

# Memorandum

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DALLAS, TEXAS



CITY OF DALLAS

DATE March 21, 2014

TO Honorable Members of the Quality of Life & Environment Committee:  
Sandy Greyson (Vice Chair), Adam Medrano, Rick Callahan, Carolyn R. Davis,  
Lee M. Kleinman

SUBJECT Quality of Life & Environment Committee Meeting Agenda

**Monday, March 24, 2014, 9:00 a.m.**

Dallas City Hall - 6ES, 1500 Marilla St., Dallas, TX 75201

The agenda for the meeting is as follows:

- |  |  |
|--|--|
| 1. Call to Order                               | Dwaine R. Caraway<br>Chair   |
| 2. Approval of February 24, 2014 Minutes       | Dwaine R. Caraway<br>Chair   |
| 3. Sustainability Plan Progress Report         | Frank A. Camp<br>Managing Director, Office of<br>Environmental Quality |
| 4. Earth Day – April 22, 2014<br>Briefing Memo | Frank A. Camp<br>Managing Director, Office of<br>Environmental Quality |
| 5. 2014 Mosquito Plan                          | Jimmy Martin<br>Director, Code Compliance                              |
| 6. It's My Park Day<br>Briefing Memo           | Willis Winters<br>Director, Park and Recreation                        |

#### Upcoming Agenda Items

- |   |                            |
|---|----------------------------|
| 7. Authorize the first amendment to the Fair Park Contract with the Friends of Fair Park to establish, operate, manage and market the bicycle rental program at Fair Park – Council Addendum March 26, 2014 |                            |
| 8. Adjourn  | Dwaine R. Caraway<br>Chair |

Please let me know if you have any questions.

*Sandy Greyson / N.K.*

Dwaine R. Caraway  
Chair

Public Notice

140330

POSTED CITY SECRETARY  
DALLAS, TX

cc: Honorable Mayor and Members of the City Council  
A.C. Gonzalez, City Manager  
Warren M.S. Ernst, City Attorney  
Daniel F. Solis, Administrative Judge  
Rosa A. Rios, City Secretary  
Craig D. Kinton, City Auditor  
Ryan S. Evans, Interim First Assistant City Manager  
Jill A. Jordan, P.E., Assistant City Manager

Forest E. Turner, Assistant City Manager  
Joey Zapata, Assistant City Manager  
Charles M. Cato, Interim Assistant City Manager  
Theresa O'Donnell, Interim Assistant City Manager  
Jeanne Chipperfield, Chief Financial Officer  
Frank Libro, Public Information Officer  
Elsa Cantu, Asst. to the City Manager – Mayor and Council

**NOTICE: A quorum of the Dallas City Council may attend this Council committee meeting.**

A closed executive session may be held if the discussion of any of the above agenda items concerns one of the following:

1. Contemplated or pending litigation or matters where legal advice is requested of the City Attorney. Section 551.071 of the Texas Open Meetings Act.
2. The purchase, exchange, lease or value of real property, if the deliberation in an open meeting would have a detrimental effect on the position of the City in negotiations with a third person. Section 551.072 of the Texas Open Meetings Act.
3. A contract for a prospective gift or donation to the City, if the deliberation in an open meeting would have a detrimental effect on the position of the City in negotiations with a third person. Section 551.073 of the Texas Open Meetings Act.
4. Personnel matters involving the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee or to hear a complaint against an officer or employee. Section 551.074 of the Texas Open Meetings Act.
5. The deployment, or specific occasions for implementation of security personnel or devices. Section 551.076 of the Texas Open Meetings Act.

# Quality of Life & Environment Committee Meeting Record

**DRAFT**

**Meeting Date:** February 24, 2014

**Convended:** 9:14 a.m.

**Adjourned:** 11:00 a.m.

**Members Present:**

Dwaine R. Caraway, Chair  
Sandy Greyson, Vice Chair  
Rick Callahan  
Lee M. Kleinman  
Adam Medrano  
Carolyn R. Davis

**Members Absent:**

**Briefing Presenters**

LaToya Jackson  
Assistant Director, Strategic  
Customer Services

**Staff Present:**

Joey Zapata, Jimmy Martin, Cecilia Scheu, Chris Bowers, John Rogers, Frank Camp, Priscylla Bento, Eric Izuora

**AGENDA:**

1. **Approval of January 27, 2014 Minutes**

**Presenter(s):**

**Action Taken/Committee Recommendation(s):**

A motion was made to approve the minutes of January 27, 2014.

**Motion made by:** Adam Medrano

**Motion seconded by:** Rick Callahan

**Item passed unanimously:**

**Item passed on a divided vote:**

**Item failed unanimously:**

**Item failed on a divided vote:**

2. **Approval of February 10, 2014 Minutes**

**Presenter(s):**

**Action Taken/Committee Recommendation(s):**

A motion was made to approve the minutes of February 10, 2014.

**Motion made by:** Adam Medrano

**Motion seconded by:** Rick Callahan

**Item passed unanimously:**

**Item passed on a divided vote:**

**Item failed unanimously:**

**Item failed on a divided vote:**

**2. Proposed Amendments to City Council Rules of Procedure Section 6.3 (f) Open Microphone**

**Presenter(s):** John Rogers

The committee discussed proposed amendments to City Council Rules of Procedure Section 6.3(f) Open Microphone.

The committee motioned to move the amendment as originally presented at the January 22<sup>nd</sup> agenda meeting to a full council vote.

**Action Taken/Committee Recommendation(s):** Move proposed amendment as originally presented at the January 22<sup>nd</sup> Council Agenda to a full council vote.

**Motion made by:** Sandy Greyson                      **Motion seconded by:** Dwaine Caraway

<b>Item passed unanimously:</b>	<input type="checkbox"/>	<b>Item passed on a divided vote:</b>	<input checked="" type="checkbox"/>
<b>Item failed unanimously:</b>	<input type="checkbox"/>	<b>Item failed on a divided vote:</b>	<input type="checkbox"/>

**3. Proposed Amendments to Anti-litter Ordinance**

**Presenter(s):** Chris Bowers  
The committee entered executive session at 10:18 a.m.

The committee returned from executive session at 10:39 a.m.

The Committee recommended that the full council be briefed on the proposed amendments to the anti-litter ordinance.

**Action Taken/Committee Recommendation(s):**

<b>Motion made by:</b>		<b>Motion seconded by:</b>	
<b>Item passed unanimously:</b>	<input type="checkbox"/>	<b>Item passed on a divided vote:</b>	<input type="checkbox"/>
<b>Item failed unanimously:</b>	<input type="checkbox"/>	<b>Item failed on a divided vote:</b>	<input type="checkbox"/>

**4. Proposed Strategic Plan FY 2015 - 2017**

**Presenter(s):** LaToya Jackson  
The Committee provided input to the clean healthy environment components of the draft strategic plan, which will be updated and briefed to the City Council in April.

The chair requested that the committee be briefed on efforts to prevent storm water pollution caused by grass clippings and blown leaves.

**Action Taken/Committee Recommendation(s):**

**Motion made by:**

Item passed unanimously:   
Item failed unanimously:

**Motion seconded by:**

Item passed on a divided vote:   
Item failed on a divided vote:

**5. Sustainability Plan Progress Report**

**Presenter(s):** Frank Camp  
This briefing was rescheduled for March 24, 2014.

**Action Taken/Committee Recommendation(s):**

**Motion made by:**

Item passed unanimously:   
Item failed unanimously:

**Motion seconded by:**

Item passed on a divided vote:   
Item failed on a divided vote:

**6. Authorize acceptance of FY 2014 Economic Development Assistance Grant for Infrastructure Improvements for the Briscoe Carpenter Center, Fair Park – Council Agenda February 26, 2014**

**Presenter(s):**  
A briefing memo was provided for this item, which is scheduled for the February 26, 2014 council agenda.

**Action Taken/Committee Recommendation(s):**

**Motion made by:**

Item passed unanimously:   
Item failed unanimously:

**Motion seconded by:**

Item passed on a divided vote:   
Item failed on a divided vote:

**6. Authorize an increase in the contract with J.C. Commercial, Inc. for additional work necessary to meet code requirements, replacement of existing plumbing fixtures, plaster repairs, and other repairs at Anita Martinez Recreation Center – Council Agenda February 26, 2014**

**Presenter(s):**  
A briefing memo was provided for this item, which is scheduled for the February 26, 2014 council agenda.

**Action Taken/Committee Recommendation(s):**

**Motion made by:**

Item passed unanimously:   
Item failed unanimously:

**Motion seconded by:**

Item passed on a divided vote:   
Item failed on a divided vote:

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**Councilmember Dwaine R. Caraway**  
Chair

# Memorandum



CITY OF DALLAS

DATE March 21, 2014

TO Honorable Members of the Quality of Life & Environment Committee:  
Dwayne R. Caraway (Chair), Sandy Greyson (Vice Chair), Rick Callahan, Carolyn R. Davis, Lee M. Kleinman, Adam Medrano

SUBJECT **Sustainability Plan Progress Report**

On Monday, March 24, 2014, the Quality of Life & Environment Council Committee will be briefed on a progress report for the City's Sustainability Plan.

The following materials are attached for your review:

1. Sustainability Plan Progress Report Briefing
2. Sustainability Progress Report, March 2014 (41 pages)

If you have any questions or require additional information, please do not hesitate to contact me.

A handwritten signature in blue ink that reads "Jill Jordan".

Jill A. Jordan, P.E.  
Assistant City Manager

c: The Honorable Mayor and Members of the City Council  
A.C. Gonzalez, City Manager  
Warren M.S. Ernst, City Attorney  
Rosa A. Rios, City Secretary  
Judge Daniel F. Solis, Administrative Judge  
Craig D. Kinton, City Auditor  
Ryan S. Evans, Interim First Assistant City Manager  
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Theresa O'Donnell, Interim Assistant City Manager  
Jeanne Chipperfield, Chief Financial Officer  
Frank Libro, Public Information Office  
Elsa Cantu, Assistant to the City Manager – Mayor and Council

# Sustainability Plan Progress Report

Quality of Life and Environment Committee  
March 24, 2014

Presented by the Office of Environmental Quality



# Organization

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- Need, page 4
- Content Format, page 5
- Moving Forward, page 27



# Purpose

- Report the progress of Sustainability Plan presented to the Transportation and Environment Committee, August 28, 2012
- Outline next steps for revising and reporting progress

# The Need for a Sustainability Plan

- Citizens of Dallas want an efficient, responsive government that forecasts needs and responds accordingly to build a stronger city
- Present City's environmental goals and EMS progress to the City Council and the public

# Format of Progress Report

- Goal description within each of these five categories
  - Air Quality: Improve Air Quality
  - Land Use: Promote Smart Growth and Development
  - Water Quality: Improve Water Quality
  - Materials Management: Better Materials Management
  - Energy: Reduce Non-Renewable Energy Use
- Individual objectives with strategies and targets for achieving categorical goals
- Results for each target

# AIR QUALITY: IMPROVE AIR QUALITY

## Objective: 1. Increase alternative commute options

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Promote Green Ride.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in single-rider vehicle miles travelled by 10% annually over previous year through 2014 (OEQ, EMS O&amp;T 00992).</li> </ul>	<ul style="list-style-type: none"> <li>In 2010: 3.14M miles/926 tons CO2 reduced.</li> <li>In 2011: 3.70M miles/1,560 tons CO2 reduced.</li> <li>In 2012: 1.81M miles/851 tons CO2 reduced.</li> <li>In 2013: 3.39M miles/1,594 tons CO2 reduced.</li> <li>Total reduction in CO2: 4,931 tons.</li> </ul>
<ul style="list-style-type: none"> <li>Expand street car service.</li> </ul>	<ul style="list-style-type: none"> <li>Completion of McKinney Avenue Trolley Loop in 2014 (SDC, Strategic Plan, EV 8).</li> <li>Initiate TIGER streetcar service and Urban Circulator streetcar service (SDC, Strategic Plan, EV 8).*</li> </ul> <p style="text-align: right;">*new target</p>	<ul style="list-style-type: none"> <li>McKinney Avenue Trolley loop extension project construction is underway with Olive Street Extension scheduled for completion by May 2014.</li> <li>TIGER streetcar service scheduled completion by October 2014; revenue service by February 2015. Urban Circulator projected to be complete in 2014; revenue service by November 2014.</li> </ul>

Objective: 2. Reduce emissions from idling		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Replace fleet with alternative fuel vehicles to reduce emissions.</li> <li>Enforce and educate around the anti-idling ordinance.</li> </ul>	<ul style="list-style-type: none"> <li>Replacement of 15% of Sanitation Services' fleet with alternative fuel vehicles by September 2014 (SAN, EMS O&amp;T 01023).</li> </ul>	<ul style="list-style-type: none"> <li>Sanitation replaced 43 vehicles. In June 2013, Council approved replacement of 10 more vehicles.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction of NO<sub>x</sub>, VOC, PM and CO<sub>2</sub> emissions by 5% from on-road and off-road vehicles through vehicle replacement by September 2015 (EBS, EMS O&amp;T 00961).</li> </ul>	<ul style="list-style-type: none"> <li>The FY12-13 fleet purchase replaced 53 traditionally-fueled vehicles that began arriving in February 2014 to reduce emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction of Code's dependency on gas and diesel fueled vehicles by 1% over previous year by October 2012 (CCS, EMS O&amp;T 00982).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, Code acquired 4 alternatively fueled vehicles. In FY12-13, Code acquired 13 CNG vehicles, further reducing emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>Offer anti-idling signs and educational materials to schools (OEQ).</li> </ul>	<ul style="list-style-type: none"> <li>OEQ posted information on GreenDallas.net and in the Green Times newsletter, and sent 254 letters to schools.</li> </ul>

## Objective: 3. Reduced emissions from industry

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Reduce air emissions through industrial process inspections.</li> </ul>	<ul style="list-style-type: none"> <li>Inspection of 600 industrial sources of emissions annually through October 2014 (PBW, EMS O&amp;T 01020).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, PBW completed 750 emission source inspections. In FY12-13, PBW completed 843 emission source inspections.</li> </ul>

# LAND USE: PROMOTE SMART GROWTH AND DEVELOPMENT

Objective: I. Build “green” in Dallas		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Identify green building standards and procedures for Phase II of green building ordinance.</li> </ul>	<ul style="list-style-type: none"> <li>Preparation of recommendations from Green Building Task Force for Phase II implementation of Green Building Ordinance by October 2012 (PBW, Strategic Plan, CHE 5).</li> </ul>	<ul style="list-style-type: none"> <li>Phase II Green Building Ordinance adopted. The City Manager is authorized to reconvene the Green Building Task Force in 2015 to report on progress.</li> </ul> <p>Within the community, there are 13 Platinum, 54 Gold, 116 Silver, 339 Certified, and 225 registered projects.</p>
<ul style="list-style-type: none"> <li>Reduce impact of construction in Dallas.</li> </ul>	<ul style="list-style-type: none"> <li>Track construction of new buildings over 10,000 square feet through September 2014 (PBW, EMS O&amp;T 00665).</li> </ul>	<ul style="list-style-type: none"> <li>Since February 2012, 4 City facilities have been completed, another 5 have received LEED certification, another 2 have applied for LEED certification, and another 8 buildings began construction.</li> </ul> <p>To date, 27 City facilities are LEED certified and 20 projects are registered.</p>
	<ul style="list-style-type: none"> <li>Provide environmental impact reduction outreach to city contractors through September 2013 (PBW, EMS O&amp;T 01046).</li> </ul>	<ul style="list-style-type: none"> <li>PBW provides environmental compliance and EMS information to contractors through bidding and contract packages. Contractors must sign a contractor environmental affidavit prior to starting work.</li> </ul>

Objective: 2. Open space acquisition		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Acquire vacant properties and designate them for future use or add to existing “green space”.</li> <li>Procure land for new parks and projects in Trinity River Corridor.</li> <li>Amend and update the Tree Ordinance.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in “green space” by adding to existing property and increasing natural and wildflower areas by 700 acres by October 2012 (PKR, Environmental Sustainability Plan).</li> </ul>	<ul style="list-style-type: none"> <li>Natural and wildflower areas increased by 718 acres to bring the total to 6,895 natural acres and 226 wildflower acres.</li> </ul>
	<ul style="list-style-type: none"> <li>Continued development of neighborhood parks by implementing bond program through FY12-13 (PKR, Strategic Plan, CHE 7).</li> </ul>	<ul style="list-style-type: none"> <li>Construction award/COs: \$8,628,723 at 34 parks. Parks has completed 73% of their 2006 bond projects and have 18% progressing.</li> </ul>
	<ul style="list-style-type: none"> <li>Revision of the Tree Preservation Ordinance to address increasing the urban tree canopy in Dallas (SDC, Strategic Plan, CHE 8).</li> </ul>	<ul style="list-style-type: none"> <li>Formal amendment process initiated, deliberation and discussion by Zoning Ordinance Committee and City Plan Commission beginning in 3<sup>rd</sup> quarter 2014.</li> </ul>



<b>Objective: 3. Development and redevelopment</b>		
Strategy	Target	Results
<ul style="list-style-type: none"><li>• Use MSD and economic tools to promote redevelopment and/or brownfield reclamation.</li></ul>	<ul style="list-style-type: none"><li>• Completion of internal processing of MSD applications within nine months, excluding applicant response time to City comments (OEQ).</li></ul>	<ul style="list-style-type: none"><li>• In FY11-12, 7 MSDs were presented to Council; 5 of these MSDs were processed within 9 months (staff review time) and 2 took longer (10 months and 17.5 months). In FY12-13, 1 MSD was presented to Council; 18 months to process.</li></ul>

