

CITY GREEN PLAN REPORT

2018



Introduction

Overview

Each year, the City Green Plan Report generates key information on the City's advancement toward addressing seven environmental themes: energy, water, urban design, urban nature, waste reduction, transportation, and climate change. This report summarizes accomplishments for the 2018 calendar year. Historical data is located on the City's website http://www.coconutcreek.net/sd/living_green or available upon request.

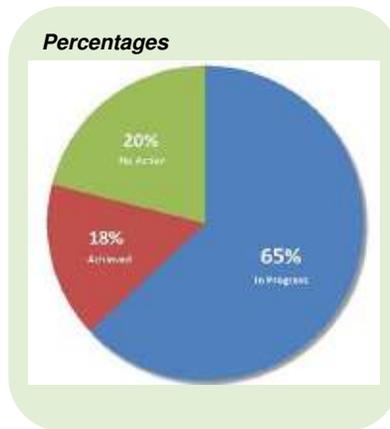
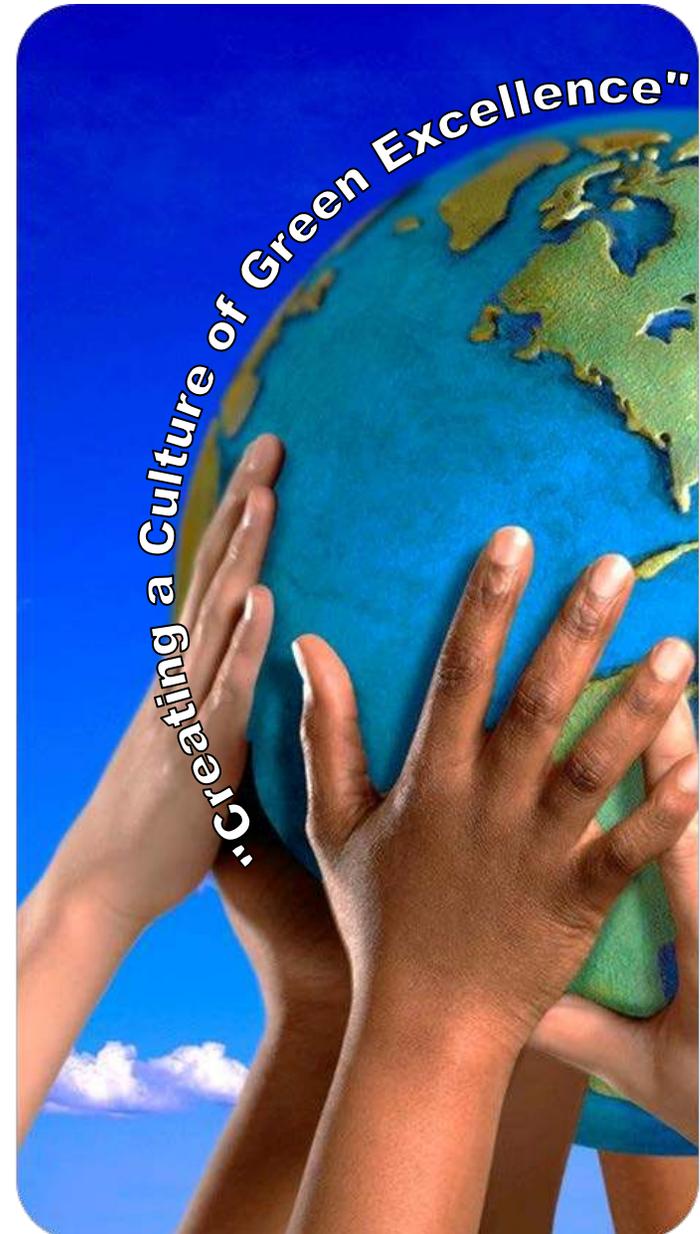
Collaborative Effort

The *City Green Team* consists of members from all departments working together to track the progress of the plan. The team identified valuable data under each category and specified indicators for measuring each action step. Without this collaborative effort, this report would not be possible.

- Linda Whitman, Sharon Vollmer, and Sean Flanagan - Sustainable Development
- Lori Messer and Jessica Reeder - Finance and Administrative Services
- TBD - Public Works
- Theodore Risberg – Utilities and Engineering
- Yvonne Lopez - Community Relations
- Darnette Grant - City Clerk
- Justin Weinberg - Human Resources
- Ken Brown and Eric Rupert - Information Technology
- Phil Randazzo - Parks and Recreation
- Edwin Almanzar - Police Department

Implementation

The City Green Plan was adopted with 51 action steps under 9 categories. The majority of action steps relate to Category 1: MainStreet and Green Development, and Category 8: City Operations. In 2018, there were 33 action steps in progress, which represents 65% of all action, and 10 action steps have had no action, representing 20%. The reasons for no action range from a change in priorities for the City to lack of MainStreet development. There are 9 action steps achieved, representing 18% of all action.



Green Plan Success Snapshot

Category	Action Item	Comments
1.6	Ensure 100% of new development projects throughout the City contain conspicuous displays of green technology that function in the project design while providing a social, artistic, and environmental value.	<i>From the beginning of the Green Plan, the Planning Staff has actively pushed this Action Item as much or more than any other. The reason for this is that it's readily achievable and easily comprehensible. At the time a new project is going through development review at the planning level, many elements of the design are massaged to achieve the best possible outcome for the applicant as well as the residents. It is at this time that the applicant works with Staff to identify and plan for the "conspicuous display of green technology" required on site. These may present themselves in the form of a bio-swale, solar installation, or a cistern for rainwater collection, among others. When the project is complete and being used by the public, the applicant is required to identify this element and actively educate the public. It becomes as much of a highlighted part of the project as art. A full list of these green requirements is available on the City website under "City Projects".</i>
3.4	Modify the City's Neighborhood Enhancement Grant Program making renewable energy projects eligible for application submittal with 50% of all grants toward renewable/ energy efficient projects by 2020.	<i>This program in recent years has seen an uptick in the interest of HOA's seeking to change out their common area lighting to utilize LED technology which saves electricity and saves money. The City continues to encourage using this program to upgrade to LED.</i>
7.4	Seek Florida Green Building Coalition (FGBC) Local Government Designation by 2012.	<i>The City achieved GOLD certification through the Florida Green Building Coalition in 2015. It is time to review the achievements and resubmit for renewal (2020). By reviewing the criteria and actions of the City, we are able to monitor goals set and achieved and focus on new areas of concern. Together with the Green Plan and Audubon International certifications, the City continues to be a leader in Broward County for sustainable practices and climate actions.</i>
9.1	Participate in a regional or county Climate Action Plan.	<i>Coconut Creek benefits from our relationship not only with Broward County but also with the Southeast Florida Regional Climate Compact. The City actively participates with both of these entities at an annual conference as well as throughout the year in an effort to identify climate concerns and resiliency efforts. In addition, City Staff participates in the state-wide sustainability group, Florida Sustainability Directors Network. This group enables county and municipal sustainability managers and directors to coordinate ordinance language, share successful operations practices and procedures, and share citizen concerns, providing a unified voice throughout the State. Many of these FSDN members are also members of the national network, allowing for a clear voice throughout the country. Participation in these groups keeps Coconut Creek active, responsive, and aware of the most pressing sustainable and climate issues facing America.</i>

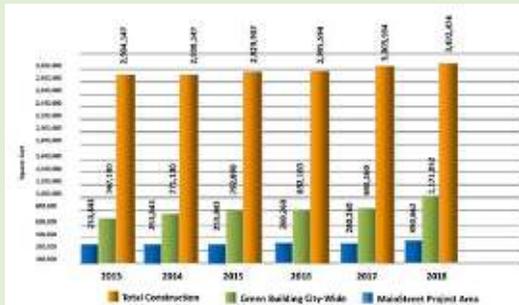
Category 1: MainStreet and Green Development

Urban Design

Green Building – Urban Planning – Economic Development

Green Building Growth

There was a slight increase in green development for 2018 with the construction industry catching up with the economy. Section 13-320 of the Land Development Code, along with LEED, FGBC and others has been recognized by the City as contributions to green building construction.



Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 1 → 9
- # of actions in progress → 8
- # of proposed green buildings → 0
- # of LEED® certified buildings → 14
- # of FGBC certified buildings → 0
- # of FDEP certified Green Lodging → 1
- # of NAHB green certified buildings → 11
- # of Green Globes certified buildings → 1

Total Construction

Construction that received a CO and included elements of Sec. 13-320 for 2018 include Elite Aluminum, Broward Prep School, Volvo, and Monarch Station.

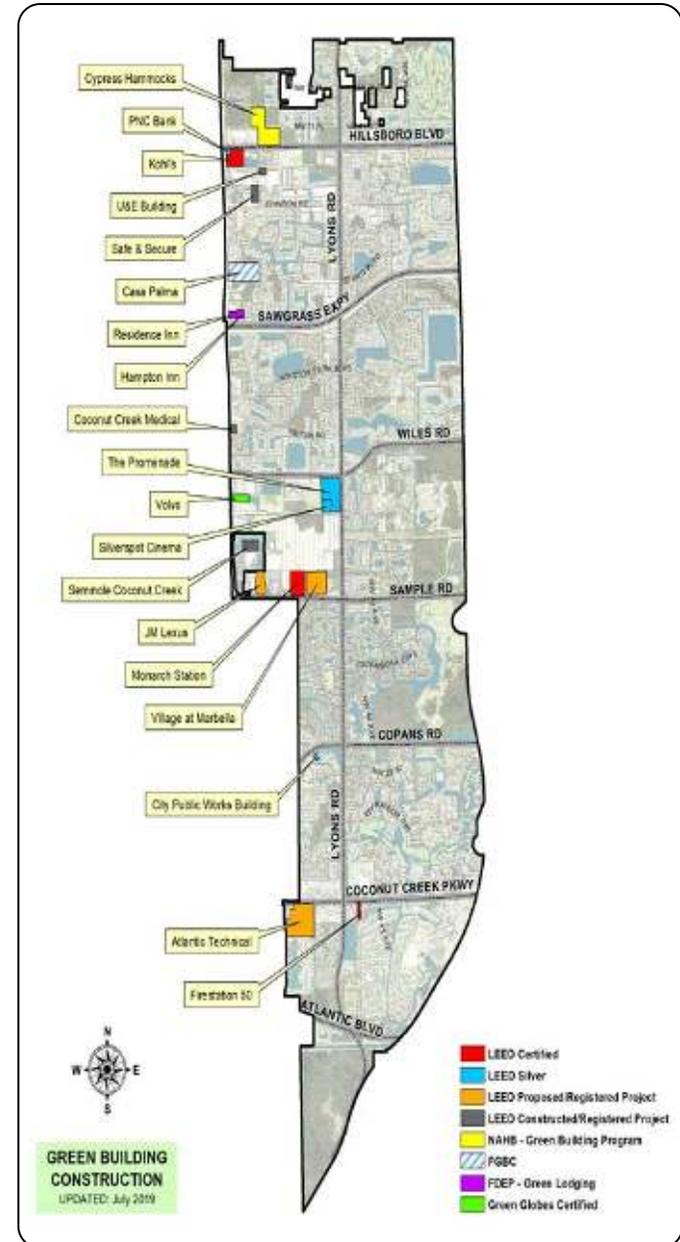
USGBC Certification

The City continues to encourage LEED® certification. Below are the certification levels to date.



Green Building by Area

Green building construction continues to be mostly outside of the MainStreet Project Area. This is expected until future development occurs in MainStreet.



Map available in larger print

Action Steps

Results of each action step under Category 1

Category 1: MainStreet and Green Development

ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018	
1.1 Achieve LEED® Certification for all buildings in the MainStreet Project Area with at least 15% certified at Silver, Gold, or Platinum level.	Status: ✓ In progress Target Date: 2020 Data Sources: Site Plans, USGBC Note: (1) Results are based on # of buildings not by project (2) % certified is based on cumulative total of issued COs since 2009, * 1 bldg, Volvo, seeking Green Globes	# of buildings constructed (based on issued COs)	2	0	0	0	1	0	9	
		# of buildings seeking certification	0	1	0	0	0	0	*9	
		# of buildings certified (cumulative)	14	14	14	14	14	14	14	23
		% certified as Silver, Gold, or Platinum	82%	82%	82%	82%	83%	83%	91%	
1.2 Achieve LEED® Certification or Florida Green Building Coalition (FGBC) Certification on 50% of buildings outside the MainStreet Project Area.	Status: ✓ In progress Target Date: 2020 Data Sources: Site Plans, USGBC, FGBC Note: (1) Results are based on # of buildings not by project (2) % certified is based on cumulative total of issued COs since 2009 (3) Other green building programs have been added to this action (see map).	# of buildings constructed (based on issued COs)	6	23	16	1	1	1	5	
		# of buildings seeking certification	1	0	14	1	0	0	0	
		# of buildings certified (cumulative)	1	13	13	14	14	14	14	
		% certified	3%	24%	19%	20%	20%	20%	17%	
1.3 Achieve LEED® Certification for all new City constructed buildings, and, when feasible, strive for Silver, Gold, or Platinum certification level.	Status: ✓ In progress Target Date: 2020 Data Sources: Site Plans, USGBC Note: City's Public Works Administration EOC Building received LEED® Silver in December 2013	# of city projects proposed	1	0	1	1	1	0	0	
		# of projects constructed (based on issued COs)	0	1	0	0	0	1	1	
		# of buildings seeking certification	1	0	1	0	0	1	0	
		# certified (cumulative)	0	1	1	1	1	2	2	
1.4 Retrofit all City-owned buildings with green building techniques by 2020 and, where feasible, seek LEED® Existing Building Certification.	Status: ✓ In progress Target Date: 2020 Data Sources: Public Works Dept.	# of retrofitted buildings	0	0	0	0	0	0	0	
		# of retrofitted buildings seeking certification	0	0	0	0	0	0	0	
		# certified	0	0	0	0	0	0	0	
1.5 Create a "green" checklist by 2010 for use on all City projects such as engineering or landscape projects, permits, etc.	Status: ✓ In progress Target Date: 2013 Data Sources: - Note: Checklist developed for all projects based on LDC 13-320 and Green Plan	Date checklist was created	-	-	-	-	1/2/16*	-	-	
		# of city projects	-	-	-	-	1	0	0	
1.6 Ensure 100% of new development projects throughout the City contain conspicuous displays of green technology that function in the project design while providing a social, artistic, and environmental value.	Status: ✓ In progress Target Date: 2020 Data Sources: Site Plans Note: New projects include those under review and approved since 2009	# of new projects	8	13	4	10	4	1	10	
		# of green tech/art displays proposed (cumulative)	4	4	6	13	16	17	5	
		# of green tech/art displays constructed	1	1	1	2	2	0	5	
1.7 Create a MainStreet Workforce Housing Incentive Program by 2010 in order to provide additional density for projects that demonstrate superior green building design while providing workforce housing, including those projects that seek LEED® Certification at Silver, Gold, or Platinum level.	Status: ✓ In progress Target Date: 2013 Data Sources: Site Plans, USGBC Note: Program completed by staff. Waiting to present to City Commission when appropriate developer is identified.	# of projects under review	-	-	-	-	-	-	-	
		# of projects with residential use	-	-	-	-	-	-	-	
		# of projects seeking incentive	-	-	-	-	-	-	-	
		# of additional units provide through incentive	-	-	-	-	-	-	-	
1.8 Create an educational eco-village within the MainStreet Project Area that can promote the dual-use of school facilities and provide for eco-cultural activities.	Status: No Action Taken Target Date: 2020 Data Sources: -	# of school properties in MainStreet Area	1	1	1	1	1	1	1	
		# of potential parcels	-	-	-	-	-	-	-	
		# of proposed projects	-	-	-	-	-	-	-	
1.9 Increase residential density and promote mixed-use for projects that support planned long-range transportation systems such as the U.S. 441/State Road 7 Corridor or Educational Corridor.	Status: ✓ In progress Target Date: 2020 Data Sources: Site Plans Note: (1) New projects include those under review and approved since 2009 (2) % is based on new projects	# of new projects (cumulative)	4	5	8	13	14	0	0	
		# of projects higher density/mixed-use (cumulative)	3	4	4	4	4	0	0	
		% of projects support action	75%	80%	50%	31%	29%	0%	0%	

