainable Hollywood Action Plan is an acknowledgement of our commitment to a common goal of creating a sustainable future. The plan was developed over the course of a year by a task force made up of staff from multiple departments across the City. The end result is a document outlining 99 actions to be taken by the City for the purpose of meeting 32 set goals. Progress towards these goals will be measured using 23 identified quantitative metrics listed within the plan. Achievement of these goals and progress within those metrics will rely on coordinated efforts across departments and throughout the community.

### *What does Sustainable Hollywood wish to achieve?*

*Vision statement:* Hollywood, Florida strives to be a model of sustainability by recognizing the environment as an asset, and as such, works to reduce the impacts of municipal operations and empower residents, business owners, employees, and visitors to partner with the City in taking bold, proactive, and evidence based actions to create a resilient, accessible, attractive, healthy, and prosperous City.

*Mission statement:* The Sustainability Hollywood Action Plan will coordinate efforts across City departments and into the community to achieve the goal of a resilient and sustainable Hollywood.

### *Focus Areas*



**Leadership By Example:** Actions taken by the City to reduce impacts including operations, plans, and policies.



**Resiliency (Climate Action Plan):** Actions to both mitigate Hollywood's contributions to Climate Change as well as adapt to impacts such as sea level rise.



**Built Environment:** Utilization of buildings and zoning in order to minimize the impact and maximize the benefits of urban areas.



**Environmental Quality:** Improve health and protect wildlife through air and water quality, open space, and natural systems.



**Resource Stewardship:** Wise use of resources through energy and water conservation and reduction of solid waste.



**Mobility:** Identifying strategies to increase mobility and decrease reliance on single passenger vehicles.



**Community Engagement:** Increasing environmental knowledge and community involvement in resiliency strategies.



## Leadership by Example

- The City of Hollywood demonstrates leadership through affiliation with organizations and certifications that measure, demonstrate, and provide guidance on sustainability.
  - United States Green Building Coalition (USGBC),
  - Florida Green Building Coalition (FGBC) – Green Local Government 2012-2017
  - Tree City USA (36 years),
  - National Wildlife Federation Community Habitat (in progress), and
  - STAR Communities. (in progress).
- Several employees are accredited through The United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) program. This includes employees from Public Utilities, Development Services, the City Manager's Office, and the Community Redevelopment Agency.
- The City Manager's Office is involved with the Broward County City Manager's Coastal Coalition group and the Chief Civic Affairs Officer Ms. Mertens-Black, was recently selected to represent the City on the Staff Steering Committee for the Southeast Florida Regional Climate Change Compact. Public Utilities Director Steve Joseph serves as the Chair of the Technical Advisory Committee for the Broward Water Advisory Board. In addition, and the Green Team Chair Barry Faske sits on the County's Climate Change Task Force.
- The City of Hollywood maintains Water Supply Plans and Water Conservation Plans. The Water Conservation Plan covers a water saving horizon of 2008-2027 with implementation planned from 2008-2016. Additionally, the City is a member of the Broward Water Partnership Conservation Program, contributing to the county wide goal of saving 30 million gallons per day.
- City Water Conservation Efforts
  - Tiered billing structure to encourage reduced water consumption.
  - Regularly monitored meters allowing for leak detection and repair.
  - Customer leak notification system.
  - Landscape irrigation ordinance that adheres to SFWMD irrigation restrictions.
  - Coordination with Naturescape Broward to conduct audits of irrigation on City properties since 2005. In the first year, evaluations were performed at twelve locations resulting in an annual savings of close to 7 million gallons. In 2014 resulting savings were 1,396,759 gallons and in 2015 the savings added up to 2,651,896 gallons for the year.



- Approximately 2.66 million gallons a day of treated wastewater are recycled and used in the City for irrigation in order to reduce the need to dispose of waste water.
- Tankless toilets and flushometers are used at City facilities to reduce water consumption by toilets from 3.6 gallons to 1.5 gallons a flush.
- Renewable energy generation occurs at four City facilities, City Hall, the Hollywood Beach Culture and Community Center, and Fire Stations #74 and #105.
- The City of Hollywood is in the process of converting some High Pressure Sodium Vapor street lights to LED. Once converted, the City will conduct an energy consumption analysis and use the information to inform further lighting improvement plans.
- To improve energy efficiency, all florescent lights in City facilities were converted from T-12 lamps to the more efficient T-8 lamps. In addition, City Hall and all community centers use an automated energy management system in order to optimize energy consumption based on building demand and air conditioning schedules.
- City facilities utilize “green” cleaners.
- In October 2016 the City switched to a 4-10 schedule, closing City Hall and other City Facilities on Fridays for the purpose of energy conservation.
- The Green Team has been advising the City Commission on environmental and Sustainability initiatives since 2007.
- The City’s Code requires that new landscaping consist of 60% native trees and 50% native shrubs. In addition, all Category I and II exotic plant species, as defined by FLEPPC (Florida Exotic Pest Plant Council) are prohibited. Water conservation through landscape design is encouraged.
- The Police Department of Hollywood uses 263 Flex Fuel vehicles and 5 Hybrid vehicles out of approximately 500 total vehicles. In addition, there are bike patrols utilized in downtown, the Broadwalk, and neighborhoods. The City of Hollywood maintains a fleet of approximately 300 vehicles. Of those, there are three electric carts, 26 hybrid vehicles, 30 E85 and 18 CNG vehicles, 61 diesel, and 4 bi-fuel vehicles.
- The City encourages fuel efficiency in the operations of the vehicles. Fleet management provides a set of guidelines to vehicle operators to maximize fuel efficiency.
- The City of Hollywood encourages employees, residents, and visitors to utilize the public transit system. Employees are eligible for the Employer Discount Program (EDP) to ride Tri-Rail. In addition, the City operates a trolley service in downtown and on the beach as well as a shuttle which connects the TriRail station with the trolley route.

## Identified Needs, Challenges, and Opportunities

1. Continue to find ways to reduce energy use and increase electricity generation at City buildings.
2. Continue to improve the efficiency of city fleet and increase investment in alternative fuels and electric vehicles.
3. Increase water reuse and eliminate ocean outfall.
4. Continue to provide outreach and education to employees on energy conservation and other sustainability topics
5. Create more visibility through the website and City publications about the excellent work being done to advance sustainability and resiliency.



### Resiliency: Mitigation and Adaptation (Climate Action Plan)

- The City of Hollywood is a part of the Southeast Florida Regional Climate Change Compact. As a part of the compact Hollywood has access to shared resources and guidance on adaptation and mitigation to Climate Change and Sea Level Rise.
- Public Utilities utilizes wells from both the Biscayne Aquifer and the Floridan Aquifer. While currently our water comes 92% from the Biscayne Aquifer, having the infrastructure in place to increase use of the Floridan Aquifer ensures long term sustainability of water supplies.
- The City is in the process of identifying opportunities to convert septic users to sewer as septic systems will be impacted by rising ground water levels.
- The Public Utilities Department addressed the negative effect of tidal flow through the City's drainage system by installing flap gates at all drainage outfalls at South Lake (14 devices were installed at a cost of approximately \$400,000) and North Lake area (18 devices at a cost of approximately \$660,000). The flap gates work to minimize tidal flow into the system at high tide, but will allow water to flow out of the system once the tide goes down.
- The City Commission adopted the Unified Sea Level Rise Projection used by the Southeast Florida Regional Climate Change Compact.
- Broward County conducted a vulnerability report for the City of Hollywood in response to Sea Level Rise. According to the assessment, which considered scenarios of sea level rise of one and two feet, several areas of the City are vulnerable to sea level. These include seven segments of arterial roads, 18 city parks, both the Hollywood Central and Hollywood Beach CRA, four evacuation routes, and one fire rescue station. City Hall, all schools, all police stations, the water treatment plant, and the waste water treatment plant were found to have little or no vulnerability to sea level rise up to two feet. One foot of sea level rise

is likely within the next thirty years with two feet of sea level rise likely to be surpassed by 2100.

### City-Owned Arterial Roads in Hollywood Two Foot Sea Level Rise Scenario

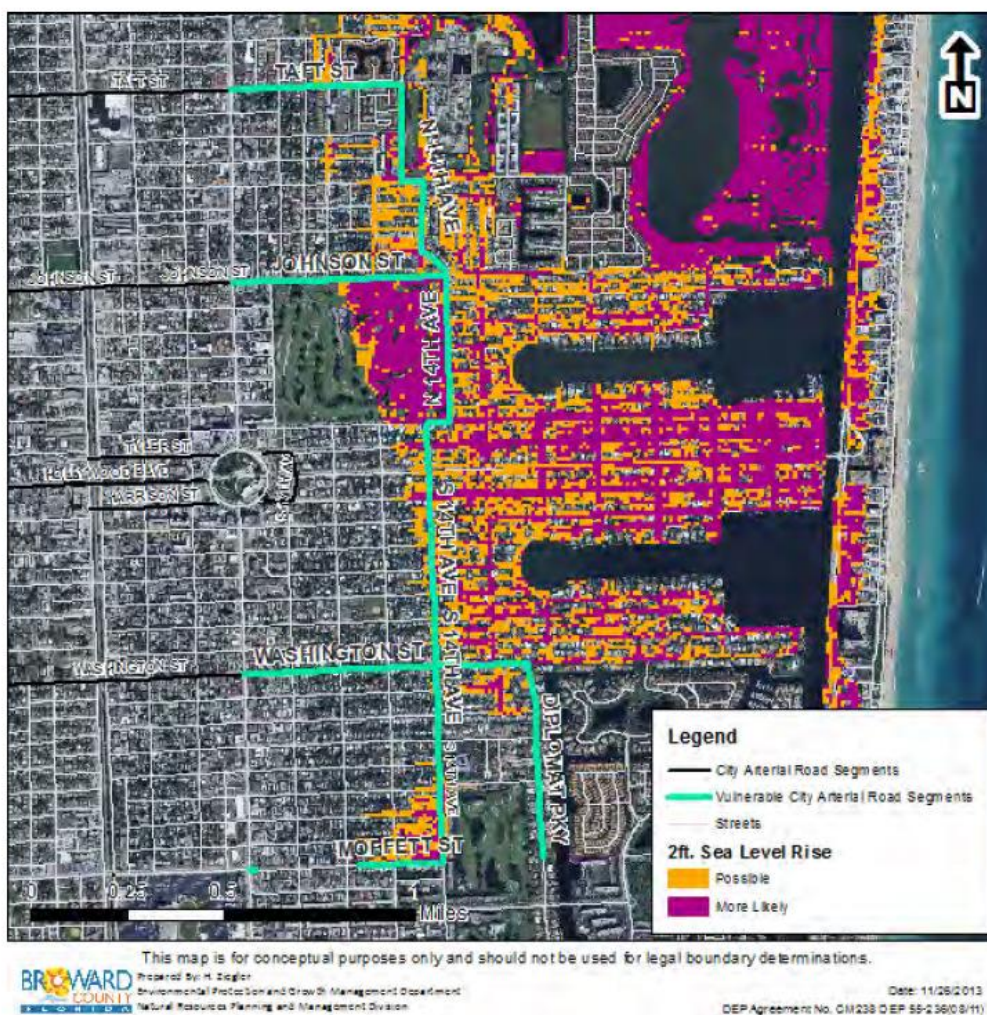


Image from (page 21):

[http://www.broward.org/NaturalResources/ClimateChange/Toolbox/Documents/ResilientCoastalComm/hollywd\\_slr.pdf](http://www.broward.org/NaturalResources/ClimateChange/Toolbox/Documents/ResilientCoastalComm/hollywd_slr.pdf)

### Identified Needs, Challenges, and Opportunities

1. Additional community outreach about Sea Level Rise and impacts for coastal property and the community as a whole.
2. Increase water conservation to reduce the need for the ocean outfall.

3. Dedicated funding for infrastructure projects to increase resiliency such as sea walls, green infrastructure, nature based coastal defenses, and pervious pavement.
4. Complete a Greenhouse Gas Inventory, set targets, and reduce Greenhouse Gas emissions.



## Built Environment

- The City of Hollywood has a green building ordinance. Under this ordinance all new development is required to choose from a selection of green building practices and developments over 20,000s.f. are required to achieve LEED or equivalent certification.
- All new City facilities must be certified LEED silver.
- A category of “Environmental Sustainability” was added to the Technical Advisory Board during the plan review process.
- Hollywood’s home rehabilitation program requires green features for the property improvements made under the program including Energy Star rated doors, windows, and roofs, Energy Star appliances, efficient toilets, high efficiency HVAC systems with programmable thermostats, and low VOC interior paint.
- The Regional Activity Center (RAC) is a high intensity, high density multi-use area designed as appropriate for growth by the local government or jurisdiction. RACs are intended to encourage attractive and functional mixed living, working, shopping, education, and recreational activities, in areas of regional importance. The RAC is intended to facilitate mixed use development, encourage mass transit, reduce the need for individual travel by car, and expand the urban core.

## Identified Needs, Challenges, and Opportunities

1. Develop a City Green building program customized for Hollywood
2. Create incentives for builders, developers, and building operators to incorporate green features into building design.
3. Improve existing infrastructure in the City.
4. Continue to identify zoning and development that encourage sustainability, such as transportation oriented development, multi-use development, and higher density.



## Resource Stewardship

- The City of Hollywood offers several rebates and giveaway programs to promote water conservation, including showerhead exchanges and toilet rebates.

- Water conservation is encouraged in the City through the Public Utilities Department. Public Utilities offers residents the opportunity to participate in rebate and retrofit programs to improve the water efficiency at their property. Additionally, Public Utilities offers educational opportunities to residents and students to learn more about water pollution prevention and water use reduction.
- Water conservation behavior is encouraged through the tiered billing structure. Under this system, water prices increase as more water is used.
- In 2015, the City of Hollywood approved the Property Assessed Clean Energy (PACE) program for residents and businesses. Broward County has since then also approved a PACE program available to all county residents.
- In 2014, the City updated its code of ordinances to establish clear regulations for rooftop PV solar. The ordinance was added to chapter 151 which regulates buildings and came about to allow Hollywood to participate in the Rooftop Solar Challenge along with Broward County. The ordinance has the intent to remove barriers to adoption of alternative energy systems such as rooftop PV solar.
- City residents have increased recycling rates by over 200% since 2010. This is in part a result of moving to single stream recycling and initiating recycling incentive programs. In October of 2015, the City's Code of Ordinances was updated to make recycling mandatory for commercial and multi-family buildings.

