

# CITY OF CORVALLIS



## 2009 Sustainability Report

### SIXTH ANNUAL

In 2004, the City Council adopted a Sustainability Policy to ensure that City departments achieve a more sustainable workplace through plans and programs that promote a balance of environmental, economic and social equity values in the expenditure of public funds. The policy requires an annual report that identifies the progress achieved and sustainability objectives for the next reporting period. This sixth Annual Report on Organizational Sustainability Practices presents a snapshot of the City's aggressive sustainability work plan goals.

*Sustainability means using natural, financial and human resources in a responsible manner that meets existing needs without compromising the ability of future generations to meet their own needs.*

— City Council Policy on Sustainability

<http://www.ci.corvallis.or.us>

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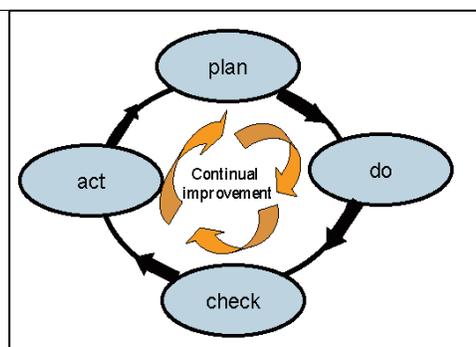
# Sustainability Planning

## Background

Since early 2007, the City of Corvallis has been developing and implementing a Sustainability Management System (SMS)—a set of processes and practices that enable an organization to manage its sustainability efforts in a way that integrates with existing planning processes and business goals. The intent of the SMS is to take a systematic, comprehensive approach to sustainability, with stated goals, timelines and metrics. The City is using the ISO 14001 framework, from the International Organization for Standardization’s family of standards for environmental management systems. The City calls its program a Sustainability Management System because its Organizational Sustainability Policy calls for weighing social and economic considerations along with environmental ones—the “triple bottom line”—in decision making.

The ISO 14001 Standard follows an approach developed many years ago by quality experts. The "Plan, Do, Check, Act" model fosters continual improvement based upon:

- **Planning:** identifying activities and their impacts and establishing goals.
- **Doing:** training, communication, documentation and operational controls.
- **Checking:** monitoring, measuring, corrective/preventive action, audits.
- **Acting:** progress reviews and updating the SMS.



## 2009 Accomplishments

In 2009, the City continued “Doing” SMS implementation, most notably by completing a Sustainability Management System Manual. The manual is the central document for identifying and controlling all SMS-related information and material and provides reference to all supporting documents. The manual includes:

- **SMS Procedures** that describe how to carry out SMS tasks such as training, identifying sustainability issues and improvement projects, and managing records.
- **Directions** that enable individuals to locate records of specific SMS activities.
- **Definitions and References** useful to individuals reviewing the SMS.

The SMS concurrently entered the “Checking” stage early in the year when the Citywide Core Team—a group representing all departments and a cross-section of functions—worked to define how to monitor and measure progress relative to the City’s five long-term sustainability goals (see page 7). The goals were set in 2008 by the Core Team and the Sustainability Steering Committee—an internal policy-setting body composed of the City Manager, department directors and another representative from each department—based on information gathered during the SMS planning process. By establishing a baseline of performance indicators, the City will be able to systematically evaluate its progress toward objectives and targets.

“Checking” also includes conducting audits to identify areas where the SMS is working well and where improvements are required. Through discussions with personnel and review of records and relevant documentation, the audit process evaluates the adequacy and implementation of documents, procedures, programs, and records; the organization's planned activities for meeting its goals; evidence of management's commitment to the sustainability policy and the SMS; and employee awareness.

In the first half of 2009, the Public Works sustainability team developed and piloted an auditing process. The team conducted two reviews, making contact with representatives from every work group in the department. The desired outcomes were to evaluate the SMS within Public Works and to identify and recommend auditing best practices to the Citywide Core Team.

In November 2009, the Citywide Core Team was trained on internal auditing and interviewed staff in the City Manager's Office, Library, Finance and Police departments. Both the exercise and the post-audit evaluation process were streamlined to minimize the workload on the team. The findings were similar in all departments audited, namely a need to increase communication of goals and plans and to improve the flow of information from management to the front line.

### **Integrating Internal and External Efforts**

In June 2009, the City Council appropriated \$40,000 for a community sustainability program, which provided funding for a half-time Program Specialist position that will concentrate on the Council's priority areas of energy and transportation. Previously, the City's sustainability staff was focused on internal activities. Staff determined that the most efficient use of the funding would be to create a sustainability program that integrates the internal and external efforts, thereby eliminating the duplication of effort that would result from two separate programs. In the integrated program, the tasks are distributed between the Sustainability Supervisor, who focuses on strategy (i.e., higher-level program development) and the Program Specialist, who reports to the Sustainability Supervisor and focuses on tactical implementation.

The integrated sustainability program builds on the work of the internal program and expands it to the wider community. The new funding is not sufficient to meet all the needs or desires identified by the City Council, the City organization, and the community. Therefore, the immediate priority will be in the areas of metrics and communication, which are also gaps in the current program. Ultimately, a successful program will also include work in the areas of:

- Grant opportunities—connect opportunities with appropriate people for both organizational and community sustainability efforts.
- Records and reporting—expand record-keeping required by the Sustainability Management System to include records on community projects in the Council-priority areas.
- Policy creation—research in support of City Council policy and analysis of policies needed.

