



# Burnsville Sustainability

**2012**

## **Annual Report**



Photo by Caleb Ashling



# City of Burnsville Sustainability Annual Report

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For more information on Sustainability in the City of Burnsville please visit [www.burnsville.org/sustainability](http://www.burnsville.org/sustainability)



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## Executive Summary

### Fourth Annual Report

This is the fourth annual Sustainability Report for the City of Burnsville. The City Council adopted the *Sustainability Guide Plan* in February 2009. The

Sustainability Report is based on the 14 Best Practices Areas (BPA) from the

*Sustainability Guide Plan* plus a section on the City's Sustainability Team. The Report focuses on the previous year's activities and progress towards meeting the 14 BPA goals.



### 2012 Efforts Included:

- Received a Blue Star Award for protecting Minnesota's water resources and public health through excellence in stormwater management.
- Conducted a Greenhouse Gas Emissions Inventory.
- Installed underground infiltration chambers that capture and allow runoff from streets to infiltrate into the ground, thereby reducing the pollutants going into nearby Lake Alimagnet.
- Received a Level Two MN GreenStep Cities award.
- Adopted a Sustainable Infrastructure Policy.
- Installed nine energy efficiency projects that saved more than \$6,763 and 91,423 kWh's annually.
- Received a Conservation Partner Legacy Grant to restore 22 acres of remnant prairie and aspen stands.

Thank you to the many people involved in implementing the sustainable activities.

**Burnsville will strive to establish city goals for environmentally preferable purchasing and develop a city-wide educational effort to purchase economical and environmentally preferable products and services.**

The City of Burnsville is striving to purchase products and services that conserve energy, water, and resources. The 2012 activities included:

- Purchased five banners made out of recycled plastic bottles for the Household Hazardous Waste (HHW) collection day. Banners are an Ecophab Canvas that is made 100% from post consumer recycled plastic bottles. The inks are permanent water based inks. The banners can be washed and dried as needed.
- Purchased recycled-content office supplies when available and with comparable pricing.
- Purchased pencils made from tires for promotional materials for school and scout presentations.



Banner made from recycled bottles for the HHW collection event



## Product Stewardship

**Burnsville will strive to promote product stewardship, including facilitating programs that partner with private industry to reduce the end-of-life impacts of products.**

Product Stewardship is an environmental management strategy. Whoever designs, produces, sells, or uses a product takes responsibility for minimizing the product's environmental impact. The 2012 activities included:

- Dakota County and the City of Burnsville Police Department partnered on a program to take unwanted pharmaceutical waste on an ongoing basis. The program started January of 2012. Prescription and over-the-counter medications are collected from residents for free at the Burnsville Police Department. Proper disposal of medication helps prevent crime, accidental poisoning and drug

abuse. It also protects the environment.

- In 2012 the unwanted pharmaceutical waste program collected and disposed of 2,026 pounds of pharmaceuticals from the Burnsville location.



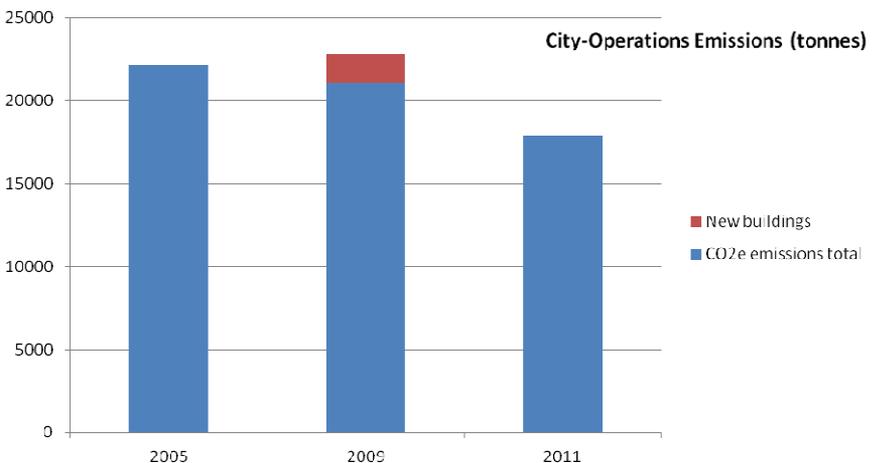
# Greenhouse Gas Reduction



**Burnsville will strive to inventory and set reduction targets for greenhouse gas emissions for city facilities.**

A systematic accounting of the quantity of Greenhouse Gases (GHG) emitted for a defined entity over a given period of time is called a GHG inventory. Inventories can be a tool to identify and implement cost-effective measures to reduce energy consumption. The 2012 activities included:

- In 2012 a GHG Inventory was conducted for the year 2011 and we found a significant reduction in GHG emissions from the 2005 baseline and the 2009 inventory.
- Although the City produced 8% more potable water for City consumers in 2011 compared to 2009, it used 54% less electricity to do it.





