

APPENDIX E

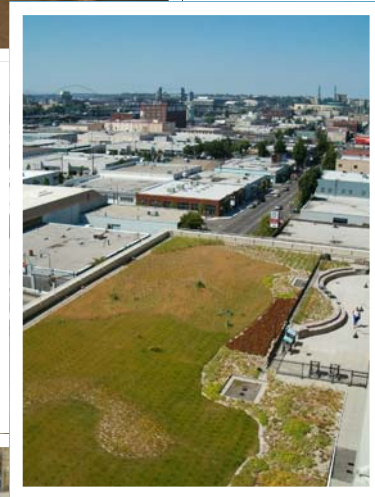
Example County Sustainability Program

This document was produced by Multnomah County in November 2004. Though the focus of their effort was broader. The same approach could be taken in Howard County with respect to pollution prevention, public education, and energy efficiency because of the potential cost savings. Part of the focus of this program could be in supporting both NPDES requirements and the Chesapeake Bay 2000 agreement.



Multnomah County Sustainability Report

November, 2004



Multnomah County Vision for Sustainability

Multnomah County government strives to be a leader in sustainability - we attempt to achieve the mutual benefits of community livability, a thriving economy, and a healthy ecological system simultaneously - in every action at every scale.



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November 2004

I am pleased to present Multnomah County's Sustainability Report 2004.

Promoting sustainability is one of my top priorities as a Multnomah County Commissioner. We have a responsibility to future generations to protect and enhance our community assets – providing for clean rivers, clean air, and fertile land. To avoid a future characterized by the economic uncertainty such as we are experiencing at this moment, we need to act decisively today. If we focus on the interconnections between environmental quality, economic health and social justice under the umbrella of sustainability we can make our community a better place for ourselves and our children.

This report outlines actions that Multnomah County is taking to achieve a vision of sustainability. It provides an overview of the diverse action areas and projects that are being conducted as part of the County's Sustainability Initiative and within Departments. I am proud of our accomplishments to date but I also recognize that there is still much work yet to be done. This report begins to outline some new directions for County action including developing a Toxics Reduction Strategy, adopting high performance green building construction practices, and continuing sustainable procurement work.

I hope you will join me in supporting progress towards sustainability at the County and I encourage you to consider how your actions might impact children of the seventh generation.

Thank you for your interest in this vital issue.

Maria Rojo de Steffey
Multnomah County Commissioner

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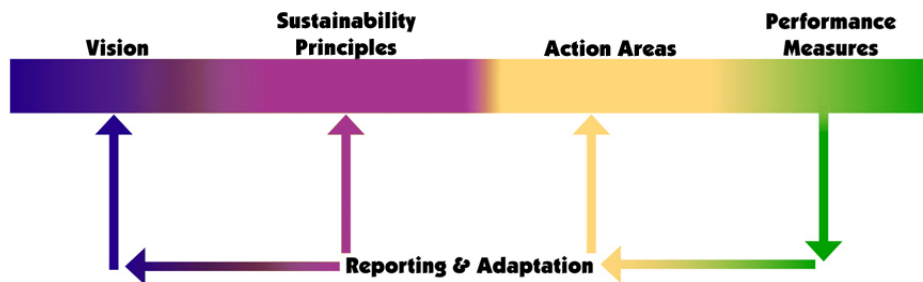
Executive Summary

Multnomah County is part of a global movement to make our planet sustainable for future generations. This movement includes all levels of government from international to local, as well as private businesses, nonprofit organizations and educational institutions worldwide.

Multnomah County's Sustainability Initiative was formalized in 2001 by the Board of County Commissioners to provide leadership to the Multnomah County organization to help implement strategies to achieve sustainability. Sustainability is defined as using, developing, and protecting resources at a rate that enables people to meet their current needs while providing for the needs of future generations.

This initiative is under the policy guidance of the County Board of Commissioners and is advised by the citizen-based Sustainable Development Commission of Portland and Multnomah County. Staffing is currently provided by a Sustainability Manager and Pollution Prevention Specialist in the County Business and Community Services Department.

The Sustainability Initiative, as described in more detail in this report and in the following illustration, includes the following closely interrelated elements:



- ◆ **Sustainability Vision** – Multnomah County government strives to be a leader in sustainability — we attempt to achieve the mutual benefits of community livability, a thriving economy, and a healthy ecological system simultaneously—in every action at every scale.
- ◆ **Sustainability Principles** – have been adopted by the Board of County Commissioners to guide all county decision-making.
- ◆ **Action Areas** – represent a wide range of actions being taken by County government to implement our sustainability vision and principles, including: climate change, education, energy conservation and renewable energy, environmental health, food, green building, pollution prevention, recycling, sustainable procurement, transportation, wildlife and water quality.
- ◆ **Profiles of Sustainability Projects** – provide successful examples of County agencies that have taken action in support of sustainability.
- ◆ **Performance Measures** – provide feedback on effectiveness of actions, projects, and changes required to achieve our vision of sustainability.

In order to achieve a sustainable Multnomah County, County agencies have taken action in many areas. In the next year, significant new action is required including:

- ◆ Developing a Green Building Policy for energy- and resource-efficient building standards for all County new construction and major renovation projects.
- ◆ Participating in a regional solicitation for hybrid electric vehicles for County administrative fleet



- vehicle purchases.
- ◆ Working with our new vendor under the Resource Management Contract as well as other recycling vendors to improve County recycling rates for County facilities.
 - ◆ Conducting a five-month pilot in partnership with County Health Promotions and the Chronic Disease Prevention Program to provide personalized assistance to employees for use of commute options including incentives, Web-based resources, group presentations, and publicized results.
 - ◆ Evaluating software for automatic shutdown of employee computers after hours.
 - ◆ Developing recycling and refurbishment options for surplus furniture to complement upcoming facilities disposition planning.
 - ◆ Developing a Toxics Reduction Strategy for County business operations jointly with the City of Portland using the precautionary principle.
 - ◆ Implementing electronic waste recycling program.
 - ◆ Strategically develop long-term sustainability goals.
 - ◆ Expanding our biodiesel fuel program to include use of ultra-low-sulfur diesel.

Progress in these areas is a priority for the Sustainability Initiative and requires commitment by County agencies and employees for continued success. We hope this report will inspire strong leadership for sustainability within the County as well as demonstrate the great value this initiative provides.

Context for County Sustainability Initiative

Sustainability is a positive vision for the future pursued on every continent. Multnomah County government is part of a worldwide movement to create a more sustainable future where, according to the World Commission on the Environment and Economy, “Development... meets the needs of the present without compromising the ability of future generations to meet their own needs.” Key global mileposts include the creation of the World Commission of Environment and Development (the Brundtland Commission), the Rio Earth Summit of the United Nations, the U.S. President’s Council report on Sustainable Development, the World Summit on Sustainable Development, and establishment of the United Nations Division on Sustainable Development.

The State of Oregon, City of Portland, and Multnomah County are advancing sustainable development in Oregon. The concept has gained widespread support. Key state and local milestones include:

- ◆ 2000 Governor Kitzhaber’s Executive Order on Sustainability
- ◆ 2001 Sustainable Development Commission for Portland and Multnomah County established (see Appendix)
- ◆ 2001 Oregon Sustainability Act established the Oregon Sustainability Board and Oregon Natural Resources Institute at Oregon State University
- ◆ 2003 Governor Kulongoski’s Executive Order – A Sustainable Oregon in the 21st Century

Private industry is also incorporating sustainable practices using a variety of tools including: Environmental Management Systems (EMS) and ISO 14001, the Natural Step, The LEED™ program of the U.S. Green Building Council, the Triple Bottom Line, Natural Capitalism, and “Cradle to Cradle” product development. In Oregon, for example, over 170 companies, organizations, and agencies are members of the Oregon Natural Step Network. Multiple companies have undertaken significant planning and actions to address in-house sustainability. A few examples include: Nike Inc., Norm Thompson, Shore Bank Pacific, TriMet, Gerding/Edlen Development Company, Neil Kelly Company, Progressive Investment Management, Rejuvenation Inc., SERA Architects, Ashforth Pacific Inc., BOORA Architects, College Housing Northwest, Collins Pine, and Hot Lips Pizza.

Multnomah County also works closely with other regional governments such as Metro and the City of Portland, and there are excellent examples of sustainable development planned and underway in Fairview, Gresham, Wood Village and Troutdale. Metro, as an enterprise, is instituting a comprehensive sustainable development management program. The City of Portland is a key partner with the County on the Sustainable Development Commission, the Global Warming Action Plan, sustainable purchasing, green building and many other initiatives. Fairview, Gresham, Troutdale and Wood Village developed a sustainable development plan for the Columbia Riverfront area. Gresham has planned sustainable development for the recent “Springwater” addition to the urban growth boundary. And Fairview is one of the region’s communities committed to “smart growth.”



