

CITY GREEN PLAN REPORT

2009



**COCONUT
CREEK**

“BUTTERFLY CAPITAL OF THE WORLD”

“Creating a Culture of Green Excellence”





Collectively, we can have a profound effect on our environment.

Overview

Each year, the City Green Plan Report will generate 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 2009 calendar year and provides cohesive data on implementation efforts along with supporting graphics. Since the 2009 City Green Plan Report is the first report under the newly adopted City Green Plan, it will establish the benchmark for reporting data over the next ten years.

Collaborative Effort

A key component to the development of this report is the collaborative effort by the *City Green Team*. The 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 the effort generated by the team, this report would not be possible.

- Jim Hetzel, Sharon Vollmer, and Sean Flanagan - Sustainable Development
- Dave Santucci and Elise Adler-Hogan - Finance and Administrative Services
- Lou Italice, John Yancey and Mike Heimbach - Public Services
- Yvonne Lopez - City Manager's Office
- Janice Ninesling - City Clerk Department
- Jenny Deng - Human Resources
- Robert Manfre - Information Technology
- Phil Randazzo - Parks and Recreation
- Tony Avello - Police Department

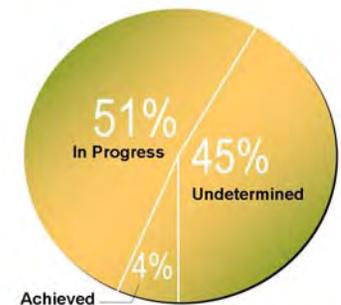
Implementation

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 2009, there were 26 action steps in progress, which represents 51% of all action, and 23 action steps undetermined representing 45%. There were 2 action steps achieved with the approval of the 2010 Annual Budget, representing 4% of all action.

Number of Actions by Category



Action Summary



Introduction

City Program Highlight

As previously stated, this report will generate key information on the City's advancement toward addressing environmental issues. Each year, the City Green Plan Report will highlight one key program or initiative that contributes to the overall environmental health of the community. The program highlighted for 2009 is the City's Tree Canopy Replacement Program.

Tree Canopy Replacement

The Tree Canopy Replacement program was created to improve the overall social, aesthetic, and environmental health of the City and as part of the program, the City is striving to increase city-wide tree canopy. The benefits of planting trees are well documented. Trees sequester CO₂, improve water quality, reduce energy demand, prevent erosion, provide traffic calming, improve property values, and provide for wildlife. According to the USDA Forest Service, over a 50-year lifetime, a tree generates \$31,250 worth of oxygen, provides \$62,000 worth of air pollution control, recycles \$37,500 worth of water, and controls \$31,250 worth of soil control. In addition, trees reduce crime rates, increase neighborhood socialization, and increases the overall health of the community.

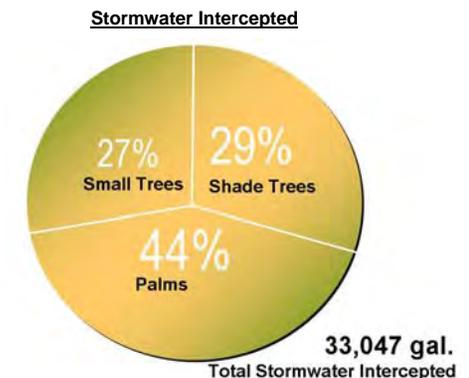
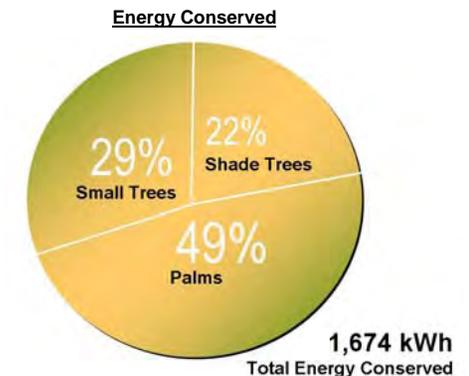
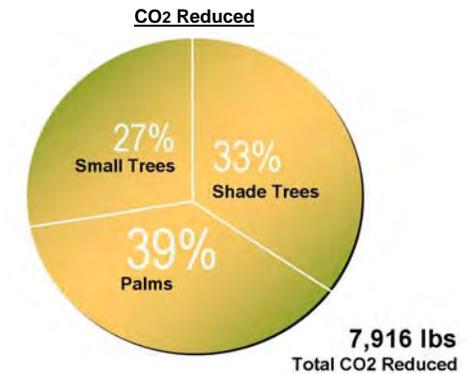
The graphics on this page focus on the environmental benefits of the program: CO₂ sequestration, energy reduction, and stormwater interception. The program for 2009 was primarily located in the SouthCreek neighborhood, south of Coconut Creek Parkway. Data presented herein are estimates for first year installation. In time, these numbers will increase exponentially as the trees mature. This effort contributes to Category 2: Urban Nature, Action 2.1, which states the need to achieve 40% tree canopy coverage throughout the City.



Map available in larger print

Program Summary	
Total # of Trees Planted	275
Of Planted, # of Shade Trees	91
Of Planted, # of Palms	103
Of Planted, # of Small Trees	81
Increase to Property Values	\$6,092

Source: City Program, National Tree Benefit Calculator
Notes: (1) CO₂, Energy, Stormwater, and Property Values are approximations on the values of trees and are not a scientific account of precise values. (2) Approximations are for first year installation. (3) Results are based on the following data input: shade trees 3" caliper, palms 4" caliper, small trees 2" caliper. (4) Palms represent a higher percentage due to number planted and size.



Presentation of Data

The City Green Team collected a wide range of data to generate this report and reviewed the performance measures for each action in progress. As a result, the City Green Team had to modify certain performance measures that were preliminarily provided in the City Green Plan. These adjustments were necessary and have been made throughout this report. When needed, notes have been provided for additional clarification.

The following pages contain a summary for each category. It is important to note the format and layout. Categories 1 through 8 are presented on a two page layout allowing the reader to review all the information, data, and graphics particular to that category cohesively. Category 9 is the only exception, where information has been presented on one page. An illustration of the layout is provided below.

Category Title

Category Summary

Quick Numbers and Highlights

Environmental Theme

Action Steps Spreadsheet

2009 Results

Category Title

Category 1: MainStreet and Green Development

Urban Design
Green Building – Urban Planning – Economic Development

Summary
The City has made great progress with green development over the past several years through the adoption of the MainStreet Design Standards and City's Green Building Ordinance. Current efforts include an the evaluation of the City's Green Building Ordinance for potential amendments, the encouragement of mixed-use projects during development meetings, and the creation of a "green" checklist for City projects. This progress directly supports Actions 1.1, 1.2, 1.3, 1.5, and 1.9.