Objective: 4. Sustainable food options		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Develop land use policies that will guide placement and operation of community gardens on City land.</li> <li>Work with groups to identify locations for neighborhood markets; work with local businesses to foster placement.</li> <li>Identify and explore removing any city code barriers that prohibit neighborhood markets and mobile food options.</li> </ul>	<ul style="list-style-type: none"> <li>Creation of land use policy governing community gardens on City land in 2014 (OEQ).</li> </ul>	<ul style="list-style-type: none"> <li>OEQ has met with internal representatives and community groups and stakeholders to discuss use of City owned property for placement of Community Gardens.</li> </ul>
	<ul style="list-style-type: none"> <li>Creation of a database of locations where neighborhood markets could be placed to address “food deserts” in 2014 (OEQ).</li> </ul>	<ul style="list-style-type: none"> <li>OEQ staff is working with local food groups to address “food deserts” and for the placement of markets to increase food availability.</li> </ul>
	<ul style="list-style-type: none"> <li>Amendment of city code to allow for mobile food options, including sidewalk kiosks, food carts, and food trucks, throughout Dallas by October 2013 (CCS, Strategic Plan, CHE 7).</li> </ul>	<ul style="list-style-type: none"> <li>Modified code regulating mobile vending in June 2013.</li> </ul>

## Objective: 1. Trinity River preservation

Strategy	Target	Results
<ul style="list-style-type: none"><li>• Restore natural contour of River to allow for filtration.</li></ul>	<ul style="list-style-type: none"><li>• Commencement of the Trinity River relocation in the Dallas Floodway to create a more natural channel by end of 2014 (TWM, Balanced Vision Plan).</li></ul>	<ul style="list-style-type: none"><li>• Dallas Floodway EIS will be complete in late 2014, providing opportunity for the Corps to begin design efforts for river relocation, dependent upon federal funding.</li></ul>
<ul style="list-style-type: none"><li>• Restore creeks to natural state.</li></ul>	<ul style="list-style-type: none"><li>• Brief City Council on daylighting creeks and streams in 2013 (TWM, Strategic Plan, CHE 8).</li></ul>	<ul style="list-style-type: none"><li>• Consultant's investigation of Mill Creek complete. Work underway to preserve Big Spring.</li></ul>

<b>Objective: 2. Protecting surface waters</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Implement a bacteria concentration reduction strategy to improve water quality.</li> <li>Implement integrated pest management (IPM).</li> </ul>	<ul style="list-style-type: none"> <li>Development of an interim Bacterial Reduction Plan to address bacteria concentrations in Dallas's streams and rivers by October 2012 (TWM).</li> </ul>	<ul style="list-style-type: none"> <li>Final version submitted to TCEQ with Annual Report in December 2012. Measures are being implemented on an ongoing basis. Data show improvement in 72% of monitored watersheds.</li> </ul>
	<ul style="list-style-type: none"> <li>Implementation of IPM at City facilities by September 2013 (PKR, EMS O&amp;T 00628/00647).</li> </ul>	<ul style="list-style-type: none"> <li>This target is being incorporated into the City-wide Integrated Pest Management effort.</li> </ul>
	<ul style="list-style-type: none"> <li>Development of IPM for City facilities by September 2012 to implement by Spring 2013 (PBW/TWM, EMS O&amp;T 00994).</li> </ul>	<ul style="list-style-type: none"> <li>The IPM Administrative Directive Plan has been updated by TAMU Extension Service. Review is scheduled for completion in FY13-14, including review by affected city departments.</li> </ul>

Objective: 2. Protecting surface waters (continued)		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>• Reduce chlorine impacts to watershed.</li> <li>• Inspect for compliance and enforce existing regulations that protect the Trinity River watershed.</li> </ul>	<ul style="list-style-type: none"> <li>• Dechlorination of water flows of 600 gallons per minute (gpm) or greater from Dallas Water Utilities flushing activities through September 2012 (DWU, EMS O&amp;T 00899).</li> </ul>	<ul style="list-style-type: none"> <li>• Distribution Division is de-chlorinating water flows of 600 gpm and greater. A procedure for de-chlorination was approved in October 2006. Implemented tracking system on flushing.</li> </ul>
	<ul style="list-style-type: none"> <li>• Inspection of City-owned or operated industrial facilities by SWM by October 2013 (PBW/TWM, EMS O&amp;T 01018).</li> </ul>	<ul style="list-style-type: none"> <li>• In FY11-12, a total of 8 City-owned and operated facilities and 29 City-owned leased facilities were inspected. In FY12-13, a total of 11 City-owned and operated facilities and 29 City-owned leased facilities were inspected.</li> </ul>
	<ul style="list-style-type: none"> <li>• Reduce pollutant load at McCommas Bluff Landfill by 5% from 2007 baseline by September 2014 (SAN, EMS O&amp;T 00986).</li> </ul>	<ul style="list-style-type: none"> <li>• As of 2013, McCommas Bluff landfill realized an overall annual decrease of 11.5% for Total Suspended Solids and a 9.5% decrease for Iron versus the baseline established in 2007.</li> </ul>

Objective: 3. Education and outreach		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Continue the education and outreach efforts, and associated line cleanings, to reduce sanitary sewer overflows through the “Cease the Grease” program.</li> <li>Provide education and outreach to residents and businesses.</li> </ul>	<ul style="list-style-type: none"> <li>Continuation of the Cease the Grease program and completion of the cleaning of 36% of city’s sanitary sewer lines by October 2014 (DWU, Performancesoft Measure).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 1,792 miles or 44.6% of sanitary sewer lines were cleaned. In FY12-13, 1,549 miles or 38.6% of sanitary sewer lines were cleaned.</li> </ul>
	<ul style="list-style-type: none"> <li>Delivery of 150 outreach presentations or events on methods and techniques to reduce pollution by SWM through September 2013 (PBW/TWM, EMS O&amp;T 01019).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, SWM participated in 214 outreach programs. In FY12-13, SWM participated in 247 outreach programs.</li> </ul>
	<ul style="list-style-type: none"> <li>Delivery of 72 outreach presentations on reducing pollution by OEQ annually through September 2013 (OEQ, Performancesoft Measure).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 64 event requests were received and completed. In FY12-13, 89 event requests were received and completed.</li> </ul>

# MATERIALS MANAGEMENT: BETTER MATERIALS MGMT

**Objective: I. Increase “household” recycling.**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Keep the “Too Good To Throw Away” message fresh and expand household recycling participation rate from 62% to 68%.</li> </ul>	<ul style="list-style-type: none"> <li>Increase the residential recycling participation rate from 70% to 74% (SAN, Strategic Plan, CHE 5).</li> </ul>	<ul style="list-style-type: none"> <li>Residential recycling rate is currently at 73%.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the tons recycled by 30% over FY09-10 totals by September 2013 (SAN, EMS O&amp;T 01022).</li> </ul>	<ul style="list-style-type: none"> <li>FY 09-10 total: 45,152; goal: 58,698.60 tons. In FY10-11, the total tonnage recycled: 49,937. In FY11-12, the total tonnage recycled: 51,893, In FY12-13, the total tonnage recycled: 53,740.</li> </ul>

Objective: I. Increase “household” recycling. (continued)		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Increase recycling rates at City facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the percentage of solid waste that is recycled by 5% per year at Love Field through 2014 (AVI, EMS O&amp;T 00706).</li> </ul>	<ul style="list-style-type: none"> <li>With new terminal, all concessionaires now use the recycle bins. Progress continues.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the paper recycling by 3% annually at Detention Center by September 2014 (CDS-DMO, EMS O&amp;T 01025).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, DMO collected and recycled 2,195 pounds of paper. In FY12-13, DMO collected and recycled 2,901 pounds of paper.</li> </ul>
	<ul style="list-style-type: none"> <li>Develop a client voluntary recycling program by October 2013 and incorporate the program in client meetings with event coordinators and sales staff by March 2014 to increase awareness of recycling at KBHCC (CES, EMS O&amp;T 01084).</li> </ul>	<ul style="list-style-type: none"> <li>The KBHCC is tracking Recycling Bag Requests. The “Recycle Here” flyer has been developed and included in collateral materials to clients. Six groups, including Mary Kay, have participated in the “Recycle Here” program.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the paper recycling throughout DPD by 2% over the baseline year FY11-12 through September 2014 (DPD, EMS O&amp;T 01045).</li> </ul>	<ul style="list-style-type: none"> <li>DPD recycling has increased due to increased employee involvement. DPD established a baseline of 86,205 pounds. In FY11-12, DPD recycled 120,210 pounds. In FY12-13, DPD recycled 172,870 pounds.</li> </ul>



Objective: 2. Process waste management.		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Implement process waste minimization programs.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in the purchase of nickel-metal hydride (NiMH) batteries by 10% annually at Radio Shop (CIS).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 520 batteries ordered. In FY12-13, 380 batteries ordered. Reduction of 26.9%.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in percentage of waste wire recycling at Radio Shop by 10% annually over FY10-11 baseline of 1,082 pounds by October 2013 (CIS, EMS O&amp;T 01015).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 2,360 pounds of wire diverted from normal waste stream and sent for recycling. In FY12-13, 1,425 pounds of wire diverted. New recycling program being instituted.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase scrap metal recycling by 10% of FY11-12 baseline annually by September 30, 2017 (DWU, EMS O&amp;T 01027).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, DWU recycled 951,000 pounds of scrap metal. In FY12-13, 926,920 pounds were recycled.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the amount of beneficial re-use items diverted from the landfill by 3% over FY08-09 baseline by September 2012 (SAN, EMS O&amp;T 00989).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, the following were reused: asphalt, 6,987 tons; concrete, 9,097 tons; glass 3,496 tons; and, sawdust 983 tons. In FY12-13, the following were reused: asphalt, 19,362 tons; concrete, 10,831 tons; glass, 2,633 tons; and, sawdust, 2,118 tons.</li> </ul>

<b>Objective: 3. Hazardous waste management.</b>		
Strategy	Target	Results
<ul style="list-style-type: none"><li>• Reduce hazardous waste impacts to the environment.</li></ul>	<ul style="list-style-type: none"><li>• Completion of two household hazardous waste collection events annually (SAN, Strategic Plan, CHE 5).</li></ul>	<ul style="list-style-type: none"><li>• In FY11-12, COD participated in 5 collection events. In FY12-13, COD participated in 3 collection events and 2 batteries, oils, paints, &amp; antifreeze (BOPA) collections.</li></ul>

<b>Objective: 4. Conserve water.</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Expand reuse and reduction strategies at City facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Collection and reuse of approximately 142 million gallons annually of groundwater at Love Field by August 2014 (AVI, EMS O&amp;T 00702).</li> </ul>	<ul style="list-style-type: none"> <li>Under drought conditions, groundwater flow has been reduced. Collection has been halted. AVI continues to explore options.</li> </ul>
<ul style="list-style-type: none"> <li>Reduce average consumption.</li> </ul>	<ul style="list-style-type: none"> <li>Completion of 45 audits and issuance of up to \$2 million in incentives annually for Dallas Water Utilities customers under the industrial, commercial and institutional incentive program (DWU, Strategic Plan, CHE 5).</li> </ul>	<ul style="list-style-type: none"> <li>February 2012 - Five year contract awarded to launch audit and rebate program. June 2012 - Water Conservation Tips Box added to water bill format and displayed on water bills. 57 audits have been conducted. DWU projects first rebates will be issued in spring 2014.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction in the average gallons per capita per day (gpcd) demand by 1.5% over FY10-11 by September 2015 (DWU, EMS O&amp;T 01028).</li> </ul>	<ul style="list-style-type: none"> <li>5 year average is 199 gpcd. FY12-13: 198 gpcd. Conservation Outreach totaled 450,797,006 impressions.</li> </ul>

Objective: 4. Conserve water. (continued)		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Reduce water waste through inspection of mains.</li> </ul>	<ul style="list-style-type: none"> <li>Inspection of 2,500 miles of water main line annually for leaks (DWU, EMS O&amp;T 00537).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 3,792 miles of main inspected. In FY12-13, 2,517 miles of main inspected. Savings projected at 17.7 million gallons of water.</li> </ul>
<ul style="list-style-type: none"> <li>Use highly treated effluent for reuse.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the amount of highly treated wastewater effluent 5 million gallons per day by September 2014 (DWU, EMS O&amp;T 01006).</li> </ul>	<ul style="list-style-type: none"> <li>In FY10-11, 84,784,700 gallons reused. In FY11-12, 60,219,300 gallons - MGD=0.164984. In FY12-13, 55,562,000 gallons - MGD=0.152225.</li> </ul>

Objective: 5. Green purchasing.		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Buy green to minimize resource impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the number of less toxic chemicals available through the Product Substitution Program by 4% by September 2014 (EBS, EMS O&amp;T 01031).</li> </ul>	<ul style="list-style-type: none"> <li>The Green Procurement Approved List has increased to 368 items approved for purchase. This is a 12.88% increase over the FY09-10 baseline.</li> </ul>
	<ul style="list-style-type: none"> <li>Develop and implement a fuel conservation program by September 2014 (EBS, EMS O&amp;T 01052).</li> </ul>	<ul style="list-style-type: none"> <li>FY09-10 baseline: 7,126,723 gallons. In FY11-12, 6,630,024 gallons used – 6.97% reduction. In FY12-13, 6,905,499 gallons used – 3.11% reduction. The FY12-13 fleet and equipment purchase includes replacing 53 vehicles with alternative fuel units which began arriving in February 2014.</li> </ul>

## Objective: I. Green energy purchase.

Strategy	Target	Results
<ul style="list-style-type: none"><li>Continue purchasing renewable energy.</li></ul>	<ul style="list-style-type: none"><li>Purchase of at least 40% of the City's energy from renewable energy sources (PBW, Strategic Plan, CHE 5).</li></ul>	<ul style="list-style-type: none"><li>City has purchased 40% renewable energy for Renewable Energy Program (REP). Continuation of this item will be placed on the Council agenda for authorization 2<sup>nd</sup> quarter FY13-14.</li></ul>

Objective: 2. Energy conservation.		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Maintain EMS conservation efforts to achieve a 5% reduction in City usage annually.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in energy use throughout Dallas Police Department by 2% through September 2013 (DPD, EMS O&amp;T 01044).</li> </ul>	<ul style="list-style-type: none"> <li>FY09-10, 17,957,660 kWh used. FY10-11, 16,872,937 kWh, decrease 6.04%. FY11-12, 16,259,800 kWh, decrease 3.63%. FY12-13, 15,872,179 kWh, decrease 2.38%.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction in average electric energy use per million gallons treated at wastewater treatment plants from FY08-09 baseline by December 2013 (DWU, EMS O&amp;T 01029).</li> </ul>	<ul style="list-style-type: none"> <li>FY12-13: average electric use 21,004 kWD.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduce monthly electrical demand and peak hour charges of ERCOT load during 4-CP (4-Coincident Peaks) months (June-September) by October 2014 (DWU, EMS O&amp;T 01068).</li> </ul>	<ul style="list-style-type: none"> <li>2011 baseline is 30,126 KWD. During 2012 season, 20,712 KWD used. During 2013 season, 22,105 KWD used. Due to new pump stations coming online, baseline will be recalculated.</li> </ul>

Objective: 3. Produce energy on-site.		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>• Conduct feasibility research and develop a plan to generate energy at City facilities.</li> <li>• Explore the construction of solar installations.</li> <li>• Replace grid-dependent school zone flashers with solar powered flashers.</li> </ul>	<ul style="list-style-type: none"> <li>• Development of an on-site energy production plan by October 2014 (PBW, Strategic Plan, CHE 4).</li> </ul>	<ul style="list-style-type: none"> <li>• Citywide Energy Management Plan on target for October 2014. Pepco Energy Services received contract February 2014. Projects to be on-line by December 2014.</li> </ul>
	<ul style="list-style-type: none"> <li>• Determination of the feasibility for solar installations by October 2012 (PBW, Strategic Plan, CHE 4).</li> </ul>	<ul style="list-style-type: none"> <li>• Three PV projects were authorized on Dec 11, 2013 Agenda. PBW initiated solar procurement at SSWWTP and continues to develop more projects where they are economically feasible.</li> </ul>
	<ul style="list-style-type: none"> <li>• Replacement of 75 alternating current powered school zone flashers to solar powered flashers by December 2012 (STS, EMS O&amp;T 01049).</li> </ul>	<ul style="list-style-type: none"> <li>• As of December 31, 2012, 75 alternating current powered school zone flashers were replaced with solar powered flashers.</li> </ul>



# Moving Forward

- Sustainability Plan will be revised annually
  - Strategic Plan elements
  - Environmental Objectives and Targets
- OEQ will report revisions and progress
  - Revise plan as needed in late spring
  - Report progress in late fall

# Questions



**sustain  
ability**

*n:* living today  
to be sure  
there is enough  
for tomorrow.

# **PROGRESS REPORT**

**March 2014**

**DALLAS SUSTAINABILITY PLAN**

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## Introduction

The City of Dallas recognizes that to promote a vibrant, healthy future, it must actively balance economic needs, environmental stewardship and social equity. Dallas needs a robust and thriving economy to ensure families are self-sufficient, and it must protect the cultural and social identities that are the fabric of community. But to do this, Dallas must protect the environment to ensure that all can enjoy the prosperity and access the resources shared today for generations to come. To be successful protecting the environment, a multi-faceted approach is required: reduce the impact from what is used, use only what is needed, and replenish resources faster than they are used.

Dallas is the largest component of the Dallas-Fort Worth-Arlington metropolitan statistical area (MSA), which is currently the fourth largest MSA in the United States. The Dallas region continues to grow as more people move here to take advantage of the many opportunities North Texas has to offer. With that growth, more demands will be made of the natural environment. In an effort to be proactive and to preserve Dallas, *our Dallas*, this sustainability plan is offered to educate and inform on the steps the City as an organization and the city as a community can take to help create a prosperous future for all.

## Sustainability Priorities

To begin, five areas where activities have an impact have been identified: air quality, land use, water quality, materials management and energy. City leaders, since the 1950s, have, in one form or another, put in place measures or plans to address the impacts from the use of the resources in these five areas. As in those previous plans, this plan will showcase what is intended to be accomplished through environmental stewardship efforts and the policies in place that will help reach those goals.