Multnomah County has an active Sustainability Initiative providing overall coordination and guidance to the vision, principles, policies, programs and projects described in this report. The Sustainability Initiative is guided by the Multnomah County Board of Commissioners and advised by the Sustainable Development Commission of Portland and Multnomah County (Appendix 1). The lead County Commissioner for sustainability is Maria Rojo de Steffey, from Multnomah County District One. Amy Joslin, Sustainability Manager of the Department of Community & Business Services, manages the effort. Molly Chidsey leads the Pollution Prevention program and assists in staffing the Sustainability Initiative.

Sustainability Vision and Principles

Sustainability Vision

Multnomah County government strives to be a leader in sustainability – we attempt to achieve the mutual benefits of community livability, a thriving economy, and a healthy ecological system simultaneously – in every action at every scale.

Why Pursue Sustainability?

In establishing the County’s Sustainability Initiative, the County Board of Commissioners adopted Sustainable Development Principles to guide the initiative. Included in the Resolution are the following findings:

- ◆ Multnomah County has a responsibility to future generations to prevent negative impacts to the natural environment, recognizing that future generations will inherit the consequences of our decisions.
- ◆ Environmental quality, economic health, and social well-being are interconnected. Action in one of these areas impacts all other areas.
- ◆ A healthy environment is integral to meeting Multnomah County’s vision of healthy people in healthy communities.
- ◆ By making thoughtful decisions and taking necessary precautions at the local level, Multnomah County also supports the future of our regional, national and global community.
- ◆ For sustainability to be successfully integrated into Multnomah County, commitment to action is required at all levels.

County Milestones on the Path to Sustainability

2001 --

- ✓ Sustainability Policy Direction with dedicated Sustainability Manager established
- ✓ Intergovernmental Agreement with City of Portland creates the Sustainable Development Commission
- ✓ Local Action Plan on Global Warming adopted

2002 --

- ✓ Employee Commute Options & Parking Recommendations adopted
- ✓ Sustainable Procurement Strategy adopted
- ✓ Food Policy Council established
- ✓ Water Quality program established
- ✓ Executive Rule on Energy Conservation adopted
- ✓ Pollution Prevention program established

2003 --


- ✓ Environmental Health Report released

2004 --

- ✓ County Sustainability Principles adopted

- ◆ The County Board has directed all County employees and officials to take the sustainability principles and related performance measures into consideration as a guide in decision-making.

Multnomah County Sustainability Principles

- 
- 1 Create a future where communities, commerce and nature thrive together in harmony.
 - 2 Consider long-term impacts of decisions in order to achieve multiple benefits for the economy, environment and community.
 - 3 Ensure healthy communities by celebrating diversity and providing safe neighborhoods, a living wage, and access to education for all ages and socioeconomic sectors.
 - 4 Build community awareness, responsibility, involvement, and education as key elements of successful policies and programs.
 - 5 Protect and restore air, water and land to preserve biological diversity and environmental health while providing a natural resource base for future generations.
 - 6 Take necessary precautions to prevent toxic pollution and waste through proactive measures.
 - 7 Ensure that ecosystem impacts and the costs of protecting the environment do not unfairly burden any one geographic or socioeconomic sector of Multnomah County.
 - 8 Use County resources efficiently by recognizing the interconnections among community well-being, land use, building, transportation, affordable housing, food systems, and the natural environment, and by adopting a holistic long-term view of our investments, which includes social and environmental costs.

The Sustainable Development Principles were adopted by the Multnomah Board of County Commissioners in February 2004.

Looking Ahead

In the three years since the Sustainability Initiative's inception, significant progress has been made. Key policies such as the *Local Action Plan on Global Warming*, the *Sustainable Procurement Strategy* and *Travel Smart* have been adopted by the Board of County Commissioners and set our direction for the future. On-the-ground projects, as described in the project profiles, demonstrate how the County is addressing policy goals and creating partnerships among County agencies. New programs such as the pollution prevention program and water quality program have been organized to lead improvements in these areas. And employee education and team development projects have worked to institutionalize sustainability as the standard way for the County to do its business.

Looking ahead, there is much more work yet to be done. The Sustainability Initiative will need to work with its County agency partners to:

- ◆ Develop sustainability plans in County agencies. Strong leadership roles for sustainability will be required in these agencies to encourage widespread ownership of sustainability within County government.
- ◆ Develop overall goals and measures of sustainability for County government that connect to the County's core mission. Strategic planning work is needed to move beyond individual fiscal year work plans and budget cycles.
- ◆ Identify and discuss options for long-term funding for the Sustainability Initiative.
- ◆ Engage citizens in setting sustainability priorities for both Multnomah County government operations and the community.

- ◆ Address issues of toxic chemical use and pollution’s legacy on the health of our employees, communities, and the environment.
- ◆ Shift from short-term, economic decision-making to holistic thinking that considers impacts to future generations.
- ◆ Strengthen ties with other local governments in the region to share expertise and experiences for coordinated progress in sustainability.
- ◆ Be open to expanding the program’s capacity to meet future needs.



Multnomah County *can* be a leader in sustainability. We have shown that we can accomplish much with limited resources if we work toward our vision of achieving the Triple Bottom Line (improving our economy, environment, and community simultaneously) in County government. To achieve our vision and implement our principles, the Sustainability Initiative needs the support of the County Board of Commissioners, agency heads, County employees—at all levels.

Multnomah County Action Areas and Project Profiles

Multnomah County is implementing its sustainability vision and principles in many areas of County government. Each of the action areas summarized below includes an overall goal, progress to date, next steps, performance measures, and profiles of sample projects from County agencies. The project profiles include contact information for the project, a project description, next steps, the triple bottom line benefits, and County sustainability principles and action areas addressed by the project.

The triple bottom line, as outlined in the Project Profiles, is a well-recognized way to consider the interdependent nature of the economic, environmental and community value of projects and programs. The triple bottom line concept encourages County employees, at all levels, to consider how our business decisions will support achieving multiple benefits to the economy, environment, and community. For example, instead of making decisions based on first cost alone—sustainability encourages consideration of life cycle costs and benefits, environmental inputs and outputs as well as community impacts. It is our hope that the work reflected in these action areas considers this interdependence and that future actions will make further progress, particularly in the areas of community or social sustainability.

The following symbols, used in the project profiles in this report, refer to the numbered sustainability principles adopted by Multnomah County and related action areas.

Sustainability Principles



Action Areas



Action Area: Transportation Options



Background

Multnomah County employees drive an estimated 12 million miles per year getting to and from County work sites. This contributes to increased traffic volume and increased smog in our region, resulting in decreased employee productivity, reduced quality of life, decreased job satisfaction, and increased recruitment difficulties. All of these factors impact the County's bottom line. Legislative requirements also set air quality and transportation goals for employee commute options for Multnomah County government. In response, the Board of County Commissioners in January of 2002 adopted the *Travel Smart Policy Recommendations*.

The recommendations address government-wide actions to promote sustainable multi-modal commute and parking strategies. They aim to: reduce the need to drive, promote biking, promote walking, use transit, support carpooling, provide education, create incentives, manage parking, pursue funding, and measure progress.

Goal

Encourage employees to reduce auto trips to their work sites by 10 percent in three years.

Progress to Date

- ◆ Alternative work schedules including the flexibility to work "9/80" and "4/10" shifts have been incorporated into many labor agreements reducing the need to drive to work.
- ◆ TriMet bus passes have continued to be offered to employees at no cost to the employee.
- ◆ The fleet bike program has been expanded to include the Multnomah building, the Blanchard building, the Bridge shop and the Mead building.
- ◆ Discounted carpool parking is provided at both the Multnomah building and downtown motor pool.
- ◆ Green Team has hosted transportation fairs at County locations to provide information to employees to support the use of commute options.



Next Steps

1. Conduct a 5-month pilot in partnership with County Health Promotions and the Chronic Disease Prevention Program to provide personalized assistance to employees for use of commute options including incentives, Web-based resources, group presentations, and publicized results.
2. Research "mini-pools" opportunities to provide additional County pool vehicles at select sites to reduce the need for employees to drive personal vehicles to work to conduct County business.
3. Evaluate cost-effectiveness of automobile sharing programs such as Flexcar to complement County-owned vehicles.
4. In 2005 conduct employee surveys for commute options to measure progress and meet stakeholder requirements.

Performance Measures

- ✓ Meet trip reduction goals set by the Oregon Department of Environmental Quality for all County work sites by 2005.
- ✓ Reduce employee vehicle miles traveled in County administrative vehicles by 20 percent by 2010.



TRANSPORTATION OPTIONS PROJECT PROFILE

Employee Commute Options Challenge



Agency Partners

Facilities and Property Management
Contact: Patrick Jones, 503-988-3322, ext. 28916

Goal

Encourage employees to carpool, take mass transit, ride bikes to work and to meetings.

Description

A competition was established to encourage every member of Facilities staff to participate in increasing awareness of commute options and try alternatives to single-occupancy car commuting. Over 50% of FPM staff participated. A matrix was created to track commutes every week and small gift certificate prizes for best bike, car pool, and bus transit commutes, as well as best “ECOcommuters” for the week and month were awarded.