Quick Numbers
of actions for Category 1 → 9
of actions in progress → 6
of LEED® registered buildings → 12
of LEED® certified buildings → 1

2009 Highlights
✓ Building D at Promenade was completed
✓ SunTrust Bank at Promenade was completed
✓ Kohl's Department Store received LEED® Certification

Green Building Growth

Total Construction	664,935
Green Building Construction	431,831
MainStreet	249,633

Total Construction

36% All-green development
64% Green building development

Green Construction by Area

Chickadee MainStreet Area: 42%
MainStreet Project: 58%

Certification Levels

1 1 0 0

GREEN BUILDING CONSTRUCTION
(Building and Proposed)

Category Graphics

Category 1: MainStreet and Green Development

Action Steps
Results of each action step under Category 1

Action Objective	Action Summary	Performance Measures	Results
1.1 Achieve LEED® Certification for all buildings in the MainStreet Project Area with at least 10% certified at silver, Gold, or platinum level.	Status: ✓ in progress Target Date: 2020 Data Sources: Site Plans, UDGC	# of buildings constructed (based on issued COs) # of buildings seeking certification # of buildings certified % certified as Silver, Gold, or Platinum	2 12 0 0%
1.2 Achieve LEED® Certification or Florida Green Building Coalition (FGBC) Certification on 60% of buildings outside the MainStreet Project Area.	Status: ✓ in progress Target Date: 2020 Data Sources: Site Plans, UDGC, FGBC Note: City has a green building ordinance for green construction techniques but the ordinance does not require a certification.	# of buildings constructed (based on issued COs) # of buildings seeking certification # of buildings certified % certified	7 2 1 14%
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, UDGC	# of city projects proposed # of projects constructed (based on issued COs) # of buildings seeking certification # certified	0 1 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 Services Dept. Note: Installation of high-efficient lighting systems in judge was the retrofit effort to date.	# of retrofitted buildings # of retrofitted buildings seeking certification # certified	4 0 0
1.5 Create a "green" checklist by 2016 for use on all City projects such as engineering or landscape projects, permits, etc.	Status: ? Undetermined Target Date: 2010 Data Sources: Building permits	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: -	# of new projects under development review # of green tech/art displays proposed # of green tech/art displays constructed	2 2 0
1.7 Create a MainStreet Workforce Housing Incentive Program by 2016 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: ? Undetermined Target Date: 2010 Data Sources: Site Plans, UDGC	# 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: Site Plans	# of school properties in MainStreet Area # of potential parcels # of proposed projects	1 - -
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: -	# of new projects under development review # of new projects with higher density/mixed-use % of projects support action	2 1 50%

Page #s

Category 1: MainStreet and Green Development

Urban Design

Green Building – Urban Planning – Economic Development

Summary

The City has made great progress with green development over the past several years through the adoption of the MainStreet Design Standards and City's Green Building Ordinance. Current efforts include the evaluation of the City's Green Building Ordinance for potential amendments and the encouragement of mixed-use projects along major roadway corridors. This progress directly supports Actions 1.1, 1.2, 1.3, 1.5, and 1.9.

Quick Numbers

- # of actions for Category 1 → 9
- # of actions in progress → 6
- # of LEED® registered buildings → 12
- # of LEED® certified buildings → 1

2009 Highlights

- ✓ Building D at Promenade was completed
- ✓ SunTrust Bank at Promenade was completed
- ✓ Kohl's Department Store received LEED® Certification

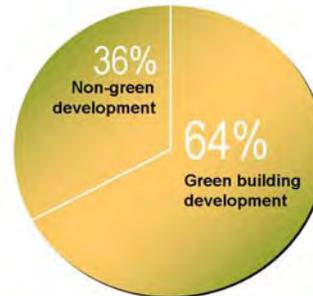
Green Building Growth



0 100,000 200,000 300,000 400,000 500,000 600,000 700,000

*Includes projects pending certification.

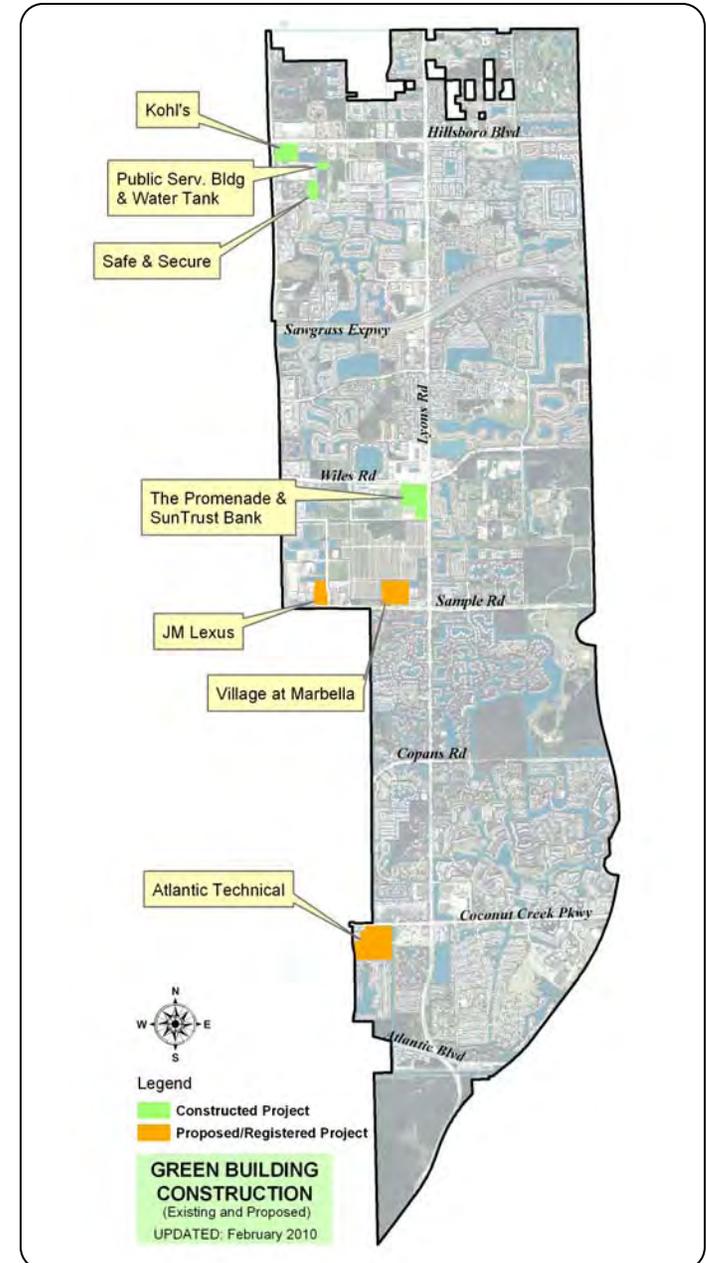
Total Construction



Green Construction by Area



Certification Levels



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 Measures	Results
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: Results are based on # of buildings not by project.	# of buildings constructed (based on issued COs)	2
			# of buildings seeking certification	12
			# of buildings certified	0
			% certified as Silver, Gold, or Platinum	0%
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) City has a green building ordinance for green construction techniques but the ordinance does not require a certification.	# of buildings constructed (based on issued COs)	7
			# of buildings seeking certification	2
			# of buildings certified	1
			% certified	14%
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	# of city projects proposed	0
			# of projects constructed (based on issued COs)	1
			# of buildings seeking certification	0
			# certified	0
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 Services Dept. Note: Installation of high efficient lighting systems in bldgs was the retrofit effort to city buildings.	# of retrofitted buildings	4
			# of retrofitted buildings seeking certification	0
			# certified	0
1.5	Create a “green” checklist by 2010 for use on all City projects such as engineering or landscape projects, permits, etc.	Status: ? Undetermined Target Date: 2010 Data Sources: n/a	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	# of new projects under development review	2
			# of green tech/art displays proposed	2
			# of green tech/art displays constructed	0
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: ? Undetermined Target Date: 2010 Data Sources: Site Plans, USGBC	# 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: n/a	# of school properties in MainStreet Area	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	# of new projects under development review	2
			# of new projects with higher density/mixed-use	1
			% of projects support action	50%

