

# CITY GREEN PLAN REPORT

2013



*"Creating a Culture of Green Excellence"*

**COCONUT  
CREEK**

BUTTERFLY CAPITAL OF THE WORLD®

# 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 2013 calendar year.

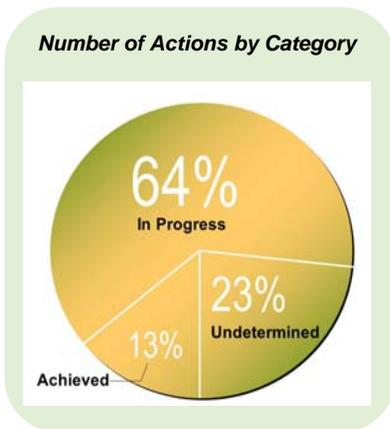
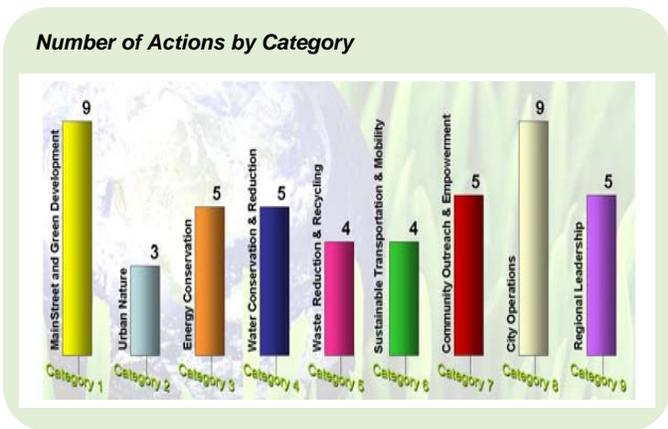
## Collaborative Effort

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.

- Jim Hetzel, Sharon Vollmer, and Sean Flanagan - Sustainable Development
- Christina Semeraro and Elise Adler-Hogan - Finance and Administrative Services
- Lou Italicco and Mike Heimbach - Public Works
- Randall Blanchette – Utilities and Engineering
- Yvonne Lopez - City Manager's Office
- Janice Ninesling - City Clerk Department
- Vacant - Human Resources
- Ken Brown - Information Technology
- Danielle DeBarros - 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 2: City Operations. In 2013, there were 33 action steps in progress, which represents 67% of all action, and 11 action steps undetermined, representing 21%. There are 7 action steps achieved, representing 12% of all action.



Credit Achievement  
LEED for New Construction v2009

Total  
**54** | **110**  
Earned | Possible

 Sustainable Sites 19 | 26

 Water Efficiency 3 | 10

 Energy and Atmosphere 8 | 35

 Materials and Resources 7 | 14

 Indoor Environmental Quality 10 | 15

 Innovation and Design 6 | 6

 Regional Priority 1 | 4

**City's Public Works Administration Building**

In 2013, the City completed the construction of a new Public Works Administration Building. The building was designed using the US Green Building Council LEED® Certification program for new construction. LEED® stands for Leadership in Energy and Environmental Design and is a rating system for the design, construction, and operation of high performance green buildings. Performance is evaluated based on categories such as sustainable site development, water efficiency, energy and atmosphere, material and resources, indoor environmental quality, innovation and design, and regional priority. Points are earned under each performance category and certification is awarded in the following levels of certification: Certified, Silver, Gold, and Platinum, with Platinum being the highest level of green building performance. In December 2013, the City received notice that the Public Works building earned LEED® Silver certification. In addition, the City earned a Green Leaf Award under the Broward League of Cities, Cities of Excellence Award Program, for the green government projects.

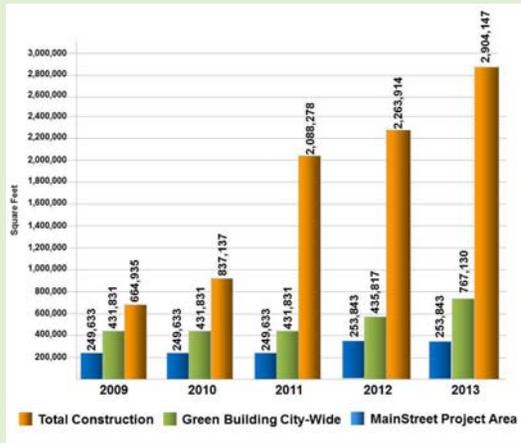


**Green Building Strategies Employed in the Project**

- ✓ LED light fixtures throughout building
- ✓ Individual air conditioning units distribute targeted cooling
- ✓ High reflective rooftop reduces heat gain
- ✓ Fully insulated roof and walls
- ✓ Low-flow fixtures throughout building
- ✓ High-efficiency natural gas appliances
- ✓ Self-powered flushing toilets
- ✓ Change rooms with showers
- ✓ Bike racks to encourage biking to work
- ✓ Metal screen on south side of building for cooling southern façade
- ✓ Exterior glass is tinted to reflect heat
- ✓ Porous concrete paving
- ✓ Drought resistant native plants
- ✓ Low-emitting alternative fueled parking spaces
- ✓ Green housekeeping
- ✓ Green pest control
- ✓ Use of low-emitting materials
- ✓ Diverted over 90% of construction and demolition debris from landfill
- ✓ 20% of materials used contain recycled content
- ✓ 20% of materials used have been extracted and manufactured within 500 miles of site

### Green Building Growth

There was a large increase in total construction for 2013 based on the completion of several multi-family residential buildings. Green building construction also increased based on the inclusion of new green programs for construction activity such as FGBC and National Builder Association (NAHB) Green Building Program. Those programs have been recognized by the City as contributions to green building construction.