## Sustainability, the Strategic Plan and Environmental Management

The City Council's Strategic Plan is driven by the six Key Focus Areas (KFAs) the City Council has identified as the roadmaps to creating a successful city. Every year, Council meets to affirm the priorities of each KFA and to identify the programs they feel best move the city toward fulfilling those priorities. From there, the City's Strategic Plan is updated to reflect the Council's goals, and the great work begins.

Enhancing the vitality and quality of life for everyone in Dallas is the ultimate goal of this sustainability plan. Reflecting on the Strategic Plan and the vision of a *City That Works: Diverse, Vibrant, Progressive*, the sustainability plan espouses the City's Core Values of accountability, commitment, customer service, environmental stewardship, innovation, integrity, leadership, sensitivity and teamwork in order to achieve the objectives framed within.



The core value of Environmental Stewardship establishes the foundations by which the City of Dallas builds a Clean, Healthy Environment.

As one of the six Key Focus Areas which governs City activities and budget allocations, the concept of a Clean, Healthy Environment is critical to the future success of the City of Dallas. Although the other Key Focus Areas of Public Safety; Economic Vibrancy; Culture, Arts & Recreation; Educational Enhancements; and Efficient, Economical and Effective (E3) Government are equally important, this plan will focus on the cornerstone of it all – a Clean, Healthy Environment.

## DALLAS CITY COUNCIL KEY FOCUS AREAS

- ★ CLEAN, HEALTHY ENVIRONMENT
- ★ CULTURE, ARTS, RECREATION
- ★ ECONOMIC VIBRANCY
- ★ EDUCATIONAL ENHANCEMENTS
- ★ E3 GOVERNMENT
- ★ PUBLIC SAFETY

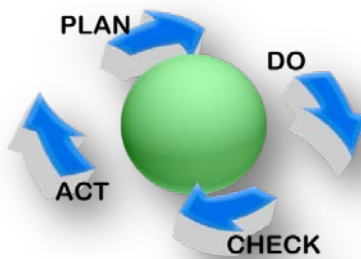
A Clean, Healthy Environment in Dallas will be accomplished through Municipal Leadership, Regional Collaboration, Environmental Initiatives, and Community Enhancement. The strategy map shown in *Figure 1* highlights the major strategies and activities that the City of Dallas uses to promote a “culture of health and cleanliness.”



**Figure 1**

effectiveness of the alternative methods at accomplishing those activities with a minimized or eliminated environmental impact. And “Acting” allows for continual improvements to be made through further planning.

To demonstrate its commitment as an organization to protecting the environment, the City has implemented an Environmental Management System (EMS) to guide internal operations. The EMS is a system based on a continual cycle of “Plan, Do, Check, Act” as shown in *Figure 2* that requires us to minimize negative environmental impacts. Through “Planning”, one identifies activities that will have an environmental impact and then comes up with alternative methods to accomplish those activities but with a lessened or altogether eliminated environmental impact. By “Doing”, one implements the alternative methods and trains others on the process to ensure consistency. Regular “Checking” ensures the



**Figure 2**

Fourteen City departments participate in the EMS and work closely with the City's Office of Environmental Quality to keep the system running optimally. In January of 2005, the City Council approved an Environmental Policy, found in Appendix D, that empowers every employee, not just those in the EMS, to minimize their environmental footprint in every aspect of their jobs and to go above and beyond to protect the environment, making Earth Day Every Day in Dallas.

This sustainability plan is the culmination of years of commitment and dedication to the environment within the City of Dallas as an organization through the work of City departments and the Environmental Management System paired with elements of the Strategic Plan to expand sustainability into daily decision making processes to build a stronger community for today and tomorrow.

This plan is designed to inform the reader of the steps already taken and the direction in which to proceed as well as serving as a road map for those wishing to green their lives and ensure a bright and prosperous future for years to come.

### **Plan Outline**

The City of Dallas' sustainability plan is divided into five categories that address a range of issues relating to sustainability: Air Quality, Land Use, Water Quality, Materials Management, and Energy. Each section of the plan includes an introduction to the topic, including the guiding principles and goal, and information on how the City of Dallas will take action to address the issue through programmatic objectives.

Five appendices are included that contain a listing of City of Dallas Programs, Tips & Tools, Selected City Council Ordinances, Resolutions and Authorizations and Administrative Directives, the City's Environmental Policy, and past initiatives upon which current efforts are based.





## Air Quality

Air quality impacts everyone every day. As pollution is released from human activities the world over, its impact can be seen on health and climate.

Today, children and the elderly spend much of their time indoors because of daily warnings about poor air quality. According to the Centers for Disease Control (CDC), roughly one in twelve Americans suffered from asthma in 2009<sup>1</sup>. Children are most prone to asthma, and respiratory ailments remain the number one reason youth under the age of eighteen visit emergency rooms in the United States.

While the public debate around the impact human activities have on the climate continues, more greenhouse gases build in the atmosphere. As a result, less solar radiation is able to escape back into space, and the atmosphere, like a pot with a lid, consequently warms. With a warmer climate come changes in weather patterns including fluctuations from normal temperatures and precipitation levels. It also causes coral bleaching, warmer seas, oceanic acidification, and shorter cold weather seasons that leave pest populations intact leading to economic and health costs associated with lost crops and the spread of insect borne diseases like West Nile virus.

Everyone is familiar with “the haze” that can be seen over Dallas. The haze is the byproduct of

internal combustion and sunlight. Emissions from the combustion of fossil fuels mix with volatile organic compounds in the presence of sunlight to produce ground-level ozone which then becomes trapped in place by weather patterns. In the stratosphere, ozone protects the planet from ultraviolet radiation; at the surface, it is an eyesore and a dangerous irritant to lung tissue.

The Dallas-Fort Worth-Arlington area has over six million individuals making an impact, positively or negatively to air quality, as a result of everyday actions.

Emissions are local, but their impact is regional. As air quality standards become more stringent, this region may face financial sanctions from governing authorities if steps are not taken to help improve air quality and bring the region into full attainment with the National Ambient Air Quality Standards of the Clean Air Act.

In 2006, the mayor of Dallas joined mayors from across the United States in signing the U.S. Mayors Climate Protection Agreement to make a commitment to reduce greenhouse gas emissions in Dallas to 7% below 1990 levels by 2012. The City commissioned an update to its existing greenhouse gas (GHG) emission survey to remain accountable to this commitment and track progress. The 2012 update shows that the City of Dallas has achieved a 33% reduction in its own emissions as an organization.

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<sup>1</sup><http://online.wsj.com/article/SB10001424052748704740604576301342646270586.html>

Efforts to reduce impacts to air quality include the installation of electric vehicle charging stations across Dallas. These stations allow commuters the security of knowing they can “top-off” their battery while conducting business in Dallas. Charging stations can currently be found at Dallas City Hall, Dallas Fair Park, Dallas Love Field and Dallas Executive Airport. For those eager to get out of the car altogether, the City is fast-tracking the Bike Plan and expanding the trail system to help provide more alternatives for commuting *sans automobile*. At Love Field, “green taxis”, taxis that generate fewer emissions, are now given front-of-the-line privileges to pick up passengers given their commitment to reduce emissions. Also at Love Field, the Voluntary Air Low Emissions (VALE) grants awarded to the City are being used to place twenty new 30-ton pre-conditioned air units to deliver temperate air to passenger and crew areas and reduce engine idling between flights.

The City has adopted and implemented an anti-idling ordinance to help curb idling of vehicles over 14,000 pounds within the City’s jurisdiction. The Dallas Marshal’s Office is charged with enforcing the ordinance while the Office of Environmental Quality works to educate residents and visitors through GreenDallas.net and placement of signage at truck stops, delivery areas and schools.

The City encourages the surrounding communities and businesses in the region to do what they can to help reduce their own impact to air quality.

### Goal

***The City of Dallas is working to improve air quality.***

#### Objective 1

Improve air quality: the City is promoting the use of alternative commutes, including mass transit, carpooling, biking and walking to reduce emissions and minimize single-rider vehicle trips.

### Strategy:

Utilize *GreenRide* to assist staff to find carpool or biking buddies to reduce single-rider trips. *GreenRide* allows staff to track their alternative commutes, records emissions reductions and calculates reductions in vehicle miles travelled (VMT) and emission reductions of CO<sub>2</sub> and other greenhouse gases (GHG) based on the type of vehicle and distances travelled.

Expand the street car system to reach further into the community, coupled with expansion plans of Dallas Area Rapid Transit (DART), to increase interconnectivity between points all over Dallas and the surrounding areas to reduce single-rider trips.

### Target:

Reduction in single-rider vehicle miles travelled by 10% annually over previous year through 2014 (OEQ, EMS O&T 00992).

Completion of McKinney Avenue Trolley Loop by March 2014 (SDC, Strategic Plan, EV 8).

Initiate TIGER streetcar service and Urban Circulator streetcar service (SDC, Strategic Plan, EV 8).\*

\*new target

#### Objective 2

Improve air quality: the City is reducing emissions associated with idling vehicles and equipment.

### Strategy:

Power-down City vehicles in observance of the Environmental Policy and as part of the Environmental Management System helps staff and City Departments minimize air emissions.

Continue purchasing alternative fuels and upgrading fleet vehicles with those that can operate on alternative fuels or hybrids of gasoline and electricity to reduce emissions.

Educate parents and bus drivers at schools on the impacts of idling and encourage voluntary engine shut-down.

**Target:**

Replacement of 15% of Sanitation Services fleet with alternative fuel vehicles by September 2014 (SAN, EMS O&T 01023).

Reduction of NO<sub>x</sub>, VOC, PM and CO<sub>2</sub> emissions by 5% from on-road and off-road vehicles through vehicle replacement by September 2015 (EBS, EMS O&T 00961).

Reduction of Code Compliance department's dependency on gas and diesel fueled vehicles by 1% over previous year by October 2012 (CCS, EMS O&T 00982).

Offer anti-idling signs and educational materials to schools (OEQ).

**Objective 3**

Improve air quality: the City promotes reducing emissions from community sources through compliance with regulations, process improvements and equipment replacement. Inspection of facilities and equipment coupled with replacement of aged or non-compliant equipment will minimize emissions.

**Strategy:**

City staff enforces sections of the Clean Air Act by monitoring industrial sources of air emissions for compliance with permit restrictions on the quantity of emissions allowed.

**Target:**

Inspection of 600 industrial sources of air pollution by October 2014 (PBW, EMS O&T 01020).



## AIR QUALITY SUMMARY OF OBJECTIVES

**AIR QUALITY GOAL:  
IMPROVE AIR QUALITY****Objective: 1. Increase alternative commute options**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Promote Green Ride.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in single-rider vehicle miles travelled by 10% annually over previous year through 2014 (OEQ, EMS O&amp;T 00992).</li> </ul>	<ul style="list-style-type: none"> <li>In 2010: 3.14M miles/926 tons CO2 reduced.</li> <li>In 2011: 3.70M miles/1,560 tons CO2 reduced.</li> <li>In 2012: 1.81M miles/851 tons CO2 reduced.</li> <li>In 2013: 3.39M miles/1,594 tons CO2 reduced.</li> <li>Total reduction in CO2: 4,931 tons.</li> </ul>
<ul style="list-style-type: none"> <li>Expand street car service.</li> </ul>	<ul style="list-style-type: none"> <li>Completion of McKinney Avenue Trolley Loop in 2014 (SDC, Strategic Plan, EV 8).</li> </ul>	<ul style="list-style-type: none"> <li>McKinney Avenue Trolley loop extension project construction is underway with Olive Street Extension scheduled for completion by May 2014.</li> </ul>
	<ul style="list-style-type: none"> <li>Initiate TIGER streetcar service and Urban Circulator streetcar service (SDC, Strategic Plan, EV 8).*</li> </ul> <p style="text-align: right; font-size: small;">*new target</p>	<ul style="list-style-type: none"> <li>TIGER Oak Cliff/Downtown streetcar service scheduled completion by October 2014; revenue service by February 2015. Urban Circulator projected to be complete in 2014; revenue service by November 2014.</li> </ul>

**Objective: 2. Reduce emissions from idling**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Replace fleet with alternative fuel vehicles to reduce emissions.</li> </ul>	<ul style="list-style-type: none"> <li>Replacement of 15% of Sanitation Services' fleet with alternative fuel vehicles by September 2014 (SAN, EMS O&amp;T 01023).</li> </ul>	<ul style="list-style-type: none"> <li>Sanitation replaced 43 vehicles. In June 2013, Council approved replacement of 10 more vehicles.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction of NOx, VOC, PM and CO2 emissions by 5% from on-road and off-road vehicles through vehicle replacement by September 2015 (EBS, EMS O&amp;T 00961).</li> </ul>	<ul style="list-style-type: none"> <li>The FY12-13 fleet purchase replaced 53 traditionally-fueled vehicles that began arriving in February 2014 to reduce emissions.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction of Code's dependency on gas and diesel fueled vehicles by 1% over previous year by October 2012 (CCS, EMS O&amp;T 00982).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, Code acquired 4 alternatively fueled vehicles.</li> <li>In FY12-13, Code acquired 13 CNG vehicles, further reducing emissions.</li> </ul>
<ul style="list-style-type: none"> <li>Enforce and educate around the anti-idling ordinance.</li> </ul>	<ul style="list-style-type: none"> <li>Offer anti-idling signs and educational materials to schools (OEQ).</li> </ul>	<ul style="list-style-type: none"> <li>OEQ posted information on GreenDallas.net and in the Green Times newsletter, and sent 254 letters to schools.</li> </ul>

**Objective: 3. Reduced emissions from industry**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Reduce air emissions through industrial process inspections.</li> </ul>	<ul style="list-style-type: none"> <li>Inspection of 600 industrial sources of emissions annually through October 2014 (PBW, EMS O&amp;T 01020).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, PBW completed 750 emission source inspections.</li> <li>In FY12-13, PBW completed 843 emission source inspections.</li> </ul>



## Land Use

Land use, in the scope of sustainability, is much more than the development of real estate. Land provides a place to live, grow food, nurture family, and create community. Land is the foundation upon which to build and shape cultural identity.

In Dallas, people value the features that create a community's identity. One can easily identify the parts of Dallas that are named after their environmental features: Oak Cliff, White Rock, Lakewood, Forest Hills, Oak Lawn, Cedars, Lake West, Bluffview, Elderwoods, Turtle Creek, Oak Highlands, Walnut Hill, to name a few. Effort is made to protect these areas and their identities through civic action and, in some cases, regulations. The White Rock Escarpment, one of Dallas's signature geological formations, is protected under Article V of the city code from any development or site alteration to protect it always.

It is important to protect the land to ensure its proper use and the use of the resources it provides – not just growth for the sake of growth but growth for a substantial and sustainable purpose. For the most part, Dallas is landlocked and has matured to understand the importance of finding a balance between preserving what has defined and shaped the contextual make up of the community and the need for future growth.

*forwardDallas!* was adopted to help guide that balance and ensure Dallas continues to remain economically vibrant while connected to its

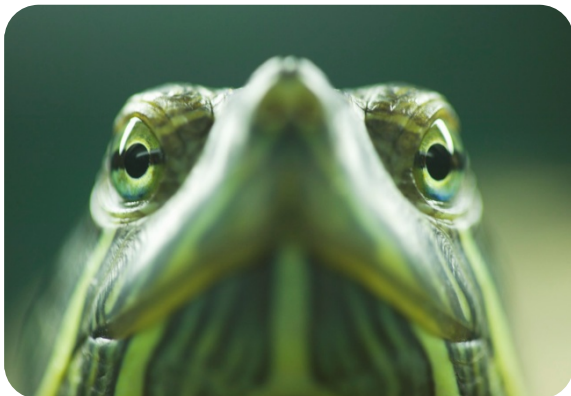
heritage. Article X of the city code was passed to protect the trees that shade Dallas, provide natural habitat, and help clean the air. By adopting long range plans and passing ordinances to protect natural resources, Dallas will arrive at its future while preserving its past.

As more people move to Dallas, they will need more places to live and work. Over time, city leaders will be afforded the opportunity to demonstrate their commitment to preserving natural resources by embracing the land use principles that will ensure smart growth and keep the city economically strong while maintaining and protecting the features that make it unique.

Such opportunities will include the continued promotion of transit-oriented design (TOD) in Dallas and the promotion of mixed-use developments that allow for the creation of urban centers where individuals can live, work and play. So important is this effort to Dallas' sustainable future, financial incentives toward this goal were considered for inclusion in the 2012 bond issue. Leaders may also wish to explore ways to preserve neighborhood identity around those areas perhaps through the use of a neighborhood stabilization overlay (NSO) for all properties within a quarter-mile of any City-assisted development project. The City could also develop a strategy to promote the restoration of historically designated structures to green standards to prevent demolition by neglect.

An existing example of leadership and commitment to preserving natural resources occurred in 2003 when the City Council passed the Green Building Resolution that requires all City facilities over 10,000 square feet in size to be built to the U.S. Green Building Council's Leadership in Energy and Environmental Design LEED® Silver levels. LEED® seeks to minimize a structure's construction and operational footprint to preserve resources over the life of the building. Today, the City is designing buildings so well that most could qualify for LEED® Gold ratings.

Then, in 2008, the City Council passed the Green Building Ordinance which essentially expanded the City's internal policy to govern all new construction within Dallas. This placed Dallas on the leading edge of green building efforts and ensures that future generations will have the incentives necessary to keep attracting businesses and home owners to Dallas.



When approving land use, city leaders have to balance the needs of the entire community against the needs of those who seek to make Dallas home. Whether it is new homes or a new retail center, leaders must weigh all the benefits and drawbacks to each proposed use so as to get the most from each parcel for the community economically while protecting the very qualities that made the parcel desirable to the community.

