

2009 Ferguson Environmental Impact Report



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Honorable Mayor Brian P. Fletcher and City Council Members:

In compliance with Ordinance Number 2009-3382, I am pleased to present you with the first annual Ferguson Environmental Impact Report. I would like to thank the City Council and various departments of the City who cooperated with the compilation of data and performance of research that made this report possible.

Introduction

On February 24, 2009, the City Council of the City of Ferguson unanimously passed Ordinance Number 2009-3382, more commonly referred to as “the Environmental Ordinance,” which was described through its title as:

AN ORDINANCE OF THE CITY OF FERGUSON IMPOSING NEW ENERGY-CONSERVATION REQUIREMENTS ON CITY OPERATIONS; AMENDING CHAPTER 37 (“SOLID WASTE”) OF THE MUNICIPAL CODE RELATING TO RECYCLING; AND AMENDING CHAPTER 7 (“BUILDING AND BUILDING REGULATIONS”) RELATING TO DESIGN AND CONSTRUCTION OF NEW AND REMODELED HOMES AND BUILDINGS.

Within that Ordinance, it was stated that “as part of the budget process, the City Manager shall include an annual report to the City Council reporting the energy consumption performance for that previous year and the plan of reduction or plan for continued maintenance.”

As this is the first year of this report, it is important to note that the format and contents will most likely change in subsequent years, if only to evolve along with advancements in environmental consciousness. For the 2008-2009 Fiscal Year, and in this document, I will explore policy development and actions taken by both the City Council and City Staff that apply to environmental issues, primarily focused in three areas: (1) Energy Conservation for City Operations, (2) Solid Waste/Recycling, and (3) Building Code/Construction. These three areas coincide with the primary sections of the Environmental Ordinance.

Although all employees are called upon to take part in the efforts outlined in this document and to address environmental concerns of the organization, the Office of the City Manager and the Department of Public Works have worked closely over the last several months in obtaining information necessary to outline a strategy for the assessment of our current energy consumption. For that reason, this document will first outline what we have accomplished over the last fiscal year in terms of environmental concerns, and then describe our assessment strategy. This would then allow us to produce a more comprehensive self-examination for FY 2009-2010, and consequently a realistic and calculated set of specific numerical goals for 2010-2011.

In the following pages, I will provide the City Council with our first review of the organization's energy consumption, waste production, and environmental policies. Within the three areas of concentration, we will begin with current efforts that have been initiated since July 2008, discuss what relevant data has been collected thus far, and outline any strategies for further assessment and policy formation. I believe that City Staff has made tremendous progress in this area over the last fiscal year and since the Environmental Ordinance's adoption. In fact, the City of Ferguson has already been praised for our efforts by the local and national media, and is quickly being recognized as one of the more environmentally progressive cities in St. Louis County for the Environmental Ordinance itself, along with our initial efforts. City Staff aspires to establish Ferguson as a true leader in St. Louis County over the next few years. Thus, I am proud to present the City Council with this report.

Energy Conservation for City Operations

Recent Efforts at Energy Conservation

At the time of the Ferguson City Council's adoption of the Environmental Ordinance, the City had just begun to internally prioritize "green" strategies in many of the projects already underway. All of the recently completed, larger capital projects contained elements that were conscious of energy conservation to some degree. However, it is important to note that these projects do present other environmental elements that could have been taken advantage of in accordance with the Environmental Ordinance, and thus we should learn from any missed opportunities so that we may apply them in future projects. Below is a list of some larger projects and the environmental elements that were included:

- ✚ Florissant Road Project: This \$3.1 million project included environmentally conscious elements such as energy efficient traffic signals and widened, streetscaped sidewalks and crosswalks to promote walking through Ferguson's Downtown District.

- ✚ Suburban Avenue and Brotherton Lane Road Projects: These two major street projects included the installation of new street and pedestrian lighting. During the design phase, both projects included a lighting study to minimize the number of light poles needed to illuminate the areas targeted. 100 and 150 Watt metal halide lamps were utilized to increase the energy efficiency of the lights over the streets and sidewalks.

- ✚ Dade Park Improvement Project: This improvement project to one of Ferguson's neighborhood parks includes the use of native plants to reduce the need for regular watering, and maximizing light provided to ensure efficiency while providing for the safety of park patrons.

- ✚ Wayside Park “Unleashed”: Ferguson’s first dog park which opened in July, 2009, utilizes a single light standard with dual heads to illuminate the entire park and minimize energy consumption. Native plants were used in areas of landscaping.
- ✚ Ferguson Neighborhood Gardens: This initiative is putting to use vacant pieces of land owned by the City of Ferguson. The City Council recently unanimously approved funding to start two such projects. Both of these gardens currently require no additional electrical lighting and promote organic agriculture at the community level. One of the two gardens has included the use of a rain-collecting cistern, eliminating the need to access the water line.

In addition to these projects, recent equipment purchases have also held environmental concerns in mind. During the past year, the City purchased its first Flex-Fuel vehicle, which will allow the City to transition to other fuel types in the future. In addition, with the purchase of two new fire trucks, the Fire Department has instituted a policy of using “Class A” foam on all “Class A fires.” This allows for quicker knock down and control, and thus reduces the amount of smoke or hydrocarbons that are emitted into the air.