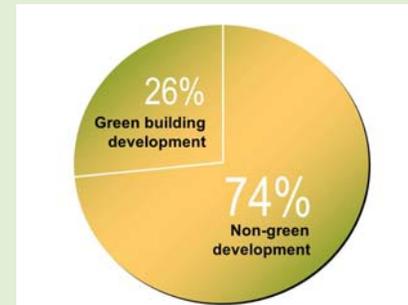
### Quick Numbers

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 → 15
- # of LEED® certified buildings → 16
- # of FGBC certified buildings → 0
- # of NAHB green certified buildings → 11

### Total Construction

The percentage of green building construction has increased from the previous year from 19% of total construction to 26%.



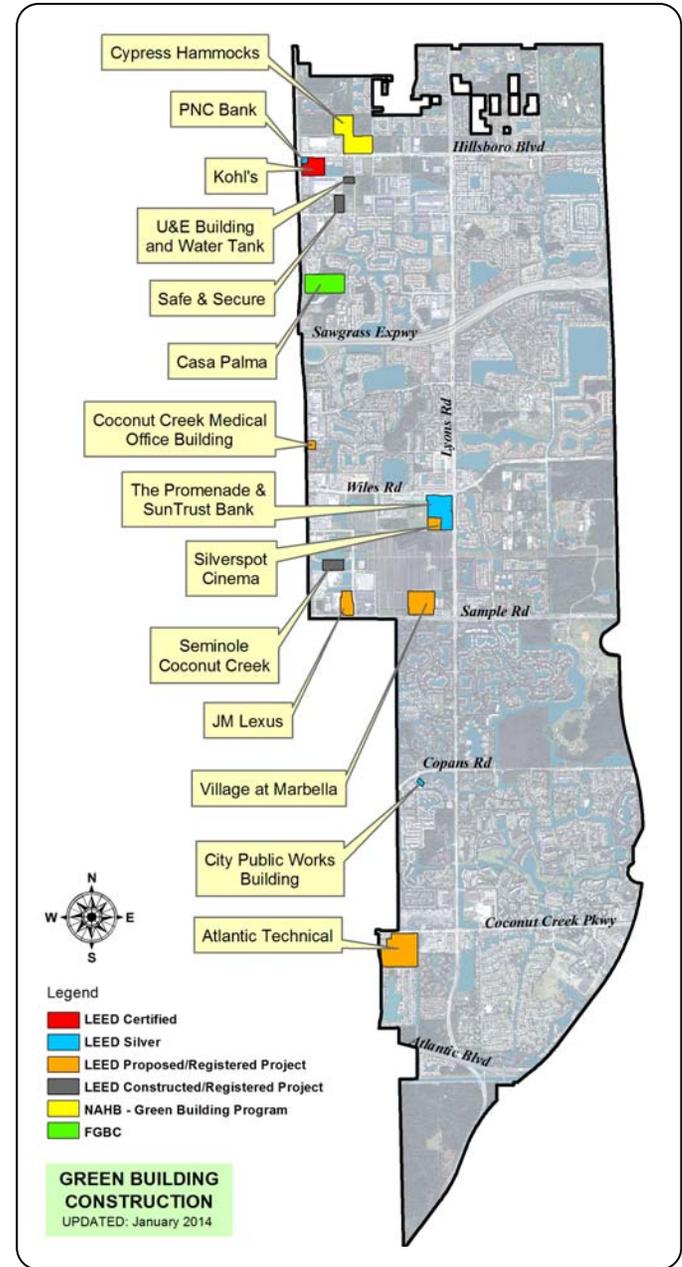
### Green Building by Area

There has been a slight shift of green building construction with the majority being outside the MainStreet Project Area. This is expected until future development occurs in MainStreet.



### USGBC Certification

Of the green construction projects, 5 have received LEED® certification. Below are the certification levels to date.



## Action Steps

Results of each action step under Category 1

## Category 1: MainStreet and Green Development

ACTION OBJECTIVE		ACTION SUMMARY	PERFORMANCE MEASURE	2009	2010	2011	2012	2013
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	# of buildings constructed (based on issued COs)	2	0	1	2	0
			# of buildings seeking certification	12	0	0	0	1
			# of buildings certified (cumulative)	0	14	14	14	14
			% certified as Silver, Gold, or Platinum	0%	100%	93%	82%	82%
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)	7	11	7	6	23
			# of buildings seeking certification	2	0	0	1	0
			# of buildings certified (cumulative)	1	1	1	1	13
			% certified	14%	5%	4%	3%	24%
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	0	1	1	1	0
			# of projects constructed (based on issued COs)	1	0	0	0	1
			# of buildings seeking certification	0	0	1	1	0
			# certified (cumulative)	0	0	0	0	1
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	4	3	2	0	0
			# of retrofitted buildings seeking certification	0	0	0	0	0
			# certified	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: This action is being developed by Green Team	Date checklist was created	-	-	-	-	-
			# of city projects	-	-	-	-	-
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	2	3	7	8	13
			# of green tech/art displays proposed (cumulative)	2	3	3	4	4
			# of green tech/art displays constructed	0	0	0	1	1
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 for final City Commission approval.	# 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: ? Undetermined Target Date: 2020 Data Sources: -	# of school properties in MainStreet Area	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)	2	2	4	4	5
			# of projects higher density/mixed-use (cumulative)	1	1	3	3	4
			% of projects support action	50%	50%	75%	75%	75%

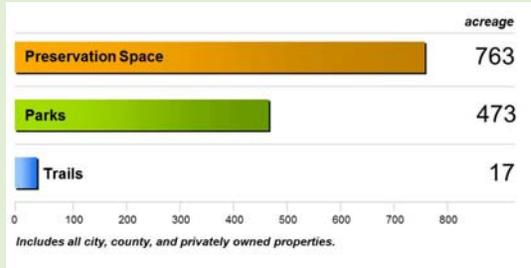
## Category 2: Urban Nature

## Urban Nature

Parks – Habitats – Wildlife

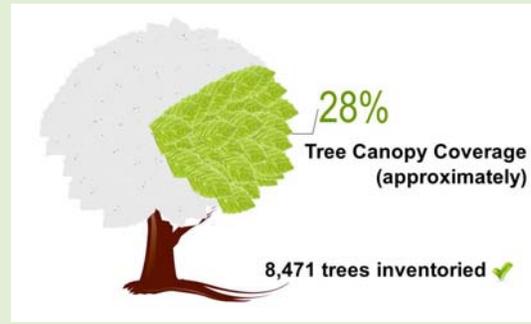
### Park and Green Space

Preservation, park, and trail acreage have remained the same since 2012. There were no increases in the City in 2013.