Next Steps

The ECO Challenge was in the fall of 2002. The project benefited from the encouragement and support of then Planning and Development Manager Peter Wilcox. With reorganization, FPM is looking for new leadership to continue this event.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Reduced air pollution emissions. Thirty-five employees used commuting options that they would not have otherwise.
- ◆ **Economic benefits:** \$325 was spent in the local community in the form of gift certificates. Employees who used these certificates were introduced to new commercial areas in the community.
- ◆ **Community Benefits:** Reduced traffic—utilizing commute options to reduce traffic congestion.

“It was a great way to inform everyone of their commuting options. Overall, people had fun with the challenge and many took advantage of the alternatives that were promoted.”

-- Brett Taute
Facilities Specialist 2

Sustainability Principles Addressed



Action Areas Addressed



Transportation



Climate Change




Education

Action Area: Climate Change



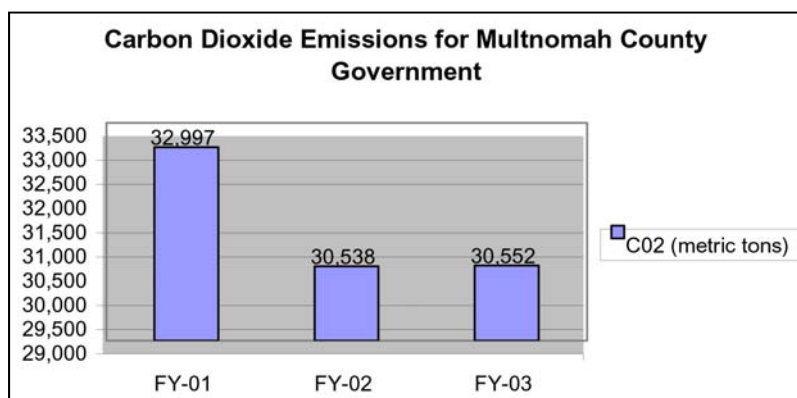
Background

In April of 2001, Multnomah County and the City of Portland adopted a joint *Local Action Plan on Global Warming*. This plan outlines the steps the County and City will take to reduce greenhouse gasses to address one of the foremost challenges the world faces in the new century.



Probable impacts in the Pacific Northwest include warmer temperatures, wetter winters, and drier summers. Climate change impacts to water resources, human health, agricultural production, coastal systems, and ecosystems are forecasted. The greenhouse gasses identified of greatest concern are carbon dioxide, methane, nitrous oxide and halocarbons. Carbon dioxide, which is produced primarily

through burning of fossil fuels, is the largest contributor to climate change. The Plan addresses actions to reduce greenhouse gasses through education, alternative transportation, energy efficiency, renewable resources, solid waste management, forestry and carbon offsets.



Goal

Reduce Multnomah County emissions of greenhouse gasses by 10 percent from 1990 levels by 2010.

Progress to Date

Energy Efficiency:

- ◆ Improved energy efficiency of our buildings with combined annual savings since inception estimated at over \$715,000.
- ◆ Adopted Executive Rule on Energy Conservation to guide further energy efficiency progress.

Renewable Energy:

- ◆ Increased County percentage of renewable energy usage from 1 to 3% for the same cost.

Transportation:

- ◆ Purchased our first hybrid vehicle.
- ◆ Continued to reduce County fleet vehicle size where appropriate.
- ◆ With Board support, identified ways to improve use of employee commute options.

Solid Waste Management:

- ◆ Established Pollution Prevention Program.
- ◆ Increased County purchase of recycled products including paper and paint.
- ◆ Improved average recycling rate from 30% to over 40%.

Education:

- ◆ Developed educational materials for employees to reduce greenhouse gas emissions including a brochure on global warming, a fleet information bulletin on fuel-efficient driving, and information on the MINT.



Next Steps

Provide report on accomplishment of 2003 action items and begin work on actions identified by 2010 including:

1. Further policy, research, and education to enhance other actions.
2. Development of energy- and resource-efficient building standards for all County new construction and major renovation projects.
3. Transportation initiatives to reduce per employee vehicle miles traveled and to improve average fuel efficiency of vehicles in Multnomah County's motor pool from 22 to 35 mpg.
4. Renewable energy installations on County facilities and exploring cost-effective opportunities to invest in renewable energy sources.
5. Improvements to recycling rates and practices to reduce methane emissions from solid waste.
6. Promotion of expanded and improved forestry and other carbon offsets.



U.S. Senator Ron Wyden of Oregon presented County Chair Diane Linn and Amy Joslin an award for the County's support of renewable energy.

Performance Measures

- ✓ To date, successfully reduced County government carbon dioxide emissions 9% from FY-01 levels.



CLIMATE CHANGE
PROJECT PROFILE

Hybrid Vehicle Purchase

Agency Partners

Business Services, Fleet Management
Contact: Michele Gardner, 503-988-3424



Goal

Purchase of gas-electric hybrid vehicles for use in County fleet.

Description

Fleet Services purchased and put into service its first gas/electric hybrid vehicle, a 2004 Honda Civic. The hybrid technology allows the vehicle to run on an integrated gas-powered engine and electric motor that is automatically recharged when decelerating through regenerative braking. This leads to better fuel efficiency and cleaner emissions. The EPA rating on this vehicle is 48 mpg in the city. No special fuel is required and it doesn't have to be plugged in to recharge.

Next Steps

We plan to participate in a regional solicitation for hybrid electric vehicles. King County, WA, with the assistance of the Center for a New American Dream, will provide the opportunity to purchase hybrid electric vehicles in a timely way and at a competitive price.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Reduced emissions—assuming 6,000 miles per year, equivalent to over 2,800 pounds of carbon dioxide per year savings.
- ◆ **Economic benefits:** Reduced fuel usage—potentially more than double the fuel efficiency.
- ◆ **Community Benefits:** Educate the public about this technology and demonstrate leadership and commitment to reducing air quality and climate change impacts to the community.

“The hybrid gasoline/electric technology is exciting, in that it is the first time that alternative fuel vehicles have been designed that do not require special fueling stations, special driving techniques, or additional fuel options to increase driving range.”

-Tom Guiney
Fleet Manager

Sustainability Principles Addressed



Action Areas Addressed



Sustainable
Procurement



Climate Change



Pollution
Prevention

Action Area: Energy Conservation & Renewable Energy



Energy

Background

Multnomah County has had an active energy conservation program since 1994. Initial focus of the program was on retrofit and replacement of energy-using equipment within County facilities to improve energy efficiency. This included a range of projects, from lighting upgrades, cooling system replacements, installation of direct digital controls to allow scheduling of equipment and better temperature control, to whole-building analysis and upgrades for several County owned buildings. More recently, the focus of the energy program has shifted to optimize operations of existing equipment in buildings. To support this work, in 2002 the Multnomah County Chair approved Executive Rule No. 268 to focus County Government on energy conservation opportunities. The Board of County Commissioners also adopted a resolution to authorize green power purchases to encourage renewable energy, which has been in place since April of 2000.

Goal

To reduce energy consumption by an additional 10% by the year 2010 from 2000 consumption levels at County facilities.

Progress to Date

- ◆ Use of building digital control systems is being optimized for changing hours of operations to better match current conditions with controls added to additional equipment.
- ◆ Submetering of individual energy loads is being conducted to identify opportunity areas for operational changes. For example, submetering of the Yeon building heating system identified operation of the boiler during off-hours and when outside temperatures did not warrant.
- ◆ County staff education is being provided to help support energy conservation within their buildings. For example, at the Dexco building, staff assisted by turning off lights and computers where they were not needed.
- ◆ The County's percentage of renewable energy was increased as the cost of renewable energy is coming down, from 1% to 3% without increasing costs.
- ◆ Hillsdale Library has been added to the list of County sites purchasing renewable energy for its electricity.
- ◆ Heating and cooling setpoints are being standardized at 68-70 degrees with a mechanical heating and cooling lockout between 70 to 75 degrees.
- ◆ Space heaters have also been prohibited at County facilities.

Next Steps

1. Evaluate software for automatic shutdown of employee computers after hours;
2. Explore a pilot building for shifting custodial services to occur during the day to save on after hours HVAC and lighting costs and to reduce custodial complaints;
3. Set goals for renewable energy that support regional efforts to move toward a renewable energy economy;
4. Continue to improve energy efficiency within operations of Multnomah County facilities—increasing use of lighting controls systems, continued tightening of hours of operations for our building equipment, and identification of additional retrofit opportunities.
5. Partner with existing projects to include energy-saving measures, for example, the chiller replacement at the Multnomah Building and the Justice Center.

Performance Measures

- ✓ Improved energy efficiency of our buildings with combined annual savings since inception estimated at over \$715,000.





Banfield Building Lighting Upgrade

Agency Partners

Business Services, Facilities
Contact: Mike Meinecke, 503-988-4476

Goal

Upgrade lighting with tenant improvements to save energy at the Banfield Building.