Continuing Education

In order to better educate ourselves, and to prepare for this new concentration on energy conservation, City Staff has been directed to seek out opportunities for learning about environmental issues. Although I have placed an emphasis on such training for all of our municipal departments for the 2009-2010 Fiscal Year, I think it is important to note the work City Staff has already done in this area since the Environmental Ordinance’s adoption.

- ✚ Greener Storm-Water Solutions: March 19, 2009
Sponsored by MSD, ShowME Rain Gardens, Shaw Nature Reserve, MO. Conservation Department, MO. Department of Agriculture, Alberici Vertegy, and Grow Native.

This seminar discussed Best Management Practices (BMP) for storm water, water conservation, and native planting.

- ✚ 1st Annual Energy Efficiency Workshop: March 21, 2009.
Sponsored by Ameren UE and the Electric Board of Missouri and Illinois.

This seminar focused on Energy Efficient Programs, Technology, Lighting Technology and Energy Savings. Staff members in attendance were also able to meet with numerous vendors that provide resources and services in these areas.

- ✚ Native Plant School: March 30, 2009
Sponsored by MSD, ShowME Rain Gardens, Shaw Nature Reserve, MO. Conservation Department, MO. Department of Agriculture, Alberici Vertegy, and Grow Native.

This seminar acted as a follow-up to the Greener Storm-Water Solutions seminar on March 19. It focused more on BMPs with an emphasis on native plants and water conservation.

- ✚ St. Louis County Municipal Environment Initiative: March, 2009.
Ferguson was the second municipal member to join the St. Louis County Municipal Environment Initiative, launched in March of 2009, as a group of cities dedicated to improve the environment through various initiatives and programs. Ferguson's Environmental Ordinance and the City were featured in the second newsletter that was released by the organization. As a member, we have access to online resources such as grant opportunities and "how-to" guides to help municipalities be more environmentally friendly, as well as representation on a listserv that allows members to share information. As of July 20, 2009, there were 21 members signed up to participate.

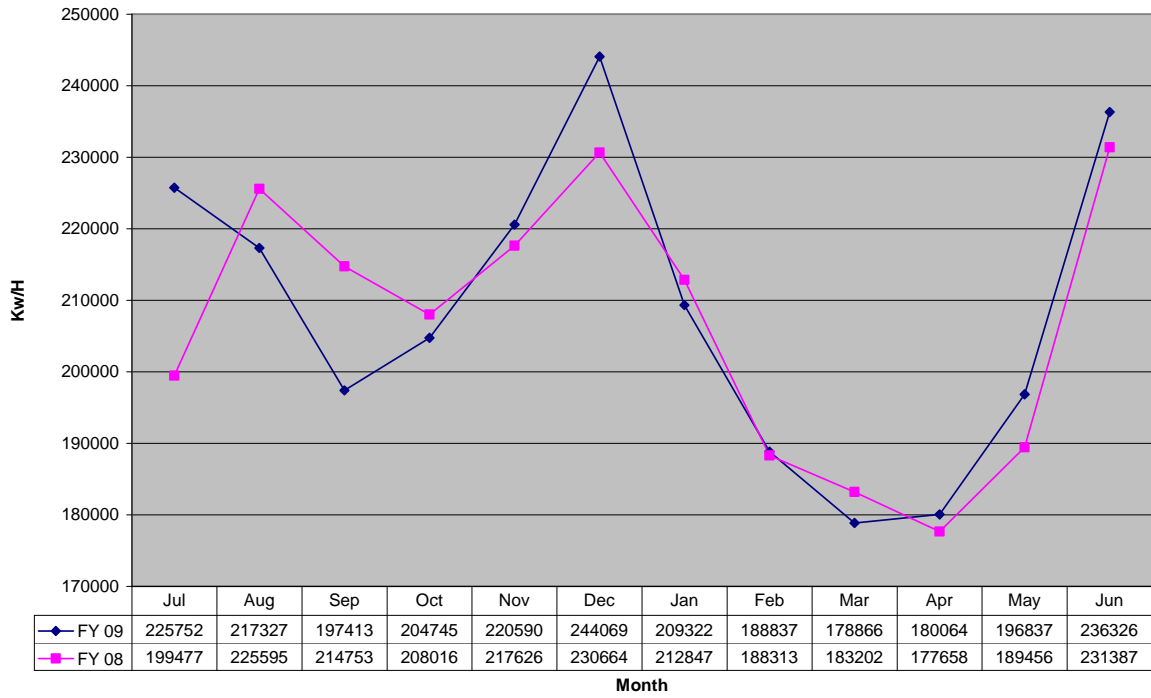
- ✚ Program for Environmental Practices: June 24, 2009.
Sponsored by the St. Louis County Municipal League.

Segments of this seminar included the following: ICLEI – Local Governments for Sustainability (discussed later in this report), energy efficiency and audits, green purchasing policies, and citizen education and engagement.