### 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.



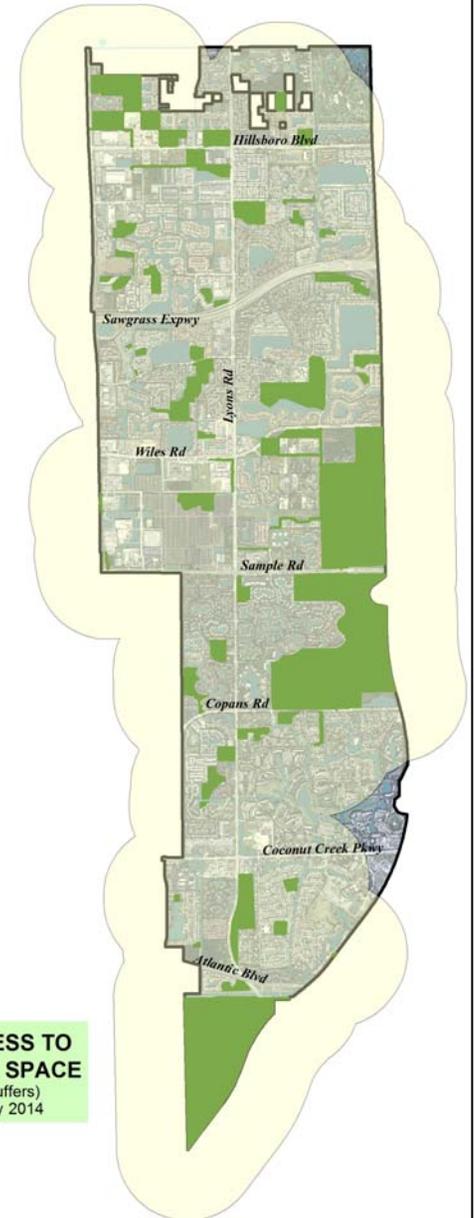
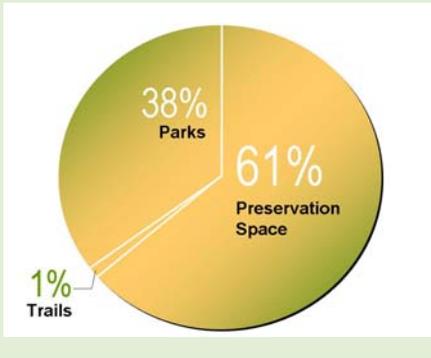
### Quick Numbers

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 → 3

### Percentage of Green Space

The percentage of green space has remained the same since 2012. As the City's trailways network expands, there will be small changes in percent totals.



**RESIDENT ACCESS TO PARKS & GREEN SPACE**  
(1/2 mile proximity buffers)  
UPDATED: January 2014

97.9% within 1/2 mile  
2.1% not covered

Map available in larger print

Action Steps

Results of each action step under Category 2

	ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2009	2010	2011	2012	2013
2.1	Achieve 40% tree canopy coverage throughout the City with maximum tree coverage on public and privately owned land by 2020.	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 1999 data (2) Inventoried trees are reflected as a cumulative total of city owned land	# of trees at free giveaway	700	700	700	700	600
			# of trees - city inventory (cumulative)	6,319	6,379	6,977	7,804	8,471
			# landscaping awards	0	2	0	0	0
			# acres of natural conservation areas (cumulative)	762	762	762	763	763
			% estimated in tree canopy coverage	21%	21%	22%	28%	28%
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.	Status: ? Undetermined Target Date: 2020 Data Sources: -	# 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.	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	# of passive parks (cumulative)	7	7	7	7	7
			# of recreational parks (cumulative)	6	6	6	6	6
			# of open space/preserve areas (cumulative)	29	29	29	30	30
			# of greenways trails (cumulative)	6	11	11	11	11
			% of city area within ½ mile of all of the above	97%	97%	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.