### Identified Needs, Challenges, and Opportunities

1. Expand water conservation programs to reduce demand further. For example, hold water conservation competitions, expand the number and types of rebates available, and promote conservation in irrigation.
2. Create incentives for energy conservation including requiring building audits, rebates for home audits, and energy conservation give-aways.
3. Increase the messaging and education about recycling to enhance compliance of commercial and multi-family buildings and reduce recycling contamination.
4. Institute alternative waste reduction practices such as municipal composting.



### Environmental Quality

- The City of Hollywood has committed to extensive environmental outreach and education primarily focused on Water Conservation.
  - On the Hollywood Florida website, [www.hollywoodfl.org](http://www.hollywoodfl.org), residents can learn about water conservation and local water treatment and sources in the video "Water! It's more than money down the drain!"

- To educate residents about water pollution and how to avoid and prevent it, Hollywood has a storm drain stenciling program. Storm drain stenciling reminds residents that the drains connect to our waterways and the ocean. The messaging reads “Dump No Waste, Drains to Ocean” and “Dump No Waste, Protect Our Water.”
- Public Utilities runs the Clean Water Cadets program that teaches third and fourth grade students about water treatment, wastewater treatment, water conservation, and storm water pollution prevention.
- Hollywood students are engaged in outreach through the annual Drop Savers poster design contest.
- Hollywood participated in the Broward Water Partnership Neighborhood Water Challenge.
- Within the City of Hollywood there are several natural areas designated as Environmentally Sensitive Lands (ESL) and Conservation Areas. The ESL’s are Sheridan Oak Forest and the southern end of Stan Goldman Park. The conservation sites include beach front dune planted parcels. The mangrove wetlands of West Lake and North Beach are also conservation sites within City limits.
- The City of Hollywood is actively pursuing certification from the National Fish and Wildlife Federation as Community Wildlife Habitat. To that end, the City has certified wildlife habitats at City facilities including parks, community centers, and City Hall. Over twenty schools, K-12, have Certified Wildlife Habitats. The City also has over 200 homes with certified habitats. The City hopes to reach the goal of Community Wildlife Habitat in 2017.
- The City of Hollywood is committed to increasing tree canopy in order to enhance environmental benefits and reduce the urban heat island effect. Hollywood has been an Arbor Day Foundation Tree City USA for the last 36 years. In 2016 the City of Hollywood was awarded a grant from the Arbor Day Foundation which resulted in planting 57 trees in the community.
- The Public Works Department has actively been engaging in dune restoration on Hollywood Beach. Working with community groups, such as Youth Environmental Alliance (YEA), a new dune was constructed in the North Beach area to provide a barrier to flooding in storm surge events. The City is looking to create a master plan for the dune systems to be included in updates to the City’s comprehensive plan.
- The City runs a monthly “beach sweep” that organizes volunteers to clean up trash from the City’s beaches. The beach sweep, coordinated by the Public Works Department, allows residents to volunteer to clean their community beaches.

## Identified Needs, Challenges, and Opportunities

1. Increase the number of neighborhood parks and parks located in underserved areas. Utilize vacant lots.
2. Increase tree canopy city wide through code requirements, City planting, and education and incentive programs.
3. Continue to offer and expand education opportunities provided by the City on a variety of environmental topics.
4. Increase the use of green infrastructure city wide to manage stormwater and tidal flooding.
5. Increase messaging and education about Wildlife Habitat Certification to meet our Community Wildlife Habitat requirements.
6. Continue to expand and enhance beach dunes through City, private, and volunteer efforts.
7. Improve air quality through public education regarding pollution reduction and prevention.



### Mobility

- The Broward County Transit system has seven bus routes that service Hollywood as well as two express buses, the 95 Express and the 595 Express.
- In addition to the Broward County Transit System, Hollywood can also be accessed by train along the CSX railway. The Hollywood station is a stop for the Amtrak Silver Service/ Palmetto route that connects Miami and Tampa with the northeast including New York and Washington DC. Additionally, two of the 18 TriRail stations are in Hollywood.
- Additional rail systems are planned for the Florida East Coast (FEC) Railway including All Aboard Florida's *Brightline* and TriRail's Coastal Link.
- Resolution R-2013-251 passed September 4, 2013 expresses the City's commitment to complete streets policies and practices set forth by Broward County. Eight Complete Streets projects are currently being planned.
- At this time, the City of Hollywood provides five electric vehicle (EV) charging stations. The stations are located one each at the Van Buren, Radius, and Garfield garages and two at City Hall.
- On December 16, 2015, the City Commissions approved an ordinance to amend Chapter 152 of the Code of Ordinances to require the installation of electric vehicle charging station infrastructure for all new developments.

## Identified Needs, Challenges, and Opportunities

1. Increase the percent of the population using public transit, walking, or using “other” transportation to commute.
2. Work on reducing commute time by promoting transit-oriented, mixed use, and work/live style developments.
3. Improve connectivity and safety of sidewalks and bike lanes.
4. Maximize efficiency of parking in the City through pricing structure and improvements in Trolley services.



## Community Engagement

- Kay Gaither Community Center has established a learning garden for the students of their aftercare and summer camp programs. The garden and fruit trees teach the students how to grow their own food in limited space and the effort that is required to do so successfully. There is a community garden located at Adams Street.
- In 2011 and 2014, the City of Hollywood held the Great Neighborhoods Challenges, a collaborative effort between the City, residents, business owners and organizations with an interest in working together to improve Hollywood neighborhoods. The Challenge was a 120-day City-wide property improvement contest that awarded cash prizes ranging from \$500 to \$2,500 for the most visibly improved properties.
- Hollywood has several areas identified as food deserts. Food deserts are areas where access to fresh, healthy, and affordable food is not readily accessible by residents of that area. A food desert may have fast food, restaurants, and convenience stores but lack grocery stores and super markets. The USDA identifies food deserts based on census tracts. A tract meets Food Desert criteria if it is both low income and low access. Low access signifies that at least 33% of the residents in the tract live one mile or more from a supermarket or grocery store.
- Volunteer opportunities which allow citizens to contribute to a clean and healthy environment include Let’s Keep Hollywood Beautiful, Adopt-a-Street, Beach Sweep, and Cash-for-Trash



**Identified Needs, Challenges, and Opportunities:**

1. Identify more opportunities to engage residents in the development of citizen driven sustainability and resiliency programs.
2. Conduct more community education and outreach on action-based environmental and resiliency topics.
3. Increase participation in community volunteer opportunities such as the Beach Sweep and Keep Hollywood Beautiful activities.

<b>Metric</b>	<b>2016 Baseline*</b>	<b>2025 goal</b>	<b>Vision</b>
City Of Hollywood Energy Usage	241,826,409 kwh (2014)	20% reduction	2% annual improvement
City Renewable Energy Generation	177,151 kwh (2014)	20% of generation	100% of energy is from renewable generation or renewable sources
Community Renewable Energy Generation	Unknown	20% of generation	100% of energy is from renewable generation or renewable sources
Community Energy Usage	1,470,772,263 kwh (2014)	2.5% annual improvement	2% annual improvement
Total Water Treated	26.5 MGD (2006 baseline)	22 MGD	Continual improvement relative to population.
Percentage of Customers On Sewer	57%	67%	100%
Solid Waste Tonnage	123,440.53 (2014)	Reduce by 10%	Reduced by 40%
Recycling Rates	7%	75%	Continue to maintain statewide goal.
Recycling Contamination Rates	24%	10%	0%
GHG Emissions	TBD	2% annually	80% reduction by 2050
Acres of Parks	633.5	913.5	5 acres per 1000 residents

\*unless otherwise stated

Area of City Within ½ Mile of Park.	TBD	100%	100%
Number of Certified Habitats/Naturescape Yards	200 homes	300 homes	Meet annual recertification goals
Tree Canopy	TBD	Increase by 10%	40% overall goal
Transit Ridership	4% of commuters	Increase by 25%	20% of commuters
Number of “Green” Municipal Buildings And Parks	1 building; 2 parks	All new facilities and parks	All facilities and parks
Number of “Green” Private Buildings	Unknown	All new/ renovated buildings > 20,000 sf	All new and renovated buildings
Efficient/Alternative/EV Vehicles in City Fleet	142/300 = 47%	Increase by 20%	80%
Efficient/Alternative/EV Vehicles in Police Fleet	268/500 = 54%	Increase by 10%	80%
Miles of Dune And Living Shoreline	TBD	Completely connected dune, living shoreline plan	All areas capable of incorporating aspects.
% Land Area Vegetated Surfaces	TBD	Increase by 10%	40%
Households Composting Food Waste.	n/a	2,000 households	30%



## Leadership by Example

Stimulating community wide change will require strong leadership from the City itself. Not only does the City control the framework within which the businesses and residents operate through the City Code of Ordinances and Zoning and Land Development Regulations, but the City is in a unique position to offer assistance and guidance to the community for the achievement of these goals. The City's own operations represent a large portion of the environmental impact. For example, the City controls two utilities and is the second largest employer in the community.

The City of Hollywood will set a strong example of environmental sustainability by achieving the following goals:

1. Integrate sustainability into City operations.
2. Dedicate funding to sustainability related projects and outcomes.
3. Reduce resource use by City buildings and employees.
4. Support county and regional actions towards resiliency and sustainability.
5. Increase visibility of sustainability actions taken by the City and residents.
6. Adapt the sustainability plan to changing conditions and lessons learned.

The following actions will be taken to achieve these six goals.

- |   |  |                             |   |
|---|--|-----------------------------|---|
| 1 | Include sustainability criteria in all major City plans and guidelines.                                  | OE<br>RA<br>CO <sub>2</sub> | Develop a checklist of environmental sustainability actions that must be addressed in all major City plans. Ensure that the checklist is addressed in all updates including the following: <ol style="list-style-type: none"> <li>a. Comprehensive Plan</li> <li>b. Capital Improvement Plan</li> <li>c. City Wide Master Plan</li> <li>d. Budget Process</li> <li>e. CRA Plan</li> <li>f. Neighborhood Master Plans</li> </ol> |
| 2 | Identify City codes and zoning ordinances which might conflict with sustainability and resilient design. | RA<br>CO <sub>2</sub>       | Identify the long term sustainability goals as presented in this document and conduct a review of the City's Code of Ordinances and Zoning and Development Regulations. Assess the policies in place that should be improved to drive goal achievement and those which are currently inhibiting the achievement of goals. Make the necessary amendments to the code.  |

CO<sub>2</sub> = contributes to carbon reductions

OE = outreach or education

RA = contributes to resiliency or adaptation to sea level rise and climate change

**Actions**

- |   |  |                             |   |
|---|--|-----------------------------|---|
| 3 | Bring the City into compliance with codes related to sustainability.   | RA<br>CO <sub>2</sub>       | While conducting the review of the code and making amendments, identify where the City must work to come into compliance and establish a plan to achieve the standards set by our Code of Ordinances and Zoning and Development Regulations.  |
| 4 | Create a user friendly reference manual to Code and Zoning requirements related to sustainability and the environment. | OE<br>RA<br>CO <sub>2</sub> | For all government and private entities interested in coming into compliance with the code, an easy to use reference guide should be completed with supplementary guidebooks which provide the necessary information to achieve the standards set by the existing, improved, and newly passed policies.   |
| 5 | Ensure that sustainability criteria are met by all capital improvement projects.                                       | RA<br>CO <sub>2</sub>       | Create a checklist of sustainability requirements incorporating measures to address future sea level rise impacts in project design. Create a forum in which City staff can communicate sustainability needs and best practices to staff in budget, finance, and the City managers as well as elected officials.                                |
| 6 | Increase the number of dedicated sustainability staff.   | OE<br>RA<br>CO <sub>2</sub> | In order to meet the goals set out in this plan, resources must be allocated to the sustainability program. This will include a full time Sustainability Coordinator and shared positions related to outreach and grant writing.  |
| 7 | Create a revolving fund for energy efficiency projects.  | CO <sub>2</sub>             | To ensure that every capital improvement project is meeting the highest energy efficiency standards, the City will dedicate a starting budget to energy efficiency upgrades and calculated annual energy savings will be paid back into the fund. The fund can be used for upgrades and enhancements related specifically to energy efficiency. |
| 8 | Track the energy used by City facilities with a goal to improve efficiency.  | CO <sub>2</sub>             | Enhance the energy tracking conducted by the City. Incorporate energy management systems, energy tracking software, and designate an energy manager. Conduct audits regularly on City buildings to identify opportunities to reduce energy usage and to track progress.   |

CO<sub>2</sub> = contributes to carbon reductions

OE = outreach or education

RA = contributes to resiliency or adaptation to sea level rise and climate change

## Actions

- |    |  |                       |  |
|----|--|-----------------------|--|
| 9  | Adopt green procurement policies.                                    | CO <sub>2</sub>       | Create a policy that gives preference to products and services which can be demonstrated to have a low impact supply chain, use recycled materials, generate less waste, reduce carbon footprints, fair labor practices, and reduce exposure to toxins.  |
| 10 | Engage employees in behavior changes to reduce water and energy use. | OE<br>CO <sub>2</sub> | Conduct trainings for employees about the importance of sustainability and environmental quality and provide messaging about positive behavior changes to impact sustainability. Work with directors to identify areas within their departments to enhance goals such as reducing waste, and conserving energy and water. Provide incentives to employees promoting behaviors such as carpooling, taking transit, or reducing energy use at their work stations. |
| 11 | Model environmental stewardship at City events.                      | OE<br>CO <sub>2</sub> | Create a green events policy for the City which outlines how the City should conduct events to minimize impact. Include aspects of recycling and waste reduction, as well as reducing energy use through electricity and transportation. Consider a <i>net zero</i> policy that will allow events to reduce impacts and buy offsets in the form of fees to enhance the City's green infrastructure.  |
| 12 | Increase the renewable energy generated and utilized by the City.    | RA<br>CO <sub>2</sub> | Identify opportunities to incorporate solar and other energy generating technologies into City facilities to meet the County goal of 20% by 2020. Identify opportunities to use energy generation in ways that also enhance resiliency and emergency management, such as solar powered street lights and emergency facilities.   |
| 13 | Participate in the Better Buildings Challenge.                       | OE<br>CO <sub>2</sub> | Enroll the City in the Department of Energy's Better Buildings Challenge in order to track the City's progress towards energy reduction and meet the Challenge's goal of 20% reduction in energy use by 2030.  |
| 14 | Retrofit streetlights to LED   | CO <sub>2</sub>       | Continue the City's LED street light retrofits. Address the best practices related to light pollution and keep relevant to new research regarding light pollution and the health impact of artificial lights.  |