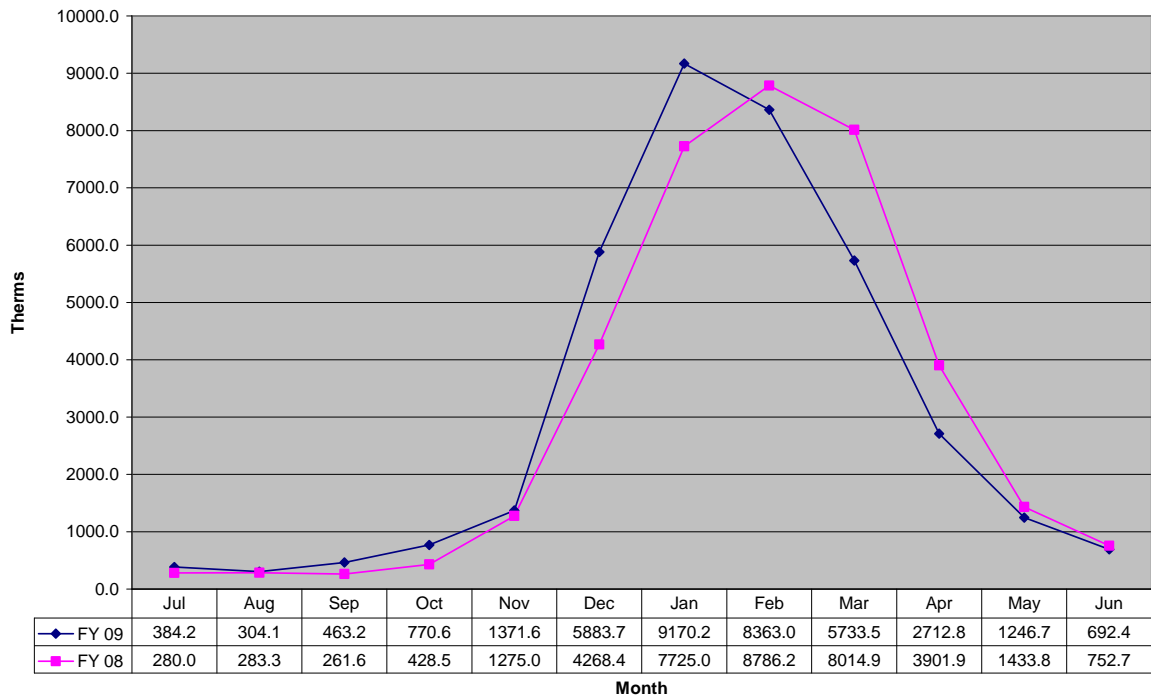
Current Consumption Data

When discussing the organization's plan for energy conservation, it is important to first examine the City's current energy usage, measured primarily through electricity and natural gas consumption. The following charts outline the history over the past two Fiscal Years with respect to electricity and natural gas usage. This data was obtained from billing records for each account and will be used to establish the baseline against which to measure the impact of future initiatives.

Electricity Consumption, Citywide



Natural Gas Consumption, Citywide



Again, City Staff will utilize this data when evaluating our current usage to determine trends and areas for improvement. City Staff is also working on the collection of other forms of useful data and exploring better methods of reporting this information.

Currently, City Staff is exploring the feasibility of membership in ICLEI. ICLEI - Local Governments for Sustainability, is an international association of local governments, as well as national and regional local government organizations, that have made a commitment to sustainable development. According to their website, “ICLEI provides technical consulting, training, and information services to build capacity, share knowledge, and support local government in the implementation of sustainable development at the local level. Our basic premise is that locally designed initiatives can provide an effective and cost-efficient way to achieve local, national, and global sustainability objectives.”

Once a proper assessment is performed, City Staff will be approaching the City Council with the proper recommendation. In the meantime, City Staff is able to take advantage of some resources ICLEI makes available to the general public, such as free "webinars" and updates on various environmental initiatives and programs.

City Staff is also exploring the use of various other organizations and companies that provide assistance in the collection of additional data and can then perform the necessary “energy audit” that City Staff has identified as essential to the organization’s adherence to the Environmental Ordinance and future progress in this endeavor. At the present time, City Staff has been in contact with the following entities to assess their potential assistance in the collection of necessary data and the performance of an organization-wide audit:

- ✚ Graybar: Graybar is an international corporation, with a local office in St. Louis County, that supplies components, equipment and materials for the electrical and telecommunication industries. Graybar has performed two preliminary audits of all facilities in the City of Ferguson. The City is currently working with Graybar to produce reports making recommendations for energy efficiency and cost savings. The first report will recommend changes/upgrades in lighting that will produce AmerenUE rebates. The second report will detail the monthly savings the City can expect based on the implementation of their recommendations.

- ✚ Energy Design Group: Energy Design Group is an “Energy Services Cooperative providing analysis, design, construction and financing of energy saving projects and facility improvements,” and is based in St. Louis. The cooperative is comprised of three local firms: Architectural Design Guild, Energy Solutions, Inc., and Salian Commercial LLC. This City has provided data to EDG, who is currently working to calculate baseline energy consumption data, evaluate City usage and compare this usage with national data.