### **Objectives for 2010**

Staff has proposed the following work plan for the integrated sustainability program:

- Continue developing metrics for the organization and work with the Corvallis Sustainability Coalition to develop metrics for community projects in Council's priority areas.

- Communicate progress on sustainability projects/items that involve City departments for both the organization and the community, concentrating on Council-priority areas. Facilitate development of education and public outreach programs.
- Research grant opportunities for the City organization and community groups.
- Promote electric vehicle use and charging stations, as directed by the Council.
- Begin planning for a Community Energy Information Center, as called for in the City Council's Community Energy Strategy.
- Facilitate the Council's discussion of a possible Sustainability Commission.

In addition, work will continue on the internal sustainability program to make it more robust and to identify ways it might be used in the community effort. Staff efforts in 2010 will be devoted to building a strong SMS infrastructure. In addition to improving monitoring, measurement, and communication, staff will complete audits of the remaining City departments and select actions to work on. Staff also is developing a training plan for employees on the SMS and job-related sustainability topics.

Finally, it is time to renew the effort started three years ago, when City departments held brainstorming sessions to identify what sustainable operations would look like within their service responsibilities. The City's SMS Manual outlines the procedure by which the organization will identify significant sustainability impacts and their associated activities, prioritize those impacts, determine how to control them, and select improvement projects. The organization has committed to mapping its impacts every three years—or earlier if warranted by changes to the organization, operations, policies, regulations, or other developments. Even as the organization works through the Doing, Checking, and Acting (reviewing progress and updating the SMS) phases of the cycle, it will begin the Planning anew.

## Challenges

*“The challenge has been, and will continue to be, to provide the coordination, effort, and energy needed with only one full-time sustainability position.”*

Those words, from last year's annual report, still ring true: despite the addition of part-time staff, it will be a challenge to meet the myriad and high expectations that accompany the expansion of the sustainability program to include community efforts. The organization must make a commitment to ensure that its internal sustainability program does not get sidelined.

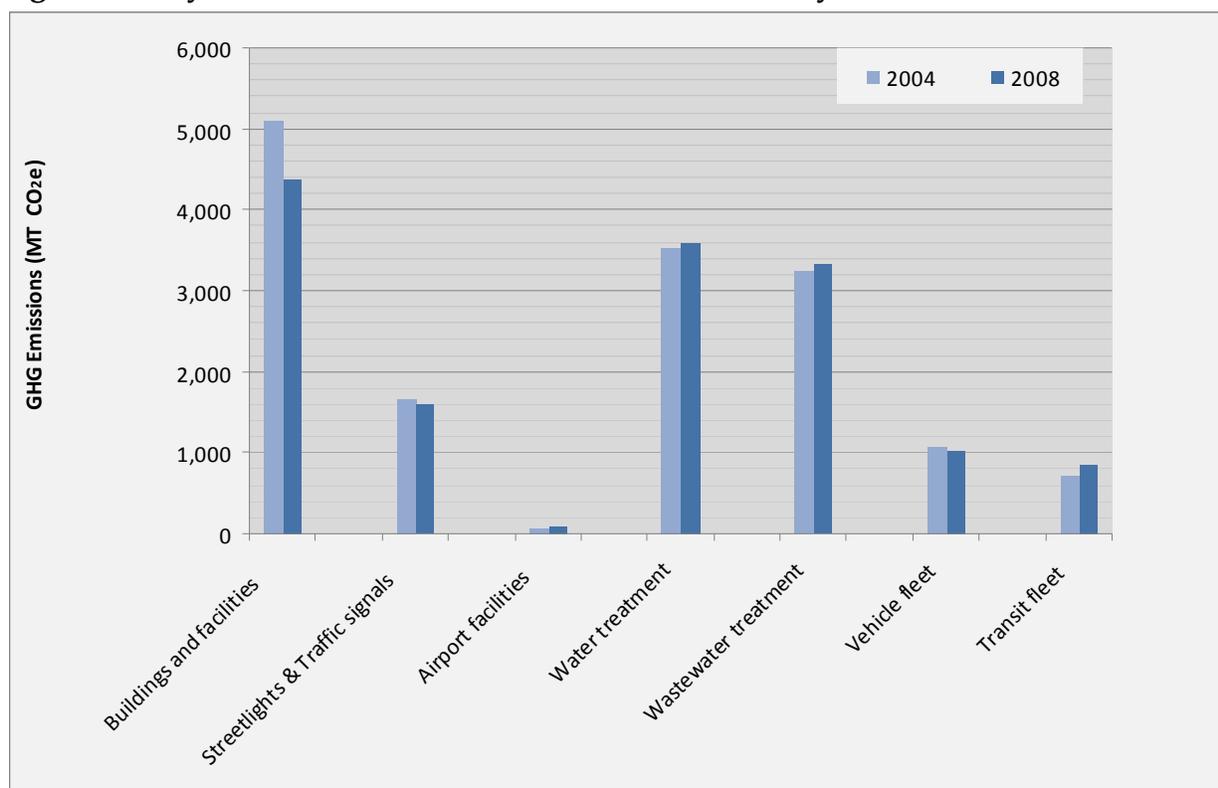
The City's sustainability teams are pivotal to the success of the SMS program. More than 15% of the workforce is regularly involved with some aspect of sustainability through membership on the Sustainability Steering Committee, the Citywide Core Team, a department core team, or other related committees, such as the Recycling Coordinators, Diversity, or Career Development. Because organizational change requires staff buy-in and engagement, participation on this scale is necessary, but many employees still view sustainability as something to do in addition to their “real jobs.” To build capacity within the teams, members need both time and authority. Management and team members will need to continue working closely together to determine how best to carry out SMS development and implementation.