Category 2: Urban Nature

Urban Nature

Parks – Habitats – Wildlife

Summary

Urban nature is important to a sustainable community and the City has made great strides in restoring tree canopy, expanding its greenway trail network, and preserving natural areas. Of importance is the newly established Tree Canopy Replacement program, which focuses on street tree replacement within residential areas and the rezoning of nine properties from various zoning classifications to Parks and Recreation District in effort to maintain park and open space for public use. This progress directly supports Actions 2.1 and 2.3.

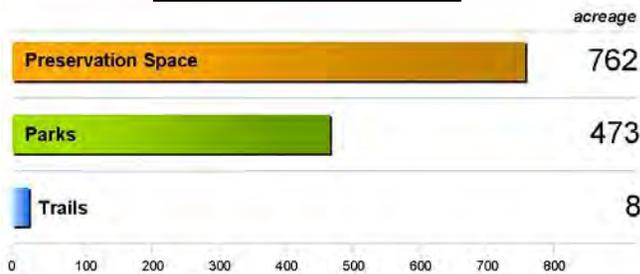
Quick Numbers

of actions for Category 2 → 3
 # of actions in progress → 2
 # of properties (to date) certified by NWF → 185
 # of acres rezoned for green space → 148

2009 Highlights

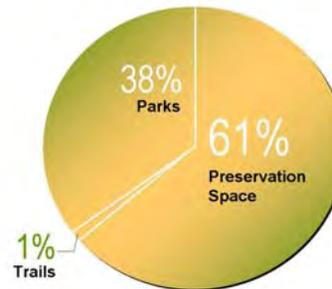
✓Tree Canopy Replacement program began in SouthCreek
 ✓Successfully completed 9th annual free tree giveaway
 ✓Inventoried trees on City-owned properties

Park and Green Space Breakdown

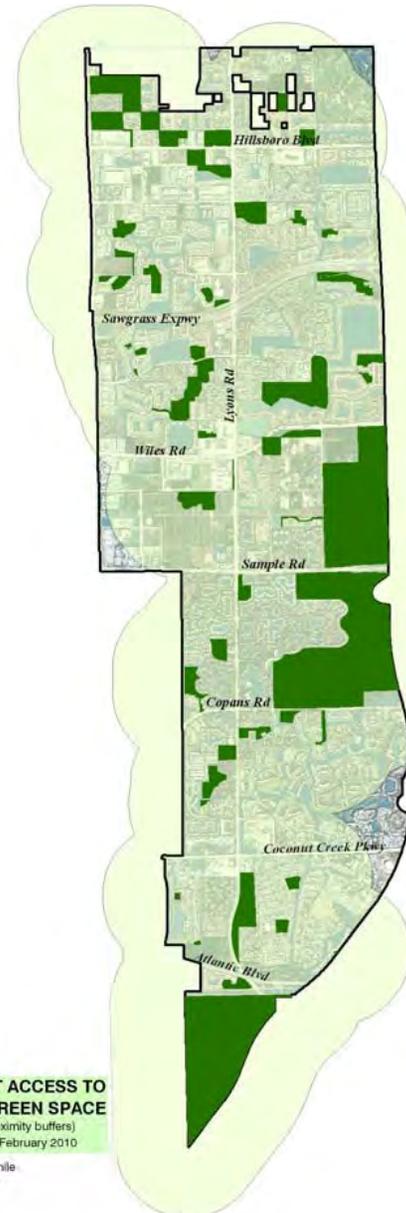


Includes all city, county, and privately owned properties.

Percentage of Green Space



Tree Canopy Coverage



Map available in larger print

Action Steps

Results of each action step under Category 2

Category 2: Urban Nature

	Action Objective	Action Summary	Performance Measures	Results
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 Services Depts. Data Records, GIS Inventory Note: Tree canopy coverage is approximate based on staff assessment from 1999 data and canopy loss from subsequent hurricane seasons.	# of trees at free giveaway	700
			# of trees - city inventory	6,319
			# landscaping awards	0
			# of acres of natural conservation areas	762
			% estimated in tree canopy coverage	21%
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: n/a	# 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: Preserves in county parks were counted as part of total open space/preserve areas.	# of passive parks	7
			# of recreational parks	6
			# of open space/preserve areas	29
			# of greenways trails	6
			% of city area within ½ mile of all of the above	97%

Category 3: Energy Conservation

Energy

Energy Efficiency – Renewable Energy – Conservation

Summary

The City has a unique opportunity to promote the use of renewable energy through innovative programs and community participation. Energy conservation under this category focuses on community-wide effort rather than City operations, which can be found under Category 8, City Operations. Over the years, there have been numerous residential solar permits but with the advancement in technology and the possibility of more financial incentives, there can be an enormous increase. In addition, the City has aggressively sought grant money in 2009 through the Energy Efficiency and Conservation Block Grant (EECBG) program. This progress directly supports Actions 3.3 and 3.5.

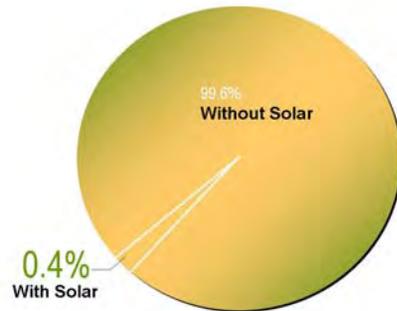
Quick Numbers

- # of actions for Category 3 → 5
- # of actions in progress → 2
- # of residential homes with solar panels → 96