## Sustainable Land Use

**Burnsville will strive to adopt land use policies that provide incentives to reduce sprawl, preserve open space, expand and enhance green corridors as redevelopment occurs and to create a walk-able community**

The activities in 2012 included:

- Conducted a Sustainability Policy Audit. U of M University of Minnesota) Urban Planning graduate students worked with staff to complete an audit of the Burnsville zoning code.
- All land use development projects and building permits have been converted from paper to electronic files. The changeover to totally digital files substantially reduces the amount of paper, storage space, postage, copying and printing for all projects and permits.
- Amended the zoning ordinance to remove lists of permitted and prohibited species for the ordinance and instead allows the City Forester to update the lists administratively as part of the Woodland Preservation handout materials which allows the city to respond more quickly to identify invasive species and address issues such as the Emerald Ash Borer infestation.
- Approved a new ABLE fire training facility which has been designed with 80% green/open space, substantially greater than the standard 25% green space that is permitted in the commercial zoning district, as well as a new stormwater pond with a clay liner. No foams or chemicals will be allowed at the site to protect the area from pollution and keep the drinking water from being contaminated.

**Burnsville will strive to promote sustainable transportation systems/networks, develop and publicize information about transit alternatives, re-evaluate transit routes and stops utilizing public input to maximize service within Burnsville and to the metropolitan area.**

The activities in 2012 included:

- Replaced six street lights on Parkwood Drive with LED street lights.
- Utilized a Safe Route to School grant to install new trails and correct drainage issues on sidewalks.
- Recycled approximately 19,000 cubic yards of bituminous pavement and base material on street reconstruction projects.
- Worked with developers to “right size” parking lots
- Installed underground infiltration chambers as part of the 2012 Street Reconstruction Project. The chambers will capture and allow the runoff from the streets to infiltrate into the ground, reducing the pollutants going into nearby Lake Alimagnet.
- Worked with Minnesota Environmental Initiative to use their diesel oxidation catalyst retrofit program for eight city trucks.

This will reduce the carbon emissions from the older trucks. The grant paid for labor and materials.





**Burnsville will strive to increase the use of clean, alternative energy options into city facilities, research methods to reduce energy consumption and promote alternative energy options within the community.**

The activities in 2012 included:

- Installed solar powered school crossing signs at Sioux Trail Elementary School
- Installed two solar powered crosswalk signs in front of the Fairview Ridges Hospital
- Installed two solar powered crosswalk signs for the Lac Lavon and Keller Lake area. The signs provide a

constant flashing that is noticeable to traffic.



**Burnsville will strive to make energy efficiency a priority in infrastructure by developing educational programs for the public about energy efficient techniques and construction practices; investigate opportunities and ways to provide incentives to encourage private sector home and business energy improvements.**

The activities in 2012 included nine energy efficiency projects at City Hall lower lobby, Police Departments property room & report room, Birnamwood Golf Course, Maintenance Center fuel canopy, Ice Center parking lot, City Garage interior circle, City Garage roof top unit and Fire Station 2 bay lights. These nine projects had the following results:

- Saved \$6,763 annually for the life of the fixture with a minimum of 10 years per fixture.
- Leveraged \$7,473 in rebates for the projects.
- Saved 91,423 kWh's annually.
- Removed 43 fixtures.
- Maintained or improved lighting levels.
- Reduced labor costs with the LED lights.

Purchased a Variable Frequency Drive for a high service pump at the Water Treatment Plant that pumps treated water to customers.

- Received \$15,451 rebate from Excel Energy.
- Saves a significant amount of energy by allowing the motor to automatically ramp up and down.





## Sustainable Building Practices

**Burnsville will strive to practice and promote sustainable building practices by providing staff training for LEED certification and green construction to assist residents/builders and to promote green building techniques for both city-owned facilities and private development.**

The 2012 activities included:

- Adopted a **Sustainable Infrastructure Policy**. The policy identifies how the city will strive to design and execute all infrastructure projects in a manner that balances long term fiscal, environmental and accessibility requirements. Guidelines included in the policy cover the areas of Safety, Mobility, the Community, and the Environment.
- Replaced an old boiler at city hall with a new high efficiency condensing boiler and recirculation pumps with Variable Frequency Drives.



Swan in the Minnesota River by Blackdog Road

**Burnsville will strive to promote a healthy community through public education, effective partnerships, and the development of infrastructure that supports walking and biking.**

The 2012 activities included:

- Offered free yoga classes at Nicollet Commons Park every second and fourth Saturday from May through August.
- City of Burnsville hosted a 5K race as a part of the “I Love Burnsville” events in June.
- Offered three off-road trail runs at Terrace Oaks West throughout the summer in partnership with the City of Lakeville and Runners Gate.
- Partnered with the Dakota County Simple Steps Program to promote walking.
- Parents and children get fit and meet new friends at Stretch and Stroll fitness classes on the second and fourth Thursdays from May through August.