## Goal

***The City of Dallas promotes smart growth and development.***

### Objective 1

Promote smart growth and development: the City promotes the use of green building practices to minimize a building's construction and use impacts on the environment, City infrastructure, and the surrounding community.

#### Strategy:

Implement and improve the Green Building Ordinance.

Reduce impact of construction in Dallas.

#### Target:

Implement Green Building Ordinance Phase II and review of International Green Construction Code (IgCC) (PBW, Strategic Plan, CHE 5).

Track construction of new buildings over 10,000 square feet through September 2014 (PBW, EMS O&T 00665).

Provide environmental impact reduction outreach to city contractors through September 2013 (PBW, EMS O&T 01046).

### Objective 2

Promote smart growth and development: the City will work to secure and preserve in perpetuity open, green spaces for common uses like parks and trails and the Trinity River Corridor.

#### Strategy:

Acquire vacant properties and designate them for future uses or add them to existing "green space" to increase natural and wildflower areas.

Procure land for new parks and future projects, including neighborhood parks and those planned for the Trinity River Corridor.

Amend and update the Tree Ordinance to protect and expand the existing tree canopy in Dallas.

**Target:**

Increase in “green space” by adding to existing property and increasing natural and wildflower areas by 700 acres by October 2012 (PKR Environmental Sustainability Plan).

Continued development of neighborhood parks by implementing bond program through FY12-13 (PKR, Strategic Plan, CHE 7).

Revision of the Tree Preservation Ordinance to address increasing the urban tree canopy in Dallas (SDC, Strategic Plan, CHE 8).

Green buildings provide an average 30% reduction in energy use, as compared with minimum energy code requirements. For energy costs of \$1.47/sqft/yr, this indicates savings of about \$0.44/sqft/yr.

source: <http://www.usgbc.org/ShowFile.aspx?DocumentID=1992>, page 26

**Objective 3**

Promote smart growth and development: the City encourages redevelopment of brownfields and other areas with historical contamination.

**Strategy:**

Use municipal setting designation (MSD), alone or coupled with economic development tools and grants, to foster redevelopment of brownfields and other areas in Dallas.

**Target:**

Completion of internal processing of MSD applications within nine months, excluding

applicant response time to City comments (OEQ).

**Objective 4**

Promote smart growth and development: promote sustainable food options including community gardens, neighborhood markets and mobile food options in Dallas.

**Strategy:**

Develop land use policies that will: identify which types of City-owned properties can be used; define responsibilities of parties using said property; and, identify what is required and permissible for community gardens on City owned land.

Work with food groups, community organizers, and businesses to identify needs and opportunities to increase access to healthy food options.

Identify and explore removing through amendment any city code barriers that prohibit neighborhood markets and mobile food options in Dallas to allow for sidewalk kiosks, food carts, and food trucks in Dallas.

**Target:**

Creation of land use policy governing community gardens on City land in 2014 (OEQ).

Identification of strategies to increase access to healthy food options to address “food deserts” in 2014 (OEQ).

Amendment of city code to allow for mobile food options, including sidewalk kiosks, food carts, and on-street food trucks, throughout Dallas by October 2013 (CCS, Strategic Plan, CHE 7).



**Urban agriculture:** the practice of cultivating, processing and distributing food locally,

- **strengthens communities;**
- **increases access to nutritious food;**
- **diminishes food deserts;**
- **provides recreation and leisure to residents; and,**
- **improves individual and community health and well-being.**

Urban agriculture expands the economic base of a region through production, processing, packaging and marketing of consumable products, which increases entrepreneur activities and lowers the cost of food.

In many cases, urban agriculture also reduces or eliminates waste streams through composting.



**LAND USE SUMMARY OF OBJECTIVES**

**LAND DEVELOPMENT GOAL:  
PROMOTE SMART GROWTH AND DEVELOPMENT**

**Objective: 1. Build “green” in Dallas**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Identify green building standards and procedures for Phase II of green building ordinance.</li> </ul>	<ul style="list-style-type: none"> <li>Preparation of recommendations from Green Building Task Force for Phase II implementation of Green Building Ordinance by October 2012 (PBW, Strategic Plan, CHE 5).</li> </ul>	<ul style="list-style-type: none"> <li>Phase II Green Building Ordinance adopted. The City Manager is authorized to reconvene the Green Building Task Force in 2015 to report on progress.</li> </ul> <p>Within the community, there are 13 Platinum, 54 Gold, 116 Silver, 339 Certified, and 225 registered projects.</p>
<ul style="list-style-type: none"> <li>Reduce impact of construction in Dallas.</li> </ul>	<ul style="list-style-type: none"> <li>Track construction of new buildings over 10,000 square feet through September 2014 (PBW, EMS O&amp;T 00665).</li> </ul>	<ul style="list-style-type: none"> <li>Since February 2012, 4 City facilities have been completed, another 5 have received LEED certification, another 2 have applied for LEED certification, and another 8 buildings began construction.</li> </ul> <p>To date, 27 City facilities are LEED certified and 20 projects are registered.</p>
	<ul style="list-style-type: none"> <li>Provide environmental impact reduction outreach to city contractors through September 2013 (PBW, EMS O&amp;T 01046).</li> </ul>	<ul style="list-style-type: none"> <li>PBW provides environmental compliance and EMS information to contractors through bidding and contract packages. Contractors must sign a contractor environmental affidavit prior to starting work.</li> </ul>

**Objective: 2. Open space acquisition**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Acquire vacant properties and designate them for future use or add to existing “green space”.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in “green space” by adding to existing property and increasing natural and wildflower areas by 700 acres by October 2012 (PKR, Environmental Sustainability Plan).</li> </ul>	<ul style="list-style-type: none"> <li>Natural and wildflower areas increased by 718 acres to bring the total to 6,895 natural acres and 226 wildflower acres.</li> </ul>
<ul style="list-style-type: none"> <li>Procure land for new parks and projects in Trinity River Corridor.</li> </ul>	<ul style="list-style-type: none"> <li>Continued development of neighborhood parks by implementing bond program through FY12-13 (PKR, Strategic Plan, CHE 7).</li> </ul>	<ul style="list-style-type: none"> <li>Construction award/COs: \$8,628,723 at 34 parks. Parks has completed 73% of their 2006 bond projects and have 18% progressing.</li> </ul>
<ul style="list-style-type: none"> <li>Amend and update the Tree Ordinance.</li> </ul>	<ul style="list-style-type: none"> <li>Revision of the Tree Preservation Ordinance to address increasing the urban tree canopy in Dallas (SDC, Strategic Plan, CHE 8).</li> </ul>	<ul style="list-style-type: none"> <li>Formal amendment process initiated, deliberation and discussion by Zoning Ordinance Committee and City Plan Commission beginning in 3<sup>rd</sup> quarter 2014.</li> </ul>

**Objective: 3. Development and redevelopment**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Use MSD and economic tools to promote redevelopment and/or brownfield reclamation.</li> </ul>	<ul style="list-style-type: none"> <li>Completion of internal processing of MSD applications within nine months, excluding applicant response time to City comments (OEQ).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 7 MSDs were presented to Council; 5 of these MSDs were processed within 9 months (staff review time) and 2 took longer (10 months and 17.5 months). In FY12-13, 1 MSD went to Council; 18 months to process.</li> </ul>

**Objective: 4. Sustainable food options**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Develop land use policies that will guide placement and operation of community gardens on City land.</li> </ul>	<ul style="list-style-type: none"> <li>Creation of land use policy governing community gardens on City land in 2014 (OEQ).</li> </ul>	<ul style="list-style-type: none"> <li>OEQ has met with internal representatives and community groups and stakeholders to discuss use of City owned property for placement of Community Gardens.</li> </ul>
<ul style="list-style-type: none"> <li>Work with food groups, community organizers, and businesses to identify needs and opportunities to increase access to healthy food options.</li> </ul>	<ul style="list-style-type: none"> <li>Identification of strategies to increase access to healthy food options to address “food deserts” in 2014 (OEQ).</li> </ul>	<ul style="list-style-type: none"> <li>OEQ staff has met with and is working with local food groups to address “food deserts” by exploring redevelopment of brownfield locations into community gardens and placement of market gardens throughout the city.</li> </ul>
<ul style="list-style-type: none"> <li>Identify and explore removing through amendment any city code barriers that prohibit neighborhood markets and mobile food options.</li> </ul>	<ul style="list-style-type: none"> <li>Amendment of city code to allow for mobile food options, including sidewalk kiosks, food carts, and food trucks, throughout Dallas by October 2013 (CCS, Strategic Plan, CHE 7).</li> </ul>	<ul style="list-style-type: none"> <li>Modified code regulating mobile vending in June 2013.</li> </ul>



## Water Quality

Until the Clean Water Act (CWA) started regulating discharges to American waters, rivers, streams and lakes were used as disposal sites to move industrial and commercial waste away from communities. History is replete with incidences where this practice resulted in undesirable side-effects that prompted the federal government to act to protect water and ensure its availability. Even with regulations now in place, many bodies of water in the United States remain threatened or “impaired” under the Clean Water Act either from decades old contamination that is persistent and accumulative, or from non-point sources that exist today.

Improving water quality requires understanding how it is impacted.

According to the Texas Commission on Environmental Quality, bacteria concentrations are occasionally elevated in portions of the Upper Trinity River (Segment 0805) that flows through Dallas. This places the River in an “impaired” state for activities identified as “contact recreation” in the state’s standards. The segment flows 100 miles through five counties with a watershed that covers nearly 1,000 square miles of the region<sup>2</sup>.

Chemicals and bacteria loads are not the only issues facing the Trinity River; litter threatens the water quality as well. Participation in the

Keep Dallas Beautiful litter survey annually helps the City identify threats to the Trinity River through drifting litter or deliberate illegal dumping. Education campaigns and inspections by staff emphasize the importance of protecting the Trinity throughout the watershed.

Dallas uses surface water reservoirs for its water supply, so the protection of these water bodies, including the Trinity River and its watershed, is imperative and a long-standing priority to City leaders and residents. Water conservation is discussed in the Materials Management section of this sustainability plan but the quality of the water in the watershed depends on the quantity of water in the watershed.

Between 1998 and 2010, Dallas averaged 37.6” of rain over 81 days annually. Comparably, Seattle, Washington, averaged 37.7” of rain over 149 days annually<sup>3</sup>. Precipitation, while comparable by amount to other “green” cities, comes infrequently to Dallas so when it falls it tends to occur suddenly and in heavy amounts. Due to the drier climate, the summer heat, and the geological formations upon which Dallas rests, soils here tend to become harder and less absorbent. As a result, flash-flooding from heavy rains running off hard clay soils are diverted to the storm sewer system bringing with it whatever contaminants it may contact in the 1,000 square mile watershed.

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<sup>2</sup> <http://www.tceq.texas.gov/waterquality/tmdl/66-trinitybacteria.html>

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<sup>3</sup> <http://www.currentresults.com/Weather/US/average-annual-precipitation-by-city.php>

However, rainfall is not the sole source of water in the region. Dallas sits atop natural springs. These springs eventually make their way to surface waters so City leaders have made it a priority to protect them and their groundwater sources and to use them wisely so as to keep them clean and clear.

To protect the quality of these water sources, the City has implemented several education and outreach programs. One such program aims primarily to protect City infrastructure but in doing so it also works to protect surface waters from sanitary sewer overflows (SSOs) caused by fats, oils and greases improperly disposed of through the sanitary sewer. When an SSO occurs, it damages the city infrastructure and resources are diverted from other projects to repair the damage they cause. More importantly, SSOs threaten the watershed when they erupt to the surface and impact the municipal separate storm sewer system (MS4) or, more commonly, the storm sewer system. Through education and outreach, Dallas Water Utilities (DWU) Cease the Grease program has reduced the incidence of SSOs in Dallas and continues to provide information and materials to DWU customers. Accompanying the outreach programs are commitments to clean sanitary sewer lines annually to prevent blockages.

The City is also working through comprehensive plans, like the integrated stormwater management plan (iSWM) that encourages the application of best practices for site design to redirect rainfall and runoff to planting areas, bioswales and on-site detention or retention ponds; and cooperative agreements with regional partners aimed to educate everyone living in the watershed about the hidden threats facing our surface waters.

Yard chemicals, lawn clippings, trash, pet wastes, pesticides, industrial pollution, automobile fluids, detergents, sediment, loose soil, and other debris can result in contaminations that harm the ecological balance of the waterways and impair the water quality. In larger quantities, accumulated across the 1,000 square miles of watershed and draining

into the Trinity River, obstructions can form and cause back-ups and floods that can damage or destroy nearby homes, neighborhoods and businesses.

When that happens, City resources are then diverted for avoidable damage repairs that could have otherwise been used to strengthen Dallas.

By protecting water quality, and the Trinity River watershed, from debris and contamination, the City can focus attention on building bettering communities and reducing environmental impacts to this vital resource.

### Goal

***The City of Dallas is working to improve water quality.***

### Objective I

Improve water quality: the City is taking steps to restore the Trinity River to a more natural state to mitigate and minimize impacts.

#### Strategy:

Recreating the natural meander of the river and restoring wetlands will slow the flow of the Trinity River, allow for settling of suspended solids and filtration of chemicals through biological means.

Restoring creeks in the watershed to their natural state to allow for natural and biological processes to filter the waters delivered to the Trinity River.

#### Target:

Commencement of the Trinity River relocation in the Dallas Floodway to create a more natural channel by end of 2014 (TWM, Balanced Vision Plan).

Brief City Council on daylighting creeks and springs in 2013 (TWM, Strategic Plan, CHE 8).

**Objective 2**

Improve water quality: utilize strategies and policies to protect the Trinity River watershed from discharges that can threaten water quality.

**Strategy:**

Implement a bacteria concentration reduction strategy to improve water quality.

Implement integrated pest management (IPM) practices reduce the frequency and quantity of pesticide applications at City facilities.

Reduce chlorine from flushing activities of water lines will help preserve the natural balance of the waterways into which the water flows.

Continue compliance inspections.

**Target:**

Development of an interim Bacterial Reduction Plan to address bacteria concentrations in Dallas's streams and rivers by October 2012 (TWM).

Implement IPM for City facilities by September 2013 (PKR, EMS O&T 00628/00647).

Development of IPM for City facilities by September 2012 to be implemented by Spring 2013 (PBW/TWM, EMS O&T 00994).

Dechlorination of water flows of 600 gallons per minute (gpm) or greater from Dallas Water Utilities flushing activities through September 2012 (DWU, EMS O&T 00899).

Inspection of City-owned or operated industrial facilities by Stormwater Management by October 2013 (PBW/TWM, EMS O&T 01018).

Reduce pollutant load at McCommas Bluff Landfill by 5% from 2007 baseline by September 2014 (SAN, EMS O&T 00986).

**Objective 3**

Improve water quality: minimize threats to the watershed through outreach and education programs to inform and engage the public in local and regional efforts.

**Strategy:**

Continue Cease the Grease education and outreach campaign and pipe clean outs.

Provide outreach and training to contractors working within the levees that protect the city through Trinity Watershed Management's Stormwater Management (SWM) team.

Provide outreach and training on the protection of the watershed through the Office of Environmental Quality as part of the Environmental Management System.

**Target:**

Continuation of the Cease the Grease program and cleaning of 36% of city's sanitary sewer lines by October 2014 (DWU, Performancesoft Measure).

Delivery of 150 outreach presentations or events on methods and techniques to reduce pollution by SWM through September 2013 (PBW/TWM, EMS O&T 01019).

Delivery of 72 outreach presentations on reducing pollution by OEQ through September 2013 (OEQ, Performancesoft Measure).