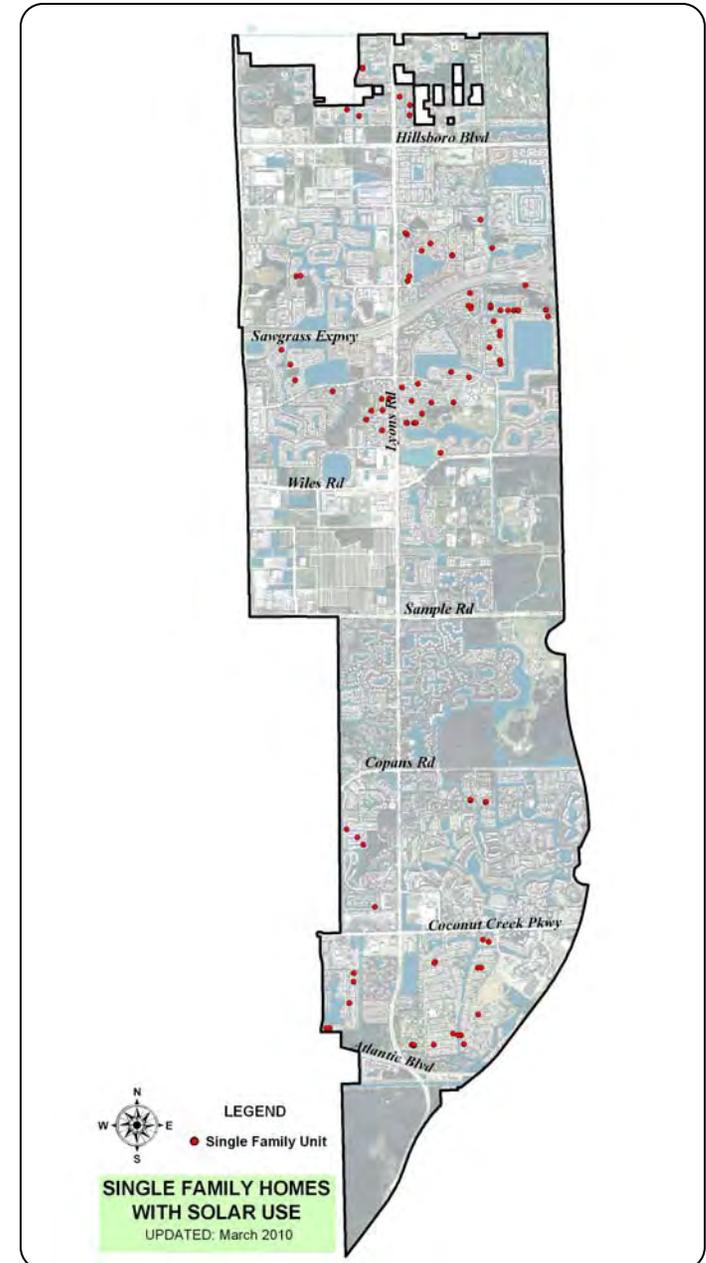
2009 Highlights

- ✓ Created a new green permit fee category for solar use

Residential Use of Solar Power



Percentage of Grant Money for Energy



Map available in larger print

Action Steps

Results of each action step under Category 3

Category 3: Energy Conservation

	Action Objective	Action Summary	Performance Measures	Results
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: n/a	% 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: n/a	# 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 Aerials, Code Compliance, Permits Note: Based on SFR homes, % per total SFR units	# of existing SFR homes with solar	96
			# of permits issued per year	11
			% of homes (of total SFR units)	0.4%
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 projects by 2020.	Status: ? Undetermined Target Date: 2020 Data Sources: n/a	# of grants applied for	-
			# of applied grants for energy	-
			% of residential neighborhoods	-
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	# of grants applied for	7
			# of grants received (awarded)	5
			# of grants for energy	1
			% of grants for energy	20%
			\$ amount of energy grants awarded	\$425,400

Category 4: Water Conservation and Reduction

Water

Water Efficiency – Water Conservation – Protection

Summary

Faced with challenges to reduce water consumption, the City finds itself in a unique situation. The City does not own, operate or control primary water plants or facilities. Therefore, efforts have focused on conservation measures such as the enforcement of water restrictions and the expansion of reclaimed water lines for future community use. Water conservation measures for City-owned building and facilities have been placed under this category rather than Category 8, City Operations, due to the City being considered a “user” of water. This progress directly supports Actions 4.3, 4.4, and 4.5.

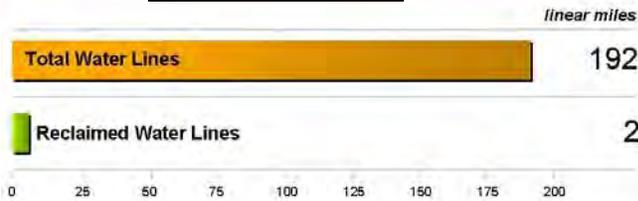
Quick Numbers

- # of actions for Category 4 → 5
- # of actions in progress → 4
- # of code violations regarding water violations → 132

2009 Highlights

- ✓ Completed the construction of the north Water Tank site
- ✓ Reclaimed water line installed along Cullum Road

Reclaimed Water Breakdown

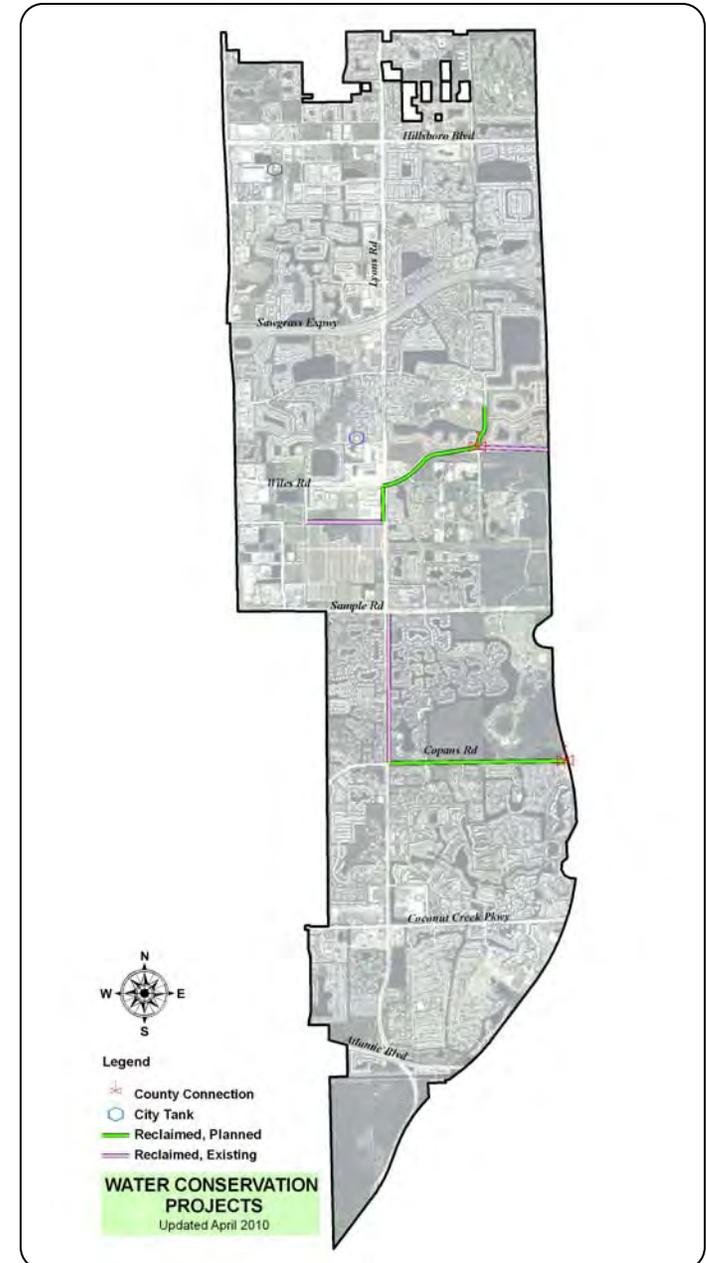


Water Savings from City-Wide Initiatives



23,800,000 (mgpy)
(total estimate since 2003)