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## Actions

- 15 City Utility plans incorporate methods for reducing carbon footprint. CO<sub>2</sub> Long term planning for the City's wastewater treatment plant and water treatment plant should include methods for calculating and reducing carbon footprint.
- 16 Creation of City sponsored demonstration projects. OE RA CO<sub>2</sub> In order to encourage City-wide adoption of new and established sustainability methods and technologies, the City will invest in demonstration and pilot projects. These may include the following:
- a. An outdoor classroom demonstrating green infrastructure, permeable pavement, native and edible landscaping, among other techniques.
  - b. Installation of energy generation and water conservation technologies on City facilities with educational signage and programming.
  - c. Pilot projects to test the effectiveness of new and emerging technologies.
- 17 Create a Sustainable Hollywood recognition program. Sustainability is integrated into every department. Projects conducted throughout the City that address one or more of the three pillars of sustainability will be labeled with the *Sustainable Hollywood* recognition and promoted in the annual sustainability report.
- 18 Create educational programs related to goals set out in the Sustainability Action Plan. OE Provide the opportunity for the community to engage in the process of meeting goals by providing regular messaging, workshops, webpages, and information.
- 19 Offer support to regional and national goals to enhance resiliency and sustainability. The City will support efforts by the County, State, and Federal government to take actions which would enhance the resiliency and sustainability of Hollywood. These may include but are not limited to:
- a. Supporting the Regional Climate Action Plan and legislative priorities of the Southeast Florida Regional Climate Change Compact.
  - b. Supporting County efforts to amend the State constitution to enable 3<sup>rd</sup> party power purchase agreements.
  - c. Support County and Regional advocacy

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## Actions

for climate change action and legislation at the state and federal level.

- d. Support the County's partnerships with federal agencies to provide technical and logistic support for regional modeling, scenario planning, vulnerability assessments, and adaptation strategies.
- e. Support the County's efforts to obtain better regional data to inform long term resiliency planning.

20 Communicate progress towards sustainability goals.

OE Publicize the goals set by the City and annually provide the commission and the community with a progress report. Incorporate the ability to reassess and adapt goals as necessary based on lessons learned, new technology, and best available knowledge.





## Resiliency: Mitigation and Adaptation (Climate Action Plan)

A truly sustainable City is one which is able to stay strong even when physical conditions change. South Florida is on the front line of impacts related to Climate Change and Sea Level Rise. Tidal flooding is a frequent occurrence. Add to the higher tides the stormwater runoff from heavy rain and dealing with water is a top priority for Hollywood. The City must address this through actions that will work to both mitigate the effect of climate change and sea level rise as well as adapt to the change. This can be achieved by decreasing our greenhouse gas emissions while increasing our resiliency.

Actions towards resiliency fall into one of six categories.

1. Mitigation – reducing our contribution to the driving causes.
2. Protection – hard and soft infrastructure meant to mitigate the impacts of sea level rise by protecting existing infrastructure.
3. Accommodation – improvements that do not block water, but rather avoid, channel, or store it in a way that protects the function and integrity of the infrastructure.
4. Managed retreat – the removal of existing buildings or infrastructure and possible relocation out of areas that have high risk.
5. Avoid – limiting development and activities in areas of high risk.

The City will increase resiliency by meeting the following goals.

1. Reduce the City's contribution to the driving causes of Sea Level Rise and Climate Change.
2. Increase the resiliency of coastal areas.
3. Reduce flooding from high tides and storm water.
4. Create resilient infrastructure.
5. Incorporate sea level rise into emergency management systems.
6. Create an educated, empowered, and resilient population.

These six goals will be achieved through the following actions:

- |   |                       |   |
|---|-----------------------|---|
| <p>21 Track community scale Greenhouse Gas emissions and set reduction targets.</p> | <p>CO<sub>2</sub></p> | <p>Conduct regular GHG inventories (every 5 years) for both government operations and community scale. Set reduction goals and develop a plan to reduce emissions. The actions necessary to reduce emissions are highlighted throughout this action plan.</p> |
|---|-----------------------|---|

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**Actions**

- 22 Develop living shorelines to combat coastal flooding. RA When deemed feasible, utilize living shoreline and natural system strategies to strengthen coastal resilience and mitigate coastal flooding damage. Conduct an assessment of the coastal areas in the City, including the beach, intracoastal, lakes, and canals, to determine suitable application of living shoreline in lieu of or in addition to seawall structures.
- 23 Increase dune cover on beach. RA As an enhancement to the beach renourishment activities, maintain existing dunes and create dunes where none exist. This will be done through City installations on public beaches and through mandates on private beach property and/or incentive programs. An educational campaign about the importance and benefits of dunes will explain their value to the property owners and educate beach visitors to the importance of the systems. Dunes can be maintained by City staff time, private management, and volunteer stewards.
- 24 Improve sea walls RA Implement the recommendations resulting from the Broward County/ US Army Corps of Engineers (USACE) study expected to be completed in 2018. Prioritize the use of living shorelines, but incorporate sea walls where necessary. City owned sea walls will be improved or built according to City sea wall height requirements. Incentives and assistance may be offered to residents to encourage proper sea wall height and construction.
- 25 Designate Adaptation Action Areas RA Based on vulnerability assessments conducted by the county, and the priority planning areas ([link](#)) highlighted in the County comprehensive plan, designate areas at greatest risk for flooding, and prioritize funding for infrastructure and resiliency projects to these area.
- 26 Incorporate Sea Level Rise into the Comprehensive Plan. RA Incorporate sea level rise scenario maps into the Comprehensive Plan and planning and zoning requirements. Identify areas at lowest risk to Sea Level Rise and focus future development in these areas.

- |    |   |          |  |
|----|---|----------|--|
| 27 | Establish a fund to allow for acquisition of land with repeat flooding.       | RA       | Create a plan to establish a fund for acquiring land with repeat flooding or vulnerable undeveloped areas to be used for restoration, recreation, or retention.  |
| 28 | Conduct pilot projects of low impact development (LID) techniques.            | OE<br>RA | Complete demonstration projects to test the effectiveness of raised roads, vegetated bioswales, pervious pavement, green alleys, and other types of green infrastructure.  |
| 29 | Expand Green Infrastructure   | RA       | Enhance flood and storm water storage through design and green infrastructure. Develop guidelines for the City on the types and designs of green infrastructure and create incentives and requirements on inclusion of green infrastructure in new developments and major renovations. Require that all City projects include an element of green infrastructure and evaluate the storage possibilities of City owned lands and vacant lots. |
| 30 | Create a long term plan to create resilient infrastructure.                   | RA       | Use the Unified Sea Level Rise Projection as created and updated by the Southeast Florida Regional Climate Change Compact and resulting vulnerability assessments to identify at risk infrastructure. Create a plan to update underground utilities, raise roadbeds, convert septic to sewer. All new improvements and new construction should be done with corrosion resistant materials and robust and permeable foundations.              |
| 31 | Convert septic systems to sewer.  | RA       | Model the impact of sea level rise on ground water levels and prioritize septic to sewer conversion in areas where the water table will reach the drainage fields first.   |
| 32 | Update emergency management systems to integrate future expected storm surges | OE<br>RA | Using the sea level rise projection, model the flooding along evacuation routes and in high risk areas. Create a plan for post disaster mitigation which takes into account higher storm surges as a result of projected sea level rise. Focus infrastructure improvements with a priority for those which would reduce risks and hazards related to post disaster flooding.   |

- 33 Support citizen action groups and advisory boards.
- OE Actively engage citizens and businesses in learning about the impacts of climate change and sea level rise and in developing solutions that meet the needs of multiple stakeholders. Continue to work with the Green Team Advisory Committee to enhance their visibility in the community and to encourage their providing advice to the City Commission.
- RA
- 34 Promote community awareness and understanding of the issues
- OE Conduct regular workshops and create regular messaging for multiple outlets that inform the residents, businesses, and visitors on what the issues and also what they can do and what is being done by the City.



## Built Environment

In order to create a City which is resilient, accessible, attractive, healthy, and prosperous, Hollywood must create and incentivize a built environment that does not impede sustainability goals. Hollywood will set in place the necessary actions and steps to incentivize desirable and discourage less desirable development features.

The vision for the built environment is integrated land use, transportation, and urban design to achieve an urban form that supports more effective use of resources, mobility options, more aesthetically pleasing active public spaces and sensitivity to historic and natural resources and neighborhood character.

The City will address the long term sustainability and resiliency of its built environment by achieving the following goals:

1. Provide clear guidelines and expectations for development within Hollywood.
2. Adopt zoning that advances mitigation and adaptation goals.
3. Create a review process for permitting that addresses sustainability goals.
4. Improve existing infrastructure to best avoid future risks.
5. Mitigate the Urban Heat Island Effect.

These five goals will be addressed with the following actions:

- |    |   |                             |  |
|----|---|-----------------------------|--|
| 35 | Create zoning regulations to encourage multi-modal transit  | RA<br>CO <sub>2</sub>       | Continue on efforts such as the Regional Action Center (RAC) zoning which concentrates activities and encourages use of transit systems in order to reduce vehicle miles travelled in the community. Create zoning that enhances mobility rather than focuses on moving automobiles.       |
| 36 | Create zoning that reduces development in high hazard areas.  | RA                          | Adopt Zoning Regulations that restrict or discourage development activities in areas, such as designated AAAs, which face high risk from sea level rise. Create zoning which would focus development instead on areas with low flood risk.   |
| 37 | Provide a green building certification that focuses specifically on those features most desirable to Hollywood. | OE<br>RA<br>CO <sub>2</sub> | Create Hollywood Green, a green building certification which can serve as an alternative to the requirement for Green building Certification over 20,000 square feet. In addition to allowing certification by the United States Green Building Council's (USGBC) Leadership in Energy and |

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**Actions**

- Environmental Design (LEED), allow for the use of other robust certifications such as those maintained by the Florida Green Building Coalition (FGBC) or the Green Building Initiative's (GBI) Green Globes but which excludes less comprehensive or rigorous certifications such as the National Green Building Standard (NGBS) which is only marginally better than what is required by state building codes. Provide additional incentives for developers to choose this option including creating recognition programs and providing technical assistance.
- 38 Include sustainability reviews at all points during the development and permit review process.
- Start early in the process working with developers and new projects to ensure that they fit into the sustainable vision for Hollywood and that they are maximizing their achievement of the Green Building requirements. Require discussion of green building options during the first Pre Application Conceptual Overview (PACO) or comparable preliminary meetings and reassess during plan reviews, TAC, and at the planning and development board. These reviews should include, at minimum, an analysis of the proposed BFEs in relation to SLR projections and anticipated FEMA requirements.
- 39 Create guidance documents for green building elements.
- To provide developers with specific instructions on the types of design elements expected and how to achieve them, create or adapt guidance documents related to topics such as incorporating green infrastructure, mitigating urban heat island, energy generation, water and energy conservation, and passive design.
- 40 Create incentives and assistance for green building.
- Encourage more developers to choose green building design and certification through offering incentives and providing assistance. A staff member in the building department should be available to offer guidance and assistance throughout the planning process. Incentives could come in the form of recognition programs, expedited reviews, or bonds. Work with local businesses and developers to identify the incentives that would be preferable.

- |    |   |                             |  |
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| 41 | Use the best available models of vulnerability for planning.  | RA                          | In order to plan appropriately for Sea Level Rise, it is important to use the best available data. Parcel level modeling will be particularly important for parcel level design and planning. Invest in making those models available whether through resources provided by the county or through third party vendors.   |
| 42 | Create demonstration projects throughout the City to demonstrate desirable development features.        | OE<br>RA<br>CO <sub>2</sub> | Identify the green building and development features (e.g. bioretention, green roofs/walls, raised infrastructure, etc) which would make appropriate demonstration and educational projects. Prioritize areas to conduct the demonstration projects by expected impact.  |
| 43 | Create a “sustainability fee” modeled after the Sustainability ordinance passed by Miami Beach.         | RA<br>CO <sub>2</sub>       | Identify an appropriate bond amount to require from developments in order to effectively encourage desired green building practices and to fund green development and growth within the community.   |
| 44 | Encourage the repurposing of existing structures.   | CO <sub>2</sub>             | Develop incentives that could be used to encourage developers to reuse existing structures rather than creating new buildings. The City should look to ways to repurpose existing facilities rather than building new.   |
| 45 | Enhance the green building requirements for the building rehab program and affordable housing programs. | RA<br>CO <sub>2</sub>       | Identify additional grants and funding to expand the housing rehabilitation program. Raise the standards of energy and water efficiency in rehabilitated properties and prioritize properties that propose these efficiency improvements. Highlight the resulting energy and water cost savings from these improvements. Ensure that individuals seeking rehabilitation assistance are benefiting from the cost savings of efficiency. Require LEED or equivalent certification for affordable housing projects. |
| 46 | Mitigate urban heat island through canopy and landscaping.  | RA<br>CO <sub>2</sub>       | Revise the landscape code so that it improves on the canopy, native landscaping, pervious, and green space requirements to meet the goal of 40% green infrastructure. Conduct a tree inventory and canopy analysis to identify the areas of the City most in need of canopy enhancements and focus tree planting   |

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## Actions

programs to these areas. Empower residents to take part by offering workshops and tree and native plant give away programs.