**Burnsville will strive to increase recycling rates, reduce waste, and promote reuse in city operations and in the community.**

The 2012 activities included:

- Recycled 291 pounds of holiday lights and cords from City of Burnsville decorations.
- Added recycling to the Burnsville International Festival by using X-Frame containers.
- Hosted a “Recycle Your Holiday Lights” container at the Burnsville Ice Center in December for residents looking to recycle their unwanted holiday lights.
- Offered recycling “X-Frames” to Night to Unite block party organizers and several organizers used the containers at their parties.
- Held a shoe recycling event in November for the cities of Burnsville, Eagan, and Apple Valley, which collected 11,092 pounds (or 5.5 tons) of shoes in the three cities.



**Burnsville will strive to maintain a healthy urban forest; promote tree planting by establishing programs to annually increase tree canopy within the city and to develop an incentive program that encourages private sector owners to plant trees within parking lots and other areas of the city.**

The 2012 sustainable activities include:

- Received a Conservation Partner Legacy Grant to restore 22 acres of remnant prairie and aspen stands. This grant for Rudy Kraemer Nature Preserve will improve habitat for wildlife and enjoyment for park visitors.
- Planted 94 bare root trees in a Missouri gravel bed for later use.
- Promoted invasive species control on city parkland including buckthorn control on more than 75 acres and Garlic Mustard control in several high quality forest areas such as Terrace Oaks Park, Alimagnet Park, and Kelleher Park.
- Assisted residents by collecting more than 1000 cubic yards of buckthorn from the Nominate Your Neighborhood Buckthorn Pickup Program and 300 cubic yards of buckthorn was dropped off at the city compost site.
- Offered native shrub and forest floor plant species at the annual tree sale in the spring where more than 2,500 plugs of native plants and 325 trees were sold.



Missouri gravel bed for bare root trees

**Burnsville will strive to provide education on how the public can incorporate sustainable practices into daily activities/operations**

The City has provided sustainability information to city staff, residents and businesses. The activities in 2012 included:

- City staff led four 62+ nature walks for Burnsville residents. The walks give seniors a chance to learn about the environment as well as visit the City's beautiful natural areas.
- Hosted a 62+ Eco Tour for 16 Seniors that included the Burnsville Performing Arts Center, the Kraemer Nature Preserve and the Wolk Park Community Garden.
- Gave a sustainability presentation to the Sioux Trail Elementary School Fifth Grade Class.
- Sent 'Sustainability Tip' monthly emails to employees.



**Burnsville will strive to protect and improve surface and groundwater resources. Towards that end the City will develop an educational program aimed at reducing groundwater use, investigate new design standards and incentives to emphasize the use of natural drainage systems over built storm water systems, and seek ways to modify street improvement projects to provide less impervious surface utilizing practices such as porous pavement.**

Surface and ground water quality is important to a sustainable Burnsville. The following 2012 activities promote improved water quality practices:

- Sent out water quality information electronically to all city customers. Previously, the information was printed and mailed. This new initiative saves resources and money.
- Offered Blue Thumb Program “Planting for Clean Water” classes. There were 114 residents that attended the classes and 13 rain gardens resulted from the classes.
- Gave out 10 Neighborhood Water Resources Enhancement Grants to residents.
- Received a Blue Star Award for protecting Minnesota’s water resources and public health through excellence in storm-water management.





## Innovative Opportunities

**Burnsville will strive to look for innovative opportunities to improve the environment. Identify ways to partner with local utility and power providers, manufacturers, etc., to establish regular meetings to brainstorm and implement environmental outreach programs, encourage neighborhood environmental initiatives, and investigate funding programs for local environmental initiatives/improvements.**

The 2012 activities included:

- Partnered with seven volunteers to assist in directing traffic at the annual Household Hazardous Waste (HHW) collection event. Volunteers worked to guide residents through the collection site.
- Conducted a Sustainability Policy Audit. U of M Urban Planning graduate students worked with staff to complete an audit of the Burnsville zoning code
- Worked with U of M students to design a Night to Unite brochure to encourage waste reduction and recycling at the organizer parties.



Volunteer at HHW event

**City of Burnsville’s Sustainability Team Members include: Julie Dorshak—Community Services, Jim Vasquez—IT, Dean Mulso—Ice Center, JJ Ryan—Recreation, Gary Novotny—Facilities, Deb Garross—Planning, Steve Albrecht—Public Works, Terry Schultz—Parks, Recreation, and Natural Resources, Sue Bast—Sustainability, and Dan Hill—Birnamwood Golf Course**

The goal of the Sustainability Team is to develop and implement projects that address City of Burnsville’s Sustainability Guide Plan strategies, establish sustainable practices for the City, and raise the sustainability awareness of employees. The 2012 activities of the City of Burnsville Sustainability Team included:

- Developed monthly sustainability tips such as, “Pumpkin Recycling”, “Temperature Setback” and “Greening Summer Outings”
- Toured River Center in St. Paul to see the recycling and organic collection at that facility
- Applied for and received a Step Two MN GreenStep City award from the Minnesota Pollution Control Agency.
- Coordinated a “Clean Up Your Office Day” for city employees suggesting recycling and reuse opportunities



MN GreenStep Cities Step Two Award

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