Water Conservation Programs Used by the City



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 Measures	Results
4.1	Ensure 100% of irrigation in the MainStreet Project Area is from on-site water collection or, if possible, reclaimed water.	Status: ✓ 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
			# of MainStreet projects (built)	1
			# with on-site water collection systems	0
			# with reclaimed water	0
			% of built projects	0%
4.2	Reduce residential water consumption by 10% by 2012 and by 15% by 2020 through a Residential Water Reduction Initiative.	Status: ✓ 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) Variations from year to year in weather conditions will affect water demand. (3) "Take Control of Your Water Bill" pamphlet was mailed to all water customers.	# of customer accts targeted for high consumption	6,557
			# of water meters checked for high consumption	1,088
			annual water consumption increase - residential	25.55 MG
			annual water consumption increase - commercial	7.3 MG
			NatureScape Inspections	0
4.3	Increase the availability of reclaimed water throughout the City by 2020.	Status: ✓ In progress Target Date: 2020 Data Sources: CIP, Grants, Public Services Dept. Note: (1) Projects are identified as separate segments. (2) Completed segments are not operational until other segments completed.	# of reclaimed water projects planned	3
			# of reclaimed water completed projects	2
			# of properties connected	0
4.4	Increase water conservation measures in cooperation with other government agencies.	Status: ? Undetermined Target Date: 2020 Data Sources: n/a	# of programs and partnerships	-
			# of grants received	-
4.5	Convert water fixtures within City-owned buildings and facilities to water saving efficient fixtures by 2014.	Status: ✓ In progress Target Date: 2014 Data Sources: Public Services Dept.	# of projects planned	1
			# of completed projects	2
			amount of water saved (estimated)	0

Category 5: Waste Reduction and Recycling

Waste Reduction

Recycling – Zero Waste – Citizen Participation

Summary

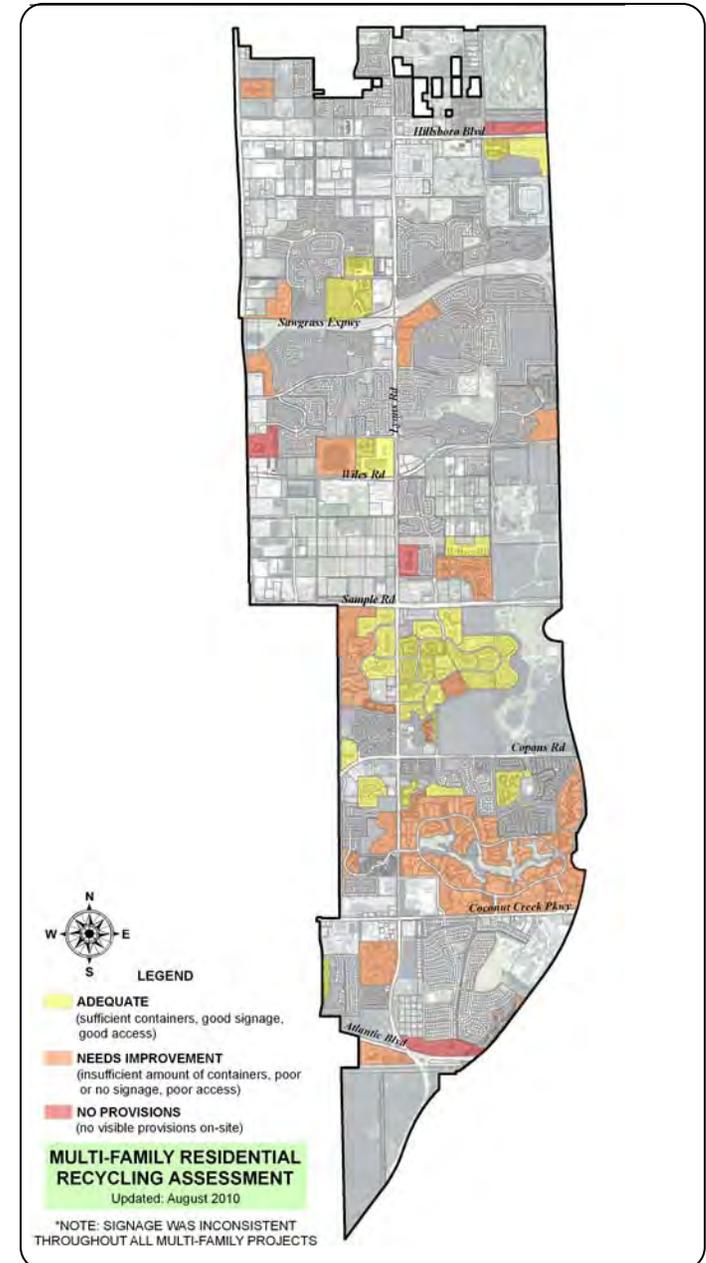
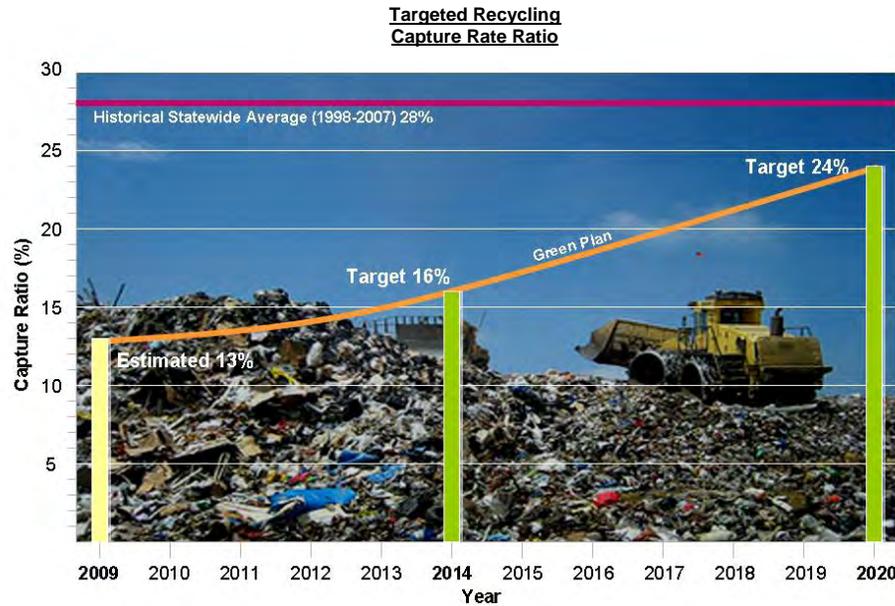
The City has been a participant in the County’s recycling programs for many years and most recently, advanced the recycling effort with the purchase of new “single stream” recycling containers. The containers were purchased in 2009 and distributed in 2010 to single-family residential areas throughout the City. The City promoted the distribution of new containers in CreekLife magazine, in emails through Cocograms, and on the City’s website. In addition to the new containers, the City continues to promote information on proper disposal of hazardous waste, bulk trash, and other waste. This progress directly supports Action 5.1.