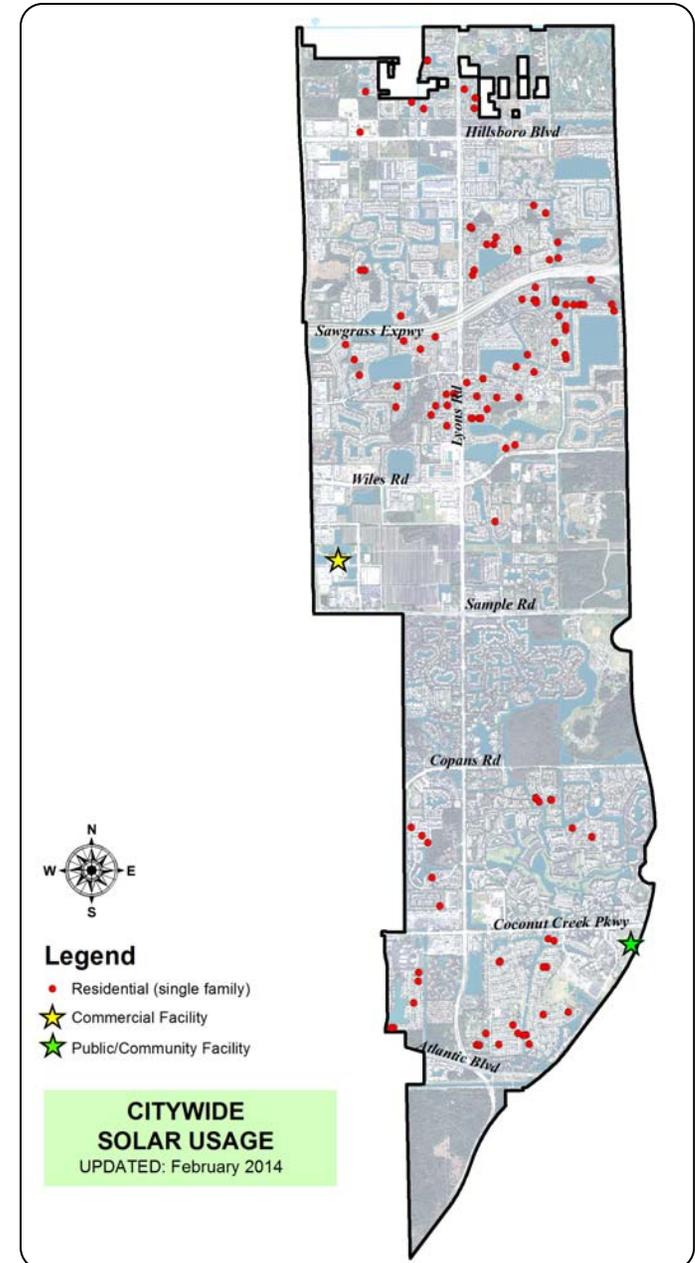
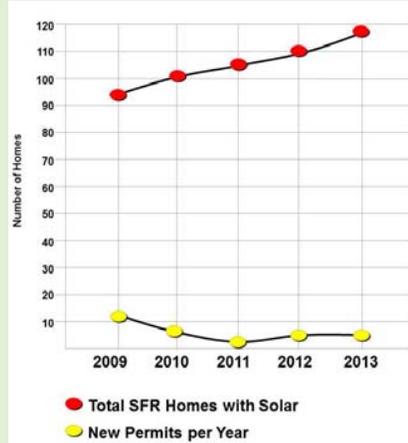
### Quick Numbers

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 → 118

### 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 2009.



Map available in larger print

Action Steps

Results of each action step under Category 3

	ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2009	2010	2011	2012	2013
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: ? Undetermined 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: ? Undetermined 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: ✓ In progress Target Date: 2020 Data Sources: GIS, Code Compliance, Permits Note: (1) Based on SFR homes only, % per total SFR units (2) Permit information obtained from Community Plus.	# of SFR homes with solar (cumulative)	96	104	108	113	118
			# of permits issued per year	11	8	4	5	5
			% of homes	0.4%	0.4%	0.4%	0.5%	0.5%
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: ✓ In progress Target Date: 2020 Data Sources: - Sustainable Development Note: (1) Grant program and application was modified the first QT 2012 (2) Tracking began in mid-2012.	# of grants applied for	-	-	-	5	4
			# of applied grants for energy	-	-	-	1	0
			% of grants toward renewable/efficient energy projects	-	-	-	20%	0%
3.5	Ensure 20% of grants received by the City are for energy conservation projects.	Status: ✓ In progress Target Date: 2020 Data Sources: Grants Received Note: (1) Grant information obtain from Finance Department which tracks all department grants.	# of grants applied for	7	5	7	3	6
			# of grants received - awarded	5	4	4	0	2
			# of grants for energy	1	0	0	0	0
			% of grants for energy	20%	0%	0%	0%	0%
			\$ amount of energy grants awarded	\$425,400	0	0	0	0

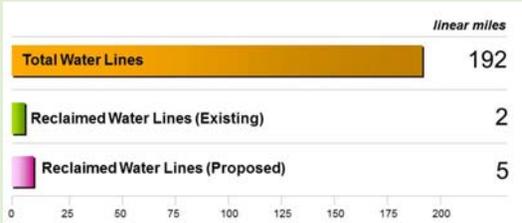
# Category 4: Water Conservation and Reduction

## 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.



### Water Consumption Analysis

Below is an analysis for water consumption by month for 2013.

Month	Residential	Commercial	Total
January	112,409	17,725	130,134
February	119,051	18,695	137,746
March	102,260	16,329	118,589
April	116,114	18,440	134,554
May	103,007	19,277	122,284
June	105,954	17,303	123,257
July	91,946	18,094	110,040
August	100,145	19,100	119,245
September	100,466	18,952	119,418
October	91,186	16,007	107,193
November	117,406	19,751	137,157
December	103,527	16,407	119,934
Monthly Average	105,289	18,007	123,296
<b>Total Avg Daily Consumption (MG)</b>	<b>4.11</b>		
Avg # Customers - Residential	10,854		
Avg # Customers - Commercial	738		
Avg Daily Consumption-Residential (MG)	3.51		
Avg Daily Consumption-Commercial (MG)	0.60		
<b>Avg Annual Consumption - Residential (MG)</b>	<b>1,281.15</b>		
<b>Avg Annual Consumption - Commercial (MG)</b>	<b>219.00</b>		

\*Numbers are per 1000 gals

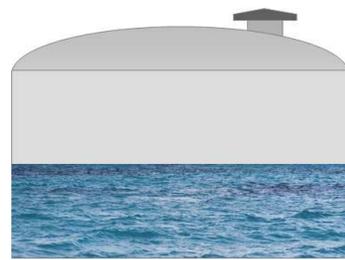
### Quick Numbers

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 → 106
- # of participants \$100 toilet rebate → 108

### City Water Savings

Below is a cumulative savings in water for City projects.

