



Preserving Resources,
Preventing Waste

Kitsap County Waste Wi\$e Program 2009 Annual Report



As a member of the US Environmental Protection Agency Waste Wise program, Kitsap County is committed to the following objectives:

- reduce waste at its source
- maximize recycling opportunities
- use water and energy resources wisely
- use more environmentally friendly products
- use less toxic alternatives
- reduce impact on climate change

This report tracks our progress and identifies activities to help County departments reach their goals.



Kitsap 1
(360) 337-5777
www.kitsapgov.com/sw





Waste Reduction

Waste reduction is our highest priority. The following are examples of our comprehensive waste reduction efforts:

The Wa\$te Exchange is an electronic surplus exchange program where departments swap unwanted office supplies and furniture. The County saved \$5,476 in 2009 by obtaining used items from other departments instead of buying new. The Wa\$te Exchange became available to all County employees with computer access when it became housed on the County Intranet.

Road shoulder and ditch spoils, which used to be landfilled, are now used to reclaim County-owned sand and gravel pits. In 2009, 4,100 cubic yards of this material were diverted, saving \$184,000 in disposal costs.

Paper reduction strategies included double-sided copying, scanning documents instead of copying them for archiving and electronic timecards. Purchasing no longer prints bid documents, reducing paper usage and saving money on paper and postage. Instead, bid documents are scanned and attached to email.

The Treasurer's office exceeded their goal of reducing paper usage by 75 reams. By increasing double-sided copying and sharing documents electronically, they saved 100 reams of paper.

Public Works is moving toward posting review drafts online in Word for the public to download, make changes, and email back instead of the department printing and mailing drafts.

Barn waste from the Fairgrounds was composted onsite.

Next steps: As a member of the USEPA Waste Wise Hall of Fame, Kitsap County will work with state agencies and regional USEPA offices to help other public agencies reduce waste.

Kitsap 24/7, comprised of online forms to help residents conduct county business from home, will expand with a new design, search engine, and marketing plan to facilitate better usage.



Recycling

County employees recycled a wide variety of materials generated during County operations, including:

Food and beverage containers, cardboard, and paper	696.04 tons	Small batteries, fluorescent lights, and mercury bearing thermostats	0.73 tons
Tires	14.2 tons	Electronics	6.3 tons
Asphalt	382.59 tons	Aluminum road signs	unknown weight
Scrap metal	unknown weight	Biosolids	3,707 wet tons
Toner cartridges	unknown weight	Garbage	2112.72 tons

Our diversion rate in 2009 was 87%, and our net savings from waste reduction, recycling, and avoided purchasing costs was \$784,022.16 (includes waste exchange and reuse of asphalt).

Next steps: Staff will continue to refine the data tracking system for recycling and garbage.



Pollution Prevention

County departments continued to recycle used motor oil and antifreeze, auto batteries, small batteries, mercury-bearing fluorescent tubes and bulbs, and other products.

The Parks and Recreation Department continued to track pesticide usage in parks and ballfields, and used best available, less toxic products.

The Local Source Control (LSC) specialist conducted 13 technical assistance visits to County facilities, chosen primarily because they have equipment repair shops. The importance of spill plans, spill kits, and secondary containment was emphasized to promote good housekeeping standards that mitigate source pollution to stormwater.

Next steps: Small Quantity Generator and Local Source Control staff will continue to work together to provide site inspections, make recommendations, and provide staff training.



Environmentally Preferred Purchasing

Purchasing hosted a product show in January, with a request to the twelve vendors to focus on environmentally preferred products. 100 County employees attended.

Departments purchased a variety of recycled-content office products.

Next steps: Purchasing will continue to work with vendors to highlight recycled-content office products at the 2010 vendor show. Kitsap staff will work with their main suppliers to refine reporting of purchases.

Departments will endeavor to increase buying local whenever economically feasible.