Quick Numbers

- # of actions for Category 5 → 4
- # of actions in progress → 1
- # of participants in the paint recycling program → 67

2009 Highlights

- ✓ Purchased 8,000 single stream recycling containers
- ✓ Improved bulk-trash pick up information for residents



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 Measures	Results
5.1	Increase recycling throughout the City by 25% by 2014 and 50% by 2020.	Status: ✓ In progress Target Date: 2014 / 2020 Data Sources: Public Services Dept. Note: Distribution of single stream containers will be reflected in 2010 Report. Average capture rate ratio is based on best available data from All Service.	# of single stream recycling containers purchased	8,000
			# of single stream recycling containers distributed	0
			Average capture rate ratio (estimated)	13%
			# of participates in paint recycling program	67
5.2	Create a "user-friendly" composting program by 2012 to reduce solid waste disposal.	Status: ? Undetermined Target Date: 2020 Data Sources:	Creation of composting program	-
			# of properties using composting	-
5.3	Require all construction and demolition debris to divert 75% of waste from landfills.	Status: ? Undetermined Target Date: 2020 Data Sources:	Code revision completed	-
			# of demolition permits	-
5.4	Create a shredded paper program for the community by 2010.	Status: ? Undetermined Target Date: 2020 Data Sources:	# of participates	-
			lbs. of paper shredded	-

Category 6: Sustainable Transportation and Mobility

Transportation

Public Transportation – Greenway Network – Mobility

Summary

The City has a firm commitment to expand transportation options throughout the community in an effort to reduce traffic and improve air quality. Working with other government agencies, the City has been able to increase the number of bus shelters and most recently, developed a custom shelter design in cooperation with Broward County Transit. In addition, the City continues to implement the City's Master Greenways Plan, which provides alternative forms of mobility to and from places of interest with connections to bus shelters and bus stops. There has been a progressive approach to address transit services to the future MainStreet Project Area, which includes a unique design to utilize the State Road 7 and Sample Road overpass for a transit gateway hub. This effort is in the preliminary stages but has been well received by other government agencies including the MPO, BCT, and FDOT. This progress directly supports Actions 6.1 and 6.2.

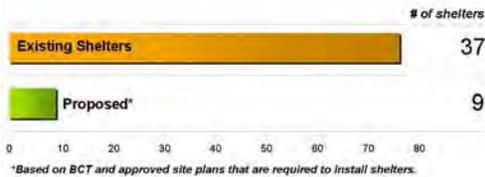
Quick Numbers

of actions for Category 6 → 4
 # of actions in progress → 2

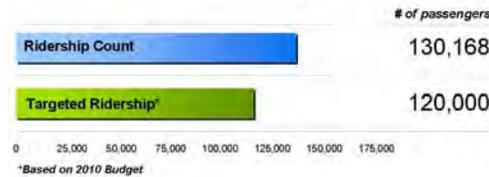
2009 Highlights

- ✓ Completed the Long Pine Greenway design/construction plans
- ✓ Completed custom bus shelter design for City shelters

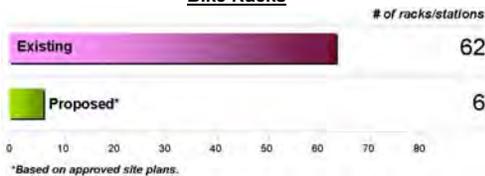
Bus Shelters



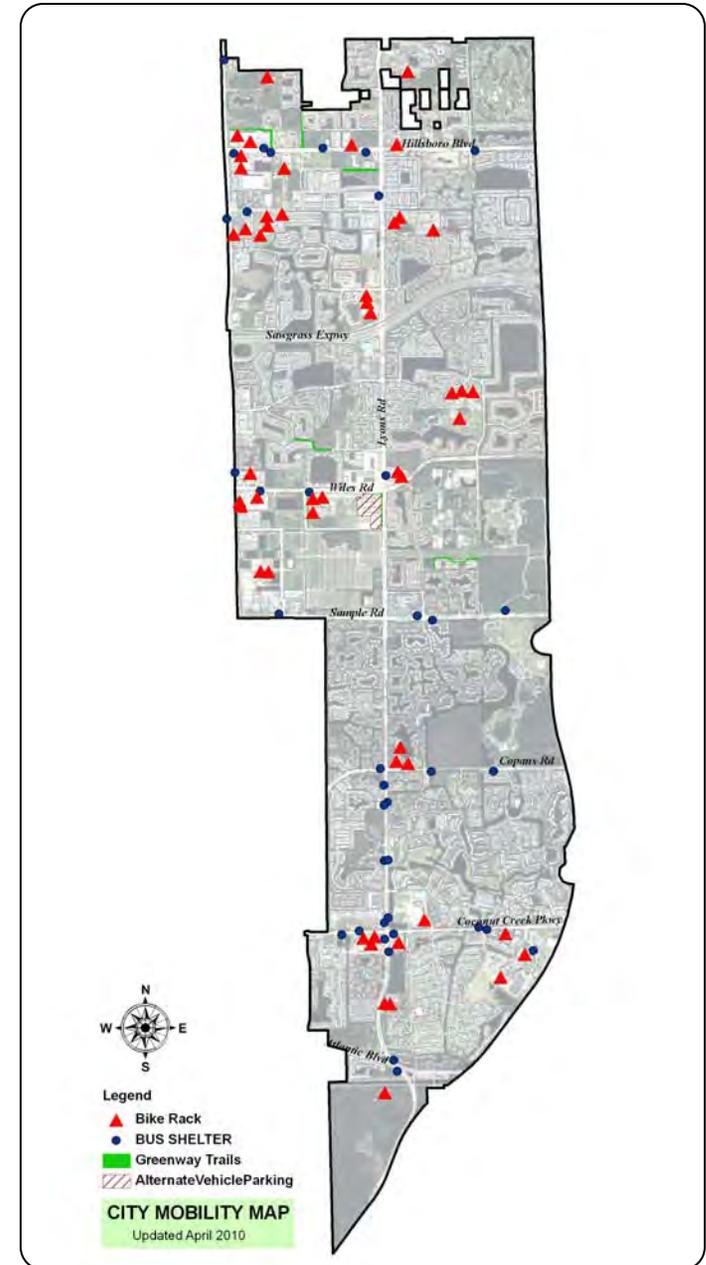
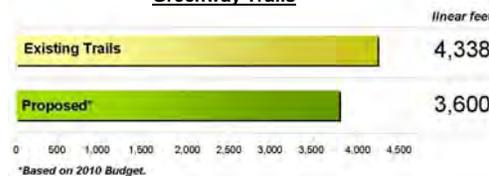
City Shuttle Service