The next step will be an actual on-site audit where EDG will visit the individual facilities to review the mechanical systems, control systems, lighting, building

envelopes and other components. This is performed to ascertain which buildings would represent the greatest energy and cost savings for the City by evaluating Energy Efficiency Measures, cost and potential return on investment (ROI). Once this is accomplished, the City will assess the value of any partnership with EDG.

- ✚ Ameren UE: Ameren UE is Missouri's largest electric utility, providing service to approximately 1.2 million customers across central and eastern Missouri, including the St. Louis area. City Staff is currently exploring a number of services Ameren UE is now providing to municipalities and corporations to help reduce energy consumption and strive for energy efficiency.

Solid Waste and Recycling

Over the last year, the City has embarked on an effort to reduce overall litter within the City and to initiate recycling efforts community-wide. The City has historically performed tremendously with street sweeping and litter removal efforts through the City's Public Works and Parks and Recreation Departments. This effort was complimented over the last year with the addition of public trash receptacles and various stream clean-ups directed by the Metropolitan Sewer District of St. Louis. However, in the area of recycling, the City has realized remarkable progress over the last fiscal year.

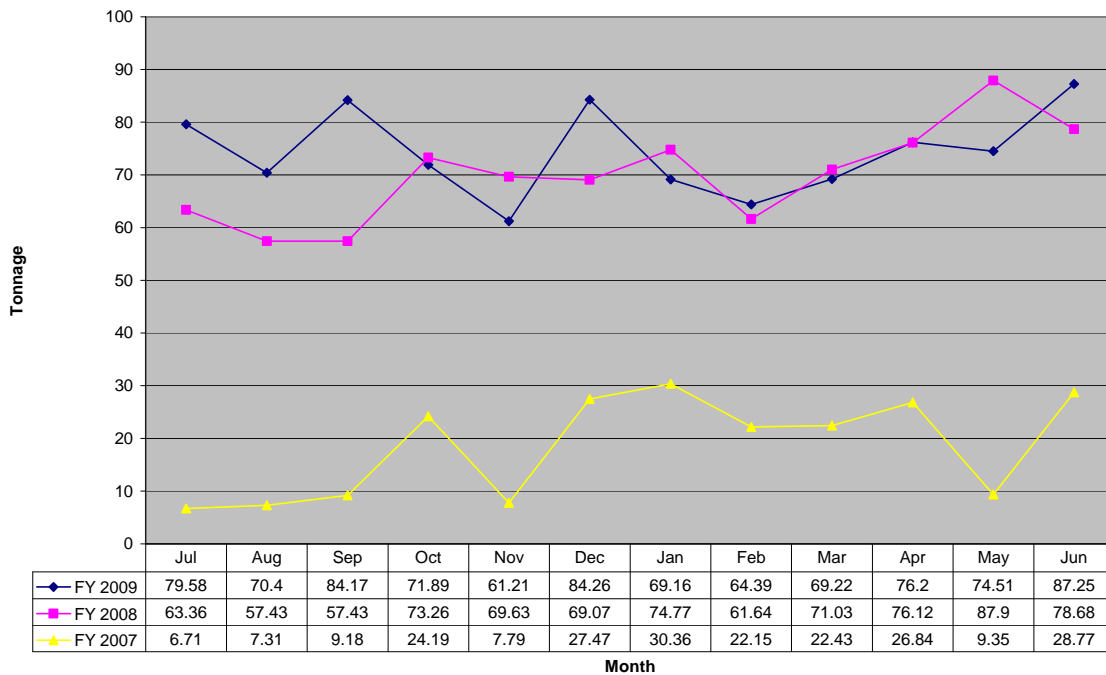
Residential Recycling

In October 2006, the City and our contract waste hauler, Allied Waste, began implementing a grant administered through the St. Louis County Department of Health. Through this grant all single-family homeowners received a recycling container to collect their recyclables. It took approximately two months to deliver the containers to all of the residential homes, but by January of 2007 the program was fully in place and operational. Through this grant the City received the following:

- ✚ \$30,000 in materials.
- ✚ 6,600 residential recycle bins for single-family homeowners.
- ✚ Assembly and delivery of the bins to the 6,600 Ferguson households.

This project has yielded remarkable results. Over the last 36 months, residential recycling has increased 348%. Of course this is based on the fact that the City did not have a recycling program in place prior, nor does it take into consideration the many residents who previously recycled on their own and perhaps continue to do so today. However, figures from July of 2008 through June of 2009 indicate that residents diverted approximately 74 tons of trash per month from the landfill by recycling these materials instead of throwing them in with their regular trash. Below you will find a chart that presents the data collected by Allied Waste with respect to resident recycling over the last three fiscal years.