Category 2: Urban Nature

Urban Nature

Parks – Habitats – Wildlife

Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 2 → 3
- # of actions in progress → 2
- # of greenway trails planned → 1*
(*Winston Park)

Tree Canopy Coverage

Tree canopy coverage has remained relatively the same since 2012. There was a slight increase in the number of trees inventoried on city-owned and maintained land; however, it did not significantly increase the percentage. Tree canopy coverage is an estimated total.



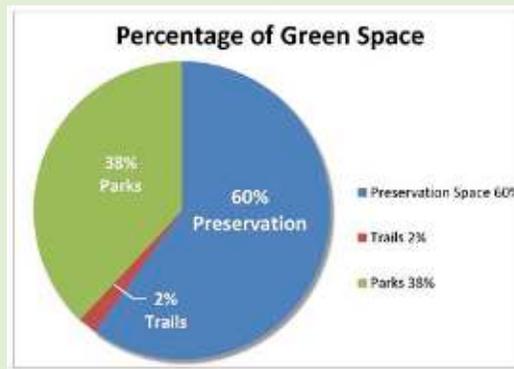
Park and Green Space

Preservation and park remained steady for the past year.



Percentage of Green Space

The percentage of green space shifted slightly with the increase of park acreage.



Action Steps

Results of each action step under Category 2

Category 2: Urban Nature

ACTION OBJECTIVE		ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018
2.1	Achieve 40% tree canopy coverage throughout the City with maximum tree coverage on public and privately owned land by 2020.	<p>Status: ✓ In progress Target Date: 2020 Data Sources: Sustainable Development and Public Works Depts. Data Records, GIS Inventory Note: (1) Tree canopy coverage is approximate based on staff assessment and 2010 data (2) Inventoried trees are reflected as a cumulative total of city owned land</p>	# of trees at free giveaway	700	600	600	600	600	520	600
			# of trees - city inventory (cumulative)	7,804	8,471	9092	9175	9775	10,295	10,895
			# landscaping awards	0	0	0	0	0	0	0
			# acres of natural conservation areas (cumulative)	763	763	763	763	763	763	763
			% estimated in tree canopy coverage	28%	28%	29%	30%	31%	31%	31%
2.2	Achieve 40% greenroof coverage for new construction in MainStreet Project Area and 10% greenroof coverage for new construction for areas outside of MainStreet.	<p>Status: No Action Taken Target Date: 2020 Data Sources: -2018-“Greenroofs” now mean vegetation AND highly reflective roof paint and product. However, only vegetative rooftops are counted in this section.</p>	# greenroofs in MainStreet	-	-	-	-	-	-	-
			% in MainStreet	-	-	-	-	-	-	-
			# greenroofs outside MainStreet	-	-	-	-	-	-	-
			% outside MainStreet	-	-	-	-	-	-	-
2.3	Ensure public access to passive parks, recreational areas, open space, or greenway trails within ½ mile of all residents by 2020.	<p>Status: ✓ In progress Target Date: 2020 Data Sources: GIS Inventory Note: (1) Preserves in county parks counted as part of total open space/preserve areas (2) County greenway trails within county parks and preserves have been added to total number of trails, *51st st Greenway, ** 10 additional acres were added to Oak Trails Park</p>	# of passive parks (cumulative)	7	7	7	7	7	7	**7
			# of recreational parks (cumulative)	6	6	6	6	7	9	9
			# of open space/preserve areas (cumulative)	30	30	30	30	30	30	30
			# of greenways trails (cumulative)	11	11	18	18	21	*22	22
			% of city area within ½ mile of all of the above	98%	98%	98%	98%	98%	98%	98%

Junior Achievement Solar Photovoltaic System

The Junior Achievement World Huizenga Center at Broward College North Campus in Coconut Creek has a solar photovoltaic system on the building rooftop. The system was installed in 2010 and is a 175 kW system achieving results ahead of scheduled.



Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 3 → 5
- # of actions in progress → 3
- # of single family units with solar → 148

NEW Solar in the Creek

In 2018, the City partnered with Florida Power & Light to install a SOLAR CANOPY on a portion of the Recreation Complex. The purpose of the collaboration was two-fold:

- Provide a shade structure for the users of the Recreation Complex
- Provide an example of a multi-functional solar installation, easily visible to the Recreation Complex users.

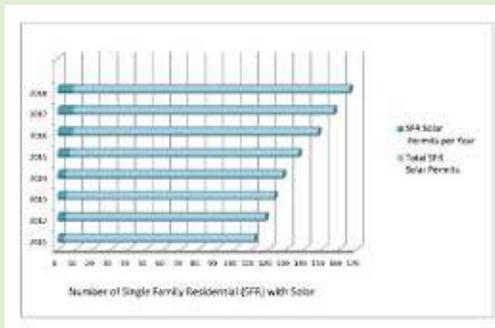
FP&L leases the land, which also benefits the City, and the power generated is directly fed to the Fire Station.

A web page will be available which will keep a real-time tally of the power generated from this installation along with solar facts and other information.



Residential Solar Use

Below is a graphic depicting the total single family homes with solar use and the numbers of permits issued for solar use since 2011.