Bike Racks



Greenway Trails



Map available in larger print

Category 6: Sustainable Transportation and Mobility

Action Steps

Results of each action step under Category 6

	Action Objective	Action Summary	Performance Measures	Results
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
			# of meetings with other government agencies/staff	12
			# of property owners planning for/participating	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 Services Department	# of existing bus shelters (city and county)	37
			# of existing bike racks (nonresidential)	62
			# of linear feet of existing greenway trails	4,338
			# of shuttle riders (est. per year)	130,168
			# of linear feet of bike lanes (approx.)	45,700
6.3	Implement a bike or car sharing program in the City by 2020.	Status: ? Undetermined Target Date: 2020 Data Sources: n/a	# of programs existing	-
			# of programs planned	-
6.4	Implement an alternative vehicle parking program to designated parking areas for alternative vehicles in developments throughout the City by 2020.	Status: ? Undetermined Target Date: 2020 Data Sources: n/a	# of parking spaces	-
			# of spaces planned	-

Category 7: Community Outreach and Empowerment

Multiple Themes

Energy – Water – Waste Reduction – Climate Change

Summary

There are many opportunities to empower the community and ensure businesses throughout the City participate in sustainable practices. By developing community outreach, educational information, and innovative programs, the City can enhance the quality of life for its residents while addressing environmental sustainability. The City produced numerous promotions and articles related to the City Green Plan as a means to communicate to the public about the City's commitment to address climate issues. This effort is evident with the implementation of a new yearly sustainable lecture series, which is discussions on a variety of green topics to educate the public. The lecture series began in October 2009 and has continued in 2010. Staff is currently planning the 2010-11 lecture series. This progress directly supports Actions 7.3 and 7.5.

Quick Numbers

- # of actions for Category 7 → 6
- # of actions in progress → 2
- # of attendees at first lecture series → 56

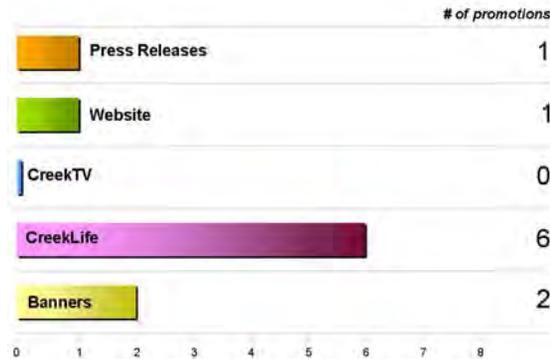
2009 Highlights

- ✓ Implemented a yearly Sustainable Lecture Series
- ✓ Adopted a City Green Plan with city-wide goals
- ✓ Participated in Broward College Earth Day event

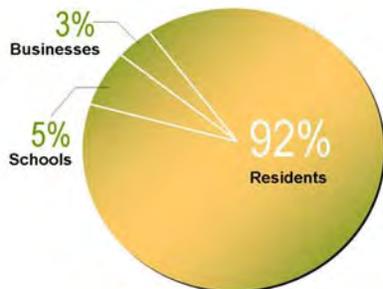
Lecture Series Attendees



2009 Promotion of the City Green Plan



Breakdown of Community Participation for 2009



LEGEND
 ● BUSINESSES
 ● ENGAGED RESIDENTS
 ● PUBLIC SCHOOLS

COMMUNITY PARTICIPATION
 UPDATED: April 2010

*NOTE: PARTICIPATION IS BASED ON
 CITIZENS ACADEMY, VISION 20/20,
 AND VOLUNTEERISM

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 Measures	Results
7.1	Proclaim a City Green Day with the first City Green Day to be held in 2010.	Status: ? Undetermined Target Date: 2010 Data Sources: n/a	Proclamation adopted	-
			# of events that support proclamation	-
			# of participants at events (approx.)	-
7.2	Implement a City Green Award program to recognize homeowners, neighborhoods, and businesses that incorporate green and sustainable practices.	Status: ? Undetermined Target Date: 2020 Data Sources: n/a	# 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: ✓ In progress Target Date: 2020 Data Sources: Sign-in Sheets, Feedback Surveys	# scheduled lectures	2
			# of attendees (total)	104
			% satisfaction rate (based on surveys)	91.2%
7.4	Seek Florida Green Building Coalition (FGBC) Local Government Designation by 2012.	Status: ? Undetermined Target Date: 2012 Data Sources: n/a	Application submitted	-
			Certification received	-
7.5	Launch a community-wide outreach campaign on the City Green Plan with continuous program promotion.	Status: ✓ In progress Target Date: 2020 Data Sources: Community Relations <i>Note: Totals reflect all effort for 2009 where the topic of a Green Plan or aspect of the Green Plan was discussed.</i>	# of press releases	1
			# of website promotions	1
			# of green productions on CreekTV	0
			# of articles and ads in Creeklife	6
7.6	Create a City Sustainable Center on City owned property by 2014.	Status: ? Undetermined Target Date: 2014 Data Sources: n/a	# of city properties available	-
			# of properties appropriate for center	-
			# of planned programs	-
			# of partnerships/sponsors	-

Summary

The City has made great progress with green initiatives in operations over the past several years. Paper reduction has been implemented by all departments through e-government solutions such as online payments, e-billing, and electronic filing system. Energy efficiency has been evaluated for all City buildings including lighting products and HVAC systems, and the I.T Department implemented a power management scheme for all employee computers to reduce energy consumption. The City's fleet utilizes a nitrogen air system for all tires to help improve mileage and reduce tire wear. Current efforts include reducing energy kilowatt consumption on all City-owned sites, evaluating the use of renewable energy sources, and improving fuel efficiency of the fleet. This progress directly supports Actions 8.3, 8.4, and 8.5. In addition, City Operations is the only category to contain achieved actions. Action 8.6 was achieved with the approval of the FY2010 Budget and Action 8.7 was achieved when the City Commission approved the City Green Plan.

Quick Numbers

of actions for Category 8 → 9
 # of actions achieved → 2
 # of actions in progress → 5

2009 Highlights

- ✓ Replaced numerous equipment with energy efficient models
- ✓ Installed solar power for city entrance signs
- ✓ Established a nitrogen air system for fleet tires to improve mileage

GHG Emissions

As part of this report, the City conducted a greenhouse gas (GHG) emission inventory for municipal operations. GHG emissions were analyzed using the LCLEI - Local Governments for Sustainability methodology and ICELI's Clean Air Climate Protection software (CACP). CACP is a comprehensive emissions software program that calculates GHG emissions and air pollutants, and is a quantification tool for tracking emissions by using a baseline year, interim year(s), and target year. City's baseline year is 2009 and correlates with this annual report with reduction targets identified for 2012 and 2020 consistent with Action 8.8.

Although emission targets have been identified, the City should develop a supplemental document to guide programs and to ensure GHG reductions are achieved. By understanding the source of GHG emissions, the City can target reduction with specific programs and monitor the progress annually. Typical offset programs include renewable energy, energy efficiency, and reforestation or tree replacement projects. Any new addition to the City's inventory, including new buildings or vehicles, should strive to be pollution free rather than offsetting its potential emissions.