Recycling, Citywide (Residential Only)



City Facility Recycling

In addition to the promotion and facilitation of residential recycling, City Staff has also implemented a more convenient and efficient way for employees to recycle while at work. Over the last fiscal year, and subsequent to the Environmental Ordinance adopted in February, City Staff has implemented the following:

- ✚ Coordination and cooperation with the Ferguson-Florissant School District. This project was achieved by the City’s strong relationship and cooperative endeavor with the Ferguson-Florissant School District through the 2+2 Program that provides for regular dialogue between City Council, the School Board, the School Superintendent and the City Manager. Through this project, students from Ferguson Middle School picked up paper set aside for recycling during the school year once per week and earned money for their school through the amount of recyclables they collected. The project started with the Recreation Office at 501 N. Florissant Road and was later expanded to include City Hall. Plans are in the works for future expansion of the project to other facilities this fall.
- ✚ Receipt of additional \$20,000 in grant monies for facility recycling and education. City Staff was successful in securing additional money that was unused from the original grant administered through the St. Louis County Department of Health. This money was used to purchase 20 recycling bins for various municipal buildings, 12 portable recycling bins used for special City-sponsored events, and 5,000 magnets with valuable recycling information that are distributed to

residents in the New Resident Packets and at different neighborhood meetings, and are also available to the public in the Public Works Department.

- ✚ Reduction of housekeeping services in City facilities. Partially due to the recycling efforts instituted for City Staff, the City was able to reduce some regular cleaning duties performed by the City's contract custodian Jani-King. In addition to saving the City thousands of dollars from the annual contract and reducing the overall amount of waste we produce, the City is able to reduce the amount of chemicals used in the cleaning of these facilities.
- ✚ Better paper-saving practices employed by City Council and City Staff. Over the last fiscal year, the City Council Intranet was successfully implemented and is currently monitored by City Staff. This tool is extremely useful to the City Manager in providing information to the City Council without the need to produce hard copies of requested materials. Council Packets are also now available through this special page on the City's website.

With respect to City Staff, communication with Department Directors has always relied heavily on email, but now Directors are being encouraged to rely more heavily on the use of shared drives that they can obtain pertinent information, previously provided in hard, paper form. Two recent examples were the internal budget-building process performed at the administrative level prior to the Council Work Sessions, and the preliminary reviews of the new Draft Personnel Manual.

Building Code and Construction

Current Projects and Adoption of ICC 2006

The final vital element in the Environmental Ordinance's prescribed focus is ensuring that all new building projects take environmental impacts into consideration, and whenever feasible, to utilize new techniques and materials in this effort. Although the City has yet to see a new private development under this new policy, the City has kept these principles in some of our more recent projects, large and small, over the last fiscal year, both prior to and after the passage of the Environmental Ordinance.

In the "Energy Conservation for City Operations" section of this report, I detailed the various projects that have been completed with environmentally conscious aspects included. Again, those projects included: the Florissant Road Project, Suburban Avenue and Brotherton Lane Road Projects, Dade Park Improvement Project, Wayside Park "Unleashed" Project, and the two Ferguson Neighborhood Gardens projects. However, it is also important to show what steps City Staff has taken to ensure that the Environmental Ordinance is shown to be a priority for both public and private building projects for the future.

On June 9, 2009, the City Council passed an Ordinance adopting International Code Council (ICC) 2006 as the official Building and Fire Codes for the City of Ferguson.

This Code replaced the Building Officials and Code Administrators (BOCA) 1996, and thus replaced many out-of-date building requirements for new construction while also implementing new environmental standards that had not been included previously. In addition to a new “Chapter 13: Energy Efficiency”, that the 2006 ICC Code uses to govern design and construction for energy efficiency in accordance with the International Energy Conservation Code, the new standards include:

- ✚ Updated requirements for insulated wall coverings for exterior walls.
- ✚ Updated requirements for thermal insulation.
- ✚ Updated performance requirements for roofing.
- ✚ Updated requirements for foam plastic insulations.
- ✚ Updated requirements for plumbing, focused on water conservation.

Future Codes and Projects

It is important to note that City Staff is also in the process of preparing the supplementary Ordinances for consideration from the City Council on the adoption of ICC 2006 to ensure that any contradictory language elsewhere in the Code is removed. With that, City Staff pledges to ensure that the various Building Codes are kept as up-to-date as possible with respect to the latest improvements in building materials and techniques, always conscious of their environmental impact. Although it is important to recognize that these new building codes do not necessarily require “green building,” they do provide a solid foundation for how those buildings should be constructed with green elements in mind.

City Staff is also looking into future projects that present the opportunity to be “green.” Staff is currently selecting the general contractor for the 501 S. Florissant Road Project. A number of environmentally-focused features are being evaluated relative to the price for construction and the established budget by the City Council.

In working with the Downtown Strategic Development Plan this past fiscal year, City Staff along with the City Council and citizen volunteers, incorporated “Smart Growth” concepts such as “Complete Streets”, form-based zoning, additional trees and landscaping elements, which all encourage walkability and less driving in Ferguson’s Downtown Business District. Similar environmentally-conscious approaches are being required in the Neighborhood Stabilization Program collaboration with Robert Wood Realty in the “rightsizing” and rehabilitation of foreclosed homes. These homes will be redesigned to incorporate as many energy efficient components as possible.

Complementing this effort, during the Fall Semester, City Staff will be working with the Cooperative Extension of the University of Missouri System for current residents to provide energy saving retrofit workshops and demonstrations, with the goal to help residents learn how to reduce energy consumption and maintain affordability, especially for older homeowners.