Action Steps

Results of each action step under Category 3

ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018
3.1 Achieve a minimum of 40% of energy use for the MainStreet Project Area from renewable energy sources by 2020 or by completion of development in MainStreet.	Status: No Action Taken Target Date: 2020 Data Sources: -	% from solar	-	-	-	-	-	-	-
		% from wind	-	-	-	-	-	-	-
		% from hydropower	-	-	-	-	-	-	-
		% from other source	-	-	-	-	-	-	-
		Total % for MainStreet	-	-	-	-	-	-	-
3.2 Utilize a minimum of 10% of City-owned land for alternative energy sources by 2020.	Status: No Action Taken Target Date: 2020 Data Sources: -	# of city properties available	-	-	-	-	-	-	-
		# of projects planned	-	-	-	-	-	-	-
		# of projects completed	-	-	-	-	-	-	-
		% of city land used	-	-	-	-	-	-	-
3.3 Increase the use of solar power in residential areas by 40% by 2020.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: GIS, Code Compliance, Permits <i>Note: (1) Based on SFR homes only (approx. 10,000), % per total SFR units (2) Permit information obtained from Community Plus. **Percent has been adjusted to account for SFR only.</i>	# of SFR homes with solar (cumulative)	113	118	123	130	139	148	158
		# of permits issued per year	5	5	5	7	9	9	10
		% of homes**	1%	1%	1%	1%	1%	1%	1%
3.4 Modify the City's Neighborhood Enhancement Grant Program making renewable energy projects eligible for application submittal with 50% of all grants toward renewable/ energy efficient projects by 2020.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: - Sustainable Development <i>Note: (1) Grant program and application was modified the first QT 2012 (2) Tracking began in mid-2012.</i>	# of grants applied for	5	4	4	4	2	5	1
		# of applied grants for energy	1	0	2	0	1	4	1
		% of grants toward renewable/efficient energy projects	20%	0%	50%	0%	50%	80%	100%
3.5 Ensure 20% of grants received by the City are for energy conservation projects.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Grants Received <i>Note: (1) Grant information obtain from Finance Department which tracks all department grants.</i>	# of grants applied for	3	6	5	20	4	1	3
		# of grants received - awarded	0	2	2	12	1	0	3
		# of grants for energy	0	0	0	0	1	0	0
		% of grants for energy	0%	0%	0%	0%	25%	0%	0%
		\$ amount of energy grants awarded	0	0	0	0	\$25K	0	0

Category 4: Water Conservation and Reduction

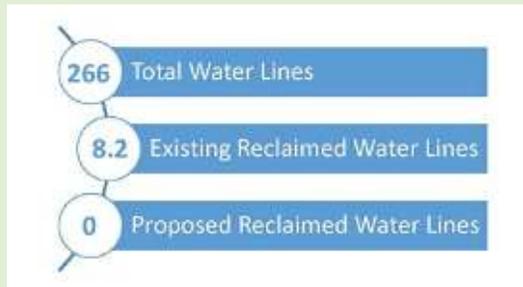
Water

Water Efficiency – Water Conservation – Protection

Reclaimed Water

With assistance from the South Florida Water Management District and Broward County, the City is developing a program to provide reclaimed water throughout the City. Below illustrates total water lines compared to existing and proposed reclaimed lines. An additional segment was added from Wiles Road to Serko Blvd.

2018 Reclaimed Water Tally



Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 4 → 5
- # of actions in progress → 5
- # of water code violations → 3
- # of participants \$100 toilet rebate → 95

City Water Savings

Below is a cumulative savings in water for City projects.



Water Consumption Analysis

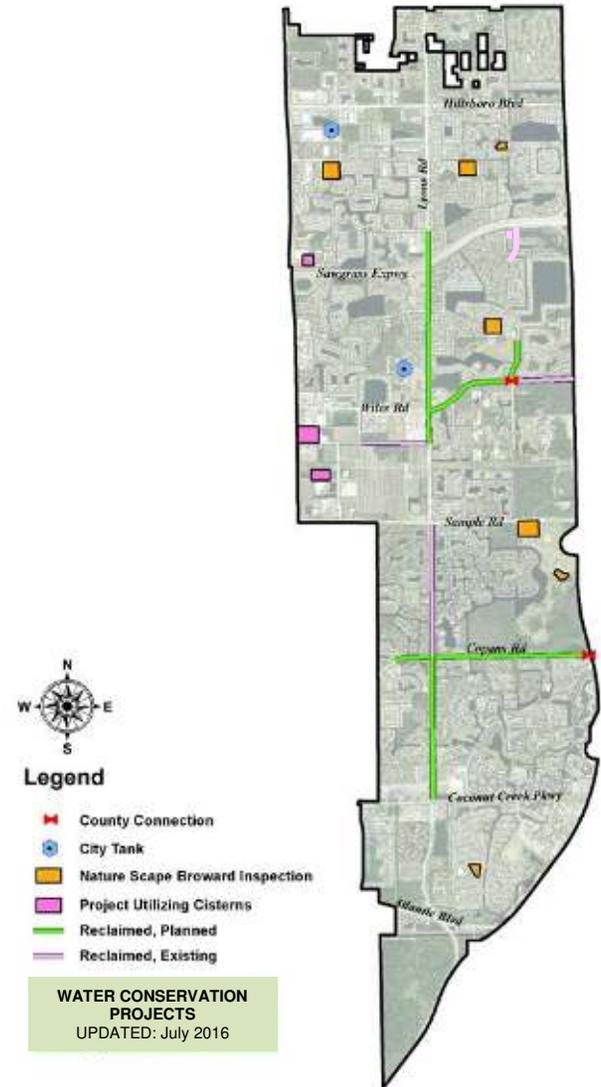
Below is an analysis for water consumption by month for 2018.

Month	Residential	Commercial	Total
January	104,790	18,843	123,741
February	101,367	19,809	121,176
March	107,206	19,791	126,997
April	113,073	19,106	132,181
May	106,722	19,661	126,383
June	101,381	18,162	119,543
July	92,520	17,527	110,047
August	106,499	20,043	126,542
September	104,079	20,275	124,358
October	102,191	19,665	121,856
November	110,638	20,175	130,813
December	108,938	19,585	128,523
Monthly Average	104,951	19,366	124,347
Total Avg Daily Consumption (MG)			4.14
Avg # Customers - Residential			11,262
Avg # Customers - Commercial			790
Avg Daily Consumption-Residential (MG)			3.50
Avg Daily Consumption-Commercial (MG)			0.65
Avg Annual Consumption - Residential (MG)			1,275.90
Avg Annual Consumption - Commercial (MG)			235.98

Residential Water Reduction Initiative

The City's Green Team conducted an analysis using GIS and Utility Billing to identify households that consumed the top 1%, 5%, and 10% of water usage in the City. The top 1% single family homes were notified via mail and directed to the City's website to become educated on water reduction. Below are some results from this initiative.