Description

The lighting upgrade at the warehouse and office space at Banfield Industrial Park included replacing all fluorescent lamps and ballasts with more energy-efficient T-8 lamps and electronic ballasts. Additionally, it was possible to reduce the total number of lamps in the office area. On all small offices, conference rooms and storage areas, occupancy sensors were added to shut off the lights when rooms were unoccupied. The County split the cost with the owner of the building. County costs were offset further by a rebate from the Energy Trust of Oregon.

Next Steps

Track energy bills for this facility to monitor savings.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Greenhouse gas reductions of nine metric tons, equivalent to one year's electricity use for a typical household.
- ◆ **Economic benefits:** Annual energy savings with a simple payback of under two years for lighting improvements.
- ◆ **Community Benefits:** Reduced cost of county operations. Benefit to employees as well because of improved lighting system.

"In the review of the tenant improvements for the new Central Stores and distribution center I saw a great opportunity to improve the lighting and save energy on the lighting systems. PacTrust [the building owner] was very open to the idea."

*-Mike Meinecke,
Facilities Energy Specialist*

Sustainability Principles Addressed



Action Areas Addressed



Energy



Climate Change



ENERGY PROJECT PROFILE

Hawthorne Bridge

Architectural Lighting



Agency Partners

Community Services, Bridge Section
Contact: Michael Pullen, Public Affairs Office,
503-988-6804

Goal

Use renewable energy to power architectural lighting to illuminate the Hawthorne Bridge towers and operator's house.

Description

Multnomah County supports adding architectural lighting to Multnomah County's downtown drawbridges by using renewable energy and if the project is privately funded. In 2004, the Willamette Light Brigade is funding the installation of architectural lights to illuminate the Hawthorne Bridge towers and operator's house. The lights will be powered by renewable energy, paid for by the purchase of "green tags" from a local utility while using energy-efficient lighting fixtures.

Next Steps

The Light Brigade plans to add architectural lights to the County's Morrison Bridge in the next year and to the Burnside Bridge in the next several years utilizing renewable energy and energy-efficient fixtures.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Promotes use of renewable energy and energy-efficient lighting fixtures in a highly visible civic application.
- ◆ **Economic benefits:** Illuminates one of Portland's most recognized historic landmarks at night. Local tourism officials believe lighting will help to give Portland an identity and aid efforts to market the city.
- ◆ **Community Benefits:** Makes the Willamette River and its historic bridges the heart and visual focus of the community. Highlights the structures which link east and west Portland. Adds a dimension of delight and pride to river crossings and urban design.

"Why light the bridges? To make the Willamette River and its bridges the visual focus of our city by night as well as by day."

-Willamette Light Brigade

Sustainability Principles Addressed



Action Areas Addressed



Energy



Climate Change

Action Area: Green Building



Background

Facilities and Property Management (FPM) has been making tremendous strides towards embracing green building concepts in recent years. Beginning with the energy efficiency program described on page 11, FPM then created a “Process Improvement Team” to lead work on incorporating green building concepts into existing operations of County facilities.



Most recently, a “Green Building Workgroup” comprised of FPM employees as well as representatives from the Health Department, Sheriff’s Office and District One is currently working to bring policy recommendations to the County Board of Commissioners in December of 2004. The development of this policy meets specific action requirements called out in the *Local Action Plan on Global Warming* to “develop and adopt energy- and resource-efficient building standards for all City and County new construction and major renovation projects.”

Goal

To achieve high-performance, energy- and resource-efficient buildings for all Multnomah County facilities that will:

1. Yield cost savings to County taxpayers through reduced maintenance and operating costs;
2. Provide a healthy work environment for staff and visitors; and
3. Protect, conserve and enhance environmental resources while minimizing waste.

Progress to Date

- ◆ Developed a “Green Guidebook for Facility Managers” that includes information on energy efficiency, water conservation, landscaping, recycled-content building materials, construction waste management and janitorial procedures as well as specific product recommendations for carpet, paint, adhesives and other flooring materials.
- ◆ Conducted training for Facilities managers and employees on the Green Guidebook.
- ◆ Created a process for continued updates and expansion of the Green Guidebook through work of the Process Improvement Team.

Next Steps

1. The work plan for the Process Improvement Team for 2004 includes updating paint recommendations, improving options for furniture surplus, formalizing lamp recycling procedures, developing lighting standards for new purchases, providing training on carpet guidelines, evaluating landscaping practices, implementing battery recycling, and including quarterly reporting at all staff meetings for FPM.
2. The Green Building Workgroup has targeted December of 2004 to bring policy recommendations to the Board of County Commissioners for formal adoption.

Performance Measures

The Green Building Workgroup currently is evaluating performance measures for Green Building.



GREEN BUILDING PROJECT PROFILE

Multnomah Building Green Roof

Agency Partners

Sustainability Initiative in partnership with Facilities Property Management and District One
Contact: Amy Joslin, 503-988-4092 and Alan Proffitt, 503-988-4218



and

Goal

Is a demonstration project of an extensive commercial green roof and implementation of best management practice for stormwater.

Description

The Multnomah building is located in an area targeted by the City of Portland for on-site stormwater management strategies. With funding support from the City, State and other regional partners, a green roofing system was installed on the Multnomah Building to prevent an estimated annual 170,000 gallons of stormwater and associated pollution from entering the Willamette River. Portland State University engineering students are monitoring the roof to measure its performance. Educational displays provide information on the benefits of this emerging technology.

Next Steps

Complete the first year of water-flow monitoring, install energy-monitoring devices and prepare a report summarizing the results. Irrigation and maintenance activities are also being adjusted.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Reduces stormwater peak flow and volume from more than 15,000 sq. ft. of impervious roof area with corresponding reductions in runoff pollutants and temperature. Reduces air pollution and captures carbon dioxide. Increases vegetation and wildlife habitat.
- ◆ **Economic benefits:** Increases roof longevity, saving replacement costs. Utility cost reductions for energy and stormwater fees. Cost savings over the life-cycle of the building were estimated in excess of \$100,000.
- ◆ **Community Benefits:** Improves the urban environment, increases urban green space, and enhances the aesthetic appeal and economic value of the property.

“Even in difficult economic times, it is important to keep your eye on long-term and cost-saving measures....This project will double the life of the roof, will provide stormwater savings, will act as a carbon sink for carbon dioxide and will save heating and cooling energy costs.”

-Commissioner Rojo de Steffey

Sustainability Principles Addressed



Action Areas Addressed



Green Building



Education



Energy



Pollution Prevention



GREEN BUILDING PROJECT PROFILE

Hillsdale Library

Agency Partners

Library Department
Contact: Mike Harrington, 503-988-4525

Goal

To build the first County LEED™ certified building.

Description

Design and build the new Hillsdale Library to serve as a model for incorporating green building materials and techniques. The new Hillsdale Library is the first Multnomah County building to pursue Leadership in Energy and Environmental Design (LEED)™ silver certification. To achieve LEED™ certification, the project incorporates many environmental design elements while providing an inviting, safe and comfortable place for library users of all ages.



Next Steps

The building opened in March, 2004. Documentation has been submitted to the Green Building Council for LEED™ accreditation. Lessons learned from this project are being applied to the development of a County Green Building Policy.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** These included: erosion control during construction; restored habitat areas with native or adaptive plants; green power (renewable energy) purchase; low-flow restroom faucets and toilets; bioswales to hold and filter runoff from roofs; building materials with significant recycled content; and sustainably harvested wood in the ceiling and walls.
- ◆ **Economic benefits:** The building is designed to be over 20% more energy efficient than a building that is built to meet local energy code. Reduced sewer charges because of less rainwater runoff.
- ◆ **Community Benefits:** Hillsdale Library is served by seven bus lines within ¼ mile of the facility. The Library is supplied with parking for 12 bikes, and has a charging station for electric cars. The building is monitored for carbon dioxide levels, and fresh air is mixed

“In Hillsdale, we’ve built a library that will give us significant cost saving during the life of the building, as well as one that will help maintain the quality of the environment. Best of all, we’ve built a library that both the employees and the public will use and enjoy for many years to come.”

-June Mikkelsen
Library Renovation Manager

Sustainability Principles Addressed



Action Areas Addressed



Green Building



Climate Change



Environmental Health



Energy

Action Area: Recycling at County Facilities



Background

In 1989, the recycling program for County facilities was established by Ordinance Nos. 606 & 608. Since then, Multnomah County has had an active recycling program. There is a growing effort to reduce waste at the source, and recycling plays an important role as an alternative to disposal of waste in a landfill.



Even though recycling is not considered a pollution prevention methodology, creation of a comprehensive plan for improving recycling at County facilities was one of the first action areas undertaken by the Pollution Prevention program. Improving the recycling program has been a collaborative effort between Facilities and Property Management and the Pollution Prevention program.

Goal

To divert a minimum of 50% of solid waste from County facilities to recycling by 2005, through improvements to the recycling program at all Multnomah County facilities, both owned and leased. Additionally, to support ongoing regional goals for recycling in the Portland Metro area “wasteshed.”