Conclusion

As clearly evidenced in this report, the City has aggressively pursued various strategies to meet and exceed the basic tenants of the Ferguson Environmental Ordinance. City Staff has taken advantage of educational opportunities, engaged professionals in energy conservation, implemented policies, and begun initiatives that all work towards the City of Ferguson becoming a more environmentally-conscious municipality. The Environmental Ordinance clearly sets a standard that the organization should view as a guideline for projects, purchases, and overall behavior. The direction to the City Staff has been to look to adhere to these guidelines closely whenever financially feasible, and to strive for excellence in this area. As I stated earlier in this report, the organization looks to establish itself as an environmental leader among municipalities in St. Louis County over the next few years and with our efforts so far, I feel we are well on our way in accomplishing this objective.

In order to achieve our goals outlined in the Environmental Ordinance and to take on a leadership role for other cities, Ferguson must first identify our organization's areas of needed improvement and opportunities for energy conservation. As I mentioned earlier in this report, we are in the process of the collection of that pertinent data. The next step for the following fiscal year is to work with professionals in this area to determine what actions can be taken that will ultimately result in lower energy use and therefore lower energy costs.

There are also many other actions that City Staff will explore over the next fiscal year to comply with the intent of the Environmental Ordinance. The following represents a list of just some of the proposals from City Council and City Staff that constitute potential future actions for Council consideration:

- ✚ The development of landscaping standards to be included into zoning ordinances.
- ✚ Discontinuing the provision of bottled water to employees and to Council, whenever practical.
- ✚ Incorporating environmentally-conscious design elements into the plan for the new Fire House Number One.
- ✚ The purchase of recycled paper through a consortium of other municipalities, to be used throughout the City.
- ✚ The replacement of select City vehicles with hybrids or alternative fuel vehicles – whenever practical.
- ✚ The establishment of a “recycling page” for businesses and homeowners on the City’s website.

The City will continue to pursue these as well as other opportunities as they are discovered. I am pleased with the City's immediate response to the Environmental Ordinance, as well as our openness to new ideas on how to provide services while having the least amount of negative effect on the environment as possible. With that, I would like to again thank the City Council and all of the City departments for contributing to this report.

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(AMENDED) BILL NO. 6869

ORDINANCE NO. 2009-3382

INTRODUCED BY COUNCIL MEMBER DWAYNE T. JAMES

AN ORDINANCE OF THE CITY OF FERGUSON IMPOSING NEW ENERGY-CONSERVATION REQUIREMENTS ON CITY OPERATIONS; AMENDING CHAPTER 37 (“SOLID WASTE”) OF THE MUNICIPAL CODE RELATING TO RECYCLING; AND AMENDING CHAPTER 7 (“BUILDING AND BUILDING REGULATIONS” RELATING TO DESIGN AND CONSTRUCTION OF NEW AND REMODELED HOMES AND BUILDINGS

Whereas, the City of Ferguson (hereinafter referred to as the “City”) has recognized the importance of implementing programs in the City that promote sustainable energy and environmental awareness; and

Whereas, the City has been named Tree City USA for the past several years and is committed to the benefits and importance of our tree population from new trees being introduced into our City through the Tree Dedication program to the trees providing shade for our parks and streets to the City trimming and cutting down trees after they have served their life course only to be used as mulch and firewood for our neighbors; and

Whereas, the City promotes the use alternative modes of travel through its Jolly Trolley for Seniors and the lunch-time trolley service to neighboring employers and schools through its Ferguson Station Business District; and

Whereas, the City, in partnership with Trailnet, is currently engaged in a Live Well Ferguson initiative aimed at improving resident health through physical activity and healthy eating; and

Whereas, the City is seeking to further encourage the voluntary *diversion* of residential, commercial, and special event waste through recycling to decrease the amount of waste in landfills helping the environment and reducing the need for new landfills; and

Whereas, it is the intent of Council to ensure that buildings built or substantially renovated by the City are built in the most environmentally sound way; and

Whereas, the City shall encourage site planning, landscaping, and structure design which maximizes the potential for energy conservation by reducing the demand for artificial heating, cooling , ventilation and lighting, and facilitating the use of solar and other energy resources; and

Whereas, it is the intent of the Council to provide the citizens and employees of the City of Ferguson with new and renovated buildings which will give the optimum comfort, ensure the durability of investments for the taxpayer, consider the health of building occupants and provide the greatest awareness possible of environmental impacts of what we do.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FERGUSON, MISSOURI, AS FOLLOWS:

Section 1. Chapter 2 is hereby amended by the addition of a new Section 2-4 which shall read as follows:

CHAPTER 2	ADMINISTRATION
ARTICLE I	IN GENERAL
SECTION 2-4	ENERGY CONSERVATION REQUIREMENTS FOR CITY OPERATIONS

In order to reduce paper usage and waste and increase efficiency, the City Manager shall develop, implement and maintain a plan to reduce at least 30% less energy of its 2008 usage and 20% of the 2008 waste generated *by* the City. Such reduction shall occur within the next five years. As part of the budget process, the City Manager shall include an annual report to the City Council reporting the energy consumption performance for that previous year and the plan of reduction or plan for continued maintenance. Possible environmental-friendly avenues and processes for the City to consider in its plan include:

1. Utilizing the Council Intranet site on the City website as web-based portal to house Council documents, such as meeting agendas, minutes, ordinances, supporting documents. Council and City staff will have access to these documents from any PC, home or office and can view all necessary documents online during Council meetings, eliminating the need for hard-copies in most circumstances;
2. Acquiring products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose in all purchases;
3. Incorporating energy efficient pulse type heating systems in City-owned buildings;
4. Using environmentally safe light bulbs to reduce energy waste;
5. Replacing a portion of City-owned vehicles with hybrids, or using bio-diesel in the fleet vehicles;
6. Requiring solicitors to include instructions asking bidders to identify any environmental benefits over the life cycle of their products and/or services in bid procurement services;
7. Adding information on to the City's Website that contains environment education on topics like landscaping, recycling and energy efficiency; and

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8. Promoting the use of Neighborhood Gardens.

Section 2. Section 37-1 of Chapter 37 is hereby amended by the addition of the following definitions:

[all other definitions are not altered or amended and remain in full force and effect]

CHAPTER 37	SOLID WASTE
ARTICLE I	IN GENERAL
SECTION 37-1	DEFINITIONS

Certified Recyclable Materials Collector means a Recyclable Materials Collector which has been issued a certificate by the City pursuant to this Division.

Collect or Collection shall mean to take physical possession of and remove solid waste or recyclable materials at the place of generation.

Commercial facilities means any facilities that are not residential facilities or mixed use facilities.

Disposal means the final deposition of waste at a permitted landfill or other permitted waste facility.

Diversion or Divert means the reduction or elimination of solid waste from landfill disposal.

Recycling facility means a recycling, composting, or materials recovery or reuse facility.

Self-haul means the process of personally, or through one’s own full-time employees, collecting, transporting, and delivering one’s own solid waste or recyclable materials.

Section 3. Chapter 37 of the Municipal Code is hereby amended by a new Section 37-5 which shall read as follows:

CHAPTER 37	SOLID WASTE
ARTICLE I	IN GENERAL
SECTION 37-5	RECYCLING REQUIREMENTS

A. *Purpose.* The purpose of this Division is to establish requirements for recycling of recyclable materials generated from residential facilities (both single family and multi-family), commercial facilities (including City buildings), and special events. These requirements are intended to increase the diversion of recyclable materials from landfill disposal, reduce

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greenhouse gas emissions, and defer potential financial obligations associated with waste to the City.

B. **Service Requirements.** Those who are provided with curbside recycling collection services (i.e., single-family residential) within the City of Ferguson shall be encouraged to utilize such services by separating recyclable materials from other solid waste and depositing the recyclable materials in the approved container. All owners of residential facilities containing more than three (3) separate dwelling units shall provide, in addition to typical trash hauling services, for removal of recyclable material from such property. The owners shall provide approved recyclable material containers that are clearly identified within two (2) years of the effective date of this ordinance. Furthermore, all owners of commercial facilities within the City of Ferguson shall be encouraged to utilize recycling collection services.

The recyclable material removal services required by this Section shall include, at a minimum, all of the following:

1. collection of recyclable materials as frequently as necessary to meet demand;
2. collection of plastic bottles and jars, paper, newspaper, metal containers, cardboard, and glass containers;
3. collection of other recyclable materials for which markets exist;
4. designated recycling collection and storage areas; and
5. signage on all recycling receptacles, containers, chutes, and/or enclosures.

C. ***Recycling at Special Events Required.*** For any community special event held after May 1, 2009, which requires any type of license or permit from the City of Ferguson, the person or entity responsible for such event shall provide recycling receptacles throughout the event venue.

1. The number of recycling receptacles shall equal the number of solid waste receptacles.
2. The solid waste and recycling receptacles shall be placed next to one another throughout the event venue.
3. The types of recyclable materials suitable for deposit into each recycling receptacle shall include, at a minimum, aluminum and metal cans, and glass and plastic bottles and jars.
4. Each recycling receptacle shall be clearly identified as a recycling receptacle and shall display a list of the types of recyclable materials which may be deposited into the recycling receptacle.
5. The responsible person shall ensure that the recyclable materials deposited into the recycling receptacles are as identified above.

D. ***Exemptions.*** Exemptions to some or all of the requirements of this Section may be granted at the discretion of the City Manager's designee. Applications for exemptions may be granted upon consideration of the following factors: available markets for recyclable materials,

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available space for recycling containers, alternative recycling efforts, and the amount and type of solid waste or recyclable materials generated. To be effective, an exemption must be in writing and signed by the City Manager. An exemption may be revoked at any time at the discretion of the City Manager if one or more of the factors justifying the exemption no longer exist, or other change in circumstances warrant revocation. Unless earlier revoked, an exemption shall be effective for a period of one year from the date it was granted. Subsequent applications for exemptions may be granted at the discretion of the City Manager’s designee upon consideration of the factors listed in this section.

E. *Scavenging of Recyclable Materials Prohibited.* No person other than an appropriate waste hauler permitted by the City of Ferguson to collect the recyclable materials, shall remove or otherwise interfere with recyclable materials which have been placed at a designated recycling or recyclable materials collection location.