## Greenhouse Gas Emissions

A major accomplishment for 2009 was the completion of a greenhouse gas inventory for municipal operations. This inventory provides valuable information to the City as it fulfills its commitments<sup>1</sup> to reduce energy consumption and associated greenhouse gas emissions. To collate and compute emissions data, the City used the Clean Air and Climate Protection 2009 software program from ICLEI—Local Governments for Sustainability, an international association of local governments working to advance climate protection and local sustainability.

The City compared emissions data from its operations in 2008 with the base year of 2004. In 2008, the City's emissions from fuel and power use by buildings and vehicles totaled 14,922 metric tons CO<sub>2</sub> equivalent (MT CO<sub>2</sub>e). This represents a 3-percent reduction since 2004, when emissions totaled 15,437 MT CO<sub>2</sub>e. The next year for comparison will be 2010.

**Figure 1: City of Corvallis Greenhouse Gas Emissions by Sector**



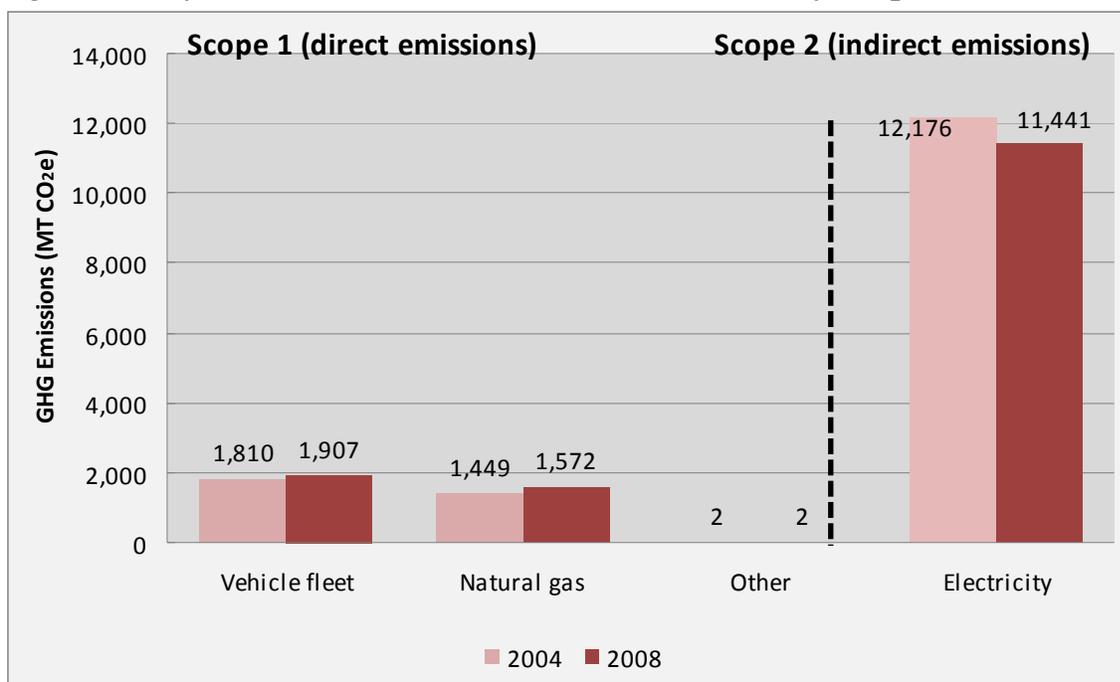
<sup>1</sup> Corvallis is a signatory to the US Mayors Climate Protection Agreement and a member of ICLEI—Local Governments for Sustainability. A comprehensive greenhouse gas inventory is the first step toward fulfilling these commitments.

During 2010, the City will work to complete the final greenhouse gas report and to develop an action plan for reducing emissions. Many energy and sustainability projects and activities in place already are reducing the organization's emissions. Staff will document these with an eye toward showing measurable results and will look for new opportunities to take action.

### A Note on Methodology

Emissions are reported for a calendar year and cover six gases measured in metric tons of carbon-dioxide equivalent (MT CO<sub>2</sub>e). The ICLEI protocol requires the reporting of emissions in Scopes 1 (direct emissions) and 2 (indirect emissions) (see Figure 2), as defined by the World Resources Institute. Scope 3 emissions, not required to be reported, come from activities outside of an organization's direct control, such as from the manufacture of purchased goods.