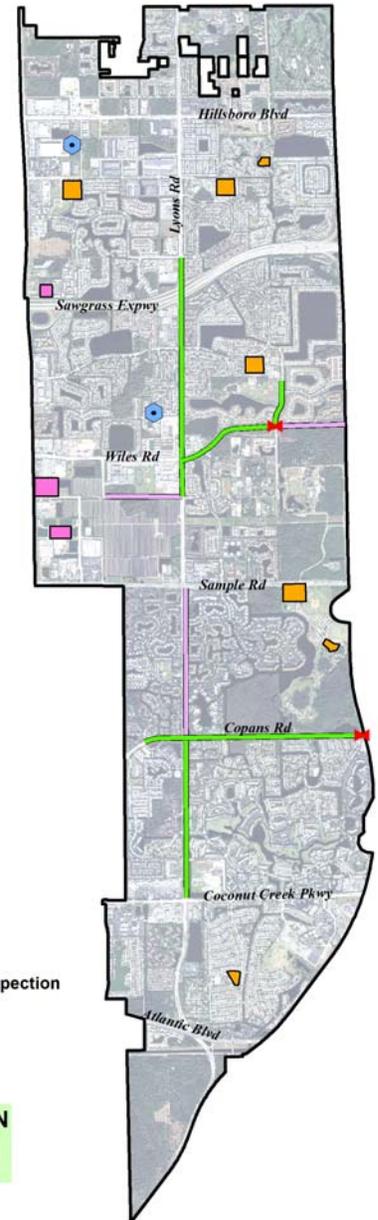


**24,800,000 (mgpy)**  
(total estimate 2003-2013)

### 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 = 0



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	2009	2010	2011	2012	2013
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	2	2	3
			# of MainStreet projects built	1	1	2	2	2
			# with on-site water collection systems	0	0	1	1	1
			# with reclaimed water	0	0	0	0	0
			% of built projects	0%	0%	50%	50%	50%
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.	# of customer accts targeted high consumption	6,557	6,770	6,767	6,762	7,571
			# of water meters checked for high consumption	1,088	1,270	1,111	2,055	2,798
			annual water consumption increase (residential)	25.55MG	80.30MG	(40.15MG)	(47.45MG)	10.95MG
			annual water consumption increase (commercial)	7.3MG	7.3MG	(10.95MG)	0 MG	.06MG
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	3	4	6	2	1
			# of reclaimed water	2	0	2	1	0
			# of properties connected	0	0	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
			# of grants received	-	-	-	0	0
			# of NatureScape Inspections	0	5	5	8	2
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	1	1	3
			# of completed projects	2	3	1	1	1
			amount of water saved (estimated gallons)	0	400,000	400,000	400,000	160,000

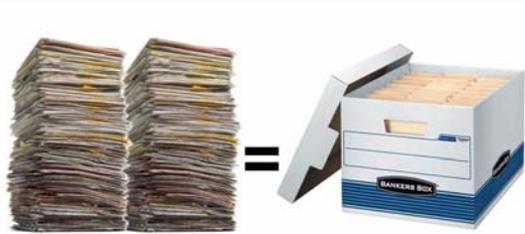
# Category 5: Waste Reduction and Recycling

## Waste Reduction

Recycling – Zero Waste – Citizen Participation

### Community Shred-It Event

The City conducted its first community shredding event in 2011 and held 3 events in 2013. Below are cumulative results for the program.



41,360 lbs

2,068 boxes

### Quick Numbers

Below are quick reference numbers in relation to this category.

# of actions for Category 5 → 4

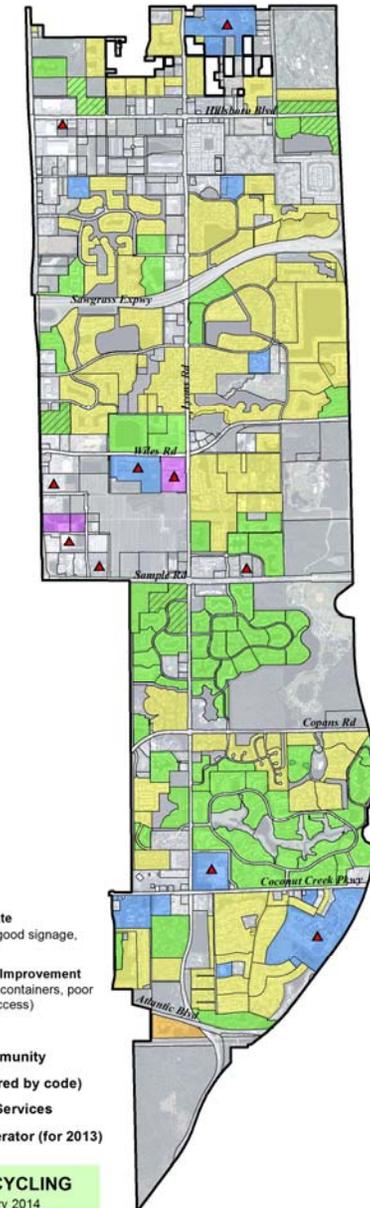
# of actions in progress → 2

# of participants shred-it events → 474

# of participants paint program → 79

### Recycling Capture Rate Ratio

The City implemented single stream recycling for residential areas in March 2009 by distributing single stream bins to single family neighborhoods then multi-family. There have been significant increases in the annual capture rate ratio since 2009 as shown in this graphic below. In 2013, there was a slight decrease in the annual capture ratio. However, the result is still above the target percentage set for 2014.



**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: February 2014



Map available in larger print

## Action Steps

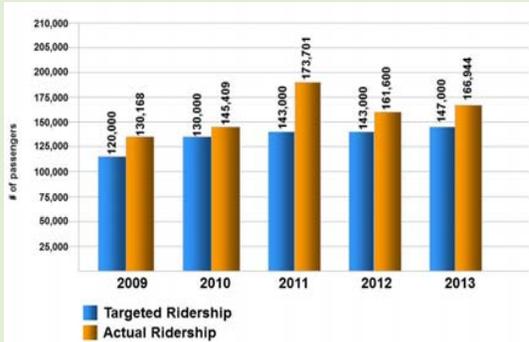
Results of each action step under Category 5

## Category 5: Waste Reduction and Recycling

	ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2009	2010	2011	2012	2013
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 ended by Broward County on Oct. 1, 2013	# of single stream recycling containers purchased	8,000	809	0	0	1,700
			# of single stream recycling containers distributed	0	8,000	10	175	290
			Average capture rate ratio (estimated)	13%	17%	21%	26%	24%
			# of participants in paint recycling program	67	54	40	65	79
5.2	Create a "user-friendly" composting program by 2012 to reduce solid waste disposal.	Status: <input type="checkbox"/> Undetermined 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: <input type="checkbox"/> Undetermined 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.	# of participants	-	-	78	508	474
			lbs. of paper shredded	-	-	12,285	28,595	41,360

### City Shuttle Service

Each year, a total number for ridership is targeted for the shuttle service. Since 2009, the City has exceeded targeted totals with ridership steadily increasing as depicted below.