Section 4. Chapter 7 of the Municipal Code is hereby amended by the addition of a new Section 7-44 which shall read as follows:

CHAPTER 7	BUILDING AND BUILDING REGULATIONS
ARTICLE III	BUILDING CODE
SECTION 7-44	ADDITIONAL REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF NEW AND REMODELED HOMES AND BUILDINGS

A. *Purpose.* The purpose of the requirements set forth herein is to provide for the enhancement of sustainable energy and environmentally friendly efforts during building construction. It is further the intent of the City Council to ensure that the development of public buildings is done in an environmentally friendly manner as well as to encourage environmentally conscious private commercial, industrial and residential development. The Program shall be mandatory for the development of all City-Owned construction projects, and is encouraged for all private commercial, industrial and residential development projects.

B. *Definitions.* For purposes of this Section, the following terms shall mean:

Construction means any project associated with the creation, development, or erection of any building or facility that is 5,000 square feet of floor area or greater.

Green building means generally the resource efficient design, construction, and operation of buildings by employing environmentally sensible construction practices, systems, and materials.

LEED means the Leadership in Energy and Environmental Design Rating System of the U.S. Green Building Council.

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LEED for Existing Buildings means the USGBC rating system that applies to existing buildings and addresses whole-building cleaning and maintenance issues (including chemical use), recycling programs, exterior maintenance programs, and systems upgrades.

Project means any construction associated with the creation, development, or erection of any building or facility.

Remodeling means any renovation or remodeling project (commercial or residential) that includes a total cost greater than fifty-one percent (51%) of the appraised value of the property.

USGBC means the U.S. Green Building Council.

C. *City-Owned Construction Projects.*

1. Any buildings built or remodeled with City funds shall be developed in accordance with, at a minimum, the LEED “silver” certification designation or another nationally-recognized certification program., as long as the estimated energy savings exceed the marginal cost of the energy saving features over the expected life of the building and subject to fiscal constraints established by the City Manager. On a project-by-project basis, the City Manager may determine that the costs or requirements associated with participating in the Program substantially outweigh the benefits of such participation. Such a determination shall amount to a waiver of the requirement that City comply with the provisions of this Chapter. In order to avoid increased cost of operation, care shall be taken to avoid complex systems that would require extensive technical training of personnel.

2. Design documents shall include an explanation of how the features listed below are incorporated into the design or, for those features not incorporated, an explanation of the financial or operational reasons why the feature was omitted from the design. Energy saving features, including but not limited to the following:

- (a) Solar orientation, with the long axis facing south
- (b) Use of daylighting
- (c) Use of appropriate glass for minimizing heating and cooling loads
- (d) Insulation beyond minimum standards
- (e) Use of renewable energy for heating and cooling
- (f) Use of renewable energy for heating and swimming pools
- (g) Use of water conservation measures including dual water systems if available

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- (h) Landscaping for summer cooling effect and for blocking winter winds
- (i) Use of energy efficient motors
- (j) Use of energy efficient lighting
- (k) Use of energy management systems
- (l) Parking areas designed to limit heat absorption
- (m) Use of building materials and color to decrease cooling load

D. *Private Construction Projects.*

1. New Residentially Permitted Projects: The permit applicant for new residential construction, shall be encouraged to satisfy the requirements associated with the current USGBC LEED for Homes program, as may be amended from time to time; or a nationally-recognized equivalent ratings system.
2. Remodeling of Existing Homes: The permit applicant for remodeling of existing homes shall be encouraged to satisfy the requirements of remodeling certification for the current LEED for Homes program, as may be amended from time to time; or a nationally-recognized equivalent ratings system.
3. New Commercial or Industrial Buildings: The permit applicant for new commercial or industrial buildings construction shall be encouraged to satisfy the requirements associated with the current LEED for New Construction or derived USGBC LEED rating system (e.g., LEED for Schools, LEED for Health Care) program, as may be amended from time to time; or a nationally-recognized equivalent ratings system.
4. Remodeling of Existing Commercial and Industrial Buildings: The permit applicant for the remodeling of existing commercial and industrial buildings shall be encouraged to satisfy the requirements associated with the current LEED for existing buildings or derived USGBC LEED rating system (e.g., LEED for Schools, LEED for Health Care) program, as may be amended from time to time; or a nationally-recognized equivalent ratings system.
5. Incentives: Permit applications submitted pursuant to this Section shall be given priority over other permit applications. The City shall use its best efforts to ensure that building permit applications for residential and commercial green buildings shall be processed within 30 business days. All such applications shall be accompanied by an appropriate green building program application form.
6. Certification: The verification of the green building designation shall be subject to certification by a qualified third party who has been trained and certified as a green

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building certifying agent. Applicants shall be responsible for all costs associated with certification.

Section 5. This Ordinance shall be in full force and effect from and after the date of its passage by the City Council.

FIRST READING: February 10, 2009 SECOND READING: February 24, 2009

PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF FERGUSON,
MISSOURI, THIS 24th DAY OF FEBRUARY 2009.

Brian P. Fletcher, Mayor

ATTEST:

City Clerk