**Figure 2: City of Corvallis Greenhouse Gas Emissions by Scope**



The City's emissions from Scopes 1 and 2 yield 14,922 MT CO<sub>2</sub>e. For a sense of scale, this is equivalent to:

- Annual emissions from 2,733 passenger vehicles.
- Annual emissions from the energy consumed by 1,358 homes (US average).<sup>2</sup>

<sup>2</sup> Source for equivalency data: <http://www.epa.gov/RDEE/energy-resources/calculator.html>

**Figure 3: City of Corvallis Greenhouse Gas Emissions Categories**

| <b>WRI Scope</b>                        | <b>Emissions Category</b> | <b>MT CO<sub>2</sub>e</b> | <b>Description</b>  |
|---|---------------------------|---------------------------|---|
| <b>Scope 1<br/>(Direct Emissions)</b>   | Vehicle fleet             | 1,907                     | <p>These sources are included in the vehicle fleet emissions category:</p> <ul style="list-style-type: none"> <li>• City fleet automobiles</li> <li>• Public Works equipment, including trucks and maintenance vehicles</li> <li>• Fire, Parks and Recreation, and Police vehicles</li> <li>• Transit fleet (862 MT CO<sub>2</sub>e)</li> </ul> |
|   | Natural gas               | 1,572                     | The City of Corvallis uses natural gas in 11 facilities for space and water heating. Natural gas is also used in wastewater treatment facilities.   |
|   | Other                     | 2                         | About 2 MT CO <sub>2</sub> e are fugitive emissions from wastewater treatment.  |
|   | Refrigerants              | < 1                       | The City uses refrigerants in HVAC systems, vehicle air conditioners, and fire extinguishers.   |
| <b>Scope 2<br/>(Indirect Emissions)</b> | Electricity               | 11,441                    | <p>Electricity is used at 15 major buildings as well as for:</p> <ul style="list-style-type: none"> <li>• Traffic lights, street lights and parking lot lighting</li> <li>• Lighting at the airport</li> <li>• Water and wastewater treatment facilities</li> </ul>   |

## Sustainable City Report Card

This report card reflects the organization's progress toward meeting key objectives for 2009 as itemized in the 2008 sustainability report. It is organized by the five overarching sustainability goals adopted in early 2008: Employer of Choice, Sustainable Facilities, Sustainable Purchasing, Vehicle Carbon Footprint, and Zero Solid Waste.

Meets/exceeds goal  Some progress toward goal  No progress toward goal 

| 2009 Objective  | Status  | Comment  |
|---|---|--|
| <b>Goal: Employer of Choice</b>   |   |  |
| <i>Align work of the Sustainability, Career Development and Diversity Committees. Determine areas of overlap.</i>       |    | The Career Development and Diversity and Inclusion Plans were not available for review. They will be completed in 2010.  |
| <i>Determine baselines on social sustainability impact areas from existing surveys.</i>                                 |    | Survey data has been analyzed by Career Development and Diversity Committees. Sustainability teams will focus on staff workload and wellness.  |
| <b>Goal: Sustainable Facilities</b>   |   |  |
| <i>Apply Leadership in Energy and Environmental Design (LEED) points to existing buildings to establish a baseline.</i> |  | Information is available for Fire Stations 1 and 5 and the Madison Avenue Building. Staff has discussed with OSU Construction Engineering the possibility of using interns to inventory other buildings. |
| <i>Inventory current facilities and forecast new facilities through 2025 (including parks).</i>                         |  | Facility inventory completed. CIP program forecasts facilities and parks through 2015. Staff will use CIP list to seek opportunities for sustainability improvements.                                    |
| <i>Review 5-, 10-, and 15-year maintenance plans.</i>   |  | All buildings have 10-year plans, which are evaluated yearly. Public Works and facilities representatives from other departments look for sustainability opportunities.                                  |
| <i>Research other relevant organizations, cities, and buildings.</i>  |  | Information compiled on US cities that require LEED certification for their facilities.  |
| <i>Research green certification for public facilities (e.g., parks).</i>  |  | The Sustainable Sites Initiative and Salmon Safe certification appear feasible.  |
| <b>Goal: Sustainable Purchasing</b>   |   |  |
| <i>Train City employees on Sustainable Purchasing Guidelines and how to analyze costs.</i>                              |  | Some progress has been made in certain departments and work groups, but formal training is not yet in place.   |
| <i>Determine product and service areas of greatest need and impact.</i>   |  | A top 10 list of purchases has been created from lists compiled during departmental brainstorming; also using greenhouse gas inventory to determine materials with greatest embedded emissions.          |