## WATER QUALITY SUMMARY OF OBJECTIVES

### WATER QUALITY GOAL: IMPROVE WATER QUALITY

#### Objective: 1. Trinity River preservation

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Restore natural contour of River to allow for filtration.</li> </ul>	<ul style="list-style-type: none"> <li>Commencement of the Trinity River relocation in the Dallas Floodway to create a more natural channel by end of 2014 (TWM, Balanced Vision Plan).</li> </ul>	<ul style="list-style-type: none"> <li>Dallas Floodway EIS will be complete in late 2014, providing opportunity for the Corps to begin design efforts for river relocation, dependent upon federal funding.</li> </ul>
<ul style="list-style-type: none"> <li>Restore creeks to natural state.</li> </ul>	<ul style="list-style-type: none"> <li>Brief City Council on daylighting creeks and streams in 2013 (TWM, Strategic Plan, CHE 8).</li> </ul>	<ul style="list-style-type: none"> <li>Consultant's investigation of Mill Creek complete. Work underway to preserve Big Spring.</li> </ul>

#### Objective: 2. Protecting surface waters

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Implement a bacteria concentration reduction strategy to improve water quality.</li> </ul>	<ul style="list-style-type: none"> <li>Development of an interim Bacterial Reduction Plan to address bacteria concentrations in Dallas's streams and rivers by October 2012 (TWM).</li> </ul>	<ul style="list-style-type: none"> <li>Final version submitted to TCEQ with Annual Report in December 2012. Measures are being implemented on an ongoing basis. Data show improvement in 72% of monitored watersheds.</li> </ul>
<ul style="list-style-type: none"> <li>Implement integrated pest management (IPM).</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of IPM at City facilities by September 2013 (PKR, EMS O&amp;T 00628/00647).</li> </ul>	<ul style="list-style-type: none"> <li>This target is being incorporated into the City-wide Integrated Pest Management effort.</li> </ul>
	<ul style="list-style-type: none"> <li>Development of IPM for City facilities by September 2012 to implement by Spring 2013 (PBW/TWM, EMS O&amp;T 00994).</li> </ul>	<ul style="list-style-type: none"> <li>The IPM Administrative Directive Plan has been updated by TAMU Extension Service. Review is scheduled for completion in FY13-14, including review by affected city departments.</li> </ul>
<ul style="list-style-type: none"> <li>Reduce chlorine impacts to watershed.</li> </ul>	<ul style="list-style-type: none"> <li>Dechlorination of water flows of 600 gallons per minute (gpm) or greater from Dallas Water Utilities flushing activities through September 2012 (DWU, EMS O&amp;T 00899).</li> </ul>	<ul style="list-style-type: none"> <li>Distribution Division is de-chlorinating water flows of 600 gpm and greater. A procedure for de-chlorination was approved in October 2006. Implemented tracking system on flushing.</li> </ul>

<b>Objective: 2. Protecting surface waters (continued)</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Inspect for compliance and enforce existing regulations that protect the Trinity River watershed.</li> </ul>	<ul style="list-style-type: none"> <li>Inspection of City-owned or operated industrial facilities by SWM by October 2013 (PBW/TWM, EMS O&amp;T 01018).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, a total of 8 City-owned and operated facilities and 29 City-owned leased facilities were inspected. In FY12-13, a total of 11 City-owned and operated facilities and 29 City-owned leased facilities were inspected.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduce pollutant load at McCommas Bluff Landfill by 5% from 2007 baseline by September 2014 (SAN, EMS O&amp;T 00986).</li> </ul>	<ul style="list-style-type: none"> <li>As of 2013, McCommas Bluff landfill realized an overall annual decrease of 11.5% for Total Suspended Solids and a 9.5% decrease for Iron versus the baseline established in 2007.</li> </ul>
<b>Objective: 3. Education and outreach</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Continue the education and outreach efforts, and associated line cleanings, to reduce sanitary sewer overflows through the “Cease the Grease” program.</li> </ul>	<ul style="list-style-type: none"> <li>Continuation of the Cease the Grease program and completion of the cleaning of 36% of city’s sanitary sewer lines by October 2014 (DWU, Performancesoft Measure).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 1,792 miles or 44.6% of sanitary sewer lines were cleaned. In FY12-13, 1,549 miles or 38.6% of sanitary sewer lines were cleaned.</li> </ul>
<ul style="list-style-type: none"> <li>Provide education and outreach to residents and businesses.</li> </ul>	<ul style="list-style-type: none"> <li>Delivery of 150 outreach presentations or events on methods and techniques to reduce pollution by SWM through September 2013 (PBW/TWM, EMS O&amp;T 01019).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, SWM participated in 214 outreach programs. In FY12-13, SWM participated in 247 outreach programs.</li> </ul>
	<ul style="list-style-type: none"> <li>Delivery of 72 outreach presentations on reducing pollution by OEQ annually through September 2013 (OEQ, Performancesoft Measure).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 64 event requests were received and completed. In FY12-13, 89 event requests were received and completed on the importance of environmental stewardship and sustainability.</li> </ul>





## Materials Management

Waste happens. Yet, much of what is no longer valued can easily be reused, repurposed or recycled; individuals simply need to overcome the natural tendency to discard what is no longer needed and participate in the proper management of wastes, regardless of their source or nature, to reduce the impacts associated with waste.

At the same time, the creation of new items from virgin materials comes at a cost difficult to truly realize. What is more valuable: a mountain or the ore it contains? The lumber of a forest or the air it purifies? A lush, grassy lawn or drinking water? Consumers should also consider how much of the virgin material went into the product versus the amount that was trimmed away and disposed, and how much material was used just for packaging the items.

Since the dawn of the industrial revolution, the industrialized nations have evolved from a locality-based sustenance economy to a market economy that relies on the consumption choices of the individual to drive economies. As a result, people now “shop ‘til they drop” and fill their homes, garages and self-storage units with items that eventually end up in the trash or storage indefinitely. The supply of materials from which these goods are fashioned is finite. The space in which these goods are stored is finite. The disposal site to which these goods are relegated at the end of their lives is finite. This model is unsustainable. Fortunately, the market economy responds to individual choices. As consumers, individuals can drive

the market toward items that are more environmentally friendly to produce, transport, use and dispose.

The City is already working to reduce its impacts through EMS commitments, including the on-site recycling of concrete and asphalt during road and sidewalk repair and rehabilitation; and with regional and state entities like the Texas Product Stewardship Council, a division of the State of Texas Alliance for Recycling (STAR), to help raise awareness about end of life options for hard to recycle products and enhanced producer responsibility; staying informed on plastic bag litter reduction strategies and policies across the state and nation while encouraging the use of re-usable bags; and, investigating long-range waste management to reduce materials going to landfill. These strategies aim to complement other efforts in place in the City to help guide consumers and provide them with more options to reduce their environmental footprint.

Another material resource to consider is water. Water is vital for life. The City has multiple plans in place to explore, procure and develop future sources of water. As mentioned in the Water Quality section of this plan, the City uses surface waters for drinking water supplies. It is also the same source for the water applied to lawns, to flush wastes and as a resource in industrial applications.

The City is reducing the amount of water it uses at City facilities. As part of the effort to build green, new facilities have water saving measures in place like low-flow toilets, rainwater harvesting, and drip irrigation to reduce use. As part of the EMS, City departments commit to reducing overall water usage by 5% annually. City golf courses are now being watered with highly treated wastewater effluent to save billions of gallons of water annually.

Dallas Water Utilities has a dedicated team to provide outreach and education on the importance of water conservation privately and commercially to ensure everyone living in Dallas has access to clean, clear sustaining water.

As with all things, there are multiple considerations which influence decisions people make. Strengthening the environmentally preferred or green purchasing policy to cover all City functions and all City staff from City Council to third-party contractors will help reduce the City's footprint further.

While it is important to work toward the protection of the environment through materials management, it is also important to not allow *perfect* to become the enemy of *good*. In other words, if the technology or practices available today are better than what was available yesterday but not as good as what will be available tomorrow, one should not dismiss the improvement or depreciate its value and remain steadfastly locked in the past or married to old technology while waiting for the *next* "next best thing".



## Goal

***The City of Dallas is working to protect natural resources through better materials management.***

### Objective 1

Better materials management: increase "household" recycling, which aids in moving items away from the waste stream and back into the production cycle.

#### **Strategy:**

Expand household recycling participation rate from 62% to 68%.

Increase recycling rates at City facilities.

#### **Target:**

Increase household participation recycling rate from 70% to 74% (SAN, Strategic Plan, CHE 5).

Increase in tons recycled by 30% over FY09-10 totals by September 2013 (SAN, EMS O&T 01022).

Increase in the percentage of solid waste that is recycled by 5% per year at Love Field through 2014 (AVI, EMS O&T 00706).

Increase in the paper recycling by 3% annually at Detention Center by September 2014 (CDS-DMO, EMS O&T 01025).

Development of a client voluntary recycling program by October 2013 and incorporation of the program in client meetings with event coordinators and sales staff by March 2014 at KBHCC (CES, EMS O&T 01084).

Increase in the paper recycling by 2% over the FY11-12 baseline through September 2014 (DPD, EMS O&T 01045).

### Objective 2

Better materials management: encourage the proper management of process wastes to divert these materials from landfilling.

**Strategy:**

Implement strategies and programs to increase recycling of process wastes to help minimize the footprint associated with providing services.

**Target:**

Reduction in the purchase of nickel-metal hydride (NiMH) batteries by 10% annually at Radio Shop (CIS).

Increase in percentage of waste wire recycling at Radio Shop by 10% annually over FY10-11 baseline of 1,082 pounds by October 2013 (CIS, EMS O&T 01015).

Increase scrap metal recycling by 10% of FY11-12 baseline annually by September 30, 2017 (DWU, EMS O&T 01027).

Increase in the amount of beneficial re-use items diverted from the landfill by 3% over FY11-12 baseline by September 2012 (SAN, EMS O&T 01057).

**Objective 3**

Better materials management: reduce the impacts of hazardous materials on the ecosystem through collection events.

**Strategy:**

Continued participation in the Dallas County inter-local agreement for household hazardous waste collection, and the hosting of hazardous waste roundups, will provide options for the disposal of hazardous materials.

**Target:**

Completion of two household hazardous waste collection events annually (SAN, Strategic Plan, CHE 5).

**Objective 4**

Better materials management: saving water through conservation programs and infrastructure inspections.

**Strategy:**

As part of the EMS, City facilities commit to reducing water use 5% annually. Expand reuse and reduction strategies at City facilities.

Reduce average consumption.

Inspections of water mains for leaks will reduce the amount of water loss in the potable system.

Increase the amount of highly treated wastewater effluent available for reuse.

**Target:**

Collection and reuse of approximately 142 million gallons of groundwater annually at Love Field by August 2014 (AVI, EMS O&T 00702).

Completion of 45 audits and issuance of up to \$2 million in incentives annually for Dallas Water Utilities customers under the industrial, commercial and institutional incentive program (DWU, Strategic Plan, CHE 5).

Reduction in the average gallons per capita per day (gpcd) demand by 1.5% over FY10-11 by September 2015 (DWU, EMS O&T 01028).

Inspection of 2,500 miles of water main line annually for leaks (DWU, EMS O&T 00537).

Increase in amount of highly treated wastewater effluent for reuse 5 million gallons per day by September 2014 (DWU, EMS O&T 01006).

**Objective 5**

Better materials management: greener purchasing reduces environmental footprints.

**Strategy:**

Increasing the purchase of products with a smaller environmental footprint helps the City reduce its environmental footprint. Buy green to minimize resource impacts.

**Target:**

Increase in the number of less toxic chemicals available through the Product Substitution Program by 4% by September 2014 (EBS, EMS O&T 01031).

Develop and implement a fuel conservation program by September 2014 (EBS, EMS O&T 01052).



## Reduce, Reuse, Recycle. Rethink.

While it is great to reduce what is needed to save resources; reuse items for other uses; and, recycle the items that are no longer needed or wanted, consumers need to rethink their choices and ask themselves if a product is needed or merely wanted, and, what the footprint was to create the item they need.

Remember, a product that is green to use may not have been green to make or transport. Keep that in mind when shopping to minimize the impact all around.

*Sound idea: buy local.*

**MATERIALS MANAGEMENT SUMMARY OF OBJECTIVES**

**MATERIALS MANAGEMENT GOAL:  
BETTER MATERIALS MANAGEMENT**

**Objective: I. Increase “household” recycling.**

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Keep the “Too Good To Throw Away” message fresh and expand household recycling participation rate from 62% to 68%.</li> </ul>	<ul style="list-style-type: none"> <li>Increase the residential recycling participation rate from 70% to 74% (SAN, Strategic Plan, CHE 5).</li> </ul>	<ul style="list-style-type: none"> <li>Residential recycling rate is currently at 73%.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the tons recycled by 30% over FY09-10 totals by September 2013 (SAN, EMS O&amp;T 01022).</li> </ul>	<ul style="list-style-type: none"> <li>FY 09-10 total: 45,152; goal: 58,698.60 tons. In FY10-11, the total tonnage recycled: 49,937. In FY11-12, the total tonnage recycled: 51,893. In FY12-13, the total tonnage recycled: 53,740.</li> </ul>
<ul style="list-style-type: none"> <li>Increase recycling rates at City facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the percentage of solid waste that is recycled by 5% per year at Love Field through 2014 (AVI, EMS O&amp;T 00706).</li> </ul>	<ul style="list-style-type: none"> <li>With new terminal, all concessionaires now use the recycle bins. Progress continues.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the paper recycling by 3% annually at Detention Center by September 2014 (CDS-DMO, EMS O&amp;T 01025).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, DMO collected and recycled 2,195 pounds of paper. In FY12-13, DMO collected and recycled 2,901 pounds of paper.</li> </ul>
	<ul style="list-style-type: none"> <li>Develop a client voluntary recycling program by October 2013 and incorporate the program in client meetings with event coordinators and sales staff by March 2014 to increase awareness of recycling at KBHCC (CES, EMS O&amp;T 01084).</li> </ul>	<ul style="list-style-type: none"> <li>The KBHCC is tracking Recycling Bag Requests. The “Recycle Here” flyer has been developed and included in collateral materials to clients. Six groups, including Mary Kay, have participated in the “Recycle Here” program.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the paper recycling throughout DPD by 2% over the baseline year FY11-12 through September 2014 (DPD, EMS O&amp;T 01045).</li> </ul>	<ul style="list-style-type: none"> <li>DPD recycling has increased due to increased employee involvement. DPD established a baseline of 86,205 pounds. In FY11-12, DPD recycled 120,210 pounds. In FY12-13, DPD recycled 172,870 pounds.</li> </ul>

<b>Objective: 2. Process waste management.</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Implement process waste minimization programs.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in the purchase of nickel-metal hydride (NiMH) batteries by 10% annually at Radio Shop (CIS).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 520 batteries ordered. In FY12-13, 380 batteries ordered. Reduction of 26.9%.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in percentage of waste wire recycling at Radio Shop by 10% annually over FY10-11 baseline of 1,082 pounds by October 2013 (CIS, EMS O&amp;T 01015).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 2,360 pounds of wire diverted from normal waste stream and sent for recycling. In FY12-13, 1,425 pounds of wire diverted. New recycling program being instituted.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase scrap metal recycling by 10% of FY11-12 baseline annually by September 30, 2017 (DWU, EMS O&amp;T 01027).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, DWU recycled 951,000 pounds of scrap metal. In FY12-13, 926,920 pounds were recycled.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the amount of beneficial re-use items diverted from the landfill by 3% over FY08-09 baseline by September 2012 (SAN, EMS O&amp;T 00989).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, the following were reused: asphalt, 6,987 tons; concrete, 9,097 tons; glass 3,496 tons; and, sawdust 983 tons. In FY12-13, the following were reused: asphalt, 19,362 tons; concrete, 10,831 tons; glass, 2,633 tons; and, sawdust, 2,118 tons.</li> </ul>
<b>Objective: 3. Hazardous waste management.</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Reduce hazardous waste impacts to the environment.</li> </ul>	<ul style="list-style-type: none"> <li>Completion of two household hazardous waste collection events annually (SAN, Strategic Plan, CHE 5).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, COD participated in 5 collection events. In FY12-13, COD participated in 3 collection events and 2 batteries, oils, paints, &amp; antifreeze (BOPA) collections.</li> </ul>
<b>Objective: 4. Conserve water.</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Expand reuse and reduction strategies at City facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Collection and reuse of approximately 142 million gallons annually of groundwater at Love Field by August 2014 (AVI, EMS O&amp;T 00702).</li> </ul>	<ul style="list-style-type: none"> <li>Under drought conditions, groundwater flow has been reduced. Collection has been halted. AVI continues to explore options.</li> </ul>

<b>Objective: 4. Conserve water. (continued)</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Reduce average consumption.</li> </ul>	<ul style="list-style-type: none"> <li>Completion of 45 audits and issuance of up to \$2 million in incentives annually for Dallas Water Utilities customers under the industrial, commercial and institutional incentive program (DWU, Strategic Plan, CHE 5).</li> </ul>	<ul style="list-style-type: none"> <li>February 2012 - Five year contract awarded to launch audit and rebate program. June 2012 - Water Conservation Tips Box added to water bill format and displayed on water bills. 57 audits have been conducted. DWU projects first rebates will be issued in spring 2014.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction in the average gallons per capita per day (gpcd) demand by 1.5% over FY10-11 by September 2015 (DWU, EMS O&amp;T 01028).</li> </ul>	<ul style="list-style-type: none"> <li>5 year average is 199 gpcd. FY12-13: 198 gpcd. Conservation Outreach totaled 450,797,006 impressions.</li> </ul>
<ul style="list-style-type: none"> <li>Reduce water waste through inspection of mains.</li> </ul>	<ul style="list-style-type: none"> <li>Inspection of 2,500 miles of water main line annually for leaks (DWU, EMS O&amp;T 00537).</li> </ul>	<ul style="list-style-type: none"> <li>In FY11-12, 3,792 miles of main inspected. In FY12-13, 2,517 miles of main inspected. Savings projected at 17.7 million gallons of water.</li> </ul>
<ul style="list-style-type: none"> <li>Use highly treated effluent for reuse.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the amount of highly treated wastewater effluent 5 million gallons per day by September 2014 (DWU, EMS O&amp;T 01006).</li> </ul>	<ul style="list-style-type: none"> <li>In FY10-11, 84,784,700 gallons reused. In FY11-12, 60,219,300 gallons - MGD=0.164984. In FY12-13, 55,562,000 gallons - MGD=0.152225.</li> </ul>
<b>Objective: 5. Green purchasing.</b>		
Strategy	Target	Results
<ul style="list-style-type: none"> <li>Buy green to minimize resource impacts.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the number of less toxic chemicals available through the Product Substitution Program by 4% by September 2014 (EBS, EMS O&amp;T 01031).</li> </ul>	<ul style="list-style-type: none"> <li>The Green Procurement Approved List has increased to 368 items approved for purchase. This is a 12.88% increase over the FY09-10 baseline.</li> </ul>
	<ul style="list-style-type: none"> <li>Develop and implement a fuel conservation program by September 2014 (EBS, EMS O&amp;T 01052).</li> </ul>	<ul style="list-style-type: none"> <li>FY09-10 baseline: 7,126,723 gallons. In FY11-12, 6,630,024 gallons used – 6.97% reduction. In FY12-13, 6,905,499 gallons used – 3.11% reduction. The FY12-13 fleet and equipment purchase includes replacing 53 vehicles with alternative fuel units which began arriving in February 2014.</li> </ul>



## Energy

Dallas has long been associated with energy, having once been an oil-boom town, and now stands ready to explore and embrace new energy technologies to decrease dependence on carbon-based fuels.

As anyone living in North Texas can attest, Dallas is blessed with an abundance of sunlight. The advancement and incorporation of solar energy production into the infrastructure and on buildings in Dallas, is logical, progressive and frees up financial resources for use on other infrastructure and social needs. Additionally, while the region does not fall into the ideal wind-generating zone, Texas remains firmly in Forbes' Top Five of America's Best Places For Wind Power Alternative Energy<sup>4</sup>. Large scale applications may currently be unattainable in Dallas, but small scale, individual unit applications are being realized and placed throughout the city.