- Top 1% (# of accounts) = 58
- Visits to website = 15
- Phone calls with questions = 2



Map available in larger print

Action Steps

Results of each action step under Category 4

Category 4: Water Conservation and Reduction

ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018
4.1 Ensure 100% of irrigation in the MainStreet Project Area is from on-site water collection or, if possible, reclaimed water.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Site Plans, Engineering Permits Note: Proposed projects are based on approved site plans.	# of MainStreet projects proposed	2	3	4	0	2	0	0
		# of MainStreet projects built	2	2	2	2	1	1	0
		# with on-site water collection systems	1	1	1	1	1	1	0
		# with reclaimed water	0	0	0	0	0	0	0
		% of built projects	50%	50%	50%	50%	100%	100%	0
4.2 Reduce residential water consumption by 10% by 2012 and by 15% by 2020 through a Residential Water Reduction Initiative.	Status: <input checked="" type="checkbox"/> Achieved / <input checked="" type="checkbox"/> In progress Target Date: 2012 / 2020 Data Sources: High Consumption Report, Statistics Report by Crew, Utility Billing Reports Note: (1) High Consumption report summarizes # of customer accounts with consumption 1.50% greater than their average bill (2) Results vary from year to year based on weather conditions (3) Increases in 2013 due to warmer weather, drier dry season. (4) In 2015, we experienced the warmest year on record and the 3rd driest summer on record	# of customer accts targeted high consumption	6,762	7,571	7,151	7,943	7,265	7,247	7,724
		# of water meters checked for high consumption	2,055	2,798	2,541	2,887	2,684	2,227	2,569
		annual water consumption increase (residential)	(47.45MG)	10.95MG	(14.60MG)	35.85MG	(14.60MG)	(21.9MG)	6.64MG
		annual water consumption increase (commercial)	0 MG	.06MG	3.65MG	18.25MG	(10.95MG)	3.65MG	1.65MG
4.3 Increase the availability of reclaimed water throughout the City by 2020.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: CIP Utilities & Engineering Dept Note: (1) Projects are identified as separate segments (2) Planned projects are reflected as a cumulative total (3) Completed segments are not operational until other segments completed.	# of reclaimed water projects planned	2	1	1	4	0	2	0
		# of reclaimed water	1	0	0	3	0	0	0
		# of properties connected	0	0	0	1	0	0	0
4.4 Increase water conservation measures in cooperation with other government agencies.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Utilities & Engineering, Code Note: Partnerships are based on SFWMD and Broward County requirements and programs.	# of programs and partnerships	6	1	0	2	1	1	1
		# of grants received	0	0	1	2	0	2	0
		# of NatureScape Inspections	8	2	8	8	7	5	5
4.5 Convert water fixtures within City-owned buildings and facilities to water saving efficient fixtures by 2014.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2014 Data Sources: Public Works Dept. Note: (1) Water savings is annual savings amount based on new city water fixtures.	# of projects planned	1	3	4	1	0	0	0
		# of completed projects	1	1	4	1	0	0	0
		amount of water saved (estimated gallons)	400,000	160,000	200,000	20,000	0	0	0

Category 5: Waste Reduction and Recycling

Waste Reduction

Recycling – Zero Waste – Citizen Participation

Community Shred-It Event

The City conducted its first community shredding event in 2011 and held 1 event in 2018. Below is estimated results for the program for 2018.



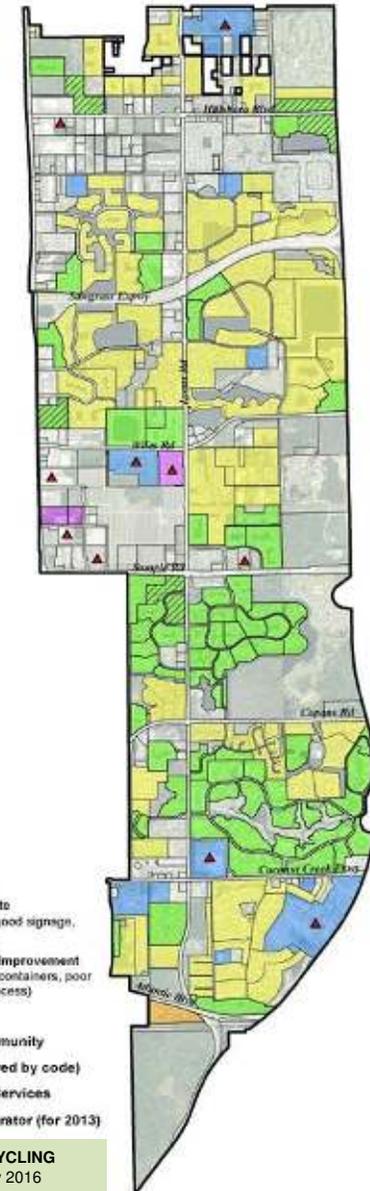
Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 5 → 4
- # of actions in progress → 2
- # of participants shred-it events → 233

Recycling Capture Rate Ratio

The City implemented single stream recycling for residential areas in March 2009 but no longer distributes single stream bins to single family neighborhoods or multi-family. Although there were significant increases in the annual capture rate ratio since 2009 as shown in this graphic below, and the percentage fluctuates, the result has begun to decline. Staff believes the decline is twofold: newspaper print is not a factor in recycling any longer and therefore the rate is affected. Also, an increase in the economic stability of the county leads to greater trash, altering the capture rate. Going forward, restrictions on inbound materials implemented by China have deflated the value of many commodities. While processing techniques and future capital investments may improve the situation in the long-run, short and mid-term estimates indicate depressed markets for materials based on either how they are processed at recycling facilities or the general value of the product. Additionally, the cost to process these materials has increased nationwide as processors require more stability in their revenue to guarantee profits. This leads to the need to evaluate the cost effectiveness of including low-value materials in programs. Glass has long been marketed at low or negative prices. Mixed paper and mixed plastics intrinsically have less value compared to other materials and were added to programs when markets were at their strongest. Contractual issues related to waste recycling have also radically impacted the City's ability to achieve these goals.



Legend

- Multi-family - Adequate (sufficient containers, good signage, good access)
- Multi-Family - Needs Improvement (insufficient amount of containers, poor or no signage, poor access)
- City Schools
- Single Family Community
- Commercial (required by code)
- Recycle Bin Valet Services
- ▲ Top 10 Waste Generator (for 2013)

CITY-WIDE RECYCLING
UPDATED: July 2016

in larger print

Action Steps

Results of each action step under Category 5

Category 5: Waste Reduction and Recycling

ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018
5.1 Increase recycling throughout the City by 25% by 2014 and 50% by 2020.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2014 / 2020 Data Sources: Public Works Dept. Note: (1) Average capture rate ratio is based on best available data from All Service Refuse (2) Paint recycling program was canceled by Broward County on Oct. 1, 2013; *recycling containers no longer distributed by the City	# of single stream recycling containers purchased	0	1,700	452	*-	*-	*-	*-
		# of single stream recycling containers distributed	175	290	101	*-	*-	*-	*-
		Average capture rate ratio (estimated)	26%	24%	21%	20%	20%	18%	20%
		# of participants in paint recycling program	65	79	-	-	-	-	-
5.2 Create a "user-friendly" composting program by 2012 to reduce solid waste disposal.	Status: No Action Taken Target Date: 2020 Data Sources: - Note: Staff is seeking grants to possibly fund a program.	Creation of composting program	-	-	-	-	-	-	-
		# of properties using composting	-	-	-	-	-	-	-
5.3 Require all construction and demolition debris to divert 75% of waste from landfills.	Status: No Action Taken Target Date: 2020 Data Sources: -	Code revision completed	-	-	-	-	-	-	-
		# of demolition permits	-	-	-	-	-	-	-
5.4 Create a paper shredding program for the community by 2010.	Status: <input checked="" type="checkbox"/> Achieved Target Date: 2010 Data Sources: Police Dept, City Clerk Note: (1) Program was created in 2011 (2) Program has been continued through the PD and will be monitored yearly., *estimated for 2014, 2015, 2017, ** Only one shred event in 2018	# of participants	508	474	*491	*491	457	*460	233
		lbs. of paper shredded	28,595	41,360	*34,978	*34,978	35,104	*35,200	**8,991

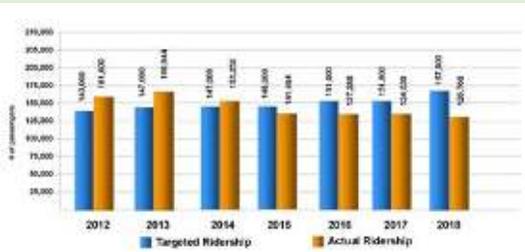
Category 6: Sustainable Transportation and Mobility

Transportation

Public Transportation – Greenway Network – Mobility

City Shuttle Service

Each year, a total number for ridership is targeted for the shuttle service. Ridership again fell below the expected amount. This may have to do with increased prosperity in the economy.



Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 6 → 4
- # of actions in progress → 4
- # of new bike racks installed → 1

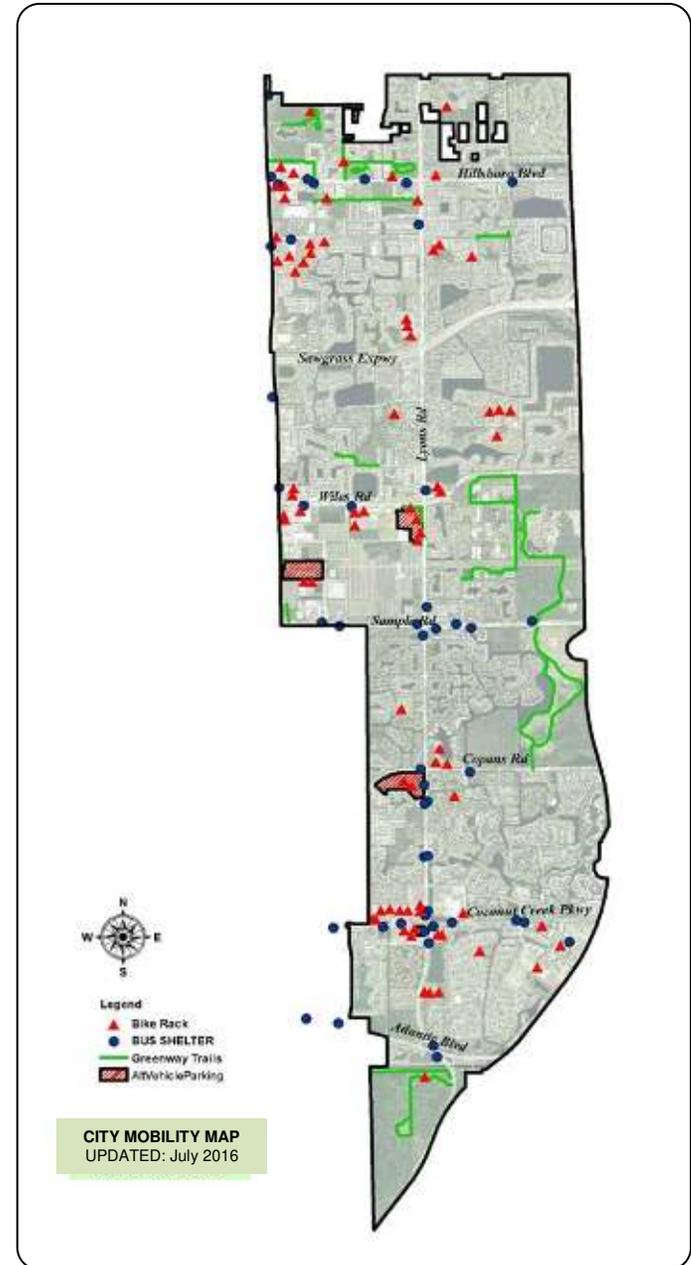
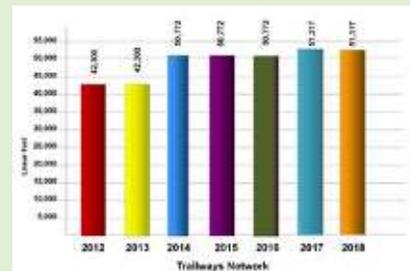
Bike Racks

In 2018, 3 new bike racks were added during the year. The graphic below depicts the increase of bike racks in the City since 2009.



Trailways Network

The total linear feet of trailways in the City increased from last year. Graphic below depicts the total linear feet.



Map available in larger print

Action Steps

Results of each action step under Category 6

Category 6: Sustainable Transportation and Mobility

	ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018
6.1	Ensure the construction of an intermodal transit hub in the MainStreet Project Area by 2020 or completion of development in MainStreet.	Status: ✓ In progress Target Date: 2020 Data Sources: GIS Inventory Data, Outlook Calendars	# of planning documents referencing hub	3	3	3	2	1	2	0
			# of meetings with other government agencies/staff	15	12	13	12	8	5	0
			# of property owners planning for/participating	2	2	2	1	1	2	0
6.2	Improve mobility throughout the City by increasing the number of bus shelters, bicycle parking, bicycle lanes, greenway trails, and local bus shuttle service.	Status: ✓ In progress Target Date: 2020 Data Sources: GIS Inventory Data, Site Visibility Analysis, Greenway Master Plan, Public Works Department Note: (1) Greenway trails include city and county (2) Shelters include city and county (3) Bike racks are in nonresidential areas (4) Linear feet of bike lanes is approximation, * addition of 51 st st gwy	# of existing bus shelters (cumulative)	37	37	42	42	42	43	44
			# of existing bike racks (cumulative)	93	94	94	99	104	107	110
			# of linear feet of existing greenway trails	42,300	42,300	50,772	50,772	50,772	*51,317	51,317
			# of shuttle riders - est. per year	161,660	166,944	153,252	141,464	137,288	134,530	126,760
			# of linear feet of bike lanes	45,700	59,800	59,800	59,800	59,800	59,800	59,800
6.3	Implement a bike or car sharing program in the City by 2020.	Status: ✓ In progress Target Date: 2020 Data Sources: Sustainable Development Note: B-Cycle Program is planned but on hold	# of programs existing	0	0	0	0	0	0	0
			# of programs planned	1	1	1	1	0	0	0
6.4	Implement an alternative vehicle parking program to designated parking areas for alternative vehicles in developments throughout the City by 2020.	Status: ✓ In progress Target Date: 2020 Data Sources: Site Plans, Permit Note: Program is being implemented through site plan approval process, *because of inability of enforcement, planning has begun to request charging station instead of alternative parking stalls.	# of parking spaces existing	188	192	193	194	195	*195	*195
			# of spaces planned	6	18	23	6	5	0	0

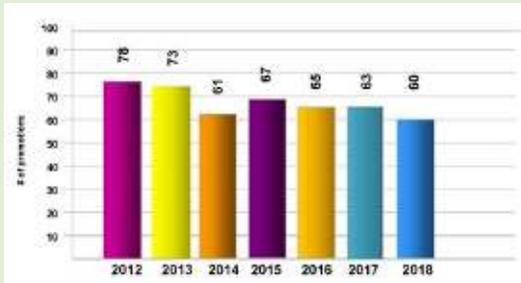
Category 7: Community Outreach and Empowerment

Multiple Themes

Energy – Water – Waste Reduction – Climate Change

Promotion of City Green Plan

Since adoption of the plan in 2009, there have been numerous promotions related to green plan programs, initiatives, and actions. Below is the total number of promotions by year.



Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 7 → 6
- # of actions in progress → 2
- # of actions achieved → 2
- # of attendees at citizen's academy → 28
- # of attendees at green events → 4,000

Community Participation by Commission District

Community participation includes residents that have participated in Citizen's Academy, Vision 20/20, and volunteerism. Below is a graphic that illustrates community participation by City Commission district since plan adoption in 2009.