|  |   |   |
|--|---|---|
| <i>Investigate environmentally preferable product options.</i>   |    | Admin staffs have made some progress, but the effort needs to be more systematic.   |
| <b>Goal: Vehicle Carbon Footprint</b>  |   |   |
| <i>For the City fleet, establish a baseline footprint of the type and amount of fuel consumed and the number of vehicles by type.</i>  |    | This information is available in City purchasing and fleet maintenance records. In addition, the organization has completed a greenhouse gas inventory for baseline year 2004 and for 2008 that shows the carbon footprint of the entire fleet.                         |
| <i>Purchase five alternative-fuel vehicles City-wide.</i>  |    | The Police Department replaced two gasoline-powered vehicles with hybrids. Other alternative-fuel vehicles were planned, but the City did not get anticipated stimulus money.   |
| <i>Train City employees on energy conservation policy and other energy-saving behaviors.</i>   |    | In progress. An energy conservation page has been added to the intranet and energy use is reviewed at Sustainability Steering Committee meetings and in the employee newsletter.  |
| <i>For emergency vehicles, establish a baseline footprint of consumption per call for service.</i>   |    | For baseline fiscal year 04/05, consumption was 3.27 gallons (unleaded and diesel) per unit movement (Fire Department vehicles responding based on call type). In FY08/09, consumption was 2.57 gallons per unit movement—a reduction of 0.7 gallons per unit movement. |
| <i>For Transit, establish a baseline footprint of ridership per gallon.</i>  |  | Rides per gallon have increased from 7.7 in 2004/05 to 8.6 in 2008/09.  |
| <b>Goal: Zero Solid Waste</b>  |   |   |
| <i>Complete a Solid Waste Management policy that aims to reduce, reuse, recycle, and compost materials to the maximum extent possible.</i>   |  | Policy completed in July 2009. It is aligned with LEED requirements and integrates the City's Sustainable Purchasing guidelines.  |
| <i>Develop an organization-wide zero solid waste plan with department-specific goals to accommodate special wastes (e.g. sweeper debris).</i>  |  | In progress. Best management practices for solid waste disposal developed for Public Works are being customized for other departments.  |
| <i>Develop recycling specifications and standards for building demolition. Identify specific recycling goals and contractor documentation to ensure that the specifications are met.</i> |  | Investigation has determined that specifications will need to be facility-specific. Specs for the Moose Lodge deconstruction include salvage of materials, recycling, and contractor reporting forms to track materials and refuse leaving the site.                    |
| <i>Train City employees on solid waste policy, zero waste plans and recycling standards.</i>   |  | Training has been conducted in Public Works, Fire, and the Library.   |

## Highlights of 2009 – Next Steps for 2010

The organization's long-term sustainability goals cover all of the impact areas that the departments identified in their brainstorming sessions, but they are even more ambitious, as they reflect the sustainable endpoints the organization seeks to achieve.

To inform and guide its next steps, the City is using the sustainability survey developed by the International City/County Management Association (ICMA) Center for Performance Management. The survey is used to evaluate and benchmark participating local governments, and the City has committed to complete it beginning in fiscal year 2010.

### Employer of Choice

An *Employer of Choice* is one whose practices, policies, benefits and overall work conditions enable it to successfully attract and retain talent. Workload and wellness are related social sustainability issues the SMS is focusing on. To assess progress, City sustainability teams will track responses to the workload and wellness questions in the annual employee survey.

- In the 2009 employee survey, 43 percent of respondents agreed that the City's Wellness program contributed to a positive work-life balance. Fifty-one percent said their workloads are "challenging" but not "overwhelming."
- However, nearly a quarter of employees (23 percent) agreed that work issues "frequently" impact their ability to enjoy a healthy work-life balance and pursue interests outside of work.

Departments are taking a variety of steps to address staff workload concerns:

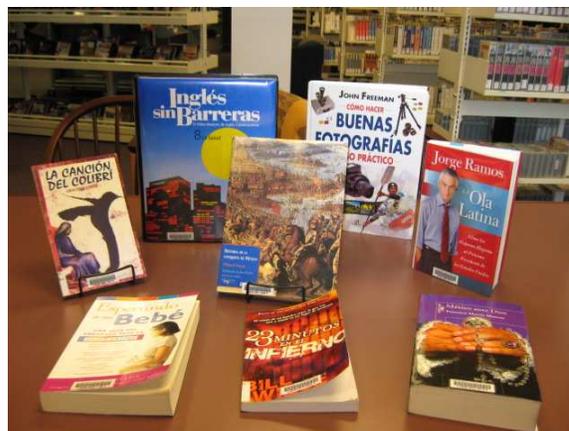
- The Finance Department now receives electronic files for online payments that upload into the City's financial system, thereby eliminating manual entry of hundreds of payments each month.

- The Police Department implemented Coplogic, an online police reporting system that enables citizens to file reports of incidents over the internet in cases where there would be little benefit to dispatching an officer. The system allows the department to better allocate resources to major crimes.
- The Fire Department partnered with the Linn Benton Fire Training Council to provide productivity skills training to City staff, a project assisted through a City sustainability grant.
- A sustainability grant was used for consultant services in researching best practices in flexible work arrangements.

The organization also moved forward on diversity issues:

- City staff continued to participate in monthly training through the Employer Partnership for Diversity.
- Diversity needs and progress continue to be assessed through the annual employee survey. Managers and supervisors attended a workshop conducted by Dr. Terryl Ross, OSU Director of Community and Diversity.

- The Diversity and Inclusion Committee continued to develop a Diversity and Inclusion Plan, with completion expected early in 2010.
- All Police Department staff attended cultural diversity training.
- Parks and Recreation established an “inclusion plan” for casual (occasional or temporary) employees to make them feel more welcome and informed.
- The City created incentive pay for staff who are qualified in Spanish and American Sign Language to be available as in-house resources.
- Library staff conducted training in basic Spanish for library employees. There were five graduates from three library divisions.



*Spanish-language materials at the Library*

### **Steps for 2010**

- Align the work of the Sustainability, Career Development and Diversity Committees. Determine areas of overlap.
- Complete the pilot project to test the viability of Individual Career Development Planning with a small group of employees and coaches.
- Design/create a calendar for in-house training and continuing education opportunities.
- Begin work on improving performance management practices by making the employee evaluation process more understandable and relevant to positions and job duties.