But power generation is only one component of freeing Dallas and all of North Texas from the shackles of carbon-based energy. The region continues to grow more populated; more people means more demand and the associated cost fluctuations and resource competition. To shield consumers from the volatility of the energy markets, conservation measures reduce what is used from conventional sources until such a time when local solar and wind based

production exceeds consumption. With the sheer amount of energy that could be generated through solar and wind sources, the residents of Dallas stand to benefit from cheap, local energy over the coming years as Dallas becomes an energy leader once again through the placement of alternative energy sources. As an added benefit, any separation from carbon-based fuels reduces grid load and the associated environmental footprint by reducing the amount of air polluting emissions released from conventional coal or gas powered electric plants.

Dallas is on the leading edge of cities in America buying alternative forms of energy. In fact, for every year since 2008, the City has remained in the top ten among municipalities on the EPA's Top 20 Local Government Green Power Partnership partners. The commitment, to purchase 40% of the City's annual energy needs from renewable energy sources, keeps Dallas eligible for federal and state dollars offered to



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<sup>4</sup> Green Power **America's Best Places For Alternative Energy**  
[http://www.forbes.com/2008/07/09/energy-solar-green-biz-energy-cx\\_bp\\_0709atlas.html](http://www.forbes.com/2008/07/09/energy-solar-green-biz-energy-cx_bp_0709atlas.html)



cities moving toward energy independence and a more sustainable way of life.

Under the leadership of The United States Conference of Mayors, the Energy Efficiency and Conservation Block Grant (EECBG) Program was conceived, making it possible for the first time in U.S. history, for cities, counties and states to receive grants specifically to fund energy-efficiency projects.\*

The City of Dallas received \$19.1M in ARRA funds for energy efficiency and energy conservation measures which included \$11.7M in EECBG funds to help minimize its environmental footprint.\*\*

\* <http://www.usmayors.org/climateprotection/revise/>

\*\* Dallas Green Building & Energy Efficiency Report 2012

Additionally, the City continues to seek out opportunities to generate energy on-site at facilities to further reduce the amount of energy purchased from the grid. The City is currently generating energy from solar, landfill gas, and cogeneration. Photo-voltaic solar installations generate over 10kW of electricity for use on-site at City facilities. McCommas Bluff landfill captures over 900 million cubic feet of natural gas from natural breakdown of organic materials. And, the Southside Wastewater Treatment Plant Cogeneration operation is generating 4.2MW of energy with plans to expand that to 6.0MW by 2015 through DWU's long range plans.

Complementing these purchase reduction strategies, EMS commitments have yielded reductions in electricity consumption year after year through conservation measures.

Of course, there are days when the sun does not shine and times when the wind does not blow in Dallas. To address those contingencies, the development of high-efficiency storage and transmission methods of electrical energy by partner organizations, including ONCOR and ERCOT, is vital to keep consumers tied to other sources for those times.

The grid in Texas is aging and near capacity; consumers are rapidly approaching the choice to either pay for more power plants (and deal with their undesirable side effects which include the financial burden of construction and the environmental impact of operation) or reduce load and grid dependence through new solar and wind installations and conservation measures.

### Goal

***The City of Dallas is working to reduce the consumption of energy from non-renewable sources and expand the availability of renewable energy.***

### Objective 1

Reduce non-renewable energy use, expand availability of renewable; purchasing alternative energy removes the environmental impacts to air associated with energy production and safeguards against market volatility.

#### Strategy:

The City of Dallas will continue in its negotiated energy contract to buy renewable energy credits that will allow for further investment in alternative energy.

At the end of this contract term, the City will continue to purchase renewable energy.

#### Target:

Maintain 40% renewable energy purchase (PBW, Strategic Plan, CHE 5).

## Objective 2

Reduce non-renewable energy use, expand availability of renewable: reduce consumption to minimize the impacts from traditional energy production methods.

### Strategy:

Maintain conservation efforts internally as part of the EMS to continue reducing City demand on the grid by 5% annually.

In addition, the City will continue to pursue performance contracting to fund refits to existing building stock and minimize demand to reduce the amount of energy needed to power facilities.

### Target:

Reduction in energy use throughout Dallas Police Department by 2% through September 2013 (DPD, EMS O&T 01044).

Reduction in average electric energy use per million gallons treated at wastewater treatment plants by 15% from FY08-09 baseline by December 2013 (DWU, EMS O&T 01029).

Reduce monthly electrical demand and peak hour charges of ERCOT load during 4-CP (4-Coincident Peaks)<sup>5</sup> months (June-September) by October 2014 (DWU, EMS O&T 01068).

## Objective 3

Reduce non-renewable energy use, expand availability of renewable: explore and pursue the installation of alternative energy power sources at City facilities on a case by case basis.

### Strategy:

Conduct feasibility research and develop a plan to generate energy at City facilities.

Explore the construction of solar installations.

Replace grid-dependent school zone flashers with solar powered flashers.

### Target:

Development of an on-site energy production plan by October 2014 (PBW, Strategic Plan, CHE 4).

Determination of the feasibility for solar installations by October 2012 (PBW, Strategic Plan, CHE 4).

Replacement of 75 alternating current powered school zone flashers to solar powered flashers by December 2012 (STS, EMS O&T 01049).

<sup>5</sup> Average 4-CP is defined as “the average Settlement Interval coincidental MW peak occurring during the months of June, July, August, and September.” [www.ercot.com](http://www.ercot.com)



## LOVE|EVOLUTION. Saving energy.

Love Field is leading the **EVOLUTION** of the Airport Experience.

Here's how.

- Changed 25 outside wall pack lights to LED on Terminal I saving around \$447 annually.
- Changed 12 outside lights to LED on chiller building saving around \$47 annually.
- Changed 120 inside lights to LED in triturator building saving around \$403 annually.
- Changed 6 outside lights to LED on triturator building saving around \$168 annually.
- All taxiway lights changed to LED. FAA has not approved LED runway lights.
- Pursuing plans to retrofit 2,500 parking garage lights to LED.
- Pursuing plans to retrofit 317 entrance lights along Cedar Springs Road to LED.

# Mind blowing!

Wind energy can provide more than one-quarter of the Texas grid's power!

source: ERCOT Grid Operations Wind Integration Report: 12/03/11: 27.97% at 04:39; [www.ercot.com](http://www.ercot.com)

## ENERGY SUMMARY OF OBJECTIVES

## ENERGY GOAL:

## REDUCE NON-RENEWABLE ENERGY USE, EXPAND AVAILABILITY OF RENEWABLE

## Objective: 1. Green energy purchase.

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Continue purchasing renewable energy.</li> </ul>	<ul style="list-style-type: none"> <li>Purchase of at least 40% of the City's energy from renewable energy sources (PBW, Strategic Plan, CHE 5).</li> </ul>	<ul style="list-style-type: none"> <li>City has purchased 40% renewable energy for Renewable Energy Program (REP). Continuation of this item will be placed on the Council agenda for authorization 2<sup>nd</sup> quarter FY13-14.</li> </ul>

## Objective: 2. Energy Conservation

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Maintain EMS conservation efforts to achieve a 5% reduction in City usage annually.</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in energy use throughout Dallas Police Department by 2% through September 2013 (DPD, EMS O&amp;T 01044).</li> </ul>	<ul style="list-style-type: none"> <li>FY09-10, 17,957,660 kWh used. FY10-11, 16,872,937 kWh, decrease 6.04%. FY11-12, 16,259,800 kWh, decrease 3.63%. FY12-13, 15,872,179 kWh, decrease 2.38%.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduction in average electric energy use per million gallons treated at wastewater treatment plants from FY08-09 baseline by December 2013 (DWU, EMS O&amp;T 01029).</li> </ul>	<ul style="list-style-type: none"> <li>FY12-13: average electric use 21,004 kWD.</li> </ul>
	<ul style="list-style-type: none"> <li>Reduce monthly electrical demand and peak hour charges of ERCOT load during 4-CP (4-Coincident Peaks) months (June-September) by October 2014 (DWU, EMS O&amp;T 01068).</li> </ul>	<ul style="list-style-type: none"> <li>2011 baseline is 30,126 KWD. During 2012 season, 20,712 KWD used. During 2013 season, 22,105 KWD used. Due to new pump stations coming online, baseline will be recalculated.</li> </ul>

## Objective: 3. Produce energy on-site.

Strategy	Target	Results
<ul style="list-style-type: none"> <li>Conduct feasibility research and develop a plan to generate energy at City facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Development of an on-site energy production plan by October 2014 (PBW, Strategic Plan, CHE 4).</li> </ul>	<ul style="list-style-type: none"> <li>Citywide Energy Management Plan on target for October 2014. Pepco Energy Services received contract February 2014. Projects to be on-line by December 2014.</li> </ul>
<ul style="list-style-type: none"> <li>Explore the construction of solar installations.</li> </ul>	<ul style="list-style-type: none"> <li>Determination of the feasibility for solar installations by October 2012 (PBW, Strategic Plan, CHE 4).</li> </ul>	<ul style="list-style-type: none"> <li>Three PV projects were authorized on Dec 11, 2013 Agenda. PBW initiated solar procurement at SSWWTP and continues to develop more projects where they are economically feasible.</li> </ul>
<ul style="list-style-type: none"> <li>Replace grid-dependent school zone flashers with solar powered flashers.</li> </ul>	<ul style="list-style-type: none"> <li>Replacement of 75 alternating current powered school zone flashers to solar powered flashers by December 2012 (STS, EMS O&amp;T 01049).</li> </ul>	<ul style="list-style-type: none"> <li>As of December 31, 2012, 75 alternating current powered school zone flashers were replaced with solar powered flashers.</li> </ul>



## Conclusion

Sustainability is an important priority in the City's plans for the present and the future. Dallas has acted to support sustainability for some time. These actions are condensed in this sustainability plan into five broad goals:

- Improve air quality;
- Promote smart growth and development;
- Improve water quality;
- Better materials management; and,
- Reduce non-renewable energy use.

As support for these goals, the City has in place eighteen objectives built upon thirty-six strategies for achievement. Finally, the strategies are actualized as the City progresses toward achieving fifty-three specific performance targets. Successful completion of the tasks in this first sustainability plan is reflective of the City Council's determination to grow the City while preserving the environment.

Over time, this plan will evolve and it is upon the achievements reached through the plan that future efforts will be based. In the immediate future, the City will need to refine some performance targets by determining not only what will be done but also by when and to what extent. Over the life of the plan, the Office of Environmental Quality will provide annual updates and revisions to capture, track and report progress.

This plan is clearly a starting point, a means and not an end. There will be new inspiration and action incorporated into this plan as Dallas grows and learns. But, the journey has begun...

# Appendices

## Green Your Life: City of Dallas Programs

The City of Dallas supports multiple programs to help residents and businesses protect the environment and save money.

More information on these programs can be found online or through [GreenDallas.net](http://GreenDallas.net).

### AirCheck Texas Drive a Clean Machine Program

A state funded program operated by the North Central Texas Council of Governments for persons living in the nine-county DFW region. The City of Dallas supports this program by advertising and helping to answer questions about application requirements. For more information, visit [www.DriveACleanMachine.org](http://www.DriveACleanMachine.org) or call 214-670-6971.

### Cease the Grease

Did you know that pouring fats, oils, or grease (FOG) down your kitchen sink drain can clog your pipes, or even the sanitary sewer lines? Prevent this by storing fats, oils, or grease in a container, then dropping it off at one of the City's waste transfer centers or The Green Spot. This not only keeps your drains clear, but the City of Dallas can convert FOG's to biodiesel. Visit [www.CeaseTheGrease.info](http://www.CeaseTheGrease.info) for more information.

### Hospitality Industry Program

Over the next several years, City of Dallas Water Utilities (DWU) will partner with Dallas hotels/motels and restaurants to encourage them to continue, and in some cases, expand their efforts to conserve water. The program will be voluntary and will not be regulated by the City of Dallas. The initiative is supported by the Hotel Association of North Texas, the Greater Dallas Restaurant Association, Downtown Dallas Inc., the Dallas Convention and Visitors Bureau, Tarrant Regional Water District and North Texas Municipal Water District. For more information on the Hospitality Industry Program, please visit [www.SaveDallasWater.com](http://www.SaveDallasWater.com) or call Yvonne Dupré at 214-671-9276.

### Irrigation Check-ups

Dallas Water Utilities conducts free automatic irrigation system check-ups to make sure that your system is operating properly and that watering schedules are appropriate for your yard's needs. To sign up for an appointment or get more information, go to [www.SaveDallasWater.com](http://www.SaveDallasWater.com).

### Minor Plumbing Repair Program

This program offers assistance with minor plumbing problems and fixtures that may cause water waste and higher water bills. [Click here to apply](#) or visit [www.SaveDallasWater.com](http://www.SaveDallasWater.com) for more information.

### New Throne for Your Home Toilet Voucher

Dallas Water Utilities offers up to \$90 per toilet to replace existing high-flow toilets (generally those installed before 1992) with low-flow or high-efficiency toilet models. A newer model could save more than 60 percent of water per flush, and save you money. For more information visit [www.SaveDallasWater.com](http://www.SaveDallasWater.com). To apply for a rebate, [click here](#) (purchase already made). To apply for a voucher, [click here](#) (for future purchase).

### Texas Emissions Reduction Plan (TERP) Grant Program

The State of Texas is providing financial assistance to those who own/operate heavy-duty diesel vehicles or equipment, i.e. semi-trucks, construction equipment, in order to improve air quality. Funding opportunities are offered once or twice each year. The City of Dallas is available to assist you through the application process. For more information about TERP visit [www.TerpGrants.org](http://www.TerpGrants.org) or call 214-670-6971.

## Green Your Life: Tips & Tools

There are many ways you can reduce your environmental footprint at home or work. When you do, you're not only saving natural resources by using less, you're also reducing emissions that impact our air quality and our water quality.

Below, we list some of the more popular suggestions. For a more in depth look, visit [GreenDallas.net](http://GreenDallas.net) or email us at [GreenDallas@dallascityhall.com](mailto:GreenDallas@dallascityhall.com).

### Save Energy

- **Unplug it!** Appliances and equipment that are plugged in are still sucking power even though they're off (think cell phone chargers, toasters, lamps). Turn off power strips when not in use to reduce "Vampire Power".
- **Install a programmable thermostat!** In the summer, keep your thermostat at least 78 degrees while you are at home and at least 85 degrees when gone; in the winter, try 68 when you're home and 60 when gone. Watch your energy bills drop!
- **Replace your air filter!** Just like you, the air conditioner needs to be able to move air to work best. Change your filter at least every 3 months because a blocked filter will make your system run longer causing higher energy costs and it could overwork and damage your system.
- **Seal it up!** Stop leaks and avoid intruding air. Replace weather stripping. Seal around window and door jams. Add extra insulation in attics and in walls.
- **Turn your hot water heater down!** Adjust your heater to 110° in summer and 115° in winter. The water will still be hot but your energy bill will be much lower. And when you run the water to get it warm, capture that cool water and use it on plants outdoors in summer or save it in the washing machine for the cool water wash year round.

### Save Water

- **Turn it off!** Turn off water when brushing teeth.
- **Take shorter showers!** You'll save water and the energy used to heat it. Extra payoff: By taking shorter showers, you'll prevent 350 pounds of CO<sub>2</sub> and keep about \$100 in your pocket each year.
- **Install a low flow shower head!** There are many types of designs that put out less than 3 gallons per minute. They still have great pressure and conserve gallons of water from each shower.
- **Install an efficient toilet!** New toilets use around 1.6 gallons per flush – older models can use up to 6 gallons! That's a lot of water. [Find out if you qualify for a voucher](#) from the City of Dallas that helps homeowners and apartment managers/owners purchase water-saving low-flow toilets.
- **Wait until it's full!** Run the washing machine and dishwasher only when they're full. Depending on the age and performance level of your dishwasher, you may need to pre-rinse to remove food items that can be stuck on or are not filtered out prior to the rinse cycle to keep from having to rewash the same dish twice which costs more than a quick rinse before loading. If your dishwasher is a high performance model, the extra pay off by skipping pre-rinse is that you can reduce carbon dioxide from being released and save money each year.

### Clear the Air

- **Tune-ups and tires!** Keep your vehicle in tune, keep it inspected, and check the air pressure in your tires. An under-inflated tire will cause your vehicle to get poor gas mileage and wear down your tires faster. The payoff: you'll increase the life of your vehicle, get better gas mileage and reduce emissions by as much as half at the same time.
- **Report smoking vehicles!** Report smoking vehicles. Dial #SMOKE from your cell phone to anonymously report smoking vehicles. Call 1-877-NTX-IDLE to report vehicles idling for more than 5 minutes.
- **Share!** Carpool or use public transportation. Fewer vehicles on the roads mean fewer emissions. You'll save a few bucks each day in gasoline and you will not have to search for a parking space. Remember, you're not stuck in traffic, you *are* traffic.
- **Don't top off!** Topping off the tank releases gas vapors in the air and cancels the effectiveness of the pump's anti-pollution devices.
- **Wait 'til the P.M.!** Do not fuel your vehicle or mow your lawn during morning hours. Emissions released in the morning hours bake in the sun and cause ozone.

### Green Your Home

- **RECYCLE!** Recycle your cardboard, metal cans, plastics, and paper products. By recycling you help reduce the amount of waste going into the landfill.
- **Change a light bulb!** Sure...you've heard this one before...and we know it's tempting to buy the four-pack of bulbs for \$2 but compact fluorescent bulbs use two-thirds less energy and last 10 times longer than standard incandescent bulbs. So, replace the 5 most used light in your house with CFLs and save yourself about \$60 per year on electricity. Plus, the bulbs burn cooler so you will not have to overcome their heat in the summer. **The payoff:** If Americans



replaced just one bulb in their home, it would save enough energy to light 2.5 million homes in one year and prevent an amount of greenhouse gases equivalent to the emissions of 800,000 cars from entering the atmosphere.