47 Reduce the urban heat island impact of roofs and paved surfaces.

OE Conduct educational outreach regarding the benefits of cool roofs and green roofs to energy bills, community environment, and how to use PACE to finance the improvements. Develop incentive programs to encourage the use of cool roofs and high Solar Reflectivity Index (SRI) paving materials. Ensure that all City projects use high SRI materials meeting the requirements for credit under LEED v4 at minimum.

RA

CO<sub>2</sub>





## Resource Stewardship

Through simple behavior changes many impacts of development on the environment can be lessened. Being conservative of our usage of our natural resources, such as water and energy, will ensure that there is long term availability of those resources, and will also save the City, its residents, and its businesses money in the long run.

The City will be stewards of its resources by achieving the following goals:

1. Reduce water use and increase opportunities for aquifer recharge.
2. Reduce energy use and increase renewable energy generation City-wide.
3. Reduce Solid Waste.

These three main goals will be achieved with the following actions:

- |    |  |    |   |
|----|--|----|---|
| 48 | Improve the landscape code to require more Florida Friendly and Native landscaping and less sod. | RA | Improve the current code, which allows for xeriscaping and design which groups plants according to irrigation needs, so that it requires a higher percentage of Florida Friendly and native plants (80% native, 100% Florida Friendly), and reduces the use of sod.           |
| 49 | Promote NWF Habitat Certification and Naturescape certification.                                 | OE | To promote the achievement of Community Habitat Certification, to enhance the wildlife benefits of private properties, and to reduce the water use by irrigation the City will promote and educate about NWF habitat certification.   |
| 50 | Promote efficient irrigation.  | OE | The City will consistently message about water use restrictions put in place by the SFWMD and remind residents to maintain their irrigation systems. The City will offer tutorials and assistance for irrigation audits and provide rebates for efficient irrigation systems. |
| 51 | Continue water conservation education.   | OE | Continue the ongoing messaging from Public Utilities related to water conservation and continue to build on and improve messaging.  |
| 52 | Conduct a vulnerability assessment of the water supply.  | RA | Conduct longer than 30 year projections of water supply and sea level rise to assess the long term sustainability of our well fields and the timeline for use of the Floridan aquifer.  |

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**Actions**

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|----|--|-----------------------------|--|
| 53 | Reduce residential water use through education.  | OE                          | Continue water conservation education efforts. Provide consistent messaging with action steps to reduce water use. Use the water bills to communicate conservation performance relative to community averages and neighbors.                               |
| 54 | Reduce residential energy use through education.                                       | OE<br>CO <sub>2</sub>       | Provide messaging regarding the importance of energy conservation and actions to take. Host workshops and create materials related to low cost and no cost energy efficiency upgrades.   |
| 55 | Encourage participation in the DOE Better Buildings Challenge.                         | OE<br>CO <sub>2</sub>       | The City will commit to reducing energy usage 20% through participation in the Better Buildings Challenge and encourage community participation by offering incentives.  |
| 56 | Develop energy efficiency give away program.   | CO <sub>2</sub>             | Develop energy efficiency give away and rebate programs. Create a DIY home energy audit tutorial and kit. Conduct before and after data collection of energy use to determine if there has been an improvement of efficiency.                              |
| 57 | Offer low cost or no cost energy audits for residents.                                 | OE<br>CO <sub>2</sub>       | Create a rebate program to reduce the cost to residents to having a professional energy audit.   |
| 58 | Empower renters and home buyers to make informed decisions based on energy efficiency. | OE<br>CO <sub>2</sub>       | Pass an ordinance requiring residential building efficiency disclosure at point of sale or rental. Offer technical assistance to home owners and building managers on the disclosure requirements and audits necessary.                                    |
| 59 | Increase energy generation City wide.  | OE<br>RA<br>CO <sub>2</sub> | Provide education to the community on energy generation technologies, rebate programs, and financing options. Provide City rebates to encourage solar PV and wind turbines. Expand the City's use of solar and wind and provide education on the projects. |
| 60 | Require commercial buildings to report energy and water performance.                   | OE<br>RA<br>CO <sub>2</sub> | Pass an ordinance requiring commercial facilities of certain size to report their energy and water usage annually. For underperforming buildings, offer incentives and guidance and require regular audits to improve performance.                         |

- |    |   |                 |  |
|----|---|-----------------|--|
| 61 | Continue public outreach regarding waste and recycling.     | OE              | Increase the frequency of outreach to the community regarding recycling and waste reduction strategies. Focus on strategies to reduce contamination and opportunities to recycle materials not accepted curbside.  |
| 62 | Declare goal of zero waste.                                 | OE              | Research the declarations and actions of other cities that have declared themselves Zero Waste and set similar goals.  |
| 63 | Obtain 100% compliance with commercial recycling ordinance. |                 | Conduct targeted outreach to buildings falling under this requirement in order to inform them of the requirements and give them the tools necessary to comply. Create rewards and recognition for compliant buildings and innovative programs and issue fines and compliance assistance for those underperforming.                                 |
| 64 | Reduce Food Waste   |                 | Starting with pilot programs at City facilities and community centers, conduct education regarding composting and encourage residents to compost food and yard waste. In addition, identify food deserts in the area and work on a strategy to divert food that would otherwise be wasted into these areas through programs such as green markets. |
| 65 | Decrease emissions related to solid waste                   | CO <sub>2</sub> | When evaluating contract renewals for haulers and waste companies, prioritize facilities that use Waste to Energy, use fuel efficient or alternative fuel trucks, and utilize local landfills and recycling facilities. Evaluate a once a week collection schedule for trash.  |



## Environmental Quality

The natural environment provides many benefits to the health, wellbeing, and economy of the region. Air and Water quality impact our health and clear, swimmable, and fishable waters are essential to our tourism industry. Open space and parks not only provide necessary ecosystem benefits – such as promoting biodiversity, purifying air, storing stormwater, and reducing the urban heat island effect – but green space also improves health both physical and mental. Maintaining our streets, neighborhoods, waterways, and parks as litter free increases the attractiveness of our community to visitors and new residents.

The City will enhance its natural environment and improve environmental quality through meeting the following goals:

1. Improve the quality of Hollywood’s waterways.
2. Improve Hollywood’s air quality.
3. Increase open space City wide.
4. Enhance ecosystems.
5. Reduce solid waste pollution.

These five goals will be met by completing the following actions:

- |    |  |    |  |
|----|--|----|--|
| 66 | Improve nutrient pollution through regulation of residential and commercial fertilizers. | OE | Encourage the use of Native and Florida Friendly landscaping through ordinance changes and education. Through a publicity campaign, encourage residents to utilize less fertilizer on their lawns. Conduct education with landscape companies. Explore the possibility of ordinances which regulate the composition of fertilizers used. |
| 67 | Require that grass clippings be mulched or bagged.                                       | OE | Enhance the Utility departments “Just Bag It” campaign to require landscape companies and residents utilize the lawnmower mulch setting or bagging grass clippings, eliminating the need for a leaf blower and reducing the grass clipping blown into storm drains.  |
| 68 | Enhance water quality through green infrastructure and natural systems.                  | RA | Create a City manual for green infrastructure design and utilization for developers and residents. Update the code to require the use of green infrastructure and low impact development when possible by new development and renovations. Create a City   |

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**Actions**

- policy which mandates City projects include elements of green infrastructure in place of gray infrastructure when possible. Update code to require that retention areas in new development and major renovations include vegetation (i.e. are bioretention areas) and park like elements (benches, trees, dog waste stations, etc.)
- 69 Utilize vacant lots for water storage. RA Identify City owned vacant lots that are suitable for water storage and convert them to stormwater retention.
- 70 Continue and increase stormwater pollution prevention education. OE Include pollution prevention messaging in communication from the City and provide information about storm drains and dumping in new resident information packets. Target education regarding water pollution to vulnerable stakeholders.
- 71 Identify and manage the sources of stormwater pollution. Study the main sources of water pollution in order to target enforcement or abatement actions. Identify non-compliant facilities and conduct outreach, audits, and implement fines. Encourage the use of Help Me Hollywood to report instances of illegal dumping. Increase the frequency of hazardous waste collection events to remove the need to dump. The City should encourage FPL to rapidly comply with the EPA's MATS and switch petroleum generation to natural gas and displace natural gas with renewable energies.
- 72 Reduce air pollution related to vehicles. CO<sub>2</sub> Promote actions to reduce vehicle miles travelled in the City. Design an outreach campaign to discourage idling at bridges and train crossings. Encourage the adoption of Electric Vehicles through the installation of additional charging infrastructure and incentives. Conduct outreach regarding fuel efficiency and vehicle maintenance.
- 73 Reduce air pollution from lawn maintenance equipment. OE Pass an ordinance banning or restricting the use of leaf blowers and gas powered mowers. Conduct workshops with landscapers to improve leaf blower use behavior. Require the bagging or mulching of grass clippings to

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## Actions

- reduce the need for leaf blowers.
- 74 Reduce air pollution from stationary sources. Identify non-compliant facilities and conduct outreach, audits, and implement fines.
- 75 Increase air quality by planting trees.   
 OE Increase tree canopy cover City wide. Conduct tree give aways for residents, increase plantings conducted by the City, and change the landscape code to require more trees for new developments and major renovations.   
 RA   
 CO<sub>2</sub>
- 76 Implement the goals set out in the Parks Master Plan.   
 RA Meet the desired goals of every resident within ½ mile of a park by implementing the goals of the Parks Master Plan to purchase land for parks. Develop pocket parks on vacant lots. Incorporate stormwater storage into the design and work with the immediate neighborhood on the design of the park.
- 77 Remove exotic plant species at parks and adjacent properties.   
 OE Identify the exotic species removal needs of the City parks and plan for the vendors necessary and volunteer labor possible. Support the State and County with exotic species removal at State and County Parks. Develop outreach regarding exotic species and their removal for distribution City wide with a focus on properties which abut park land and natural areas.
- 78 Develop habitat and wildlife corridors. Utilizing City properties and right of ways, including swales, medians, facilities, and vacant lands, plant native species and reconstruct habitats where feasible. Increase the requirement for native landscaping in the landscape code and promote backyard wildlife habitat certification programs.
- 79 Protect and restore the offshore reef system.   
 RA Implement actions laid out in the Climate Change Action Plan for the Florida Reef System. Create coral reef protection education materials for distribution at docks, marinas, and dive shops. Assess opportunities to partner with the County and Universities to plant coral or create artificial reef.   
 OE
- 80 Measure the extent and value of the tree canopy.   
 CO<sub>2</sub> Conduct a tree inventory; utilize a mixture of volunteer labor and contractors. Determine

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## Actions

- canopy cover and use iTree Tools to determine the value of the current tree canopy. Present value to the City Commission as rationale for further budget resources dedicated to tree canopy enhancement.
- 81 Improve lighting for humans and wildlife through lighting ordinances.
- CO<sub>2</sub> Revise the City's Code of Ordinances to include lighting requirements which improve safety, reduce the impact of lighting on human health and wildlife, and which reduces skyward light pollution.
- 82 Reduce litter in waterways.
- Create a map of waterways to develop a cycle of maintenance. Host more frequent waterway clean ups with volunteers. Enhance and grow the CRA's anti-litter campaign to be City wide.
- 83 Reduce litter in streets.
- Continue the efforts of Keep Hollywood Beautiful by completing the litter inventory and support the goals of Let's Keep Hollywood Beautiful. Grow the Adopt-a-Street program and the Cash for Trash program. Conduct a City-wide "Spring Cleaning" event.
- 84 Reduce non-biodegradable solid waste pollution city wide.
- Conduct outreach with businesses on alternatives to polystyrene (Styrofoam) for takeout materials. Place signage at parks and beaches discouraging the use of non-biodegradable balloons and plastic bags. Encourage businesses to adopt the Ocean Friendly business standards from the Surfrider Foundation. Encourage businesses to take part in voluntary bans of plastic disposable items.



## Mobility

Many cities, particularly cities like Hollywood that were founded after the adoption of the automobile, are designed with the main purpose of moving cars. These designs were advantageous for the adoption of the automobile, but restrict the mobility of individuals outside of personal vehicles. The mass use of personal vehicles has led to traffic congestion, air pollution, carbon emissions, and a list of health and safety issue.

Mobility refers to a focus on moving people rather than moving cars. Mobility will integrate all modes of mobility with a focus on efficiency, health, and the environment.

The City of Hollywood will strive for mobility and a reduction of the impact of mobility methods by striving for the following goals:

1. Reduce vehicle miles travelled (VMT) in the City.
2. Increase trips made by biking and walking.
3. Enhance parking efficiency downtown and at the beach.
4. Improve fuel efficiency and increasing the adoption of electric and alternative fuel vehicles.

The City will take the following actions to meet these goals:

85	Enhance the use of the Marine waterways for mobility.	RA CO <sub>2</sub>	Enact the mobility related plans found in the Marine Master Plan. Promote the linear park being constructed along the intracoastal waterway. Expand water taxi stops in the City.
86	Increase the transit options available in the City.	CO <sub>2</sub>	Conduct an assessment to determine the most needed transit routes, looking for needs from different stakeholders and filling in gaps in transit and create City shuttle routes to address the needs and gaps identified.
87	Increase ridership on current transit system.	CO <sub>2</sub> OE	Conduct an assessment of the current barriers to transit ridership and develop a plan to address those barriers. Provide outreach about transit options and create a detailed map of Hollywood showing transit options, routes, connections, and trails. Work with Broward County to improve current transit services. Improve safety and comfort of bus shelters and other transit stops. Facilitate a Green Commute Challenge. Host an annual day where transit is free to encourage new ridership.