# Sustainable Facilities

*Sustainable facilities* are those built, maintained, and operated in a manner that reduces consumption of energy, water, and materials, as well as harm to human health and the environment. They include occupied buildings and facilities such as parks and utility system pumping stations. Staff tracks electricity, natural gas, and water use to compare against baseline years and to measure progress toward reduction goals. Staff uses LEED checklists to evaluate City buildings and is investigating a similar assessment tool for parks.

## Energy Conservation

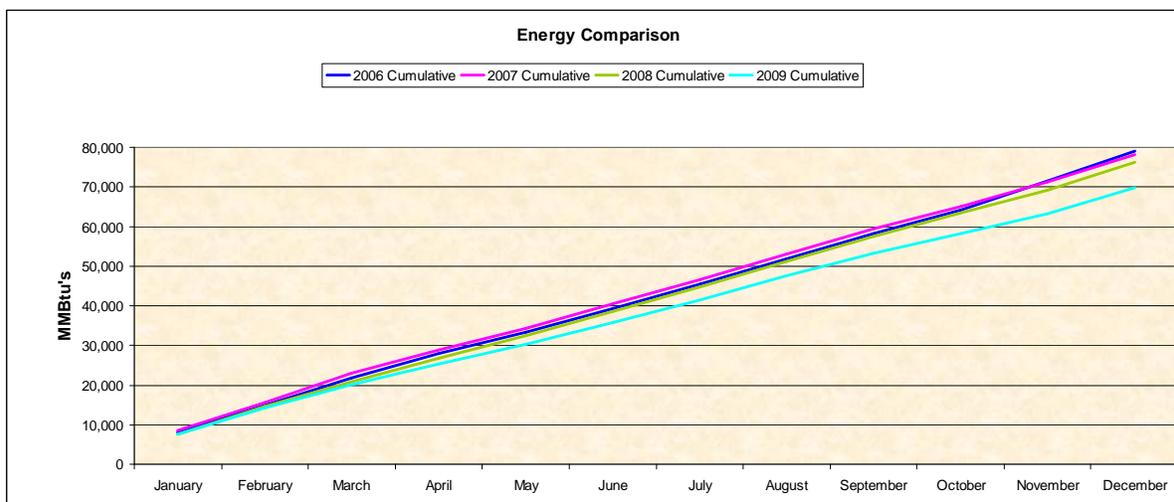
- The City received nearly \$50,000 in energy conservation incentives in 2009.
- Three high-efficiency boilers and an energy management system were installed at the Osborn Aquatic Center. Along with a partial retro-commissioning of mechanical systems, the changes have saved about \$40,000 in the first seven months of the fiscal year. Natural gas use is down by 36,000 therms and electricity use by 190,000 kilowatt hours over the previous year.

- The Library replaced its aging boiler with two smaller, energy-efficient boilers. Having two provides greater flexibility in adjusting boiler output.



*H.D. Taylor Water Treatment Plant*

- By refining processes, operators at the Taylor Water Treatment Plant have reduced the chemicals and water required for treatment and the number of miles driven to dispose of sludge. Water savings are estimated at 8 million gallons—roughly a day's production—which reduces energy use at the plant.
- Staff contracted to replace mercury vapor street lights with more efficient high-pressure sodium lights, reducing energy consumption by 43%.



- Staff has installed inductive lighting in two streetlights and in the Library garage for field evaluation.



*Inductive lighting at Madison and 6th*

### Renewable Energy

- Using grant funding, Public Works contracted to evaluate small-scale hydropower potential at the Rock Creek Water Treatment Plant. The study included a triple-bottom-line (environmental, economic, and social sustainability) analysis.
- Public Works is working with an OSU Wood Science student investigating the feasibility of using woody biomass to generate heat at Fire Station 5.
- The City received a grant from PacifiCorp to install photovoltaic solar panels on Fire Station 4 in 2010.

- Solar water heating systems were installed on the Madison Avenue Building, the Public Works facility, and Fire Station 4.



*Solar thermal on Madison Avenue Building*

### Parks and Natural Areas

- A pesticide-free/water conservation landscape was planted at City Hall.
- Parks and Recreation completed the Corvallis Urban Forestry Management Plan, which provides a 20-year strategic framework to focus and expand the city's Urban Forestry program.
- The City issued its first annual State of the Forest Report for the Corvallis Forest. The report describes activities undertaken during the previous two years to implement the Corvallis Forest Stewardship Plan, action planned for the 2009-2010 fiscal year, and conditions and trends facing the City's 2,400-acre Rock Creek Watershed property.

### Steps for 2010

- Identify a City building for which to apply LEED-EB (LEED for Existing Buildings) points to develop an evaluation process, including determining sources of data, researching cost of initial certification, and ongoing maintenance/re-certification.
- Begin implementation of the Urban Forestry Management Plan.
- Assure that all irrigation systems under City control operate at a minimum of 80% efficiency.
- Select a park to benchmark against Sustainable Sites Initiative guidelines.

## Sustainable Purchasing

*Sustainable purchasing* considers the triple bottom line (environmental, economic, and social impact) in purchasing decisions. Useful tools include: life-cycle costing to determine lowest economic cost; specifications that include environmentally preferable characteristics; and third-party certifications (e.g., ENERGY STAR) to identify products. Departments work with vendors to report on green purchases. The Finance Department tracks vendors used for discretionary purchases based on distance from Corvallis and ownership.