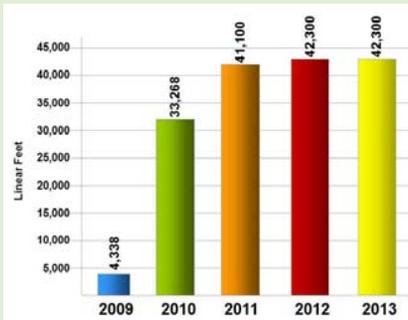
### Quick Numbers

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

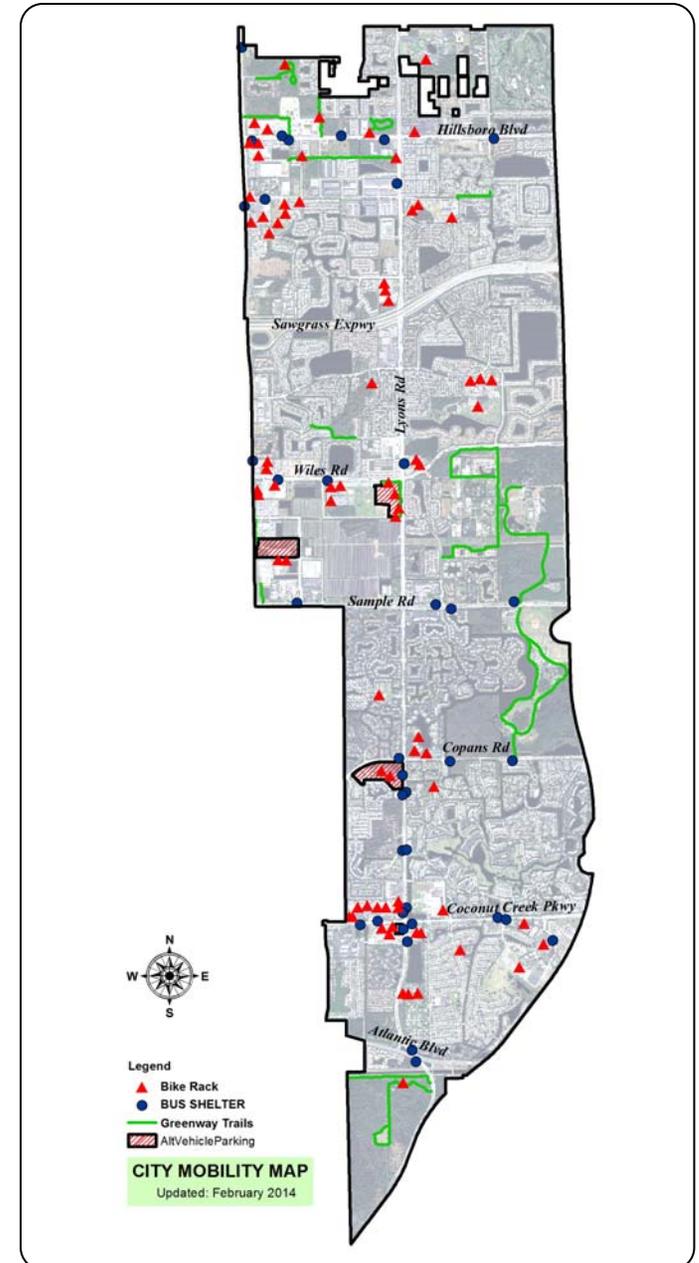
### Trailways Network

The total linear feet of trailways in the City has remained the same since last year. Graphic below depicts the total linear feet.



### Bike Racks

In 2013, there was 1 bike rack added with the completion of the City's new Public Works Building. Graphic below depicts the increase of bike racks in the City since 2009.



## Action Steps

Results of each action step under Category 6

## Category 6: Sustainable Transportation and Mobility

ACTION OBJECTIVE		ACTION SUMMARY	PERFORMANCE MEASURE	2009	2010	2011	2012	2013
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: Planning Research, Outlook Calendars	# of planning documents referencing hub	3	3	3	3	3
			# of meetings with other government agencies/staff	12	27	17	15	12
			# of property owners planning for/participating	2	2	2	2	2
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	# of existing bus shelters (cumulative)	37	37	37	37	37
			# of existing bike racks (cumulative)	62	64	91	93	94
			# of linear feet of existing greenway trails	4,338	33,238	41,100	42,300	42,300
			# of shuttle riders - est. per year	130,168	145,409	173,701	161,660	166,944
			# of linear feet of bike lanes	45,700	45,700	45,700	45,700	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
			# of programs planned	-	1	1	1	1
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	# of parking spaces existing	-	63	188	188	192
			# of spaces planned	-	125	4	6	18

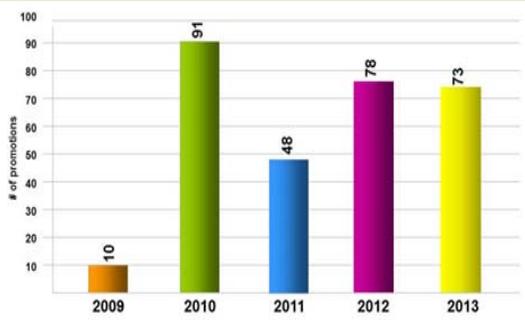
# Category 7: Community Outreach and Empowerment