COMMUNITY PARTICIPATION
UPDATED: July 2016

NOTE: Participation based on Citizen's Academy, Vision 20/20, and volunteerism since 2009.

Map available in larger print

Action Steps

Results of each action step under Category 7

Category 7: Community Outreach and Empowerment

ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018
7.1 Proclaim a City Green Day with the first City Green Day to be held in 2010.	Status: <input checked="" type="checkbox"/> Achieved Target Date: 2010 Data Sources: City Clerk, Commission Meeting Note: (1) Proclamation generally declared in April (2) Events include Arbor Day, Tree Planting Ceremony, & Shred-It Event. * Participants estimated (3) Action completed but will continue to be monitored,* no formal event for recycling but supported effort on social media to entire city.	Proclamation date	4/12/12	4/11/13	4/25/14	11/12/2015	4/14/2016	4/13/2017	4/25/18
		# of events that support proclamation	4	3	5	2	3	3	3
		# of participants at events (approx.)	2,250	3,600	6,000	*4,000	3,600	3,600	3,500
7.2 Implement a City Green Award program to recognize homeowners, neighborhoods, and businesses that incorporate green and sustainable practices.	Status: No Action Taken Target Date: 2020 Data Sources: -	# of applicants - homeowners	-	-	-	-	-	-	-
		# of applicants - neighborhoods	-	-	-	-	-	-	-
		# of applicants - businesses	-	-	-	-	-	-	-
		# of awards (total)	-	-	-	-	-	-	-
7.3 Implement a yearly green lecture series for the public on a variety of sustainable topics.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Sign-in Sheets, Surveys Note: A home garden lecture series was held in 2013, *smaller scale backyard gardening lecture	# scheduled lectures	-	4	3	1	2	-	1
		# of attendees (total)	-	68	150	15*	45	-	2
		% satisfaction rate (based on surveys)	-	94%	92%	100%	93%	-	100%
7.4 Seek Florida Green Building Coalition (FGBC) Local Government Designation by 2012.	Status: <input checked="" type="checkbox"/> Achieved Target Date: 2012 Data Sources: Sustainable Development Note: Application in process.	Application submitted	-	3/14/13	-	-	-	-	-
		Certification received (GOLD)	-	-	-	January 2015	-	-	-
7.5 Launch a community-wide outreach campaign on the City Green Plan with continuous program promotion.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Community Relations Note: Total for each measure includes any public outreach related to Green Plan actions, programs, or initiatives.	# of press releases	4	2	5	5	5	7	7
		# of website promotions	11	10	7	14	15	7	8
		# of green productions on CreekTV	5	3	3	7	4	4	5
		# of articles and ads in Creeklife	9	9	23	16	15	18	19
		# of banners	49	49	23	25	25	35	42
7.6 Create a City Sustainable Center on City owned property by 2014.	Status: No Action Taken Target Date: 2014 Data Sources: -	# of city properties available	-	-	-	-	-	-	-
		# of properties appropriate for center	-	-	-	-	-	-	-
		# of planned programs	-	-	-	-	-	-	-
		# of partnerships/sponsors	-	-	-	-	-	-	-

Vehicles

Each year, the number of vehicles that utilize fuel is provided in the annual report. Below is a graphic that clearly identifies the total number of vehicles in the City fleet and the breakdown therein with the total number of alternative fuel vehicles utilized by the City.



Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 8 → 9
- # of actions achieved → 2
- # of actions in progress → 5
- # of City LEED® certified buildings → 2

Fuel Consumption

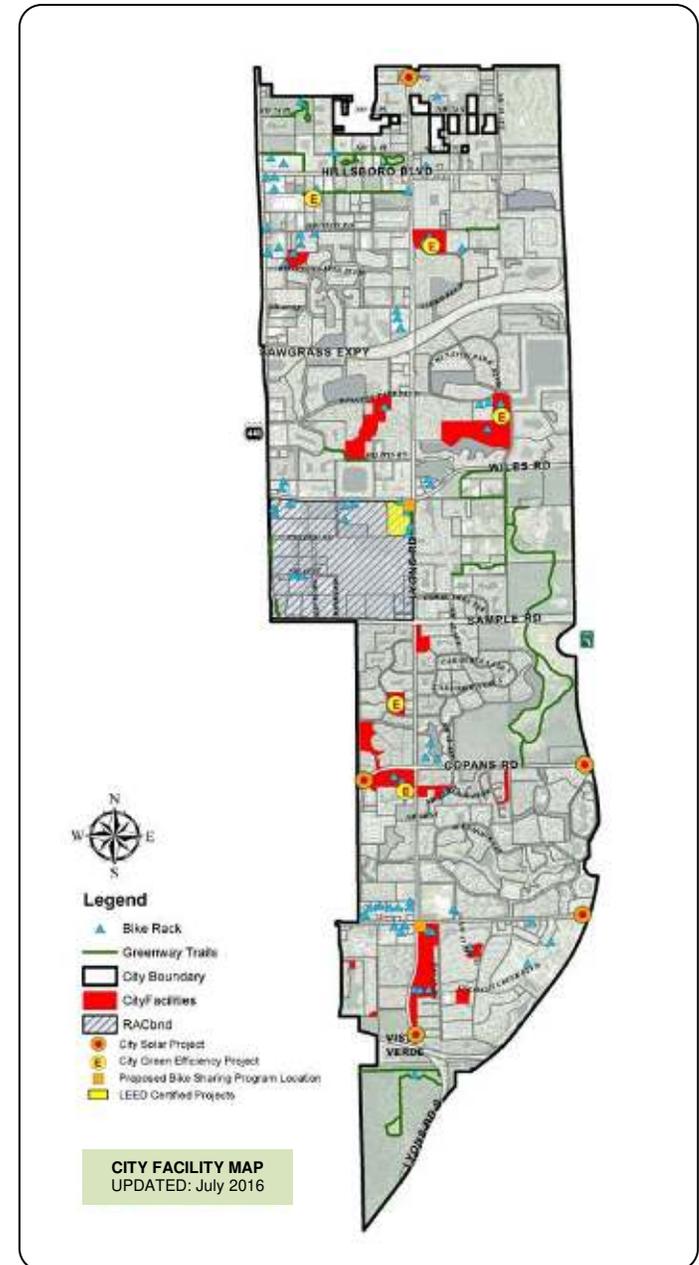


Sustainable Procurement

Purchasing continues utilizing the eBid system which allows for electronic submittals minimizing the amount of repetitious paperwork and bulky proposals to be printed.

The new eBid system has saved an estimated 1,680 pounds of paper per year, and is aligned with the City's overall sustainability goals, and specifically, directly relates to Action Objective 8.5 of the City's Green Plan.

There is a positive environmental impact with the use of SunTrust's P-Card electronic statements. For example, for every 12 statements that are not printed, (12 pages, 12 envelopes), approximate total paper =24 which is a tree equivalent of 0.0024.