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**Actions**



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| 88 | Improve the City's bike infrastructure.   | CO <sub>2</sub>             | Create a bike master plan. Increase the miles of dedicated and protected bike lanes. Design bike routes to connect areas of activity and density.  |
| 89 | Encourage road sharing and bike and pedestrian safety.                            | OE                          | Assess the results of the Complete Street strategy and consider expanding implementation to other areas of the City incorporating lessons learned from the initial projects. Conduct community outreach regarding bike and pedestrian safety targeted both to drivers and the bikers/pedestrians themselves. Host City sponsored events to encourage walking and biking such as a walking school bus program, bike to work competitions, and green commute challenges. |
| 90 | Enhance walkability City wide.  | RA<br>CO <sub>2</sub>       | Install sidewalks and improve existing sidewalks City wide. Identify opportunities to install more linear parks along heavily travelled roadways. Increase tree canopy along sidewalks.  |
| 91 | Create parking policies that will decrease VMT and congestion related to parking. | RA<br>CO <sub>2</sub>       | Identify potential parking policy measures that would discourage vehicle use and encourage the use of alternative transportation. Adjust parking fees and increase trolley routes to encourage beach employees and visitors to use the under-utilized garages.   |
| 92 | Support a "Downtown" type service.  | CO <sub>2</sub>             | Encourage private companies to provide services such as the "Downtown" found in Delray Beach and Boca Raton or other on demand ride services.  |
| 93 | Increase number of vehicles which are fuel efficient or use alternative fuels.    | OE<br>RA<br>CO <sub>2</sub> | Continue to expand the public EV charging infrastructure. Offer incentives for hybrid and alternative fuel vehicles including preferred parking and reduced parking rates.   |
| 94 | Reduce fuel consumption of the City fleet.  | CO <sub>2</sub>             | Create a policy by which new vehicle purchases must be the highest efficiency possible while performing the required function. Train and expect employees to use efficient driving behavior. Create a schedule of maintenance which will ensure vehicles are getting their maximum efficiency. Track efficiency with the mileage tracking program.   |

CO<sub>2</sub> = contributes to carbon reductions

OE = outreach or education

RA = contributes to resiliency or adaptation to sea level rise and climate change

## Actions



## Community Engagement

The City will achieve community engagement in sustainability by meeting these goals:

1. Reach a broad audience with messaging related to Resiliency and Sustainability
  2. Engage residents and businesses in the implementation of the Action Plan.
  3. Create a space to address community specific issues.
- 
- |    |   |                             |   |
|----|---|-----------------------------|---|
| 94 | Increase messaging on sustainability and sustainability related projects.                               | OE                          | Create Sustainability related educational displays to be set up at City events, meetings, and forums. Enhance the content available on the City website and create an email newsletter. Create a pledge for citizens with suggested actions to help accomplish the goals of the sustainability action plan.         |
| 96 | Engage neighborhood association in plan implementation.   | OE<br>RA<br>CO <sub>2</sub> | Promote "Sustainable Neighborhoods" program guide for use by neighborhood associations. Offer "Green for Green" incentives to neighborhoods wishing to participate in the sustainable neighborhoods program. Highlight, stories of residents and neighborhoods which have implemented unique or effective projects. |
| 97 | Encourage businesses to implement goals from the Action Plan.   | OE<br>RA<br>CO <sub>2</sub> | Create and promote a voluntary Hollywood Green Business program. Highlight stories of businesses which have implemented unique or effective projects. Engage the business community in competitions such as the better building challenge, commuter challenges, and others each year to improve engagement.         |
| 98 | Address Food Deserts.   | OE                          | Identify opportunities to create green markets, community gardens, or food waste reduction and distribution programs to benefit areas identified as food deserts.   |
| 99 | Improve neighborhood appearances through creative use of public space, vacant lots, and blighted areas. |                             | Investigate opportunities to use public art to connect neighbors and beautify neighborhoods. Utilize vacant lots for creative temporary purposes, such as gardens, parks, and gathering spaces. Engage the neighborhood in determining the use of vacant lots and solutions to blighted spaces.                     |

CO<sub>2</sub> = contributes to carbon reductions

OE = outreach or education

RA = contributes to resiliency or adaptation to sea level rise and climate change

**Actions**

## Year 1 – Initial Steps



### Leadership by Example

- ✓ Sustainability Coordinator and Sustainability Task Force create checklist of sustainability best practices to include in plan updates. (Action 1)
- ✓ Sustainability Coordinator reviews code and flags areas for potential improvements and additions. (Action 2)
- ✓ Sustainability Task Force take individual sections of code to suggest updates. (Action 2)
- ✓ Sustainability Coordinator keeps a list of items updated or added to code that would benefit from guidelines or manuals. (Action 4)
- ✓ Sustainability Coordinator and Sustainability Task Force create checklist of sustainability elements for capital improvement projects. (Action 5)
- ✓ Sustainability Coordinator and Public Works will establish energy and water audits at City facilities and enroll in the Better Buildings Challenge. (Action 8, Action 13, and Action 55.)
- ✓ Sustainability Coordinator will work with procurement to develop Green procurement policy for the City. (Action 9)
- ✓ Sustainability coordinator will create a multi-year plan for City employee engagement and work with Public Affairs to create visuals and outreach. (Action 10).
- ✓ Sustainability Coordinator will meet with the Parks Department to develop a green events policy. (Action 11)
- ✓ Sustainability Coordinator will work with Sustainability Task Force to create a list of desired pilot and demonstration projects, potential budgets, steps, and possible grants. (Action 16)
- ✓ Sustainability Coordinator and Sustainability Task Force will develop criteria for Sustainable Hollywood recognition program similar to Broward County's seal of sustainability. (Action 17)
- ✓ Sustainability Coordinator will develop a plan and schedule for multi-year community outreach regarding topics covered in the Sustainability Action Plan. (Action 18)
- ✓ Sustainability Coordinator will work with Public Affairs to promote Action Plan in the community. (Action 20)



### Mitigation and Adaptation (Climate Action Plan)

- ✓ Sustainability Coordinator will complete a Greenhouse Gas Inventory (Action 21)

- ✓ Sustainability Coordinator will work with Civic Affairs Officer to have a vulnerability assessment completed for the entire community. (Actions 22, 25, 27, 36\*, 41\*, 69\*)
- ✓ The Sustainability Coordinator will use the results of the vulnerability analysis and the help of consultants to identify locations for living shoreline and sea wall pilot projects. (Action 22)
- ✓ Public Works will complete a Dune Action Plan. (Action 23)
- ✓ Sustainability Coordinator, Landscape Architect, and City Engineers will identify potential locations for Low Impact Development pilot projects. (Action 28)
- ✓ The Sustainability Coordinator will work with the Landscape Architect to create guidelines for green infrastructure and find locations for pilot projects. (Action 29).
- ✓ The Sustainability Coordinator will work with Public Affairs to develop a plan for climate messaging to the community. (Action 34).



## Built Environment

- ✓ Identify high hazard and repeat flooding areas from the vulnerability assessment. (Action 36)
- ✓ Strengthen the Green Building requirements by completing Hollywood Green requirements and ceasing acceptance of non-comparable certification programs such as National Green Building Standard. (Action 37)
- ✓ Sustainability Coordinator and Hollywood Green task force create a voluntary recognition program for buildings operations. (Action 37).
- ✓ Development Staff will begin addressing green building at preliminary review. (Action 38)
- ✓ The Sustainability Coordinator will create a list of green building features which could benefit from easily accessible guidelines. (Action 39)
- ✓ Staff from the Hollywood Green task force will be tasked with developing or identifying appropriate guidance documents. (Action 39)
- ✓ Begin requiring parcel level modeling of sea level rise impacts before site development. Tie parcel level planning to the results of the vulnerability analysis. (Action 41)
- ✓ Sustainability Coordinator and Sustainable Hollywood will identify a list of potential demonstration projects for the purpose of seeking funding. (Action 42)
- ✓ Sustainability Coordinator and Sustainability Hollywood task force will develop a list of sustainable features that should be included in all City projects. (Action 42)
- ✓ The sustainability coordinator will work with Community Development to identify funding opportunities for including green features and green building requirements into housing rehab programs. (Action 45)

- ✓ The Sustainability Coordinator and the Landscape Architect will work with the green team to update the landscape code. (Action 46, 48\*)
- ✓ The Sustainability Coordinator, Landscape Architect, and Public Works will collaborate to complete a community tree inventory. (Action 46, Action 80)
- ✓ The Sustainability Coordinator will develop education content for the website regarding the Urban Heat Island Effect. (Action 47)



## Resource Stewardship

- ✓ The Sustainability Coordinator will work with Public Utilities and Public Affairs to design an outreach campaign regarding efficient irrigation. (Action 50)
- ✓ The Sustainability Coordinator will work with Public Utilities to include comparative use information on the utility bill. (e.g. WaterSmart) (Action 53)
- ✓ The Sustainability Coordinator will create educational content regarding low cost and no cost energy efficiency upgrades and target dissemination in the community to those with the greatest need. (Action 54)
- ✓ Seek funding for energy efficiency give away kits. (Action 56)
- ✓ Seek grant funding and partnerships for energy audit rebates. (Action 57)
- ✓ Sustainability Coordinator will research communities that have energy disclosure policies for renters, buyers, and building owners. (Action 58, 60)
- ✓ Sustainability Coordinator will research examples of zero waste cities. (Action 61)



## Environmental Quality

- ✓ The Sustainability Coordinator will research fertilizer ordinances and work with the Landscape Architect and Public Utilities to develop outreach. (Action 66)
- ✓ The Sustainability Coordinator and the Landscape Architect will develop outreach programs and a draft ordinance regarding residential and commercial green infrastructure. (Action 68)
- ✓ Identify vacant lots that have potential to be used for water storage as determined by the vulnerability assessment. (Action 69)
- ✓ The Sustainability Coordinator will work with Code Enforcement to identify locations to place “no idling” signage. (Action 72)
- ✓ The Sustainability Coordinator will create web content related to vehicle maintenance and driving behavior to reduce emissions and increase efficiency. (Action 72)
- ✓ The Sustainability Coordinator will work with the Police Department and the Crime Prevention through Environmental Design program to encourage lighting that is safe and energy efficient and which reduces light pollution. (Action 81)

- ✓ The Sustainability Coordinator will work with the Recycling Coordinator to create a City Hall waste reduction program including changing the take out containers from Gino's and encouraging City staff to use reusable containers. (Action 84)



## Mobility

- ✓ The Sustainability Coordinator will work with staff to create an RFP and hire a consultant to do a traffic analysis and needs assessment to identify areas of the community which would benefit from shuttle routes. (Action 86)



## Community Engagement

- ✓ The Sustainability Coordinator will make an inventory of sustainability outreach opportunities and topics for inclusion on the website. (Action 95)
- ✓ Roll out the Sustainable Neighborhoods program developed in conjunction with the Sustainability Action Plan. (Action 96)
- ✓ Create a green business recognition program. (Action 97)

## Leadership by Example

Action	Lead and Partners	Costs	Funding source	Milestones
Goal: Integrate sustainability into City operations				
1	<p>Include sustainability criteria in all major City plans and guidelines.</p> <p>Lead: Sustainability office, Sustainability task force</p> <p>Partners: Department heads, Green Team and other planning boards</p>	low-medium	Budget	<ol style="list-style-type: none"> <li>1. Create a checklist of sustainability best practices the follow from this Sustainability Action Plan that can be reviewed before new policies, ordinances, and plans are adopted.</li> <li>2. Create a schedule of plans requiring updates and ensure that Sustainability staff is included in the update process.</li> <li>3. Use the sustainability checklist to include sustainability criteria in all the following plans when updated:               <ol style="list-style-type: none"> <li>a. Comprehensive Plan</li> <li>b. Capital Improvement Plan</li> <li>c. City Wide Master Plan (RCAP SP-1)</li> <li>d. Budget Process</li> <li>e. CRA Plan</li> <li>f. Neighborhood Master Plans</li> </ol> </li> </ol>
2	<p>Identify City codes and zoning ordinances which might conflict with sustainability and resilient design.</p> <p>Green Team, Sustainability Coordinator, City departments, Building, Planning</p>	low	Budget	<ol style="list-style-type: none"> <li>1. Using this document as a guide, conduct a review of the City's Code of Ordinances and Zoning and Development Regulations to identify:               <ol style="list-style-type: none"> <li>a. policies in place that need improvement to drive sustainability goals.</li> <li>b. policies in place that inhibit sustainability goals</li> <li>c. policies which are missing to drive sustainability goals.</li> </ol> </li> <li>2. Prioritize the changes necessary and make the changes in order of importance.</li> </ol>

3	Bring the City into compliance with codes related to sustainability.	City attorney, City departments	medium - high	Budget and grants	<ol style="list-style-type: none"> <li>1. While conducting the review of the Code and making amendments to the codes, identify where the City must work to come into compliance</li> <li>2. Create a plan to achieve the standards set by our code of ordinances and Zoning and Development Regulations.</li> </ol>
4	Create a user friendly reference manual to Code and Zoning requirements related to sustainability and the environment.	Green Team, Sustainability Coordinator, City departments	low	budget	<ol style="list-style-type: none"> <li>1. During review of Code for existing sustainability and environmental policies, keep a reference document of existing codes.</li> <li>2. Update the reference document as new ordinances and policies are put into place.</li> <li>2. Create a manual with plain language and links to the code for quick and easy reference for residents, businesses, and employees.</li> </ol>
Goal: Dedicate City budget to sustainability relates projects and outcomes.					
5	Ensure that sustainability criteria are met by all capital improvement projects.	Lead: Sustainability office  Partners: Department heads, City Staff,	low	Budget	<ol style="list-style-type: none"> <li>1. Create a checklist of measures to address future sea level rise impacts in project design that is updated and contributed to by all departments</li> <li>2. Identify a checklist of sustainability elements, identified through the Sustainability Action Plan, that should be included in capital improvement projects.</li> <li>3. Create a forum in which City staff can communicate sustainability needs and best practices to staff from budget and finance as well as City leadership.</li> <li>4. All Capital Improvement projects are required to incorporate elements from the checklist.</li> </ol>