Progress to Date

- ◆ Conducted assessments of recycling programs at 14 County facilities.
- ◆ Conducted waste sorts at two County facilities to ascertain the composition of the County waste stream at a correctional facility and an office facility.
- ◆ Received recognition from the local Business Recycling Awards Group (BRAG) for two County facilities for excellence in recycling and waste prevention.
- ◆ Successfully worked with catering vendor to stop use of polystyrene foam plates for food service at Multnomah County.
- ◆ Successfully developed and awarded a contract for Resource Management services for 36 County-owned facilities within Portland.

Next Steps

1. Establish a baseline of recycling data through collection of data from facilities on Resource Management contract (see Profile for more information).
2. Assess recycling programs at County facilities located in Gresham and elsewhere in East Multnomah County.
3. Improve recycling collection in County facilities with public areas.
4. Establish recycling collection for other identified waste materials from County facilities including: electronic waste; media such as audio tapes, CD's and their cases; polystyrene packing foam; and alkaline batteries.
5. Work with building owners to improve recycling programs at leased facilities.

Performance Measures

Data on quantities of refuse and recycling from County facilities is collected on a monthly basis as a part of a contract for refuse and recycling services. Currently, data is only available for County-owned facilities within the City of Portland which are covered under this contract. Future efforts may include development of a tracking methodology for recycling data at the County's leased facilities and for facilities serviced by non-contracted vendors.

- ✓ Based on data available from 35 buildings in 2002, County facilities discarded more than 1,115 tons of refuse, and
- ✓ Recycled 30% of their solid waste.



Resource Management Recycling Contract

Agency Partners

Facilities and Property Management, and Central Procurement & Contract Administration
Contact: Molly Chidsey, Pollution Prevention Specialist, 503-988-5015 ext. 27365

Goal

Increase the recycling rate and decrease solid waste from County facilities through an innovative contracting model.



Description

This project aligns the County’s largest contract for refuse and recycling services with adopted recycling goals. The Resource Management contracting model was chosen because of its focus on program efficiency, providing incentives for recycling and decreasing solid waste, and its view of the wastestream as a resource.

Next Steps

Record weights of refuse and recycling from facilities to establish a baseline; establish tracking and reporting of refuse/recycling and cost data; track revenue from market for recycled materials from County facilities; and develop a five-year Resource Management plan for facilities serviced.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Reduces solid waste volume and increase recycling at participating facilities, saves landfill space, and lessens the impact to the local environment.
- ◆ **Economic benefits:** Promotes cost efficiency of the recycling program for County facilities, supports recycling vendors, and places economic incentives on waste reduction and recycling, instead of on volume of waste generated.
- ◆ **Community Benefits:** Supports regional recycling goals and serves as a model for best practices.

“This contract is a key step in what can only be described as a ‘quiet revolution’ that is occurring in Multnomah County as we think ‘out of the box’ in looking for solutions to long-term problems and attempt to find ways to reduce costs and meet ever-stringent resource requirements.”

- Jerry Jelusich
CPCA Senior Buyer

Sustainability Principles Addressed



Action Areas Addressed



Recycling



Climate Change



Pollution Prevention



Electronic Waste Recycling

Agency Partners

Department of Business and Community
Services: Information Technology
Contact: Carrie White, 503-988-3749, ext. 27038



Goal

Finding a recycling alternative to shredding old software and disposing it in the trash.

Description

The Information Technology Division at Multnomah County has been trying to find the most cost-effective, secure, and environmentally sound way of disposing of old software media (CDs, diskettes, floppies, tapes, jewel cases, and associated manuals and packaging). The recycling program offered by Green Disk is being used now to recycle various types of electronic waste. Initially, a total of 194 pounds were collected. A secure, audited process is used to destroy intellectual property contained on the media, then the recycler reclaims the metals, recycle plastics into office accessories, and reuses some of the diskettes and CDs that can be erased and resold. IT staff will continue to collect obsolete media for future recycling.

Next Steps

Continue to look for a free, local, or lower cost alternative and educate the IT staff on the new process.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Prevents waste and pollution by keeping 194 pounds (and counting) of waste out of the landfill to be recycled, reclaimed or reused.
- ◆ **Economic benefits:** Time saved by IT staff by choosing a comprehensive program to erase, sort, and recycle electronic media waste.
- ◆ **Community Benefits:** Provides a more regulated and secure way of ensuring data destruction, and keeps recyclable materials out of local landfill.

Sustainability Principles Addressed



“Sometimes it’s harder to do the “right thing” than you’d think.”

-Carrie White
Information Technology

Action Areas Addressed



Recycling



Sustainable Procurement



Pollution Prevention

Action Area: Sustainable Procurement



Sustainable
Procurement

Background

Prompted by a need to cut costs and by a desire to respond to community concerns, public organizations are increasingly driven to evaluate the environmental, social, and economic impacts of the purchases they make. Multnomah County and the City of Portland have engaged in a Sustainable Procurement Strategy, a cooperative effort to make city and county procurement more sustainable, which was adopted by the Board of Multnomah County Commissioners in 2002. The goal is a procurement system for Multnomah County that is fair, efficient, and accountable, while protecting the environment and providing resources for future generations. Sustainable procurement would move local government toward purchasing decisions that promote the long-term interests of the community.



Goals

- ◆ To complete a review and procurement policy update of 15 to 25 major commodity areas. Each annual review and update should result in commodity or contract specific guidelines and/or specification, policy, rule and/or code changes.
- ◆ To monitor sustainable product availability within select commodity areas and rigorously address possible opportunities for use by the City of Portland and Multnomah County.
- ◆ To design and implement an employee education program on sustainable procurement.

Progress to Date

- ◆ Increased recycled content for copy paper including goals for transitioning to chlorine-free-process paper.
- ◆ Standardized on low-VOC paint for latex paint applications.
- ◆ Purchased biodiesel fuel for diesel-fueled on- and off-road equipment in the County fleet.
- ◆ Review in progress for cleaning and custodial products.

Next Steps

For the coming year, the Multnomah County Sustainable Procurement Strategy has identified the following commodity areas for review:

1. electronics and computer equipment;
2. office products; and
3. medical products used in health clinics.

Work will also be conducted to implement prior recommendations for:

4. surplus furniture; and
5. hybrid vehicles.

Finally, further emphasis on employee education will be made.

Performance Measures

- ✓ Overall tracking of the purchase and use of sustainable products by Multnomah County, with individual performance measures developed for each commodity area as they are reviewed.



SUSTAINABLE PROCUREMENT PROJECT PROFILE

Biodiesel Pilot

Agency Partners

Business & Community Services, FREDs
Contact: Amy Joslin, 503-988-4092 or Michele Gardner, 503-988-3424

Goal

To pilot a clean and renewable alternative to diesel fuel within County operations that also supports goals to reduce greenhouse gas emissions.



Description

Multnomah County began using a 20% blend of Biodiesel (B20) in some of its diesel-fueled fleet in August, 2002. According to the Environmental Protection Agency, diesel pollution levels in the Portland metropolitan area were ranked in the top 50 nationwide. In some areas of Portland, diesel particulates from exhaust are 790 times the health-based benchmark (Oregon DEQ). Use of Biodiesel reduces the level of harmful toxins in urban air environment, as well as net greenhouse gasses that lead to global warming. The alternative fuel is made from natural, renewable resources such as vegetable oils and recycled restaurant grease, and it can be used in any diesel engine with no engine modification. Throughout the pilot project, selected county vehicles powered with Biodiesel will display bumper stickers that read, "This vehicle is powered by Biodiesel, because we care about our air."

Next Steps

Looking to utilize ultra-low-sulfur diesel blended with Biodiesel to further reduce particulate emission in 2005.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Particulate emission reductions of 10% and air toxin reductions between 12% and 20%
- ◆ **Economic benefits:** Biodiesel premium in FY-03 was \$7,562 or 22¢ per gallon over diesel.
- ◆ **Community Benefits:** The health and environmental impact of highway diesel engines is estimated to be equivalent to over \$2 per gallon.

"... Multnomah County has emerged as a leader in decreasing our reliance on petroleum resources by using this cleaner and biodegradable alternative to diesel in some of our fleet."

-Diane M. Linn
Multnomah County Chair

Sustainability Principles Addressed



Action Areas Addressed



Climate Change



Environmental Health



Sustainable Procurement



Pollution Prevention



SUSTAINABLE PROCUREMENT PROJECT PROFILE

Sustainable Paper Procurement Process

Agency Partners

County Business Services/FREDS/Material Management in partnership with Central Procurement & Contract Administration
Contact: Brian W. Lewis, 503-988-5299 or Dona Gaertner, 503-988-5111, ext. 29490



Goal

Procurement of sustainable copier and printing papers.