## 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.



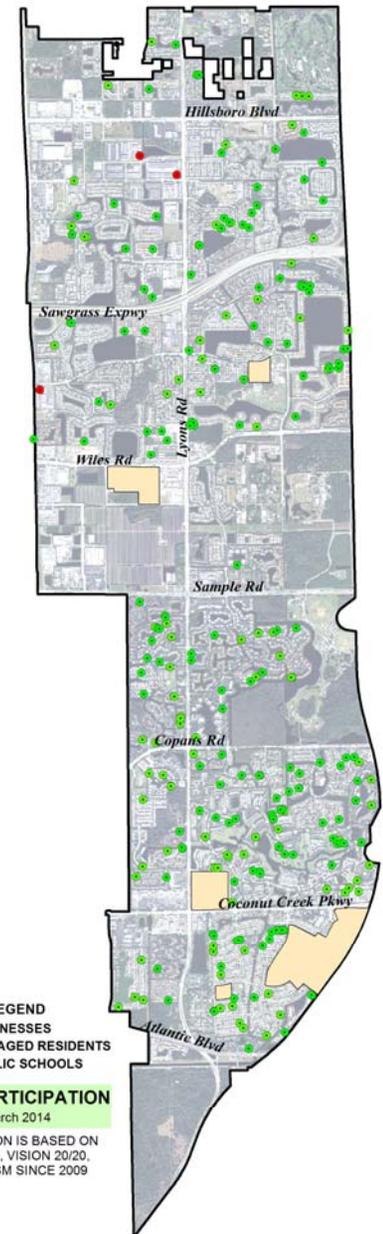
### Quick Numbers

Below are quick reference numbers in relation to this category.

- # of actions for Category 7 → 6
- # of actions in progress → 3
- # of attendees at citizen's academy → 30
- # of attendees at green events → 3,600

### 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.



**LEGEND**

- BUSINESSES
- ENGAGED RESIDENTS
- PUBLIC SCHOOLS

**COMMUNITY PARTICIPATION**  
 UPDATED: March 2014  
 \*NOTE: PARTICIPATION IS BASED ON CITIZENS ACADEMY, VISION 20/20, AND VOLUNTEERISM SINCE 2009

## Action Steps

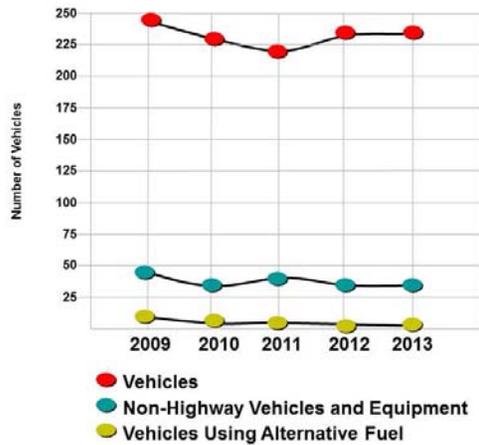
Results of each action step under Category 7

## Category 7: Community Outreach and Empowerment

	ACTION OBJECTIVE	ACTION SUMMARY	PERFORMANCE MEASURE	2009	2010	2011	2012	2013
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 declared April 22-28, 2012 as City Green Week (2) Events included Arbor Day, Tree Planting Ceremony, Shred-It Event, and CocoFest (3) Action completed but will continue to be monitored.	Proclamation date	-	11/18/10	-	4/12/12	4/11/13
			# of events that support proclamation	-	2	2	4	3
			# of participants at events (approx.)	-	3,000	1,250	2,250	3,600
7.2	Implement a City Green Award program to recognize homeowners, neighborhoods, and businesses that incorporate green and sustainable practices.	Status: <input type="checkbox"/> Undetermined 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.	# scheduled lectures	2	5	-	-	4
			# of attendees (total)	104	100	-	-	68
			% satisfaction rate (based on surveys)	91.2%	90.6%	-	-	94%
7.4	Seek Florida Green Building Coalition (FGBC) Local Government Designation by 2012.	Status: <input checked="" type="checkbox"/> In progress Target Date: 2012 Data Sources: Sustainable Development Note: Application in process.	Application submitted	-	-	-	-	3/14/13
			Certification received	-	-	-	-	-
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	1	4	3	4	2
			# of website promotions	1	26	20	11	10
			# of green productions on CreekTV	0	10	4	5	3
			# of articles and ads in Creeklife	6	33	11	9	9
			# of banners	2	18	10	49	49
7.6	Create a City Sustainable Center on City owned property by 2014.	Status: <input type="checkbox"/> Undetermined 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 utilized fuel is provided in the annual report. Below is a graphic that depicts the number of vehicles used each year since 2009, including non-highway vehicles, and a comparison on the number that is using alternative fuels.