6	Increase staff positions directly working on Sustainability.	Sustainability office, City Managers, Human Resources	medium	Budget	<ol style="list-style-type: none"> <li>1. Make sustainability coordinator position full time.</li> <li>2. Hire a grant writer</li> <li>3. Hire staff for education and outreach</li> </ol>
7	Create a revolving fund for energy efficiency projects.	Public Works, budget	low	grant or budget allocation	<ol style="list-style-type: none"> <li>1. Create a methodology for assessing annual energy cost savings from efficiency upgrade projects.</li> <li>2. Create a fund within the budget dedicated to energy efficiency upgrades and financed through energy efficiency savings.</li> </ol>
<b>Goal: Reduce resource use by City buildings and employees</b>					
8	Track the energy and water used by City facilities with a goal to improve efficiency.	Lead: Public works Partners: Utilities, NatureScape, FPL	low-medium	Grants and Budget	<ol style="list-style-type: none"> <li>1. Conduct energy and water audits at all buildings to establish baselines and identify areas for improvement.</li> <li>2. Create a constantly updated database of energy and water conservation projects with a timeline for implementation.</li> <li>3. Conduct follow up audits to assess progress.</li> <li>4. Identify and implement opportunities for further energy generation at City buildings.</li> </ol>
9	Adopt green procurement policies	Lead: Procurement	low - medium	Budget	<ol style="list-style-type: none"> <li>1. Create and pass a Green Procurement policy</li> <li>2. Create a green fleet policy for all non-emergency vehicles where the technology is most efficient.</li> </ol>
10	Engage employees in behavior changes to reduce water and energy use.	Sustainability Coordinator, sustainability task force Human Resources, Public Works and Utilities, engineering	low	Budget	<ol style="list-style-type: none"> <li>1. Develop Sustainability messaging to be presented to new employees during new employee orientation and to be included into the new employee handbook.</li> <li>2. Create regular and constant messaging to employees regarding actions they can take to reduce their environmental impact at home and at work.</li> </ol>

11	Model environmental stewardship at City events	Lead: Sustainability office, public works Partners: Sponsoring departments	medium	Budget, Grants	<ol style="list-style-type: none"> <li>1. Create a green events policy which outlines desirable green elements for events</li> <li>2. City adopts a "net zero" approach to events, reducing impacts where possible and creating offsets where necessary.</li> <li>3. Investigate creating a program like Broward County's Plan it Green or partnering with Plan it Green to use event offsets to enhance Hollywood's greenways.</li> </ol>
12	Increase the renewable energy generated and utilized by the City	Lead: Public Works	medium-high	Budget, grants	<ol style="list-style-type: none"> <li>1. Identify facilities with potential to host solar panels or wind turbines.</li> <li>2. Identify opportunities to buy electricity from renewable sources. Work with FPL to provide this option.</li> <li>3. Identify ways to utilize energy generation to also increase resiliency, such as installing solar panels to power street lights and emergency facilities in the event of outages.</li> <li>4. Continue to increase investments in this technology and identify opportunities to increase efficiency in order to meet the goal of 20% generation by 2025.</li> </ol>
13	Participate in the Better Buildings Challenge	Lead: Public Works, public affairs, Sustainability Partners: DOE, FPL	low-medium	budget, grants	<ol style="list-style-type: none"> <li>1. Enroll the City in the Department of Energy's Better Buildings Challenge.</li> <li>2. Conduct public outreach to alert the community to the City's commitment to the challenge, to educate employees of behaviors they can modify to save energy, and to encourage buildings in the community to participate.</li> </ol>
14	Retrofit streetlights to LED.	Lead: Public Works Partners: FPL	medium - high	budget	<ol style="list-style-type: none"> <li>1. Assess the savings from the existing LED retrofits as justification for expanding the program.</li> <li>2. Identify the best available technology to achieve the dual goals of energy reduction and the reduction of light pollution.</li> <li>3. Complete retrofits City wide.</li> </ol>

15	City utility plans incorporate methods for reducing carbon footprint.	Lead: Utilities	low - medium	budget	1. When revising long term planning for the City's wastewater treatment plant and water treatment plant include methods for calculating and reducing carbon footprint.
Goal: Increase visibility of sustainability action taken by the City and residents.					
16	Create City sponsored demonstration projects	Lead: Sustainability, Parks, Utilities, Public Works	medium-high	Grants and Budget	1. Using this document as a guide, create a list of potential demonstration projects. 2. Apply for grant funding to complete the demonstration projects. 3. As projects are completed, create a public awareness campaign revolving around the project, create educational content on site and on the website.
17	Create a Sustainable Hollywood recognition program	Lead: Sustainability, Public Affairs	low	budget	1. Create a list of requirements for a City project to receive recognition. 2. Regularly ask departments to submit projects that were completed which met the requirements. Projects can be related to City services or can be initiatives started by employees. 3. Promote those projects and reward the departments and individuals responsible.
18	Create educational programming related to goals set out in the Sustainability Action Plan.	Lead: Sustainability, Parks, Public Affairs Partners: Schools, community organizations	low-medium	Budget and grants	1. Identify the main areas of the Sustainability Action Plan that the outreach will address. 2. Schedule workshops, subject matter expert speakers, and follow up projects. 3. Support the trainings and workshops with content on the website.
Goal: Support county and regional actions towards resiliency and sustainability.					

19	Offer support to regional and national goals to enhance resiliency and sustainability.	Lead: Sustainability, City Commission, Civic Affairs, City manager  Partners: City Departments, community groups	low - high	Budget and grants	1. Regularly bring items related to resiliency and sustainability to the City Commission for support. 2. Continue to have staff serve as representatives on regional boards and organizations.
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Goal: Adapt the Sustainability plan to changing conditions and lessons learned

20	Communicate progress towards sustainability goals.	Lead: Sustainability Office  Partners: Public Affairs, department heads	low	Budget	1. Release the Sustainability Action Plan along with an outreach campaign. 2. Conduct annual reports to assess the implementation of the Sustainability Action Plan 3. Review and update the Sustainability Action Plan every 5 years.
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## Mitigation and Adaptation

Action	Lead and Partners	Costs	Funding source	Milestones
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Goal: Reduce City contributions to the driving causes of Sea Level Rise and Climate Change

21	Track Greenhouse Gas Emissions and set reduction targets	Lead: Sustainability Coordinator, Sustainability Task Force  Partners: Broward County, City Departments	medium	Budget	1. Conduct a baseline greenhouse gas emission inventory 2. Set GHG reduction targets that align with federal and local targets. 3. Advertise goals and conduct education to residents and businesses on their contribution to the reductions. 4. Create a GHG emission reduction plan to reach targets. 5. Conduct regular GHG inventories to assess progress and adjust action plans as needed.
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Goal: Increase the resiliency of coastal areas

22	Develop living shorelines to combat coastal flooding (RCAP NS-7)	<p>Lead: Sustainability office, Public Works, Building, Engineering</p> <p>Partners: Broward County, The Nature Conservancy, Southeast Florida Regional Climate Compact</p>	High	Federal and State Grants, Private Grants, City Budget, Private investment	<ol style="list-style-type: none"> <li>1. Identify areas where it is feasible and advantageous to utilize living shorelines in place of or in conjunction with seawall improvements.</li> <li>2. Create an education campaign to inform coastal property owners and residents to the importance and benefits of living shorelines.</li> <li>3. Create demonstration projects of living shorelines on City property.</li> </ol>
23	Increase dune coverage on the beach	<p>Lead: Sustainability office, Public Works</p> <p>Partners: Non profit organizations (YEA), private property owners</p>	medium - high	Federal and State Grants, Private Grants, City Budget, Private investment	<ol style="list-style-type: none"> <li>1. Create a Dune master plan following the guidance of the County.</li> <li>2. Create a public outreach campaign regarding the importance of dunes.</li> <li>3. Create an incentive or assistance program to encourage dune creation on private property.</li> <li>4. Create monthly volunteer opportunities for Dune maintenance.</li> </ol>

24	Improve sea walls City-wide to protect existing property from sea level rise	<p>Lead: Sustainability office, Public Works, Building</p> <p>Partners: Broward County, The Nature Conservancy, Southeast Florida Regional Climate Compact</p>	High	Federal and State Grants, Private Grants, City Budget, Private investment	<ol style="list-style-type: none"> <li>1. Implement recommendation resulting from the Broward County/USACE study scheduled to be completed in 2018.</li> <li>2. Identify opportunities to enhance the effectiveness of sea walls using living shorelines and create requirements and guidelines for including living shorelines in seawall improvements.</li> <li>3. Identify budget for City owned sea wall improvements. Require that, where appropriate, all City sea wall projects include aspects of living shorelines.</li> <li>4. Create a funding program to assist private sea wall owners to improve sea walls requiring, where appropriate, that living shorelines be included.</li> <li>5. Conduct a pilot project with partnerships to demonstrate the use of living shorelines to enhance seawall effectiveness.</li> </ol>
25	Designate Adaptation Action Areas	<p>Lead: Sustainability Office, City Manager, Planning</p> <p>Partners: Broward County, consultants</p>	High	Federal and State grants, City Budget	<ol style="list-style-type: none"> <li>1. Implement Adaptation Action areas based on vulnerability assessments conducted by consultants. (RCAP SP-3 to SP-11)</li> <li>2. Create a plan for acquiring land with repeat flooding or vulnerable undeveloped areas to be used for restoration, recreation, or retention. (RCAP SP-13)</li> <li>3. Incorporate sea level rise scenario maps into the Comprehensive Plan and planning and zoning requirements. (RCAP SP-7)</li> <li>4. Identify areas at lowest risk to SLR as "growth areas" to encourage future development. (RCAP SP-14)</li> </ol>
26	Incorporate Sea Level Rise into the Comprehensive Plan.	Lead: Sustainability, Planning, Engineering	medium	budget	<ol style="list-style-type: none"> <li>1. Incorporate sea level rise scenario maps into the comprehensive plan and planning and zoning requirements.</li> <li>2. Identify areas at lowest risk to Sea Level Rise and focus future development in these areas.</li> </ol>

27	Plan to acquire land with repeat flooding.	Planning, Community Development	medium - high	budget, grants	<ol style="list-style-type: none"> <li>1. Identify areas at the highest risk for repeat flooding.</li> <li>2. Create a plan to prioritize acquisition, starting with vacant properties.</li> <li>3. Repurpose vulnerable properties for restoration, recreation, or retention.</li> </ol>
28	Conduct pilot projects of Low Impact Development techniques	Planning, engineering, public works, Sustainability	Medium-High	Grants and Budget	<ol style="list-style-type: none"> <li>1. Create a list of projects which might include elements of the resilient redesign such as raised roads, bioswales, green alleys, etc.</li> <li>2. Construct the demonstration project and monitor costs and impact on issues related to flooding, erosion, and storm water.</li> </ol>
29	Expand the use of green infrastructure city wide	Lead: Sustainability office, Landscape Architect, Engineering	Medium	Federal and State grants, City Budget	<ol style="list-style-type: none"> <li>1. Create a green infrastructure handbook for the city. Require that new developments and major renovations include aspects of green infrastructure.</li> <li>2. Complete demonstration projects to test the effectiveness of raised roads, vegetated bioswales, green alleys, and other green infrastructure.</li> <li>3. Evaluate the storage possibilities of City owned lands and develop a plan for enhancing their use of storage (e.g. Resilient Redesign, Detroit water storage on vacant lots, etc.).</li> <li>4. Re-evaluate the building requirements for properties in flood zones and water storage options.</li> </ol>

30	Create a long-term plan to create resilient infrastructure	Lead: Sustainability office, Planning, Public Works, Engineering	low - medium	City budget	<ol style="list-style-type: none"> <li>1. Use the Unified Sea Level Rise projection created by the Climate Compact to inform land use and zoning decisions.</li> <li>2. Identify vulnerable critical infrastructure and City facilities and create a plan to address those risks.</li> <li>3. Identify a sustainable budget for adaptation projects and planning.</li> <li>4. Create a plan to update underground utilities, raise roadbeds, convert septic to sewer.</li> <li>5. All new improvements and new construction should be done with corrosion resistant materials and robust and permeable foundations.</li> </ol>
31	Convert septic systems to sewer	Public Utilities	High	budget	<ol style="list-style-type: none"> <li>1. Model the impact of sea level rise on ground water levels and prioritize septic to sewer conversion in areas where the water table will reach the drainage fields first.</li> <li>2. Delay septic to sewer conversions in areas that are not at risk as a result of rising ground water.</li> </ol>
Goal: Create emergency management plans which incorporate sea level rise.					
32	Update emergency management systems to integrate future expected storm surges. (RCAP SP-4, WS-1)	Lead: Emergency management, Public Utilities	medium - high	City budget	<ol style="list-style-type: none"> <li>1. Model evacuation routes and flood mitigation for high risk areas (RCAP RR-2)</li> <li>2. Create a plan for post-disaster mitigation (RCAP RR-3)</li> <li>3. Assess the vulnerability of the fresh water supply to sea level rise and high intensity storm events.</li> </ol>
Goal: Educate and empower the community to create resiliency.					
33	Support citizen action groups and advisory boards.	Lead: Sustainability office, Civic Affairs	low	none	<ol style="list-style-type: none"> <li>1. Engage the Green Team and other citizen groups in conversations about solutions.</li> <li>2. Encourage the Green Team to enhance their community outreach and to provide substantive recommendations to the commission.</li> </ol>



34	Promote community awareness and understanding of the issues.	Lead: Sustainability office  Partners: Broward County, Community Groups, Green Team	Low	none	1. Schedule a series of workshops that focus on science, impact, and solutions. 2. Annual or semi-regular updates on City actions regarding climate adaptation.
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## Built Environment

Action	Lead and Partners	Costs	Funding source	Milestones	
Goal: Provide clear guidelines and expectations for development within Hollywood					
35	Create zoning regulations to encourage multi-modal transit	Planning	low	budget	1. Continue on efforts such as the Regional Action Center (RAC) zoning which concentrates activities and encourages use of transit systems in order to reduce vehicle miles travelled in the community. 2. Create zoning that enhances mobility rather than focuses on moving automobiles.
36	Create zoning that reduces development in high hazard areas.	Planning	low	budget	1. Identify the areas of the City which are the most vulnerable to Sea Level Rise. 2. Utilize policy mechanisms such as adaptation action areas to create special regulation and priorities for these areas.