2009 GHG Emissions

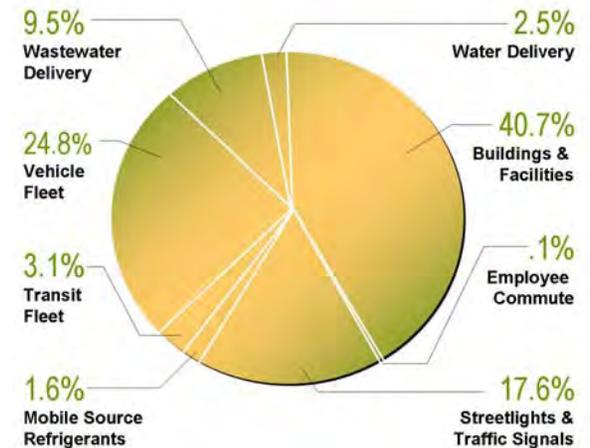
6,664 tonnes of CO₂e

GHG are expressed in carbon dioxide equivalents (CO₂e): 1 tonne of CO₂e is equal to the emissions from the combustion of 112 gallons of gasoline

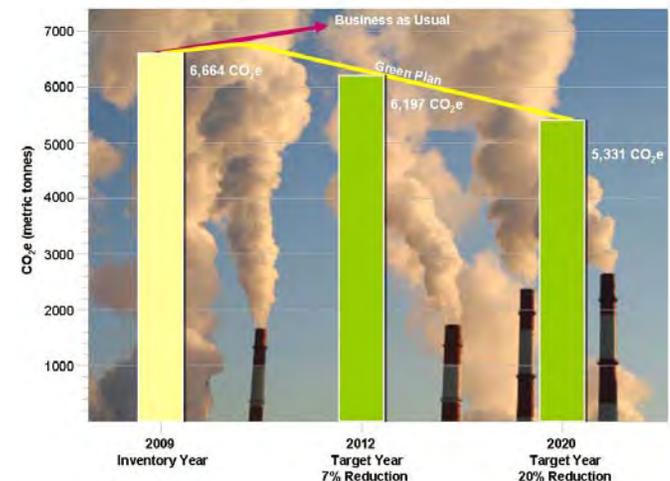
6,664 tonnes of CO₂e = 746,368 gallons of gasoline

City's GHG emissions inventory was conducted based on municipal energy use and fuel use for the calendar 2009. A summary of this inventory has been provided herein. All direct emissions, emissions from purchased electricity, and other indirect emissions are reflected in the total. Detailed information can be found in the City's 2009 Government Operations GHG Inventory Report dated August 2010.

**2009 City Operations
GHG Emissions Inventory**



**City Operations
GHG Emissions and Targets**



Action Steps

Results of each action step under Category 8

Action Objective		Action Summary	Performance Measures	Results
8.1	Improve indoor air quality in all city buildings by 2020.	Status: ? Undetermined Target Date: 2020 Data Sources: n/a Note: Hill York Air quality team is scheduled to do a full clean air analysis of government center & results will be in 2010 Report.	# of indoor air quality inspections	-
			# of indoor air improvements/cleaning projects	-
			# of fake plants removed from buildings	-
8.2	Advance emission controls on all City fleet vehicles to reduce emission by 50% by 2020.	Status: ? Undetermined Target Date: 2020 Data Sources: n/a	# 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 Services Dept. Note: Solar power projects are listed as individual projects that may be under a overall program (e.g. solar lighting for city identity signs)	# of solar power projects	20
			# of projects/programs (other renewable)	0
			% of city owned buildings using renewable energy	0%
			% of building usage from renewable energy source	0%
8.4	Reduce overall energy consumption on City owned sites by 20%.	Status: ✓ In progress Target Date: 2020 Data Sources: Public Services and IT Depts. Note: # of solar power projects/programs is the same data from Action 8.3.	# of initiatives from IT city-wide technology system energy consumption	3
			# of solar power projects/programs	20
			# of energy efficiency projects (lighting and HVAC)	3
			# of city buildings certified as LEED®	0
			Savings per electric bills	
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: E-gov solutions include internal and external online efforts.	# of E-gov solutions (e.g. online billing, CRM)	16
			# of pages printed city-wide	723,221
			City-wide copy paper expense	\$9,982.11
8.6	Create a Sustainable City Coordinator position by 2010.	Status: ✓ Achieved	Proposed as part of 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: ✓ In progress Target Date: 2012 / 2020 Data Sources: Finance, Public Services, & Sustainable Development Depts., ICELI – CACP Software Note: See GHG Inventory Report for more detailed information.	GHG missions (tonnes of CO ₂ e)	6,664
			% of reduction	-
			# of programs achieving this action	-
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 2009. (2) Only fleet vehicles that consumed fuel for CY 2009 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 (2009 fuel use)	242
			# of non-highway & equipment (2009 fuel use)	42
			% of fleet using alternative fuels	2.6%
			Gallons of fuel consumed (total of all fuels)	183,327
			Idle time for vehicles (minutes)	46,774

Category 9: Regional Leadership

Climate Change

Carbon Reduction— Regional Leadership – Environmental

Summary

Regional participation is very important to the advancement of this plan since GHG emissions are not limited to jurisdictional boundaries and each city has a role in reducing its impact. Broward County Commission recognizes this issue and recently adopted a Climate Action Plan. The policies in the County's plan are similar to the City's Green Plan. From time to time, both plans should be reviewed to ensure consistency with goals and target in the event changes occur. Another aspect of regional leadership is the opportunity for the City to lead the effort on the closure of the Waste Management Landfill, which is immediately adjacent to the City's eastern border. Numerous meeting have been held regarding this matter including a joint meeting between Coconut Creek City Commission and Broward County Commission. This progress action directly supports Actions 9.1 and 9.2.

Quick Numbers

of actions for Category 9 → 6
 # of actions in progress → 2
 # of high ranked actions in County Plan → 65
 # of members in County Climate Task Force → 25

2009 Highlights

✓ Attended County's Climate Action Task Force meetings
 ✓ Participated and won 1st place in South Florida Living Green Fair Mayor's Challenge



	Action Objective	Action Summary	Performance Measures	Results
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
			# of public meetings attended by staff	5
9.2	Lead the effort to close the Waste Management Landfill.	Status: ✓ In progress Target Date: 2020 Data Sources: Outlook Calendars	# of city lead efforts	21
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: n/a	# 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: n/a	# of partnerships	-
			# of programs	-
			# of events	-
9.5	Lead the effort for a local referendum on funding for regional transportation planning.	Status: ? Undetermined Target Date: 2020 Data Sources: n/a	# of public meetings	-
			# of action efforts	-
9.6	Create a new local business tax structure by 2012, which can become a regional model, based on a sustainable business practices.	Status: ? Undetermined Target Date: 2012 Data Sources: n/a	# of business participating in pilot program	-
			# of businesses in City	-
			# of public meetings held	-



FOR COMMENTS OR QUESTIONS REGARDING THIS REPORT CONTACT:

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