### 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 → 1

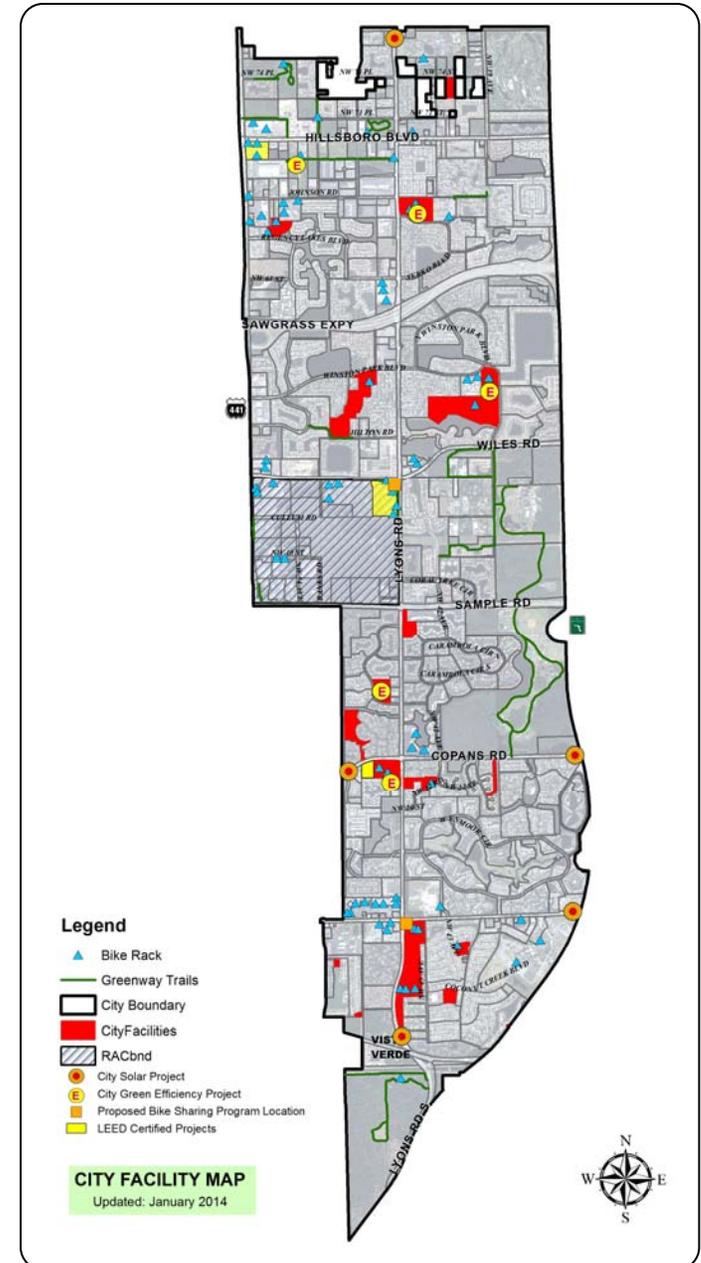
### Fuel Consumption

Below is a graphic that depicts the gallons of fuel used each year since 2009.



### Idle Time

The City does not contain a formal written policy, but vehicles are equipped with GPS and a 10 minute idle limit is in effect with automatic email notification after that time limit. Below depicts idle time since 2009.



Action Steps

Results of each action step under Category 8

ACTION OBJECTIVE		ACTION SUMMARY	PERFORMANCE MEASURE	2009	2010	2011	2012	2013
8.1	Improve indoor air quality in all city buildings by 2020.	Status: ✓ In progress Target Date: 2020 Data Sources: Public Works Dept.	# of indoor air quality inspections	-	-	-	-	1
			# of indoor air improvements/cleaning projects	-	-	-	-	0
			# of fake plants removed from buildings	-	-	-	-	27
8.2	Advance emission controls on all City fleet vehicles to reduce emission by 50% by 2020.	Status: ? Undetermined 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: ✓ 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	20	0	0	0	0
			# of projects/programs (other renewable)	0	0	0	0	0
			% of city owned buildings using renewable energy	0%	0%	0%	0%	0%
			% of building usage from renewable energy source	0%	0%	0%	0%	0%
8.4	Reduce overall energy consumption on City owned sites by 20%.	Status: ✓ 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	3	1	0	0	0
			# of solar power projects/programs	20	0	0	0	0
			# of energy efficiency projects (lighting and HVAC)	3	1	2	1	0
			# of city buildings certified as LEED®	0	0	0	0	1
8.5	Reduce paper consumption by 50% through a Paperwork Reduction Policy.	Status: ✓ 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	# of E-gov solutions (e.g. online billing)	16	1	0	2	2
			# of pages printed city-wide	723,221	614,062	750,756	709,721	897,173
			# of pages produced by city-wide copy machines	-	-	813,087	922,654	932,402
			City-wide copy paper expense	\$9,982.11	\$6,976.83	\$9,144.96	\$9,176.83	\$8,350.83
8.6	Create a Sustainable City Coordinator position by 2010.	Status: ☑ Achieved	Approved as part FY 2010 budget	10/1/2009	-	-	-	-
8.7	Create a City Green Team by 2010 with a representative from each department.	Status: ☑ Achieved	Green Team formed	10/1/2009	-	-	-	-
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: ☑ Achieved / ✓ In progress Target Date: 2012 / 2020 Data Sources: ICLEI – CACP Software	GHG missions (tonnes of CO <sub>2</sub> e)	7,065	-	-	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: ✓ 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)	242	236	224	236	233
			# of non-highway & equipment (CY fuel use)	42	30	34	40	40
			% of fleet using alternative fuels	2.6%	1.5%	.75%	0.1%	0.74%
			Gallons of fuel consumed (total of all fuels)	183,327	180,013	181,341	175,701	177,432
			Idle time for vehicles (hours)	46,774	48,461	49,384	76,766	47,124

# 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 5<sup>th</sup> annual summit was held at the Broward Convention Center with over 350 participants. Coconut Creek Commissioners and staff attended the conference to demonstrate our commitment to regional participation and leadership regarding climate change.

### 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	2009	2010	2011	2012	2013
9.1	Participate in a regional or county Climate Action Plan.	Status: ✓ In progress Target Date: 2020 Data Sources: Outlook Calendars	# of public meetings attended by Commission	3	0	0	4	2
			# of public meetings attended by staff	5	12	0	3	4
9.2	Lead the effort to close the Waste Management Landfill.	Status: ☑ 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	21	5	3	3	0
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: ? Undetermined 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	-	-	-	-	-
			Value of tax base	-	-	-	-	-
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: ? Undetermined Target Date: 2020 Data Sources: -	# of partnerships	-	-	-	-	-
			# of programs	-	-	-	-	-
			# of events	-	-	-	-	-
9.5	Lead the effort to eliminate the garbage waste being deposited in the landfill.	Status: ✓ In progress Target Date: 2020 Data Sources: City Manager's Office	# of public meetings	-	-	3	3	0
			# of action efforts	-	-	1	1	1
9.6	Create a new local business tax structure by 2012, which can become a regional model, based on a sustainable business practices.	Status: ✓ In progress Target Date: 2012 Data Sources: - <i>Note: Staff evaluating legislative impacts.</i>	# of businesses participating in pilot program	-	-	-	-	-
			# of businesses in City	-	-	-	-	-
			# of public meetings held	-	-	-	-	-



Completion date of report: March 2014  
Environmental Advisory Board meeting: March 18, 2014

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