37	Provide a green building certification that focuses specifically on those features most desirable to Hollywood.	Lead: Sustainability Office, Planning, Building, Landscape Architect  Partners: Green Team, Chamber of Commerce	low	Budget	<ol style="list-style-type: none"> <li>1. Identify the green building practices that are most valuable for Hollywood and most needed in local conditions. Create credit point system to prioritize most desirable features.</li> <li>2. Create a recognition program for compliance with Hollywood Green. Extend recognition and incentives to include operations. Highlight innovative practices and projects.</li> <li>3. Prioritize LEED certification and LEED comparable certifications for meeting the requirements of the City's Green Building ordinance. Discourage certifications which are not comparably rigorous or which do not significantly improve upon the Florida Green Building Code.</li> </ol>
38	Include reviews of green building practices at all points during the development and permit review process.	Planning, Sustainability	low - medium	budget, fees	<ol style="list-style-type: none"> <li>1. Create a process by which developers must work with City Staff to identify and plan for green building practices as the project begins to develop.</li> <li>2. Require presentation and discussion of green building practices at the Pre Application Conceptual Overview (PACO) and reassess during plan reviews, Technical Advisory Committee, and the planning and development board.</li> </ol>
39	Create guidance documents for green building elements.	Planning, Sustainability	low-medium	budget, grants	<ol style="list-style-type: none"> <li>1. Go through the Hollywood Green building program and identify requirements or recommendation which might benefit from guidelines or clarification.</li> <li>2. Create manuals and guidebooks based on best available practices and incorporating regional considerations.</li> </ol>
40	Create incentives and assistance for green building.	Lead: Sustainability, Planning, Building, Landscaping	low-medium	budget, grants	<ol style="list-style-type: none"> <li>1. Conduct a survey with the business and development community to identify the types of incentives or assistance which would best encourage green building practices.</li> <li>2. Promote incentive/assistance program</li> </ol>

41	Use the best available models of vulnerability for planning.	Planning, sustainability	low-medium	budget	<ol style="list-style-type: none"> <li>1. Use parcel level modeling for parcel level design and planning.</li> <li>2. require developers to demonstrate that their project is addressing vulnerability based on this modeling for the expected life of the project.</li> </ol>
42	Create demonstration projects throughout the City to demonstrate desirable development features.	<p>Lead: Planning, Building, Sustainability</p> <p>Partners: Green Team</p>	medium	Budget, Grants	<ol style="list-style-type: none"> <li>1. Identify green building practices that the city would like to see more frequently implemented by private developers and create a plan to implement them as demonstration at City owned properties.</li> <li>2. Incorporate sustainable features in all improvements or renovations on City property, such as permeable pavement and bioswales in the City Hall parking lot.</li> <li>3. Create educational signage and outreach for all demonstration projects.</li> </ol>
Goal: Create financing for sustainability projects					
43	Create a "sustainability fee" modeled after the Sustainability ordinance passed by Miami Beach	<p>Lead: Planning, Building, Sustainability</p> <p>Partners: Green Team</p>	low	none	<ol style="list-style-type: none"> <li>1. Pass an ordinance requiring the collection of a sustainability fee at the beginning of the planning process with return of the fee at the end on a scale of green building achievements.</li> </ol>
Goal: Improve existing infrastructure					
44	Encourage the repurposing of existing structures through incentives	Lead: Planning, Building	low-medium	none	<ol style="list-style-type: none"> <li>1. identify possible incentives that can be offered to developments that repurpose existing structures.</li> </ol>

45	Enhance the green building requirements for building rehabilitation and renovations to make sure that low income families are benefitting from the energy and water efficiency resulting from higher standards	Lead: Community Development, Planning, Building	medium - high	Federal Grants (HUD, DOE, etc.)	<ol style="list-style-type: none"> <li>1. Identify additional funding to grow the rehabilitation program.</li> <li>2. Raise standards for energy and water efficiency in rehabilitated properties with expectations that the projects are designed for resulting cost savings.</li> <li>3. Create requirements for affordable housing projects to certify green.</li> </ol>
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Goal: Mitigate the Urban Heat Island Effect

46	Mitigate the Urban Heat Island through increasing canopy cover.	Lead: Sustainability office, Landscape Architect, Engineering	Medium	City budget, grants (Florida Forestry grant, etc.)	<ol style="list-style-type: none"> <li>1. identify areas of the community that experience urban heat island impacts and which need enhanced canopy - determined through a tree inventory.</li> <li>2. Target tree planting programs to these identified areas.</li> <li>3. Strengthen the landscape and tree ordinances to require greater canopy cover.</li> <li>4. Conduct regular tree give away programs for residents.</li> </ol>
47	Mitigate the Urban Heat Island effect of roofs and paved surfaces.	Lead: Sustainability office, planning, building	Medium	City budget, grants (DOE, EPA, etc.)	<ol style="list-style-type: none"> <li>1. Conduct outreach about the benefits of cool roofs to energy bills and community impacts, particularly targeted to PACE.</li> <li>2. Conduct education about the Urban Heat Island effect and the materials which can be used to reduce impacts.</li> <li>3. Develop a rebate program for cool roofs or high SRI paving.</li> </ol>

## Resource Stewardship

Action	Lead and Partners	Costs	Funding source	Milestones
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Goal: Reduce water use and increase opportunities for aquifer recharge City wide.

48	Improve the landscape code to require more Florida Friendly and native landscaping; less sod.	Lead: Sustainability office, Landscape Architect Partners: Utilities	Medium	Grants and Budget	<ol style="list-style-type: none"> <li>1. Review the current City code and compare to the policies of other municipalities.</li> <li>2. Revise the code to require more use of Florida Friendly and native plants.</li> <li>3. Revise the code to reduce the area that can be covered by sod.</li> </ol>
49	Promote National Wildlife Federation habitat certification and NatureScape participation.	Lead: Sustainability office, Landscape Architect Partners: Utilities	Medium	Grants and Budget	<ol style="list-style-type: none"> <li>1. Develop and implement messaging regarding Florida Friendly landscaping, native plants, and wildlife habitat certification.</li> <li>2. Host native plant give aways regularly in the City.</li> </ol>
50	Promote efficient irrigation.	Lead: Sustainability, Landscaping Partners: Utilities, Public Affairs	Medium	Grants and Budget	<ol style="list-style-type: none"> <li>1. Messaging regarding irrigation maintenance.</li> <li>2. Offer irrigation audits and rain sensor give aways.</li> <li>3. Improve the landscaping code with stronger requirements for water saving landscaping design.</li> </ol>
51	Continue Water Conservation Education.	Lead: Public Utilities			
52	Conduct a vulnerability assessment of the water supply.	Lead: Utilities	Medium-High	Budget, Grants	<ol style="list-style-type: none"> <li>1. Expand the existing 30 year projections to a longer planning time frame and incorporate the projected sea level rise into the assessments of water supply, well field location, and Biscayne Aquifer use.</li> </ol>
53	Continue to provide education related to water conservation.	Lead: Utilities, Sustainability	Medium	Grants - SFWMD	<ol style="list-style-type: none"> <li>1. Implement a messaging campaign to go on water bills and in city publications related to water conservation.</li> <li>2. Use water bills to communicate water usage performance relative to neighbors and community. (Example: WaterSmart)</li> <li>3. Create City of Hollywood water conservation competitions.</li> </ol>

Goal: Reduce energy use and increase renewable energy conservation City wide.

54	Reduce residential energy use through education	Lead: Sustainability, Public Works  Partners: FPL	low-medium	Budget, Grants	<ol style="list-style-type: none"> <li>1. Develop workshops and educational materials regarding low cost and no cost energy efficiency upgrades for residents and businesses.</li> <li>2. Create a "Home Energy Audit" kit that residents can use to conduct a DIY home energy audit and upgrades.</li> <li>3. Create an energy competition for businesses and residents which encourages efficiency and highlights success stories.</li> <li>4. Create demonstrations at public buildings of available energy efficiency and energy generation techniques and technologies.</li> </ol>
55	Encourage participation in the DOE Better Buildings Challenge	Lead: Sustainability, Public Affairs, Public Works	low	budget	<ol style="list-style-type: none"> <li>1. Promote the City's participation in the Better Building Challenge.</li> <li>2. Conduct outreach regarding the benefits of energy upgrades, the availability of PACE financing,</li> </ol>
56	Develop energy efficiency give away programs.	Lead: Sustainability, Public Works  Partners: FPL	Medium	Budget, Grants, Partnerships. (DOE, FPL)	<ol style="list-style-type: none"> <li>1. Identify the targeted items to give away and the types of rebates to be offered.</li> <li>2. Secure funding for program.</li> <li>3. Conduct outreach to inform residents and businesses of the program.</li> <li>4. Measure and track energy use reductions as a result of the program.</li> </ol>
57	Offer low or no cost energy audits to residents and businesses.	Lead: Public works  Partners: FPL, contractors	Medium	Grants	<ol style="list-style-type: none"> <li>1. Develop funding and partners to conduct audits.</li> <li>2. Develop outreach program to announce energy audit program.</li> <li>3. Develop program for follow up to measure the energy efficiency improvements from the audit program.</li> </ol>

58	Empower renters and home buyers to make informed decisions on housing based on energy efficiency.	Lead: Partners: Broward County, Property Appraisers, Realtors	medium	Grants and budget	<ol style="list-style-type: none"> <li>1. Pass an ordinance requiring residential building efficiency is disclosed in the form of the results of an energy audit to potential buyers and occupants.</li> <li>2. Conduct outreach to inform residents about the energy efficiency disclosure requirements.</li> <li>3. Provide technical assistance to homeowners and rental property owners to encourage compliance.</li> </ol>
59	Increase energy generation City wide.	Lead: Sustainability office Partners: FPL, contractors	Medium-High	Grants and Budget	<ol style="list-style-type: none"> <li>1. Provide education to the community on energy generation technologies</li> <li>2. Create rebate and incentive programs for installation of solar PV, solar-thermal, and other energy generating system.</li> <li>3. Create demonstration projects at City properties with educational displays.</li> </ol>
60	Require commercial buildings to report energy and water performance.	Lead: Sustainability, Utilities; Public Affairs Partners: SFWMD, FPL	Medium	Budget, Grants, Partnerships. (DOE, FPL)	<ol style="list-style-type: none"> <li>1. Pass an ordinance requiring annual disclosure of energy and water usage for buildings over a particular size.</li> <li>2. Assign energy performance scores from the usage provided. Require that low performing buildings conduct audits every 5 years.</li> <li>3. Work with participating buildings to inform and assist about energy and water efficiency upgrades, best practices, technologies, and financing.</li> </ol>
Reduce Solid Waste Community Wide					
61	Continue public outreach regarding waste and recycling.	Lead: Public Works Partner: Sustainability, Green Team	Medium	Budget, grants	<ol style="list-style-type: none"> <li>1. Increase the frequency of outreach to the community about recycling and waste reduction strategies.</li> <li>2. Conduct more frequent hazardous waste and electronics recycling events.</li> </ol>

62	Declare a goal of zero waste.	Lead: Public Works, Sustainability, Public Affairs Partners: Green Team	Medium	Budget, grants	1. Research declarations and actions taken by other "zero waste" cities and determine benchmarks. Research examples of Cities identified as Zero Waste or Circular Economy and consider setting goals as zero waste or circular economy. (e.g. Minneapolis, Dallas, Oakland, Washington, D.C.) 2. Promote the goals through public outreach.
63	Obtain 100% compliance with the commercial recycling ordinance.	Lead: Public Works Partner: Sustainability, Green Team	low-medium	budget	1. Conduct targeted outreach to businesses and multi-family residences to alert them of the ordinance and the fines associated. Begin writing warning citations. 2. Begin issuing fines for non-compliant buildings.
64	Reduce food waste	Lead: Public Works, Sustainability Partners: Community development, Green Team, Broward County	low	budget, grants	1. Create compost bin give away and workshop series. 2. Partner with local restaurants and groceries to divert food away from the landfill through donations to community organizations. 3. Identify food deserts in the community and work with community partners to divert excess food into these areas.
65	Decrease emissions related to solid waste	Lead: Public Works, Procurement	low - medium	budget, fees	1. Create a policy for evaluating hauler contracts that prioritizes companies that haul to local facilities, waste to energy facilities, and which use alternative fuel vehicles. 2. Evaluate the possibility of moving to a once a week or three times in two weeks schedule.

## Environmental Quality

Action	Lead and Partners	Costs	Funding source	Milestones
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Goal: Improve Water quality in Hollywood's water ways



66	Improving nutrient pollution through regulation of residential and commercial fertilizers.	Lead: Utilities, Sustainability, Landscape Architect	low-medium	budget, grants	<ol style="list-style-type: none"> <li>1. Encourage the use of Florida Friendly and native landscaping with the goal of reducing lawn size and fertilizer use.</li> <li>2. Conduct education to home owners and landscape companies to encourage reduction of fertilizer use.</li> <li>3. Create an ordinance requiring residents and landscaping companies to bag or mulch lawn clipping and eliminate the use of leaf blowers with the intention of reducing nutrient loads entering storm drains.</li> <li>4. Explore the possibility of an ordinance with regulates and limits fertilizer compositions.</li> </ol>
67	Promote the mulching or bagging of lawn clippings.	Lead: Sustainability, Public Affairs, Utilities	low	budget	<ol style="list-style-type: none"> <li>1. Enhance the Utility department's "Just Bag IT" campaign.</li> </ol>
68	Enhance water quality through green infrastructure and natural systems.	Lead: Engineering, Landscaping, Utilities, Sustainability	Medium - High	Budget and grants	<ol style="list-style-type: none"> <li>1. Conduct education and create manual regarding green infrastructure and low impact development strategies. Offer incentives for neighborhood projects.</li> <li>2. Develop strategy for increased vegetation in outfall areas &amp; vegetative layering strategies at water edge.</li> <li>3. Create a policy requiring all improvements of City streets, parking lots, right of ways, or other City managed projects to include storm water treatment in the form of pervious pavement/pavers or vegetated bioswales.</li> <li>4. Pass ordinance requiring new development and major renovations to incorporate green infrastructure and that all retention areas are landscaped with native plantings and augmented with park like facilities (shade trees, benches, fountains, pet waste bags).</li> <li>5. Develop a strategy to identify unbuildable vacant lots and convert them to storm water retention with naive low-maintenance plantings.</li> </ol>