Map available in larger print

Action Steps

Results of each action step under Category 8

ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018
8.1 Improve indoor air quality in all city buildings by 2020.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Public Works Dept.	# of indoor air quality inspections	-	1	3	0	0	0	0
		# of indoor air improvements/cleaning projects	-	0	1	0	0	0	0
		# of fake plants removed from buildings	-	27	20	0	0	0	0
8.2 Advance emission controls on all City fleet vehicles to reduce emission by 50% by 2020.	Status: No Action Taken Target Date: 2020 Data Sources: - Note: Since adoption of plan, focus has been on vehicles replacement rather than retrofitting older fleet vehicles	# of emission programs evaluated	-	-	-	-	-	-	-
		# of vehicles for emission improvements	-	-	-	-	-	-	-
		% of vehicles improved	-	-	-	-	-	-	-
8.3 Increase the use of renewable energy sources in City buildings with 15% of building usage from renewable source by 2020.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Public Works Dept. Note: Solar power projects are listed as individual projects that may be under an overall program (e.g. solar lighting for city identity signs)	# of solar power projects	0	0	0	0	0	0	0
		# of projects/programs (other renewable)	0	0	0	0	0	0	0
		% of city owned buildings using renewable energy	0%	0%	0	0	0	0	0
		% of building usage from renewable energy source	0%	0%	0	0	0	0	0
8.4 Reduce overall energy consumption on City owned sites by 20%.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Public Works and IT Depts. Note: (1) # of solar power projects/programs is the same data from Action 8.3 (2) Public Works building earned LEED certification in December 2013.	# of initiatives from IT city-wide technology system energy consumption	0	0	1	0	0	0	0
		# of solar power projects/programs	0	0	0	0	0	0	0
		# of energy efficiency projects (lighting and HVAC)	1	0	0	0	0	0	0
		# of city buildings certified as LEED®	0	1	0	0	0	1	0
8.5 Reduce paper consumption by 50% through a Paperwork Reduction Policy.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: IT Dept., Finance Plus, Go Green Printing Report – Coconet Note: (1) E-gov solutions include internal and external online efforts (2) Copy machines print jobs and on-glass copies, * estimated for 2014	# of E-gov solutions (e.g. online billing)	2	2	2	2	3	3	3
		# of pages printed city-wide	709,721	897,173	*742,928	100,000	100,000	100,000	105,000
		# of pages produced by city-wide copy machines	922,654	932,402	*889,381	1,162,032	1,051,332	1,115,904	1,197,109
		City-wide copy paper expense	\$9,176.83	\$8,350.83	*\$8,412.36	\$8,051.11	7,035.80	8,424.00	8,873.46
8.6 Create a Sustainable City Coordinator position by 2010.	Status: <input checked="" type="checkbox"/> Achieved	Approved as part FY 2010 budget	-	-	-	-	-	-	-
8.7 Create a City Green Team by 2010 with a representative from each department.	Status: <input checked="" type="checkbox"/> Achieved	Green Team formed	-	-	-	-	-	-	-
8.8 Monitor greenhouse gas (GHG) emissions from city operations with a reduction target of 7% below 2009 levels by 2012 and 20% below by 2020.	Status: <input checked="" type="checkbox"/> Achieved / <input checked="" type="checkbox"/> In progress Target Date: 2012 / 2020 Data Sources: ICLEI – CACP Software	GHG missions (tonnes of CO ₂ e)	6,246	-	-	-	-	-	-
		% of reduction achieved	11%	-	-	-	-	-	-
8.9 Increase the number of City vehicles using alternative fuels by 25% by 2014 and 50% by 2020.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2014 / 2020 Data Sources: FASTER Query and Report, Fuelmaster Note: (1) Based on fuel consumption data for CY 2013 (2) Only fleet vehicles that consumed fuel for CY 2013 are listed here (3) Percent of fleet using Alternative Fuels includes any vehicle that utilized biodiesel (4) P.D. motorcycles and leased vehicles are included in # of vehicles in fleet because of fuel consumed at expense of the City	# of vehicles (CY fuel use)	236	233	256	246	271	250	284
		# of non-highway & equipment (CY fuel use)	40	40	44	40	37	44	32
		% of fleet using alternative fuels	0.1%	0.74%	.70%	.53%	.53%	.53%	.48%
		Gallons of fuel consumed (total of all fuels)	175,701	177,432	185,750	181,851	184,831	195,568	200,894
		Idle time for vehicles (hours)	76,766	47,124	43,914	51,594	60,080	92,791	104,103

Category 9: Regional Leadership

Climate Change

Carbon Reduction— Regional Leadership – Environmental

Southeast Florida Regional Climate Change Compact – Leadership Summit

In 2009, elected officials from Broward, Miami-Dade, Monroe, and Palm Beach Counties adopted a joint compact in addressing and adapting for climate change in an effort to partner and develop strategies in addressing impacts from climate change on the Southeast Florida region. Each year since 2009, there has been a leadership summit to discuss issues and potential funding regarding impacts. The 10th annual summit was held in Miami and celebrated a decade of progress with critical discussions on adaptation, innovation, and resilience. The Summit featured keynotes and panels with local, state, and federal government officials, business and nonprofit leaders, and other experts discussing plans to ensure the region not only survives, but thrives, in the face of sea level rise and other climate impacts. Coconut Creek Commissioners and Staff regularly attend the Summit and participate in the Climate Change Task Force.

Quick Numbers

Below are quick reference numbers in relation to this category.

of actions for Category 9 → 6

of actions in progress → 3

of high ranked actions in County Plan → 65

of members County Climate Task Force → 31

	ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2012	2013	2014	2015	2016	2017	2018
9.1	Participate in a regional or county Climate Action Plan.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: Outlook Calendars	# of public meetings attended by Commission	4	2	11	8	8	8	7
			# of public meetings attended by staff	3	4	0	4	3	3	4
9.2	Lead the effort to close the Waste Management Landfill.	Status: <input checked="" type="checkbox"/> Achieved Target Date: 2020 Data Sources: Outlook Calendars <i>Note: This action is considered achieved with legal resolution on limiting expansion.</i>	# of city lead efforts	3	-	-	-	-	-	-
9.3	Establish an eco-business hub for Northern Broward County, in the MainStreet Project Area, that generates jobs and advances a sustainable City tax base.	Status: No Action Taken Target Date: 2020 Data Sources: -	# of new businesses in MainStreet	-	-	-	-	-	-	-
			% of new businesses / eco-business related	-	-	-	-	-	-	-
			# of jobs created	-	-	-	-	-	-	-
			% of new jobs created where employees live and work in city or Northern Broward	-	-	-	-	-	-	-
9.4	Create a partnership with local colleges and universities, such as Broward College and Florida Atlantic University, for sustainable research, pilot programs, and education courses.	Status: No Action Taken Target Date: 2020 Data Sources: -	Value of tax base	-	-	-	-	-	-	-
			# of partnerships	-	-	-	-	-	-	-
			# of programs	-	-	-	-	-	-	-
9.5	Lead the effort to eliminate the garbage waste being deposited in the landfill.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2020 Data Sources: City Manager's Office	# of events	-	-	-	-	-	-	-
			# of public meetings	3	0	0	0	0	0	0
9.6	Create a new local business tax structure by 2012, which can become a regional model, based on a sustainable business practices.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2012 Data Sources: - <i>Note: Staff evaluating legislative impacts.</i>	# of action efforts	1	1	0	0	0	0	0
			# of businesses participating in pilot program	-	-	-	-	-	-	-
			# of businesses in City	-	-	-	-	-	-	-
			# of public meetings held	-	-	-	-	-	-	-



Completion date of report: July 2019

FOR COMMENTS OR QUESTIONS REGARDING THIS REPORT CONTACT:

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