- **Buy energy-efficient appliances!** Let's say your old fridge gives out. There is a bright side! Replace it with an [Energy Star™](#) appliance and you'll use at least 15 percent less energy and water in your home. It might be a little pricier to buy up front, but you'll be saving money on your utility bills each month. And you'll be helping the environment. **The payoff:** If we all installed one Energy Star™ appliance, it would be like planting 1.7 million acres of new trees.
- **Reuse plastic bags!** Instead of contributing to the 100 billion plastic sacks a year that are thrown away, try to get a second, third, or even tenth use out of them. Tote your lunch to work or bring them with you and carry a second set of groceries home. Better yet, next time you shop, try a reusable bag and recycle those plastic bags at the grocer. At the very least, use them as garbage bags or to pick up pet waste. **The payoff:** You're reducing pollution. The amount of oil it would take to make just 14 plastic bags could run your car for one mile.
- **Cancel unsolicited mail!** Many of us have a steady flow of unwanted and unsolicited junk mail, catalogs, and magazines. Call 888-5-OPTOUT to get off the list. Also, make sure to recycle what you do receive. **The payoff:** Less energy is spent on creating paper (which kills trees we need) and less trash is created when we can reuse products. The immediate return? Less clutter at home! Long term? A cleaner planet!

### Green Your Lawn

- **Compost!** Green your garden with a compost pile. You'll save space in the landfill and in the process you'll create free, healthy fertilizer for your garden. A good compost pile consists of a balance of carbon and nitrogen materials. Carbon materials include leaves, shredded cardboard, shredded newspaper, straw, pine needles. Nitrogen materials include fresh grass clippings, kitchen scraps, manure (no cat or dog feces), coffee grounds and tea leaves. Check out [www.mastercomposter.com](http://www.mastercomposter.com) for more compost ingredients and more.
- **Leave it there!** Instead of bagging your lawn clippings leave them on the lawn. The clippings will naturally fertilize your yard.
- **Go Native Texan!** Use native plants for landscaping. They require less water and are more tolerant to our climate.
- **Plant a tree!** The shade it provides can lower your cooling bills if it shades your roof or walls. A single tree can absorb one ton (2,000 pounds) of carbon dioxide over its lifetime. One acre of tree cover can compensate for automobile fuel use equivalent to driving a car between 7,200 and 8,700 miles.
- **Water wise!** Only water your lawn when it needs it which is about 1 inch every 7 to 10 days. Watch for signs of stress between waterings. Bermuda will turn a bluish color or leave imprints when you step on it. St. Augustine blades will begin to roll. Call 214-670-3155 to get a free sprinkler system inspection and find out how some Dallas residents have already saved over 29,000 gallons of water a week!

### Know Your Impact

- Find out your "carbon footprint" aka your environmental impact on the planet. We all contribute to climate change when we do things like heat and cool our homes, drive our cars, and fly on airplanes.
- Find out how to begin decreasing the energy you use each day, and offset the rest of your carbon-emitting energy use through this easy-to-use carbon calculator and BeGreen Carbon Offsets. Once you do, tell the planet (or at least a few friends).
- Calculate your carbon footprint:  
[EPA Personal Emissions Calculator](#)  
[Be Green Carbon Calculator](#)

## **Selected City Council Ordinances, Resolutions and Authorizations**

Tree Resolution, 90-1496

Ozone Action Plan, Council Resolution 94-2201

Tree Preservation Ordinance, Council Resolution 94-1988, Ordinance 22053

Conservation Easement Ordinance, Ordinance 25155, 24843

Water Conservation Ordinance, Council Resolution 01-2840, Ordinance 24745

Green Building Program, Council Resolution 03-0367

Office of Environmental Quality Ordinance, Council Resolution 04-0810, Ordinance 25517

Environmentally-Preferred Procurement Green Purchasing, Council Resolution 04-1722

EMS Policy, Council Resolution 05-0362

Clean Fleet Vehicle Policy 01/25/06, Resolution 06-0323

“Too Good to Throw Away”, 10/11/2006 Consent Agenda

TCEQ Sanitary Sewer Outreach Agreement, Council Resolution 07-0279

Integrated Stormwater Management, Council Resolution 08-0421

Green Building Ordinance, Phase I, Council Resolution 08-1070, Ordinance 27131

Green Building Ordinance, Phase II, Council Resolution 12-2428, Ordinance 28813

Great Trinity Forest Management Plan, Council Resolution 08-2779

Creation of Trinity Watershed Management, Council Resolution 09-2383, Ordinance 27697

Compressed Natural Gas Taxicab Ordinance, Council Resolution 10-0729, Ordinance 27831

Community Gardens Ordinance, Council Resolution 11-0434, Ordinance 28125

Green Cement Purchasing Policy, Council Resolution 11-0657

Idling Ordinance, Council Resolution 11-2976, Ordinance 28456

Neighborhood Farmers Markets, Council Resolution 10-2781, Ordinance 28046

## **City of Dallas Policies**

AD 2-49, “Environmental Management Systems”

AD 3-73, “Environmental Management Program”

AD 6-2, “Fleet and Equipment Utilization”

Ozone Action Plan

AD 6-15, “Inspection of City Vehicles”

## City Environmental Policy



### Environmental Policy

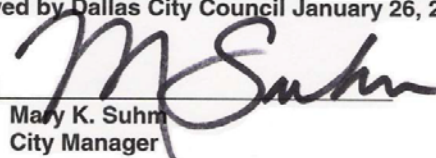
The City of Dallas is committed to a clean, safe, and healthy environment. As such, we will exercise environmental stewardship in our dealings with employees, other governments, citizens, City contractors, business and others in the community for our world today as well as for future generations. Caring for the environment is one of our core values, and this is demonstrated by ensuring our activities are in harmony with the natural world around us.

This commitment is embodied by the following actions:

- ❖ Implementation of programs and procedures with an intent to meet or exceed all applicable environmental laws and regulations.
- ❖ Continual improvement of our environmental performance through proactive environmental management and self-assessments and/or third-party assessments.
- ❖ Prevention of pollution at its source through implementation of best management practices and resource conservation measures to reuse, reclaim, and recycle materials we generate.
- ❖ Utilization of Environmental Management Systems, as appropriate for our operations, to provide a framework for systematically reviewing and reducing our environmental footprint.
- ❖ Employees will abide by all environmental regulations and demonstrate environmental compliance in their daily work practices.
- ❖ Educate City employees on Dallas' environmental policies and motivate and encourage employees to practice environmental stewardship by raising awareness and sensitivity to environmental issues through City policies, regulations, training, and interactive dialogue.
- ❖ Outreach to the citizens and businesses of our community by communication of this Policy and education on the importance of environmental stewardship for clean air and water and sustainable development for the City of Dallas.

Approved by Dallas City Council January 26, 2005.

Signed

  
 Mary K. Suhm  
 City Manager

# Memorandum



CITY OF DALLAS

DATE March 21, 2014

Honorable Members of the Quality of Life & Environment Committee:  
TO Dwaine R. Caraway (Chair), Sandy Greyson (Vice Chair), Adam Medrano,  
Rick Callahan, Carolyn R. Davis, Lee M. Kleinman

SUBJECT **Earth Day – April 22, 2014**

The City of Dallas environmental outreach teams are scheduled to be involved in the following 2014 Earth Day activities in Dallas:

- Mar 29 **Earth Hour** – This 1-hr event, where certain City lights are turned off, seeks to raise awareness about energy use and its relationship to climate change. All City Departments are asked to remind their staff to turn off lights before leaving their office space.
- Apr 4 **Singing Hills Earth Day Celebration** – This second annual Earth Day celebration seeks to educate youth and the community about the importance of protecting and sustaining our community's natural resources. City staff will exhibit and present information to attendees ranging from grade school to adult age groups. Staff from the Office of Environmental Quality, Cease the Grease, Waste Diversion, Streets, Water Conservation, and Parks will attend.
- Apr 9 **Brookhaven College Earth Day** – This annual event seeks to inform and educate on the need to minimize environmental impacts every day. City staff will exhibit and present environmental information to college students and faculty. Staff from the Office of Environmental Quality, Cease the Grease, Waste Diversion, and Streets will attend.
- Apr 12 **Oak Cliff Earth Day** – This annual event, held at Lake Cliff Park, celebrates the planet at the local level to raise awareness. City staff will exhibit and present environmental information to Dallas residents and visitors at Lake Cliff Park. Staff from the Office of Environmental Quality, Stormwater, Parks, Waste Diversion, Water Conservation, and Cease the Grease will attend.
- Apr 18 **Earth Day at the U.S. Department of Labor** – This annual event takes place in Downtown Dallas to help educate workers and visitors on environmental issues and what they can do to protect the environment. City staff will exhibit and present environmental information to staff and visitors of the A. Maceo Smith Federal Building in downtown. Staff from the Office of Environmental Quality, Cease the Grease, and Waste Diversion will attend.
- Apr 22 **GEICO Green Fair** – This event seeks to promote knowledge and skills toward increasing recycling and lowering carbon footprints. City staff will

exhibit and present environmental information to employees. The Office of Environmental Quality will attend.

- Apr 22 **Earth Day – RPM** – This will be the first time the City has been asked to exhibit and present environmental information to employees at Raytheon Precision Manufacturing. Staff from the Office of Environmental Quality, Cease the Grease, and Waste Diversion will attend.
- Apr 24 **KPMG Living Green Week** – This event celebrates Earth Day all week and seeks to share environmental information about living green. City staff will speak before an audience on the benefits of green living. Staff from the Office of Environmental Quality will present.
- Apr 25 **URS Lunch and Learn** – This event promotes environmental stewardship and seeks to spread that message to URS employees. City staff will speak before an audience on the benefits of green living. Staff from the Office of Environmental Quality will present.
- Apr 26-27 **Earth Day Texas** – Formerly known as Earth Day Dallas, this event is an annual festival seeking to elevate environmental awareness and influence the way Texans think, live, and work. City staff has been asked to participate by exhibiting and presenting environmental information to thousands of attendees. City staff from the Office of Environmental Quality, Cease the Grease, Waste Diversion, Water Conservation, Parks, Streets, Stormwater, Trinity, Sustainable Development and Construction, Public Works, Aviation, Code, Strategic Customer Services, and Centerplate at KBHCCD have been asked to participate.

If you have any questions or require additional information, please contact me.



Jill A. Jordan, P.E.  
Assistant City Manager

- c: The Honorable Mayor and Members of the City Council  
A.C. Gonzalez, City Manager  
Warren M.S. Ernst, City Attorney  
Rosa A. Rios, City Secretary  
Judge Daniel F. Solis, Administrative Judge  
Craig D. Kinton, City Auditor  
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Theresa O'Donnell, Interim Assistant City Manager  
Jeanne Chipperfield, Chief Financial Officer  
Frank Libro, Public Information Office  
Elsa Cantu, Assistant to the City Manager – Mayor and Council

# Memorandum



CITY OF DALLAS

DATE March 21, 2014

Honorable Members of the Quality of Life & Environment Committee:

TO Dwaine R. Caraway (Chair), Sandy Greyson (Vice Chair), Adam Medrano,  
Rick Callahan, Carolyn R. Davis, Lee M. Kleinman

SUBJECT 2014 Mosquito Plan

The attached briefing will be presented to the Quality of Life & Environment Committee on Monday March 24, 2014. The briefing will provide you with the mosquito abatement plan for the 2014 season implemented by the Department of Code Compliance.

Please let me know if you have any questions.

A handwritten signature in blue ink, appearing to read 'Charles M. Cato'.

Charles M. Cato

Interim Assistant City Manager

Attachment

cc: Honorable Mayor and Member of the City Council

A.C. Gonzalez, City Manager

Warren M.S. Ernst, City Attorney

Daniel F. Solis, Administrative Judge

Rosa A. Rios, City Secretary

Craig D. Kinton, City Auditor

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Elsa Cantu, Assistant to the City Manager – Mayor and Council

# 2014 Mosquito Plan

Quality of Life & Environment  
Committee

March 24, 2014

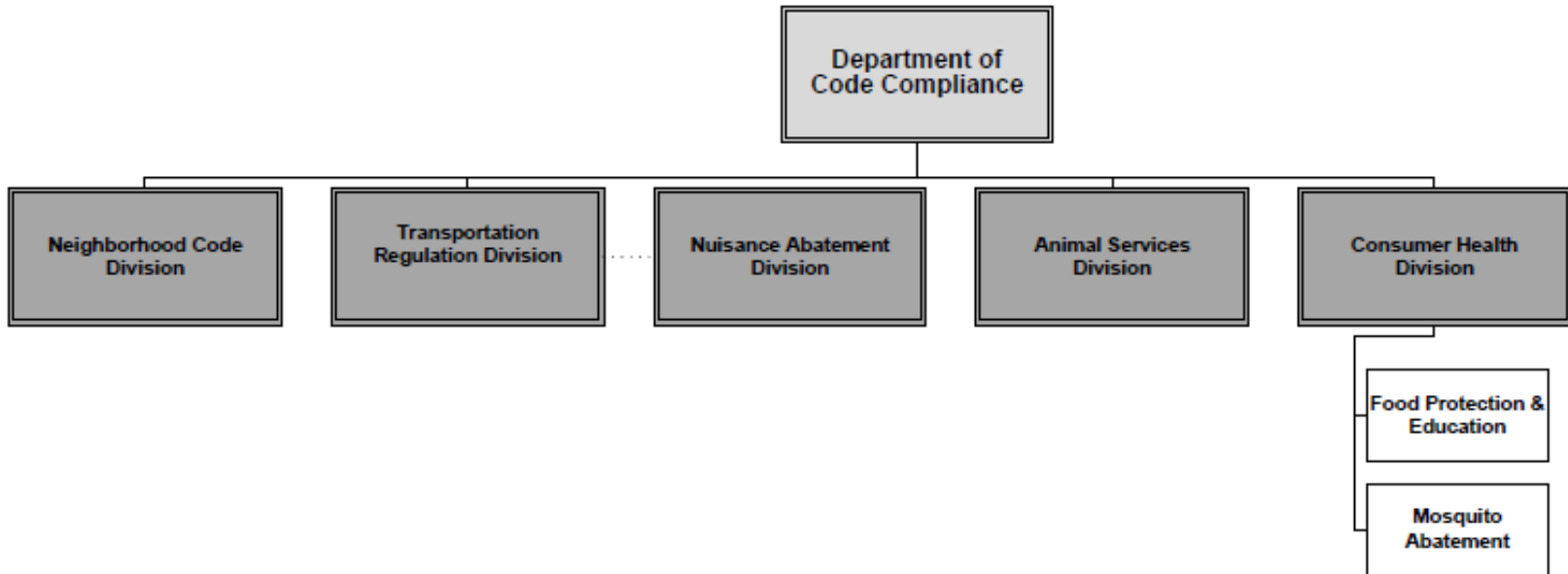


# Outline

- Background
- 2014 WNV Action Plan
- Public Education
- Mosquito Surveillance
- Environmental Mitigation
- Spray and Notification
- Additional Preparedness Efforts



# Background



- Consumer Health Division
  - Created January 2014
  - 37 FTE
  - \$2.8M FY 13 Budget

# Background

- Consumer Health Division – Mosquito Abatement Unit
  - Works to prevent the spread of mosquito-transmitted diseases to the public.
  - Information concerning the control of a variety of pests, including rats, roaches, and other insects, is also available from this office.
- The City contracts with Dallas County to act as Health Authority and advise on matters affecting public health.
- The City of Dallas implements Mosquito Control guidelines provided by Dallas County (Exhibit A).

# Background

- Mosquito Abatement Unit
  - Deploys traps and collects samples for testing.
  - Treats standing water with larvicide when it cannot be drained.
  - Issue a Notice of Violation (NOV) to correct standing water.
  - Conducts ground-based spraying on positive test results.
  - Educates citizens on preventive measures.

# Background

- Mosquito Abatement Unit
  - Train other Departments/Divisions within the City to increase awareness of standing water.
    - Streets
    - Parks & Recreation
    - TWM
  - Code staff to assist with abatement efforts.
    - 6 employees in Mosquito Abatement
    - 23 employees in Food Protection & Education
    - 10 employees in Neighborhood Code

# Background

## WNV Human Cases, Dallas County

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Cases	44	104	23	9	16	0	2	398	16
WNV Human Deaths	1	4	0	0	1	0	0	21	2

# Background

## WNV Human Cases, Dallas County & City of Dallas

<b>WNV Deaths</b>	<b>2012</b>	<b>2013</b>
Dallas County	21	2
City of Dallas	9	1

<b>WNV Cases</b>	<b>2012</b>	<b>2013</b>
Dallas County	398	16
City of Dallas	211	7

# 2014 WNV Action Plan

## Primary Focus – Proactive Prevention

Action	2014 Plan
Public information	Radio, television, billboards, Internet, phone calls, water bill inserts, neighborhood outreach & free mosquito dunks to City of Dallas residents.
Standing water complaint turnaround	Respond within 1 day
Mosquito traps	90 traps
Lab results turnaround	3-5 days for PCR only and 5 to 7 days for cell cultures.
Action Thresholds plan	Joint plan will be updated as needed in coordination with Dallas County.
Truck-mounted sprayers	5 Trucks
Emergency Management Plan	To be implemented during declared emergency.
Aerial spraying plan	Guidance from Dallas County and the CDC.