Description

This project helps implement County Resolution No. 03-092 *Adopting a Policy for Paper and Paint Purchasing and Setting Goals for Paper Use*. Multnomah County and the City of Portland combined their requirements and collaborated on the procurement of copier and printer papers. This was part of a joint effort to implement more sustainable purchasing practices, to raise the level of post-consumer recycled content, and to investigate alternative processing methods and fiber sources and types. It allowed vendors to offer several different paper choices for consideration. As a result of this bid process, 30%, 50% and 100% post consumer recycled content copier paper is now available to County agencies.

Next Steps

To work toward the adopted County goals of all copier and general paper products containing a minimum of 50% post-consumer recycled content and to reduce overall paper consumption by 10% reduction by September, 2005.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Reduces paper waste entering landfills, prevents pollutants from entering the air and water, reduces the use of natural resources and encourages the use of alternative products.
- ◆ **Economic benefits:** This procurement resulted in a 17% reduction in copy paper prices for the first year of the contract over previous contract.
- ◆ **Community Benefits:** Supports expansion of markets for products containing recycled materials and provides stimulation to new local products.

“As a project participant I find it gratifying to see the enthusiastic response from our customers to use the 50% and 100% recycled paper as well as the 30%.”

-Michael Dubesa, Jr.
Multnomah County Senior Buyer

Sustainability Principles Addressed



Action Areas Addressed



Recycling



Sustainable Procurement

Action Area: Pollution Prevention



Pollution
Prevention

Background

Pollution Prevention (P2) is any activity which reduces or eliminates the creation of pollutants or waste at the source, and is based on the principle that waste and pollution can and should be prevented, instead of simply controlled or reduced. The federal Pollution Prevention Act of 1990 put P2 at the top of a hierarchy of management options for pollution, above recycling, treatment, and disposal.



The Pollution Prevention program is a part of the Multnomah County Sustainability Initiative and was launched in November of 2002. This program helps Multnomah County to go beyond compliance by preventing pollution at its source. The P2 program assists Multnomah County to integrate pollution prevention into business operations; promote awareness of P2 to Multnomah County employees; provide in-house technical assistance and research on issues related to pollution, solid waste, and best practices; initiate demonstration projects throughout Multnomah County that prevent pollution and waste; and reduce costs associated with pollution and solid waste through preventative measures. Though the program was initially focused on fostering improvements to the recycling program for County facilities, progress has been made toward preventing both pollution and waste.

Goal

The pollution prevention program seeks to protect human health and the environment through prevention of pollution and waste at the source of Multnomah County business operations.

Progress to Date

- ◆ Utilized Chemical Assessment and Ranking System to initiate analysis of toxicity of chemicals in use at Multnomah County.
- ◆ Switched from solvent-based automotive parts washer to water-based washer for fleet vehicles.
- ◆ Established a goal to purchase only processed chlorine-free (PCF) copy paper by 2005.
- ◆ Held a public workshop on toxics and use of the precautionary principle to prevent toxic pollution.
- ◆ Initiated development of a policy which was adopted by the County Board of Commissioners to reduce toxics and to develop a *Toxics Reduction Strategy*.
- ◆ Initiated assessment of landscaping practices at Multnomah County facilities, including use of herbicides and pesticides.
- ◆ Developed toxicity criteria for procurement of cleaning and custodial products used at Multnomah County facilities.

Next Steps

1. Develop an action plan for reduction of toxicity of Multnomah County operations.
2. Prioritize toxic substances in use at Multnomah County for replacement with safer alternatives.
3. Identify short- and long-term goals for toxics and waste reduction at Multnomah County.
4. Develop purchasing specifications for products containing toxic substances or byproducts and alternatives for upcoming product procurements, including: fluorescent lamps, cleaning and custodial products, landscaping maintenance chemicals, building materials, and office supplies.

Performance Measures

- ✓ Quantity of toxic substances eliminated from County operations (TBD)
- ✓ Quantity of less-toxic alternative products used at County operations (TBD)
- ✓ Quantity of waste reduced or prevented from County facilities based on established baseline (TBD)



POLLUTION PREVENTION PROJECT PROFILE

p2 at Fleet Services Shops

Agency Partners

Department of Business & Community Services, Fleet Services

Contact: Ron Patterson, 503-988-5265

Goal:

Achieve certification for the operations of the three Multnomah County Fleet Services vehicle repair shops.



DESCRIPTION

All three Multnomah County Fleet Shops were certified by the "Automotive Eco-Logical Business Program," a local best practices guide developed by the Pollution Prevention Outreach Team, a group of pollution prevention experts from seven Portland-area agencies. To be certified as an Eco-Logical fleet shop, shop evaluations were required using the program's 112-point inspection process. After the findings were evaluated, Fleet Services then worked with each shop to meet identified program requirements. Some changes that were made as a result of the program included replacing solvent-based parts washers with water-based ones; expanded recycling program to include filters, oil and antifreeze; and prepared each shop with spill kits and drain plugs to protect storm water.

Next Steps

Quarterly inspections of each shop will be made to assure continued compliance with environmental standards.

Triple Bottom Line Benefits:

- ◆ **Environmental benefits:** Increased protection of streams and ground water, minimized generation of solid waste, and raised employee awareness about how to maintain a more environmentally friendly work place.
- ◆ **Economic benefits:** Discontinued use of some older, more polluting processes while keeping costs stable.
- ◆ **Community Benefits:** Setting an example for the community by minimizing environmental impact and by establishing and maintaining high environmental standards.

Sustainability Principles Addressed



"It was a good project for overall staff awareness in minimizing our environmental impact."

– Ron Patterson
Fleet Maintenance Supervisor

Action Areas Addressed



Environmental Health



Pollution Prevention



POLLUTION PREVENTION PROJECT PROFILE

Workshop on Toxics & the Precautionary Principle

Agency Partners

Department of Business & Com. Sustainability Initiative
Contact: Molly Chidsey, Pollution Prevention Specialist,
503-988-5015, ext. 27365

Goal

Host a workshop on toxic pollution and the precautionary principle for members of the community and local government employees.



Description

Multnomah County's Pollution Prevention Program cooperated with the Sustainable Development Commission and the Oregon Center for Environmental Health to organize a workshop about prevention of toxic pollution and protection of human health through precautionary approaches on April 20, 2004. Speakers included leaders from San Francisco and Seattle, as well as County Commissioner Maria Rojo de Steffey and Health Department Director Lillian Shirley. Over 120 people attended the workshop; most indicated they were interested in Multnomah County further pursuing toxics reduction.

Next Steps

To form a workgroup consisting of local leaders and members of the community to develop policy recommendations to Multnomah County and the City of Portland on toxics issues and use of the precautionary principle in the form of a Toxics Reduction Strategy.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Provided attendees with information on how toxic substances negatively impact human health and the environment, and offered some successful models for preventing toxic pollution.
- ◆ **Economic benefits:** Addressed how the reduction of the use of toxic substances and substitution of safe alternatives will have positive, localized economic impacts.
- ◆ **Community Benefits:** Provided a learning and discussion forum for members of the community about toxics and precautionary approaches.

“Through support and sponsorship of the spring 2004 “Precautionary Approaches for Health and the Environment” workshop, Multnomah County has taken a commendable step forward as a leader in integrating sustainability with a focus on pollution prevention into county operations.”

- Neha Patel, MS
Program Manager, Oregon Center for
Environmental Health

Sustainability Principles Addressed



Action Areas Addressed



Environmental
Health



Pollution
Prevention



Education

Action Area: Environmental Health



Background:

The Environmental Health Section of the Health Department, works to promote health by preventing disease and injury. Environmental issues affecting the health of Multnomah County residents include air pollution, brownfield sites, and fish advisories in local waterways. Some residents are more exposed than others to pollutants, such as communities of color and low-income communities. For example, there are:

- ◆ Fourteen air toxics in Multnomah County that exceed health-based benchmarks, with six pollutants more than ten times the benchmark;
- ◆ Three listed Superfund sites within Multnomah County, and four sites under investigation as hazardous waste sites; and
- ◆ Six of seven waterways in Multnomah County ranked as poor or very poor by the Oregon Department of Environmental Quality, with five water bodies in violation of federal Clean Water Act standards.

Goal:

To promote healthy living in healthy communities located in a healthy environment.

Progress to Date:

- ◆ Released a report, “The Environmental Health of Multnomah County,” as a way to collate environmental health data available for Multnomah County at the time.
- ◆ Initiated the PACE-EH program (Protocol for Assessing Community Excellence in Environmental Health), involving communities in planning and decision making about local environmental health and environmental justice issues. PACE-EH is working with the affordable housing community in N/NE Portland to develop solutions and interventions for identified concerns of 1) trash, 2) mold and mildew and 3) lead. An approved action plan is pending in December 2004.
- ◆ Posted signage in the Portland Harbor section of the Willamette River regarding fish consumption advisories due to contamination of fish by pollutants.