69	Utilize vacant lots for water storage.	Lead: Community development, sustainability, planning, engineering, utilities	medium - high	Budget and grants	1. Identify City- owned vacant lots that would be suitable for water storage and convert them to bio retention with recreational amenities.
70	Continue and increase storm water pollution prevention education.	Lead: Utilities, Sustainability Partners: Non-profit groups, schools	Low	Budget and grants	1. Include pollution prevention messaging on water bills. 2. Study main sources of water pollution and target education. 3. Target mercury pollution and fish consumption advisories to at risk communities, such as prenatal care facilities. 4. Include education regarding storm drain dumping particularly to new residents. Identify opportunities to label the storm drains.
71	Identify and manage sources of storm water pollution.	Lead: Utilities, Code	Low	Budget	1. Study the main sources of water pollution in order to target enforcement or abatement actions. 2. Identify non-compliant facilities and conduct outreach, audits, and implement fines. Encourage the use of Help Me Hollywood to report instances of illegal dumping. 3. Increase the frequency of hazardous waste collection events to remove the need to dump. 4. The City should encourage FPL to rapidly comply with the EPA's MATS and switch petroleum generation to natural gas and displace natural gas with renewable energies.
Goal: Improve Hollywood's Air Quality					

72	Reduce air pollution related to vehicles.	Lead: Sustainability, Public Affairs, parking	low - medium	budget, grants	<ol style="list-style-type: none"> <li>1. Design an outreach campaign to discourage idling at bridges and train crossings.</li> <li>2. Encourage the adoption of electric vehicles through installation of additional charging infrastructure and incentives.</li> <li>3. Conduct outreach regarding fuel efficiency and vehicle maintenance.</li> <li>4. Promote actions in the mobility section of this plan to reduce vehicle miles travelled in the City.</li> </ol>
73	Reduce air pollution from lawn maintenance equipment.	Public affairs, Sustainability	low	budget, grants	<ol style="list-style-type: none"> <li>1. Pass an ordinance banning or restricting the use of leaf blowers and gas powered mowers.</li> <li>2. Conduct workshops with landscapers to improve</li> </ol>
74	Reduce Air pollution resulting from stationary sources	Lead: Code compliance	low	budget	<ol style="list-style-type: none"> <li>1. identify non-compliant facilities and conduct outreach, audits, and implement fines.</li> </ol>
75	Increase air quality by planting trees.	Lead: Sustainability, Public Works, Landscaping	low-medium	budget, grants	<ol style="list-style-type: none"> <li>1. Conduct a tree inventory to identify the best locations for additional tree plantings.</li> <li>2. Make alterations to the landscape code to require a greater number of trees for new development and renovations.</li> <li>3. Engage citizens in tree enhancements by holding tree give aways.</li> <li>4. Identify budget for City tree plantings.</li> </ol>
Goal: Increase open space City wide					
76	Implement the goals set out in the Parks Master Plan.	Lead: Parks and Community Development	medium - high	Budget and grants	<ol style="list-style-type: none"> <li>1. Develop a plan to acquire land for parks with the goal of making sure every resident of the city is within 1/2 mile of a park.</li> <li>2. On small vacant lots, develop pocket parks which are developed with community input and which incorporate storm water retention when appropriate.</li> </ol>
Enhance the natural environment					

77	Remove exotic species at City parks and adjacent properties	Lead: Parks, Public Works	medium	Budget and grants	<ol style="list-style-type: none"> <li>1. Identify areas of need in City parks for targeted exotics removal. Identify which areas can be hand treated by volunteers and which need mechanical removal by contractors.</li> <li>2. Create a schedule for exotics removal requiring crew or contractors and identify a budget.</li> <li>3. Schedule regular volunteer days at nature centers and parks for exotic species removal.</li> <li>4. Conduct outreach, education, and trainings for properties adjacent to City parks and beaches about exotic species and removal</li> </ol>
78	Develop habitat and wildlife corridors	Lead: Parks, Public Works, Sustainability	Medium	Budget and grants	<ol style="list-style-type: none"> <li>1. Promote the wildlife habitat certification through messaging, workshops, and plant give aways.</li> <li>2. Identify restoration needs and opportunities at Stan Goldman, Holland Park, and Sheridan Oaks.</li> <li>3. Identify opportunities to restore natural habitat in other City parks and public spaces or right of ways to create connectivity (RCAP NS-5)</li> </ol>
79	Protect and restore offshore reef system	Lead: CRA, Sustainability Partners: Universities, Marine Advisory Board	low	budget and grants	<ol style="list-style-type: none"> <li>1. Create a plan to implement actions from the Climate Change Action Plan for the Florida Reef System (RCAP NS - 8)</li> <li>2. Create coral reef protection educational materials for distribution at docks, marinas, and boat or dive shops.</li> <li>3. Assess the feasibility of developing an artificial reef program as part of living shoreline resiliency projects.</li> </ol>

80	Measure and value the existing tree canopy.	Lead: Landscape, Sustainability, Public Works	Low - medium	Budget and grants	<ol style="list-style-type: none"> <li>1. Conduct an assessment of current canopy using a tree inventory and iTree tools. Use the results to target resources and plantings.</li> <li>2. Increase biodiversity in the City by encouraging wildlife habitat certification, focusing on native species in landscaping, using public spaces to increase native species diversity, and providing citizens with native species through give away programs.</li> <li>3. Engage citizen volunteers in monitoring and recording the urban biodiversity through neighborhood bioblitzes, volunteer tree inventories, annual bird counts, and utilization of social applications such as iNaturalist.</li> </ol>
81	Improve lighting for humans and wildlife through lighting ordinances.	Lead: Sustainability, Public Works, Engineering	low-medium	Budget	<ol style="list-style-type: none"> <li>1. Revise the City's Code of Ordinances to include lighting requirements which improve safety, reduce the impact of lighting on human health and wildlife, and which reduces skyward light pollution.</li> <li>2. Conduct outreach to the community about the importance of the ordinance and the pathways for compliance.</li> </ol>
Goal: Reduce Solid Waste Pollution					
82	Reduce litter in waterways.	Lead: Public Works, Parks	low-medium	Budget and grants	<ol style="list-style-type: none"> <li>1. Create a map of waterways to develop a cycle of maintenance</li> <li>2. host more frequent waterway clean ups with volunteers</li> <li>3. Enhance and grow the CRA's anti litter campaign to be city wide</li> </ol>
83	Reduce litter in streets.	Lead: Public Works, CRA, Public Safety	low-medium	Budget and grants	<ol style="list-style-type: none"> <li>1. Continue the efforts of Keep Hollywood Beautiful by completing the litter inventory and supporting the goals of Let's Keep Hollywood Beautiful.</li> <li>2. Expand and promote both the Adopt-a-street and the Cash for Trash programs.</li> <li>3. Institute annual "spring clean ups" and other city-wide street cleaning events with incentives.</li> </ol>

84	Reduce non-biodegradable solid waste pollution city wide	Lead: Sustainability, CRA Partners: HBBA, Chamber of Commerce	low-medium	Budget and grants	1. Outreach to businesses regarding sustainable materials for take out containers. 2. Encourage businesses to take part in voluntary bans of plastic bags, straws, and other plastic disposables.
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## Mobility

Action	Lead and Partners	Costs	Funding source	Milestones
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Goal: Reduce vehicle miles travelled (VMT) in the City.

85	Enhance the use of marine waterways for mobility	Lead: Parks, CRA	medium	budget grants	1. Increase the number of water taxi stops in Hollywood. 2. Explore options for reducing the cost of the water taxi for Hollywood residents and visitors. 3. Promote the linear park along the intracoastal once completed.
86	Increase transit options available in the City	Lead: Engineering	medium - high	Budget and grants	1. Conduct an assessment to determine the most needed transit routes, looking for needs from different stakeholders and filling in gaps in transit. 2. Create city shuttle routes to address the needs and gaps identified.

87	Increase ridership on current transit	Lead: Sustainability, CRA	low	Grants and Budget	<ol style="list-style-type: none"> <li>1. Conduct and assessment of the current barriers to transit ridership and develop a plan to address those barriers.</li> <li>2. Provide outreach about transit options and create a detailed map of Hollywood showing transit options, routes, connections, and trails.</li> <li>3. work with Broward County to improve transit services offered in the City.</li> <li>4. Facilitate a Green Commute Challenge for local businesses and City employees (examples, key west, orange county)</li> <li>5. Promote annual or semi-annual "free transit" days. Partner with Broward County and SFRTA for bus and train fares and offer the trolley and shuttle for free.</li> </ol>
Goal: Increase trips made by biking and walking					
88	Improve the City's bike infrastructure	Lead: Engineering	medium - high	grants and budget	<ol style="list-style-type: none"> <li>1. Assess bike infrastructure needs and create a bike master plan.</li> <li>2. Install protected bike lanes throughout the City to connect areas of activity and density.</li> <li>3. Create a policy that requires safe/protected walking and biking infrastructure as part of all road improvement plans and new development.</li> </ol>
89	Encourage road sharing and bike and pedestrian safety.	Lead: Sustainability, Engineering Partners: Safety, Police, schools	low - medium	budget and sponsorships	<ol style="list-style-type: none"> <li>1. Assess the results of the complete street strategy and consider expanding implementation to other areas of the City incorporating lessons learned from the initial projects.</li> <li>2. Conduct community outreach regarding bike and pedestrian safety targeted both to drivers and the bikers/pedestrians themselves.</li> <li>3. Host City sponsored events to encourage walking and biking such as a walking school bus program, bike to work competitions, and green commute challenges.</li> </ol>

90	Enhance walkability City wide.	Lead: Engineering, Planning Partners: FDOT	medium	Budget and grants	<ol style="list-style-type: none"> <li>1. Install sidewalks and improve sidewalks City wide.</li> <li>2. Identify opportunities to install more linear parks along heavily travelled roadways.</li> <li>3. Increase tree canopy along sidewalks.</li> </ol>
Goal: Enhance parking efficiency on beach and downtown.					
91	Create parking policies that will decrease VMT and congestion related to parking.	Lead: Parking	low	none/ TBD	<ol style="list-style-type: none"> <li>1. Identify potential parking policy measures that would discourage vehicle use and encourage the use of alternative transportation.</li> <li>2. Adjust parking fees and increase trolley routes to encourage beach employees and visitors to use the under-utilized garages.</li> <li>3. Develop an app that provides information about the number of spaces available in garages before an individual drives to the garage.</li> </ol>
92	Support a "Downtowner" service	Lead: CRA	low	none	<ol style="list-style-type: none"> <li>1. Encourage private companies to provide services such as the "Downtowner" in Delray Beach and Boca Raton.</li> </ol>
Goal: Improve fuel efficiency and adoption of electric and hybrid vehicles from residents					
93	Increase the number of vehicles which are fuel efficient or use alternative fuels.	Lead: Parking, Civic Affairs	low - medium	budget and grants	<ol style="list-style-type: none"> <li>1. Continue to invest in public infrastructure for EV charging.</li> <li>2. Offer parking incentives for fuel efficient and electric vehicles.</li> <li>3. Create a policy which requires aging out City vehicle to be replaced with Electric vehicles when possible and fuel efficient vehicles otherwise.</li> </ol>
94	Reduce the fuel consumption of the City fleet.	Lead: Public Works	medium-high	budget	<ol style="list-style-type: none"> <li>1. Create a policy by which new vehicle purchases must be the highest efficiency possible while performing the required function.</li> <li>2. Train and expect employees to use efficient driving behavior.</li> <li>3. Create a schedule of maintenance which will ensure vehicles are getting their maximum efficiency.</li> <li>4. Track efficiency with the mileage tracking program.</li> </ol>



## Community Engagement

Action	Lead and Partners	Costs	Funding source	Milestones	
Goal: Reach a broad audience with messaging and education pertaining to resiliency.					
95	Increase messaging on sustainability and sustainability related projects.	Lead: Sustainability, Public Affairs	low	none	<ol style="list-style-type: none"> <li>1. Create Sustainability related educational displays that can be set up at City events, meetings, and forums.</li> <li>2. Enhance the content available on the City website and create an email newsletter to send to a voluntary list and link to on social media.</li> <li>3. Create a pledge for citizens to take with suggested actions to help accomplish the goals of the sustainability action plan.</li> </ol>
Goal: Engage residents and businesses in implementation of the Resiliency Action Plan					
96	Engage neighborhood associations in the implementation of the sustainability action plan.	Lead: Sustainability, Civic Affairs, Community Development Partners: Civic associations	medium	grants, budget	<ol style="list-style-type: none"> <li>1. Promote a "Sustainable Neighborhoods" program guide for use by neighborhood associations</li> <li>2. Offer "Green for Green" incentives to neighborhoods wishing to participate in the sustainable neighborhoods program</li> <li>3. Highlight, through social media, newsletters, and the website stories of residents and neighborhoods which have implemented unique or effective projects.</li> </ol>
97	Encourage businesses to participate in the implementation of the Sustainability Action Plan	Lead: Sustainability, CRA, Chamber of Commerce Partners: Business associations	medium	grants, budget	<ol style="list-style-type: none"> <li>1. Create and promote a voluntary Hollywood Green Business program.</li> <li>2. Highlight, through social media, newsletters, and the website, stories of businesses which have implemented unique or effective projects.</li> <li>3. Engage the business community in competitions such as the better building challenge, commuter challenges, and others each year to improve engagement.</li> </ol>
Goal: Address Community Specific Issues					

98	Address Food Deserts	Lead: Community development, Sustainability, Planning	low	none	<ol style="list-style-type: none"> <li>1. Promote the development of community gardens.</li> <li>2. Identify opportunities to create green markets in areas labeled food deserts that sell produce and food items at close to peak.</li> <li>3. Promote the development of urban agriculture.</li> </ol>
99	Improve neighborhood appearances through creative use of public space, vacant lots, and blighted areas.	Lead: Community development, Sustainability, Parks,	medium	budget	<ol style="list-style-type: none"> <li>1. Investigate opportunities to use public art to connect neighbors and beautify a neighborhood. (RCAP SP-17)</li> <li>2. Utilize vacant lots for creative temporary purposes, such as gardens, parks, and gathering spaces.</li> <li>3. Engage the neighborhood in determining the use of vacant lots and solutions to blighted spaces.</li> </ol>