# Public Education

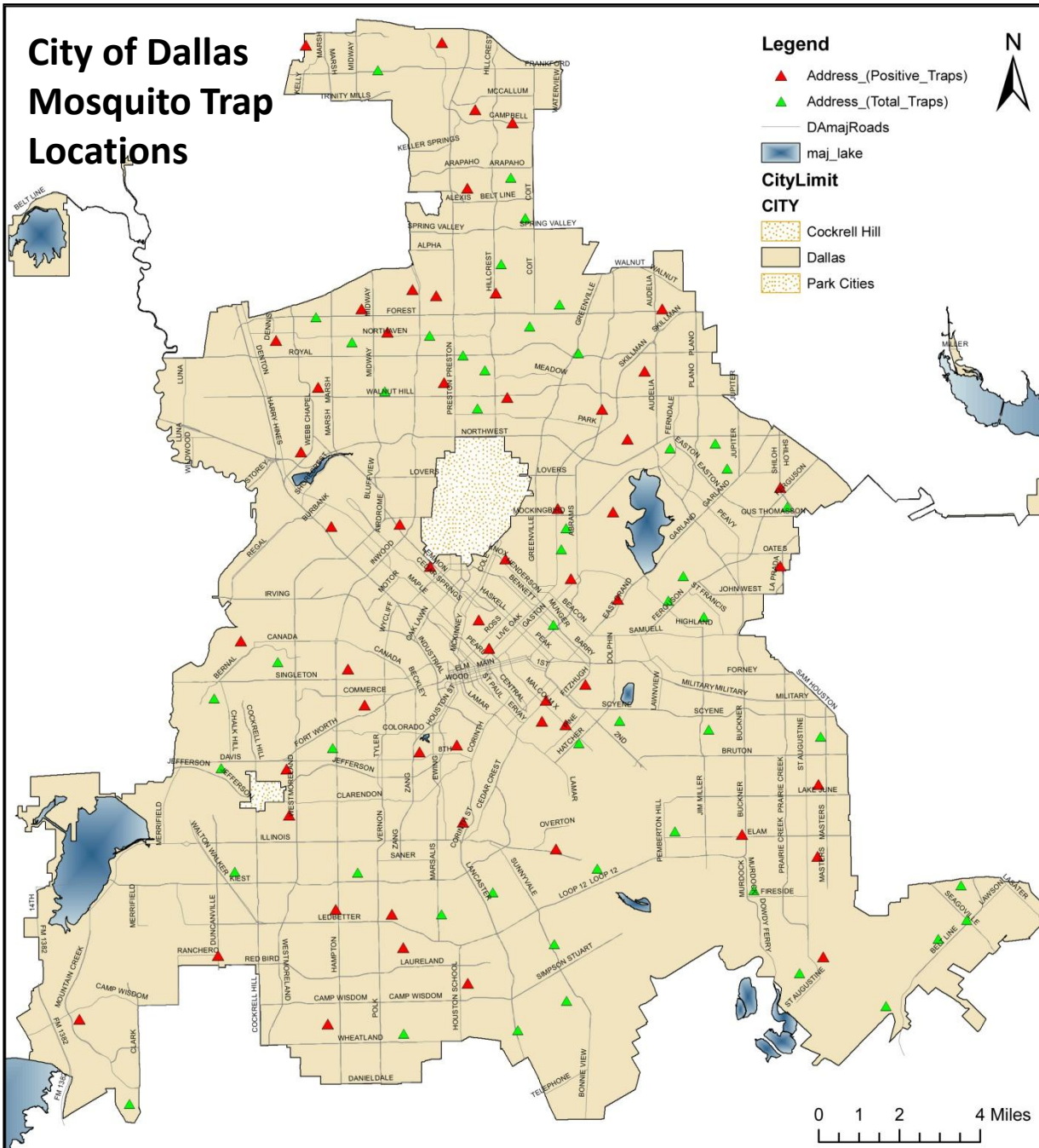
- WNV public education efforts
  - Billboards, radio spots and kiosks
  - Social media, Internet and e-mail blasts
  - Press announcements
  - Street median signs and outreach at community meetings and events
  - Free mosquito dunks to City of Dallas residents
- Emphasize the “4-Ds” of prevention
  - Drain or treat standing water
  - Avoid outdoor activity at Dawn/Dusk
  - Use mosquito repellent (DEET)
  - Dress with long sleeves, pants



# Mosquito Surveillance

- Mosquito trapping and testing for 2014 includes:
  - ✓ Off-season (Winter – Early Spring) mosquito trapping and testing
  - ✓ 90 traps on a weekly basis during 2014 WNV season (May 2014)
  - ✓ 30 traps sent to DCHHS per week
  - ✓ 60 traps sent to DSHS per week

# City of Dallas Mosquito Trap Locations



# Environmental Mitigation

- Use of EPA-approved products to reduce larvae populations (Larvicide):
  - Insecticide used specifically for the larval life stage of a mosquito.
  - Used in breeding sites (abandoned pools, bird baths, tires, any areas that have standing water, etc.).
  - Mosquito Dunks are a form of larvicide.
  - Does not kill adult mosquitoes.
  - Does not harm people, pets, fish or plants.

# Environmental Mitigation

- Use of EPA-approved products to reduce mosquito populations (Adulticide):
  - The City uses Pyrethroid (Aqua Lure 20/20).
  - Naturally occurring pesticide which is found in chrysanthemums.
  - Only product that is mixed with water (other products are chemical based and mixed with oil).
  - Safe for plant life (apples, peaches, leafy vegetables, melon, walnuts, etc).

# Spray & Notification

- Spray Guidelines
  - Trap locations with “high trap count”.
  - Mosquito pool has tested positive for WNV.
  - Confirmed human case of WNV in the City of Dallas and positive mosquito pool in the same area.
    - Team will investigate the area of the human case to identify any breeding sites/sources.
    - Appropriate treatment method utilized.
  - Multiple human cases of WNV within ½ mile radius.

# Spray & Notification

- Spray Guidelines
  - The City generally sprays within a ½ mile circle around the positive trap in population dense areas from the public streets only.
  - Spray between 9:00 PM and 5:00 AM.
    - (10:00 PM and 3:00 AM in 2013)
  - Spray activities begin within 5-7 hours after notification by lab.
    - (A minimum of 24 hour notice required in 2013)

# Spray & Notification

- Notification
  - News release issued in April and posted on City's website:
    - Announce start of mosquito season
    - Spray guidelines
    - Precautions to take
    - Avoid contact, stay indoors (including pets)
    - Keep windows up on passing vehicles
    - Don't follow trucks
    - Wash thoroughly with soap and water if you come in contact

# Spray & Notification

- Notification
  - Signs posted in the area to be sprayed (if time/location permits)
  - Radio Ads begin in May – expand message.
    - Announce start of mosquito season
    - Emphasize the 4-D's
    - Spray Guidelines
  - Weekly recap of spray activities.
  - Trap location and spray activity maintained on the City of Dallas website.



# Additional Preparedness Efforts

- Update WNV Action Thresholds Plan
  - Joint plan with Dallas County that allows for uniform response for public information, education, testing, and spraying efforts.
  - Phased response plan for public education, mitigation and surveillance efforts based on increasing risk of infections.
- Emergency Management Plan (TBD)
  - Developed a guide for conducting operations in response to a declared WNV outbreak.
  - Utilizes Incident Command System (ICS) to integrate and coordinate response among city departments.

# Exhibit A

# Exhibit A

## Dallas County Mosquito Control: Action Thresholds

The following recommendations are intended to guide mosquito control programs and may include other applicable community procedures. All actions are subject to change without notice due to organizational priorities, weather or other unforeseen circumstances.

<b>Risk Level One – Normal Response</b>	
<i>Conditions: Probability of human outbreak is low (Year-round status in the absence of escalating triggers)</i>	<i>Trigger: Normal mosquito activity with little or no evidence of viral activity</i>
<b>Surveillance</b>	
<ul style="list-style-type: none"> <li>• Routine monitoring of public health threats by DCHHS Epidemiology Division</li> <li>• Monitor larval and adult mosquito bionomics (dip counts and trap surveillance)</li> <li>• Identify mosquito samples and laboratory testing for disease</li> </ul>	
<b>Information/Education</b>	
<ul style="list-style-type: none"> <li>• Public education and community outreach programs focused on risk potential, personal protection and residential source reduction</li> </ul>	
<b>Control Measures</b>	
<ul style="list-style-type: none"> <li>• Source reduction through physical and environmental measures</li> <li>• Biological – mosquito fish</li> <li>• Larvicides (surface oils, biorational bacterial products and insect growth regulators)</li> </ul>	

<b>Risk Level Two – Public Health Advisory</b>	
<i>Conditions: Probability of human outbreak is moderate</i>	<i>Trigger: Virus detected in mosquito samples</i>
<b>Surveillance</b>	
<ul style="list-style-type: none"> <li>• Increased mosquito surveillance in areas of positive traps</li> </ul>	
<b>Information/Education</b>	
<ul style="list-style-type: none"> <li>• Public health advisory released</li> <li>• Advise the public and emphasize source reduction, personal protection and disease symptoms</li> </ul>	
<b>Control Measures</b>	
<ul style="list-style-type: none"> <li>• Ground-based ULV adulticide application multiple times around positive trap location, with continued mosquito surveillance *</li> <li>• Contact vendor for ground ULV assistance in designated treatment areas</li> <li>• Larviciding of breeding sites around infected trap sites</li> </ul>	

# Exhibit A

## Dallas County Mosquito Control: Action Thresholds

The following recommendations are intended to guide mosquito control programs and may include other applicable community procedures. All actions are subject to change without notice due to organizational priorities, weather or other unforeseen circumstances.

<b>Risk Level Three – Public Health Warning</b>	
<i>Conditions: Probability of human outbreak is high</i>	<i>Trigger: Virus detected in multiple mosquito samples from different times and locations; or confirmed human case(s)</i>
<b>Surveillance</b>	
<ul style="list-style-type: none"> <li>Increase surveillance activities in adjacent areas where spread of virus is likely</li> </ul>	
<b>Information/Education</b>	
<ul style="list-style-type: none"> <li>Public health warning released</li> <li>Publicize vector control measures within the target communities</li> <li>Warn the general public of the probability of disease and provide guidance</li> </ul>	
<b>Control Measures</b>	
<ul style="list-style-type: none"> <li>Adjust ground-based ULV adulticide equipment to maximum label rate</li> <li>Ground-based ULV adulticide application of area around confirmed human case(s) after mosquito trapping confirms the presence of disease *</li> <li>Ground-based ULV adulticide application of positive mosquito sites and expanded areas around sites *</li> <li>Contact vendor for possible aerial treatment(s)</li> </ul>	
<b>Risk Level Four – Public Health Emergency</b>	
<i>Conditions: Human outbreak is confirmed</i>	<i>Trigger: Multiple human cases confirmed and detection of increased or continued viral mosquito activity</i>
<b>Surveillance</b>	
<ul style="list-style-type: none"> <li>Continued mosquito surveillance in areas of confirmed human cases</li> </ul>	
<b>Information/Education</b>	
<ul style="list-style-type: none"> <li>Public health emergency considered</li> <li>Declaration of public health emergency/distribution of emergency alerts</li> </ul>	
<b>Control Measures</b>	
<ul style="list-style-type: none"> <li>Ground-based ULV adulticide application in areas of clustered human cases *</li> <li>Recommend aerial adulticide applications in targeted zones</li> </ul>	

\*Ground based ULV applications should ideally be conducted multiple times per week in targeted areas based on mosquito surveillance and positive mosquito virus isolates

# Memorandum



CITY OF DALLAS

**Date:** March 21, 2014

**To:** Honorable Members of the Quality of Life and Environment Committee:  
Dwaine R. Caraway (Chair), Sandy Greyson (Vice Chair), Adam Medrano,  
Rick Callahan, Carolyn R. Davis, Lee M. Kleinman

**Subject:** It's My Park Day

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On March 29, 2014, between 9:00 a.m. and 12:00 noon, the Dallas Park and Recreation Department will host the semiannual It's My Park Day event at parks throughout the city. It's My Park Day encourages and supports individuals, families, businesses, corporate employees and community groups to organize and participate in beautification projects such as litter pick up, weeding and mulching, at a park of their choice.

The deadline to register for the event was March 16, 2014 however we are still receiving inquiries. We expect to have a list of parks and projects to the Councilmembers on Tuesday, March 25.

If you have questions, please contact me at 214-670-4071.

A handwritten signature in black ink, appearing to read "Willis Winters".

Willis C. Winters, FAIA, Director  
Park and Recreation Department

C: Honorable Mayor and Members of the City Council  
A.C. Gonzalez, City Manager  
Warren M. S. Ernst, City Attorney  
Judge Daniel F. Solis, Administrative Judge  
Rosa A. Rios, City Secretary  
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Jeanne Chipperfield, Chief Financial Officer  
Frank Libro, Public Information Officer  
Elsa Cantu, Assistant to the City Manager – Mayor and Council

# Memorandum



CITY OF DALLAS

Date: March 21, 2014

To: Honorable Members of the Quality of Life and Environment Committee: Dwaine R. Caraway (Chair), Sandy Greyson (Vice Chair), Adam Medrano, Rick Callahan, Carolyn R. Davis, Lee M. Kleinman

Subject: Authorize the First Amendment to the Fair Park Contract with the Friends of Fair Park to establish, operate, manage and market the bicycle rental program at Fair Park – Council Addendum March 26, 2014

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On March 26, 2014, the City Council will consider authorizing the first amendment to the Fair Park Contract with the Friends of Fair Park, Inc. to establish, operate, manage and market the bicycle rental program at Fair Park. A bicycle rental program is proposed as part of the initiative to increase daily activity at Fair Park. It is anticipated the rental proceeds will provide for the on-going maintenance required for the bicycles, marketing this visitor amenity and potentially expanding the program within the parks interior in the future. Additionally, these bicycle stations are anticipated to be complimentary to any future city-wide bicycle rental program.

This contract amendment will authorize the Friends of Fair Park, Inc. to install and operate the bicycle rental facilities, including on-going maintenance obligations for a one-time management fee of up to \$125,000. The Dallas Park and Recreation Board approved the first amendment to the lease agreement on March 6, 2014.

If you have questions, please contact me at 214-670-4071.

A handwritten signature in cursive script, appearing to read 'Willis C. Winters'.

Willis C. Winters, FAIA, Director  
Park and Recreation Department

c: Honorable Mayor and Members of the City Council  
A.C. Gonzalez, City Manager  
Warren M. S. Ernst, City Attorney  
Judge Daniel F. Solis, Administrative Judge  
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Jeanne Chipperfield, Chief Financial Officer  
Frank Libro, Public Information Officer  
Elsa Cantu, Assistant to the City Manager – Mayor and Council

**KEY FOCUS AREA:** Economic Vibrancy  
**AGENDA DATE:** March 26, 2014  
**COUNCIL DISTRICT(S):** 7  
**DEPARTMENT:** Park & Recreation  
**CMO:** Willis Winters, 670-4071  
**MAPSCO:** 45Q

---

### **SUBJECT**

Authorize the first amendment to the Fair Park Contract (hereinafter "Agreement") with the Friends of Fair Park, Inc. (FFP) to establish, operate, manage and market the bicycle rental program at Fair Park - Not to exceed \$125,000 - Financing: Current Funds

### **BACKGROUND**

On June 14, 2000, Resolution No. 00-1879 authorized an agreement with the Friends of Fair Park, Inc. (FFP) for the management and operation of the Magnolia Lounge for a term of ten years with options to extend for two consecutive terms of five years each, exercisable by the Park and Recreation Board. The agreement stipulates that Friends of Fair Park shall diligently improve and promote Fair Park as a recreational, historical, educational and entertainment destination, utilizing all revenues from the operation of the Magnolia Lounge. Founded in 1984, FFP is a Texas non-profit 501(c)(3) corporation dedicated to the improvement, preservation and continued use of Fair Park and its facilities. In support of the Fair Park Comprehensive Plan initiatives, FFP is committed to help make Fair Park a year-round destination and growing the number of visitors to the park by working in partnership with Fair Park Administration and the cultural/entertainment venues at Fair Park.

On June 3, 2010, the Park and Recreation Board exercised the first five-year option with FFP under the same terms and conditions as the original agreement. The first option is set to expire on June 14, 2015. One additional five-year option may be exercised by the Park and Recreation Board which would extend the contract through June 14, 2020.

## **BACKGROUND** (Continued)

A bicycle rental program is proposed as part of the initiative to increase daily activity at Fair Park. This contract amendment will authorize the Friends of Fair Park to install and operate the bicycle rental facilities, including on-going maintenance obligations. It is anticipated the rental proceeds will provide for the on-going maintenance required for the bicycles, marketing this visitor amenity and potentially expanding the program within the parks interior in the future. Additionally, these bicycle stations are anticipated to be complimentary to any future city-wide bicycle rental program.

### General Principles of the Contract:

1. City will pay Operator a one-time management fee of up to \$125,000 to establish, operate, manage, and market the Bicycle Rental Program.
2. Friends of Fair Park will use reasonable efforts to purchase, manage and operate a Bicycle Rental Program at Fair Park as a recreational opportunity and visitor amenity.
3. Friends of Fair Park will market and promote the Bicycle Rental Program as an offering to visitors.
4. Friends of Fair Park will manage and maintain the Bicycle Rental Program as an independent contractor.
5. City will retain ownership of premises, bicycles and all improvements.
6. Friends of Fair Park will recommend operating hours, subject to approval by the Park and Recreation Director.
7. Friends of Fair Park will recommend all rates, fees and charges, subject to final approval by Park and Recreation Director.
8. All items, materials and equipment purchased by Operator shall become the property of the City.
9. Friends of Fair Park will pay City a 20% commission on all sponsorship(s), including naming rights associated with the Bicycle Rental Program to be placed in a Park and Recreation Department multi-year fund designated for marketing of Fair Park.

## **PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)**

Ten-year lease agreement with two consecutive five-year terms authorized by City Council on June 14, 2000, by Resolution No. 00-1879.

First five-year term option approved by the Park and Recreation Board on June 3, 2010.

First amendment to the lease agreement approved by the Park and Recreation Board on March 6, 2014.



**FISCAL INFORMATION**

Current Funds - \$125,000