Next Steps:

1. Review establishing a County-wide policy on hazardous waste to encourage cleanup of contaminated sites.
2. Explore ways to mediate indoor air quality problems in public housing facilities in N/NE and East Multnomah County.
3. Work with Multnomah County Child Care Centers to identify asthma triggers and reduce health impacts on children.
4. Create a Vector and Nuisance Advisory Committee to seek input from diverse community members on vector control strategic directions.

Performance Measures:

- ✓ Develop collaborative models and guidelines to support residents, property managers and owners working together to solve environmental health problems experienced in multi-family affordable housing units.
- ✓ Continue to reduce the number of children with elevated blood lead levels.
- ✓ Increase public involvement, especially among racial and ethnic minority populations, in the delivery of environmental health services.
- ✓ Increase public awareness and understanding, especially among racial and ethnic minority populations, of environmental health risks.



ENVIRONMENTAL HEALTH PROJECT PROFILE

Decreasing Toxic Substances At Health Clinics



Agency Partners

Health Department

Contact: Gary Sawyer, Health Services Manager,
503-988-3663, ext. 22429

Goal

This project describes an initiative to ban mercury as well as several toxic substances with carcinogenic or other negative health effects from operations and equipment of Health Department.

Description

Over a period of 12 years the Health Department, under the guidance of the County's labs, banned the use of the following products containing toxic substances:

- Mercury-containing equipment collected and recycled all mercury-containing thermometers and sphygmomanometers (blood pressure units);
- Gluteraldehyde, a cold sterilant with respiratory irritating and carcinogenic activity; substituted single use applicator sticks for bottles of phenol, which has clinical uses but is extremely dangerous in larger quantities;
- Aerosol spray surface disinfectant due to respiratory and dermatologic irritants, as well as reproductive toxicity.

Next Steps

- Educate staff on disinfectant spray ban and collect existing inventory for proper disposal.
- Initiate recycling for alkaline and rechargeable batteries

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Reduced heavy metals and toxics in the water, air and soil through pollution prevention.
- ◆ **Economic benefits:** Reduced days lost due to exacerbation of asthma and reactive airway diseases. Reduced effects of hazardous chemical exposure in the workplace and stimulation of the creation and purchase of new, safer products.
- ◆ **Community Benefits:** Reduced exposure to toxic substances for patients, clinical staff and community members in our facilities.

Sustainability Principles Addressed



"We should all do our part to reduce hazardous chemicals in our homes and workplaces.."

- Gary Sawyer
Health Services Manager

Action Areas Addressed



Environmental Health



Pollution Prevention



Sustainable Procurement

Action Area: Food Policy Council



Background

On June 20, 2002 the Board of County Commissioners approved the formation of the Portland/Multnomah County Food Policy Council as a subcommittee of the Sustainable Development Commission. The Council is composed of 11 members representing the diversity of interests in the community on issues of hunger, nutrition, food business and industry, local farming, community education and food purchasers. The Food Policy Council has been charged with identifying options for improving:

- ◆ Local land use policies and rules related to food production and distribution;
- ◆ Methods for building regional demand for locally produced foods and food products;
- ◆ City and County food purchasing policies and practices;
- ◆ The availability of healthy, affordable food to all residents; and
- ◆ The capacity of local communities to promote and engage in healthy food practices.

Goal

To ensure that all residents of Multnomah County have access to nutritious, affordable, sustainably-grown food.

Progress to Date

In October, 2003, the Food Policy Council presented a report to the Board of County Commissioners identifying priority recommendations for local government to plan for food access, increase visibility of regional food, support food and nutrition programs, model purchasing practices, defend land use laws and implement awareness campaigns. Committees are actively working on implementation of priority recommendations in 2004 including:

- ◆ Conducting a Lents neighborhood community food assessment in which residents will survey their neighbors about their access to healthy and affordable food. In addition, a market basket survey will be conducted to evaluate the quality of Lents-area grocery stores. The goal is to develop recommendations for policy change to improve food insecurity in Lents, and to provide a model for addressing food insecurity in other county neighborhoods.
- ◆ Implementing a pilot project within the Multnomah County Sheriff office to purchase food for our correctional facilities from regional farmers.
- ◆ Conducting a needs assessment for farmers' markets to identify areas where City and County government can contribute to the continued future success of the markets.
- ◆ Exploring conservation easements as a means to protect existing agricultural lands in the metropolitan region from future development.
- ◆ Recognizing local businesses that promote sustainable food systems. The Portland Office of Sustainable Development "Businesses for an Environmentally Sustainable Tomorrow" awards included a new category for food in 2004: Hot Lips Pizza, Burgerville, and Big City Produce were the award recipients.

Next Steps

An annual report is being scheduled to provide an update to the Multnomah County Board on progress.

Performance Measures

The Food Policy Council is in the early stages of their work, and has not developed performance measures at this time.





FOOD PURCHASING PROJECT PROFILE

Local Food Purchasing Pilot Project

Agency Partners

Sheriff's Office

Contact: Captain Linda Yankee, 503-988-3442

Goal

Encourage institutional food purchasing practices to support a sustainable regional food system.



Description

Multnomah County Sheriff's Office is responsible for serving approximately 5,400 daily meals to the inmate population. As a significant institutional food purchaser, we are interested in purchasing practices that support a sustainable regional food system.

Next Steps

Our food service provider, Aramark, in collaboration with Rinella Produce, has established a tracking mechanism to determine the level of participation by local vendors in this program and economic impacts. We will analyze the data and assess what steps should be taken to expand levels of participation by local vendors.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Purchase from local vendors to alleviate transport of food. Transportation now averages between 1,500 and 2,500 miles from farm to table, with tremendous environmental impacts.
- ◆ **Economic benefits:** Purchasing from local farmers provides economic benefits to the farmers and local jobs in the area.
- ◆ **Community Benefits:** Supports local agriculture and farmers in the region. In addition, some parts of the community lack sufficient access to fresh, healthy, regionally-grown food.

"The Sheriff's Office is very interested to encourage institutional food purchasing practices that support a healthy food system and provide local vendors with business opportunities."

- Captain Linda Yankee
Multnomah County Sheriff's Office

Sustainability Principles Addressed



Action Areas Addressed



Food



Sustainable Procurement

Action Area: Water Quality & Wildlife Habitat



Background

The County is required to comply with several environmental laws.

1. Safe Drinking Water Act – regulates water quality associated with ground water. UIC (Underground Injection Control) limits the pollutants in stormwater discharged into drywells/sumps.
2. Clean Water Act – regulates water quality associated with surface water, e.g., streams, lakes and rivers. NPDES (National Pollutant Discharge Elimination System) - requires a permit to discharge stormwater into surface waters. TMDL (Total Maximum Daily Load) - limits the amount of a particular pollutant that the County is allowed to discharge into surface water.
3. Endangered Species Act – prohibits “taking” a threatened or endangered species.

Goal

To assist county staff and citizens in the unincorporated areas of the county with ensuring that their activities do not adversely impact water quality or wildlife habitat. For example, the Road Maintenance Functional Group is assigned to report on the street sweeping Best Management Practice in the daily course of their work. Street sweeping removes road waste material such as sand, brake dust, oil and litter from the road surface. Removing road waste material from the road effectively prevents those materials from washing into nearby surface or ground waters. Along with street sweeping, are catch basins that trap road waste materials from the road and prevent the further transport of those pollutants to the storm sewer where they could be discharged to surface or ground water. By looking at these two quantities collected relative to each other, program enhancements may be warranted as part of adaptive management.

Progress to Date

- ◆ Staff training on how our daily activities may adversely impact water quality or endangered species.
- ◆ Best Management Practices (BMP’s) – Develop a standard set of practices that if followed ensure that water quality and/or threatened/endangered species are protected or enhanced.
- ◆ BMP Tracking – provides a method of tracking progress as well as providing assurance to regulatory agencies that the County is complying with environmental law.
- ◆ Reporting – Annual reports are required to show compliance with the environmental programs. The annual report reflects the County’s efforts with: staff training, BMP development, tracking and effectiveness monitoring.

Next Steps

1. **Effectiveness Monitoring** – Determines if the BMP is doing what it is designed to do, if not change it – this is called adaptive management.

Performance Measures

The Water Quality program periodically reviews county adherence to adopted best management practices and efforts to apply adaptive management to reach desired outcomes. The goal is to protect water quality or wildlife habitat. The Program utilizes an Implementation Team with representatives from various Functional Groups from around the county. These Functional Groups are assigned specific BMP’s related to their work that may impact water quality or wildlife habitat.



WILDLIFE HABITAT PROJECT PROFILE

Beaver Creek Fish Habitat Enhancement Project



Agency Partners

Business and Community Services, Land Use and Transportation Program
Contact: Kim Peoples, 503-988-5050, ext. 26797

Goal

Improve passage for threatened salmon and other fish species by restoring an improperly functioning fish ladder and associated riparian habitat.

Description

The fish ladder at the Stark Street crossing of Beaver Creek has been retrofitted to allow improved passage for many species of fish. Rated “highest priority” among fish passage culverts in Multnomah County, and in the top of Metro’s priority culvert list. Invasive plants were removed with the help of volunteers from the Friends of Beaver Creek, Salmon Corps, Reynolds and Barlow High Schools and the neighboring community. Native vegetation was reintroduced.