- Public Works has added a local biodiesel producer to its list of vendor contacts for fuel quotes.
- The Finance Department offers customers online utility billing. Its billing envelope has a window made of biodegradable cornstarch.

- The Police Department purchased ultra-capacitor flashlights, which charge within 90 seconds from standard 110-volt or vehicle chargers and are rated at 50,000 hours of service before needing replacement. The flashlights have a lower life-cycle and environmental cost than other flashlights because there are no batteries to replace or dispose of.
- All Police patrol cars are equipped with battery-powered LED "PowerFlares" to reduce the use of traditional flares to mark road hazards. Road flares have a limited duration, emit noxious smoke, and leave a chemical residue on road surfaces. PowerFlares have long lifespans, low operating costs, and will cut the number of traditional flares purchased and used each year by an estimated 70 percent.



*Cost of PowerFlares versus Traditional Road Flares*

|                               | Road Flare  | PowerFlare   |
|-------------------------------|---|--|
| <b>Purchase cost</b>          | \$29.00/case<br>(36 flares/case)                          | \$40.00 each   |
| <b>Replacement battery</b>    | None  | \$0.75 each<br>(Every 2 years or 30 hours of use)                                |
| <b>Annual cost</b>            | 22 cases (792 flares) =<br><b>\$640/year</b>              | ~ \$0.38 each<br><b>\$15/year</b>  |
| <b>Operational hours</b>      | 30 minutes/flare  | 15-30 hours/PowerFlare   |
| <b>Estimated 10-year cost</b> | 22 cases/year =<br>220 cases =<br><b>\$6,400/10 years</b> | 60 PowerFlares + 240 batteries =<br>\$2,400 + \$180 =<br><b>\$2,580/10 years</b> |

### Steps for 2010

- Create training and/or a training aid to help employees understand the City's sustainable purchasing guidelines, life-cycle costing and how to navigate other sustainable purchasing information on the intranet.
- Arrange sustainable purchasing training from the State of Oregon for employees who make purchases so they understand what is allowed by State law.

## Vehicle Carbon Footprint

*Vehicle carbon footprint* is measured in the organization's greenhouse gas inventory. The City aims to decrease its use of fossil fuels by using more energy-efficient, alternative-fuel, and hybrid vehicles and by changing driving behaviors.

- The City's updated internal policy on driving and vehicle use includes language encouraging employees to use bicycle transportation for City business.
- The City encouraged employees to use alternative transportation options by participating in Get There Another Way week.
- A public bicycle shelter was installed in front of the Madison Avenue Building, and a secure bike shelter was built in the back of the building to accommodate employees of the City Hall block.



*Bike parking at Madison Avenue Building*

- The Police Department replaced two gasoline-powered vehicles with hybrids, and Public Works purchased two backhoes that run on 20% biodiesel.



- The FY 09-10 Capital Improvement Program includes a project to install six electric vehicle charging stations in FY 10-11.
- The City is participating in Oregon's aggregation of projects to submit to the federal government for electric vehicles and charging stations. This program includes funds for hybrid vehicles, plug-in hybrid conversion kits, plug-in hybrids, and battery electric vehicles.

### Steps for 2010

- Formalize departmental procedures for reviewing fleet size for possible reductions and/or more economical vehicles.
- Ensure fleet tracking by Public Works agrees with ICMA definitions for light, medium, and heavy vehicles to enable data collection for comparison purposes.

## Zero Solid Waste

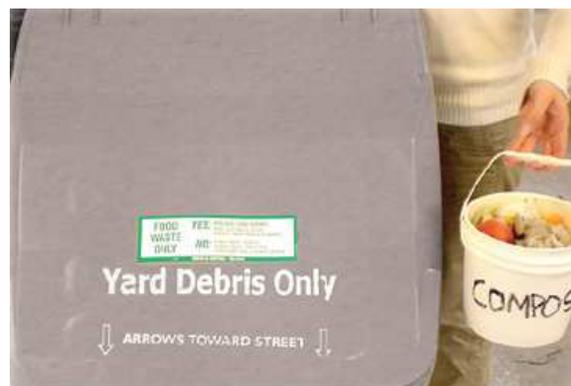
*Zero solid waste* encourages staff to use resources in a manner that reduces waste to the landfill to zero. It promotes reuse, recycling, and waste prevention from reduced consumption and considers the entire life cycle of a product. Staff conducts waste audits and measures success by the diversion of waste from the landfill, an increase in materials recycled or reused, and financial savings from smaller garbage bins.

- The City completed an internal Solid Waste Management Policy that includes language required by LEED and integrates the City's Sustainable Purchasing guidelines.

Staff has initiated a variety of innovative recycling and composting solutions:

- Plastic film recycling was expanded to all staff-occupied facilities and has been very successful, with large volumes at every collection site.
- Parks and Recreation piloted a project to put recycling bins at sports fields for summer programs. The initial project at the Sunset Park softball complex got good results, with many plastic bottles recycled and minimal contamination.
- City employees bring cans and bottles from home and staff volunteers return them for deposit, donating the proceeds to the Linn Benton Food Share. They give the pull tabs to Good Samaritan Regional Medical Center, which sells them to a recycler and uses the proceeds for services and supplies not covered by insurance and to help patients with no or insufficient insurance. Last year the project netted \$571 in deposits and sixty-eight pounds of pull tabs.

- The Library has reduced the quantity of discarded books being recycled by making more available for sale and redistribution. Books have been donated to local schools and shipped to sister libraries in China.
- Parks and Recreation recycled accordion doors from the Majestic Theatre for future use at the Osborn Aquatic Center.
- City Hall and Finance employees use Allied Waste's curbside green waste program, disposing of food debris in the yard waste cart. Public Works began a project to dispose of staff-generated paper towel waste in yard carts.



- The City bought compostable plates, cups, cutlery, and napkins from a local vendor for use at the employee picnic.

Departments continue to make progress toward reducing paper consumption:

- Finance staff began saving their nightly updates in PDF format instead of printing them, saving enough paper each month to fill two 4-inch binders.
- The Library reformatted its daily "pick list" of hold items, reducing the report from 60 pages to 12. A local organization turns the old reports into art journals for homeless teens.

The City also seeks to reduce waste from Capital Improvement Projects:

- In 2009 it delivered more than 6,250 cubic yards of soil and 2,150 cubic yards of Portland cement concrete from the Walnut Boulevard reconstruction project to Benton County for use in the realignment of Reservoir Avenue. The benefit to the County was roughly \$10 per cubic yard or \$84,000.



*Recycling concrete from Walnut Boulevard*

- The Majestic Theatre seismic upgrade called for the contractor to remove and reuse all existing wood trim and molding. Saving these materials reduced waste, consumption of new materials, and the time to sand, prime and paint the trim and molding. The additional cost was only \$420 more than the \$128,934 base bid.

### **Steps for 2010**

- Expand composting program for staff-generated paper towels to 50% of City buildings.
- Evaluate potential for food debris composting at each City building.
- Train City employees on the solid waste policy and implementation in their workplaces.
- Formalize in the Solid Waste Management Policy City practices regarding reduction of waste from fleet repair and preventive maintenance operations.

## In the Community

As directed by the City Council Organizational Sustainability policy, this report focuses on progress achieved by the City's internal sustainability program and objectives for the next reporting period. However, the significant role that the organization plays in community sustainability should not go unmentioned.

City employees sponsor or participate in many community education and outreach events:



*Da Vinci Days  
stormwater pollution  
prevention booth*

- Staff members promote alternative transportation, water conservation, and stormwater pollution prevention at events such as da Vinci Days, the Corvallis Farmers Market, Kids Day for Conservation, and Earth Day fairs (Corvallis Environmental Center, OSU, Hewlett-Packard) and give presentations to organizations such as the Downtown Corvallis Association, Rotary Club, OSU Climate Masters, Willamette Riverkeeper, Marys River Watershed Council, and public schools.
- City staff serve on external advisory boards, such as for OSU's graduate program in water resources and for the State of Oregon's green building codes.
- Water conservation staff collaborated with Allied Waste and the Oregon Department of Environmental Quality on a mercury collection/thermometer exchange.
- Stormwater pollution prevention staff led volunteers to install native plants along creeks, mark more than 1,000 storm drains with "Dump No Waste, Drains to River" decals, and distribute English/Spanish door hangers about pollution prevention.
- Four Public Works employees attended training on Fostering Sustainable Behavior in community-based programs. Others participated in conferences (e.g., Northwest Facilities Expo, National Safe Routes to School) to learn more about green building opportunities and bicycle and pedestrian programs.



*Student marking drain*

The City is a founding member of the Corvallis Sustainability Coalition and works with the organization in various capacities:



- The City Council has a liaison to the Coalition, and the Sustainability Supervisor serves on the Steering Committee.
- Public Works staff assisted the City Council in its sustainability goal-setting by developing a process to prioritize actions in the Coalition's Community Sustainability Plan.
- Staff also assisted the expanded Urban Services Committee, which included two members of the Coalition's Energy Action Team, with the public process to decide how to spend Corvallis's \$511,600 federal energy block grant allocation. Two of the proposals selected were from the Energy Action Team.

- Staff from Parks and Recreation participate on the Coalition Communications Committee and the Waste Action Team.
- Water conservation staff is working with the Water Action Team and the First Alternative Food Co-op to reduce water use and waste as part of a community demonstration project.

Beyond Corvallis, the City organization serves as a model for local governments throughout the country that are working on sustainability issues. During 2009, the Sustainability Supervisor was contacted by officials in Bend, McMinnville, Gresham, and Benton and Linn Counties in Oregon; Urbana and Normal, Illinois; Lawrence, Kansas; Sonoma County, California; and El Paso, Texas. Water conservation staff routinely fields requests for advice from utilities and consultants in the Pacific Northwest and beyond. Conversely, staff researches the best practices of cities and organizations from which Corvallis can learn and shares information through the International City/County Management Association (ICMA), ICLEI-Local Governments for Sustainability, the International Society of Sustainability Professionals (ISSP), the Public Sector Sustainability Professionals (PSSP), the Urban Sustainability Directors Network (USDN), and other professional and sustainability-related organizations.



One of the roles of City staff is to serve as a public resource. If you have questions or comments about the City's sustainability program, please contact the Sustainability Supervisor at 541-766-6916 or visit <http://www.ci.corvallis.or.us/>.