Next Steps

Continue to monitor the effectiveness of the restoration for fish passage.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Opening upstream habitat for migrating salmonids and other fish species.
- ◆ **Economic benefits:** Return to Multnomah County of energy use payments from For the Sake of the Salmon’s Pacific Salmon Watershed Fund and Portland General Electric’s Salmon-Friendly Power program.
- ◆ **Community Benefits:** Multnomah County developed a wide range of partners for this project including state, local, educational, nonprofit, business and volunteer groups. Students from Mt. Hood Community College used this project as a “classroom” as part of the Integrated Natural Resources Program.

“Fixing this culvert is an essential undertaking in Endangered Species Act compliance and environmental sustainability, one of my top priorities.”

- Maria Rojo de Steffey
Multnomah County
Commissioner

Sustainability Principles Addressed



Action Areas Addressed



Wildlife & Habitat

Action Area: Education



Education

Background

Education is a critical element in making progress towards sustainability. Individual as well as organizational change to rethink how the County conducts its business practices is needed. The purpose of this education is to advance the concepts of sustainability and pollution prevention within County operations, providing leadership and resources to employees who are working to make their operations more sustainable. At the end of the day, it will be the individual decisions of employees and managers at Multnomah County that will determine the success of sustainability goals.



Library Health Fair Display

Goal

Generally, there are four goals for education on sustainability:

1. Provide effective information to employees.
2. Motivate and inspire employees to take action.
3. Remove perceived or real barriers to sustainability actions.
4. Make change easier for employees.

Progress to Date

Several actions have already been taken to provide education on sustainability for Multnomah County employees, including:

- ◆ Created a Green Team of County employees to raise employee consciousness about the environment and sustainable actions within Multnomah County and to reduce the County's environmental impact.
- ◆ Provided Northwest Earth Institute Discussion Courses for employees at sites across the county.
- ◆ Sponsored speakers on recycling, green building, stormwater, pollution prevention, and climate-friendly transportation.
- ◆ Organized three different half-day workshops for County employees on sustainable procurement; toxics reduction and the precautionary principle; and food policy.
- ◆ Sponsored employees to attend outside training on "Creating Sustainable Facilities," "Toxic Threats to Child Development" and electronic waste.
- ◆ Developed monthly sustainability "tips" that were sent out over the course of one year.
- ◆ Prepared different monthly educational displays in the lobby of the Multnomah building.
- ◆ Organized transportation fairs at different County locations to provide resources for employee commute options.



Transportation Fair at East County Building

Next Steps

1. Launch a quarterly newsletter.
2. Maintain a MINT site to act as a clearinghouse of sustainability information for County employees.
3. Bring in speakers to provide information specific to target audiences.

Performance Measures

Specific performance measures for education on sustainability have not been developed. However, future development of indicators might consider:

- ✓ Number of employees attending training on sustainability
- ✓ Number of new sustainability initiatives in County agencies
- ✓ Training evaluation to measure the effectiveness of education offered





EDUCATION PROJECT PROFILE

Northwest Earth Institute Discussion Courses



Agency Partners

All agencies in the Multnomah Building
Contact: Steve Wright, Sheriff's Office, 503-988-4560

Goal

Make five discussion course options from the Northwest Earth Institute available to County employees to support the commitment of individuals who seek to protect the earth.

Description

The Northwest Earth Institute has produced five discussion courses addressing sustainable living, voluntary simplicity, sense of place, deep ecology, and globalization. These discussion courses are taken informally by small groups in the workplace at noon. These programs encourage participants to explore their values, attitudes, and actions, and are organized around three key principles: 1) an earth-centered ethic promoting individual responsibility for the earth; 2) the practice of engaged simplicity to enrich life and reduce personal impact on the earth; and 3) a dedication to living fully in place and protecting the unique bioregion in which you live.

Next Steps

Solicit Green Team participation to offer courses to more County employees.

Triple Bottom Line Benefits

- ◆ **Environmental benefits:** Examine and transform personal values and habits to protect and take action for the earth.
- ◆ **Economic benefits:** Provides information for making economic decisions within the context of sustainability.
- ◆ **Community Benefits:** Provides inspiration and tools to help employees protect our unique bioregion and create a neighborhood sense of place.

“Northwest Earth Institute provides easy access to the necessary tools to walk lightly on and to take action for the earth.”

– Stephen Wright
Administrative Analyst
Multnomah County Sheriff's Office

Sustainability Principles Addressed



Action Areas Addressed



Education

Resources & Acknowledgements

Multnomah County employees interested in more information on adopted policies referenced in this report can visit the Sustainability Initiative's internal webpages (MINT) at:

<http://mint/dbcs/sustainability/>.



For additional questions, or for external audiences, please contact:



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This report would not have been possible without the expert prose, advice and graphic design of Bob Wise and Jennifer McReynolds of Team Oregon and Cogan Owens Cogan, 813 SW Alder Street, Suite 320, Portland, OR 97205.

The advice of several County managers including:

- ◆ Dan Kaplan
- ◆ Tom Guiney
- ◆ Wanda Yantis
- ◆ Christine Moody

As well as the excellent project profiles that make this report fun to read submitted by the following County employees:

- ◆ Mike Meinecke
- ◆ Kim Peoples
- ◆ Michele Gardner
- ◆ Ron Patterson
- ◆ Captain Linda Yankee
- ◆ Steve Wright
- ◆ Brian Lewis
- ◆ Mike Pullen
- ◆ Patrick Jones
- ◆ Gary Sawyer
- ◆ Mike Harrington

Finally, the Sustainability Initiative would like to thank Multnomah County District One for their steadfast leadership on sustainability; the City of Portland Office of Sustainable Development for their ongoing support and joint efforts which have made County sustainability that much more successful; and the members of the Sustainable Development Commission who provide their ongoing advice and input.

Sustainable Development Commission (SDC) of Portland and Multnomah County

The Sustainable Development Commission was established in April, 2001 by Intergovernmental Agreement with the City of Portland.



Mission

A sustainable community is one in which economic, ecological, and social well-being are integrated to ensure all live well, within nature's means. The mission of the Sustainable Development Commission is to develop and advocate for programs, policies, and actions by government, citizens, and businesses leading to sustainable communities in the Portland metropolitan area, including those that:

- ◆ Support a diverse and vibrant economy;
- ◆ Promote an equitable distribution of resources;
- ◆ Protect and restore the integrity of the natural systems that support life, including air, water, and land;
- ◆ Preserve the diversity of plant and animal life; and,
- ◆ Reduce human impacts on local and worldwide ecosystems.

Powers and Duties

The Commission is authorized to:

- ◆ Advise and make recommendations to the Portland City Council and the Multnomah County Board of Commissioners on policies and programs that create sustainable communities;
- ◆ Articulate and promote long-range goals and objectives for developing and achieving sustainable communities;
- ◆ Promote sustainable communities among citizens, businesses, governmental agencies and community-based organizations;
- ◆ Develop opportunities for all citizens to learn about values, principles, and practices that will bring about sustainable communities;
- ◆ Assist city and county personnel in the coordination of policies and actions creating sustainable communities;
- ◆ Conduct public meetings as necessary;
- ◆ Meet at least once each month; and
- ◆ Meet annually with the City Council and the Multnomah County Board of Commissioners on the Commission's activities, achievements and plans for the coming year.

Membership

The Commission consists of 17 members - 10 are appointed by the City of Portland, 7 are appointed by Multnomah County. Appointments to the Commission are for two years. For more information on membership or an application, contact Matt Emlen at 503-823-7224 or Amy Joslin at 503-988-4092.



2004 Sustainable Development Commission Members

- ◆ Nancy Bond, Portland Public Schools
- ◆ Rosemarie Cordello, Co-Chair Food Policy Council
- ◆ Tim Crump, University of Portland Health Center
- ◆ Veronica Dujon, Portland State University
- ◆ John Echlin, SERA Architects
- ◆ Stephanie Farquhar, Portland State University
- ◆ John Haines, Mercy Corps
- ◆ Bill Hart, Carleton Hart Architecture
- ◆ Thor Hinckley, Portland General Electric
- ◆ Alan Hipolito, Hacienda Community Development Corp
- ◆ Mike Houck, Audubon Society
- ◆ Amy Jones, David Evans & Associates
- ◆ Allen Lee, Quantec, LLC
- ◆ Paulette Rossi, Metro Recycled Paint
- ◆ Kent Snyder, Snyder & Associates
- ◆ Yumei Wang, OR Dept. of Geology & Min. Industries, consulting engineer
- ◆ Robert Wise, Cogan Owens Cogan, LLC and Team Oregon, LLC

Portland City Council & Board of County Commissioners

- ◆ Maria Rojo de Steffey, Multnomah County Board of Commissioners
- ◆ Dan Saltzman, Portland City Council