In 2010 the Board of County Commissioners will form a Food and Farm Policy Council to promote buying local.



Climate Protection

Each year the USEPA uses data from Kitsap County's annual report to determine how our waste reduction and recycling affects greenhouse gas emissions.

By recycling and reusing biosolids for land application, we reduced greenhouse gas emissions by 5,919 metric tons carbon dioxide equivalent. These greenhouse gas reductions from recycling are equivalent to any one of the following:

- 301,577 gallons of gasoline consumed
- 18 acres of standing forest
- The annual GHG emissions from 486 passenger vehicles
- The emissions from the energy consumption of 241 homes for one year
- 110,704 propane cylinders used for home barbeques

The Solid Waste Division exports solid waste via train. This mode of transport used 50% less fuel (137,700 vs. 274,050 gallons) than combined truck/rail transport in 2009. Train transport emitted 1,751 tons of CO₂ emissions versus 5,214 tons produced with combined truck/rail transport. This equates to 66% fewer CO₂ emissions from rail only versus combined truck/rail transport to the landfill.

About 200 employees participated in the Commuter Trip Reduction program, choosing an alternative method of transportation at least 3 days a week.

The Public Works and Sheriff's fleets continued to use ultra low sulfur diesel and rerefined motor oil.

Columbia Ridge Landfill, the ultimate disposal site for waste produced in Kitsap County, constructed a gas-to-energy plant in 2009 that consists of three engines that convert methane gas generated by the landfill to electricity.

Next steps:

Apart from the Waste Wi\$e program, Federal stimulus money was used to purchase 80 sets of Big Belly recycling/garbage containers for use in 2010. The garbage containers are solar-powered compactors, and are projected to reduce carbon dioxide emissions by 33 tons.

The Public Works Wastewater Division has applied for Federal stimulus funds for two energy projects at the Central Kitsap Wastewater Treatment Plant. One project will be to harness the methane gas byproduct from the wastewater treatment process for heating and electricity at the plant. The second project will upgrade the aeration basins with more efficient blowers and diffusers to reduce energy use and greenhouse gas emissions.



Green Building

Kitsap County considers stormwater a water resource, not a waste stream. County development codes are under revision to better manage the infiltration and velocity of stormwater runoff to recharge ground water and reduce pollutants entering our surface waters. County engineering staff have received training in Low Impact Development (LID), and County roads and stormwater retrofit projects are under review for opportunities to take advantage of LID techniques such as pervious pavement, bioswales, rain gardens, and green roofs. Currently under construction is a parking lot for the Illahee Preserve Heritage Park, where rain gardens will receive stormwater runoff and filter it while slowly releasing back into the ground.

Next steps: In 2010 the Courthouse will upgrade to more efficient lighting, including installation of motion detectors, and install solar panels to pre-heat water as much as possible using Federal stimulus money.



Resource Conservation

The Board of County Commissioners (BOCC) temporarily reassigned an existing Public Works employee as a Resource Conservation Manager (RCM) to apply for stimulus grants and serve as the lead on the Energy Conservation Committee. The committee consists of employees and citizen volunteers who meet monthly to explore ways to save money on energy costs. In 2009 the committee completed a draft energy policy.

Information Services continued to virtualize servers. The continued server virtualization has offset some of the operating costs of new equipment required to support County employees and residents.

The Public Works department has converted all incandescent traffic lights to LED, which requires about one tenth the energy. The old bulbs each used 135 watts. The new LEDs use 12 or 14 watts, depending on the type. Pedestrian displays, which used 60 watts, now use 9.4 watts.

Next steps: The BOCC will hire a Resource Conservation Manager in 2010 with Federal stimulus money. Information Services will continue to virtualize servers and has just begun a 4 year program to virtualize approximately 80 % of the County's desktop computers.



Outreach and Education

Solid Waste staff will continue to use email, posters, In the Loop weekly online employee newsletter, and displays to communicate with employees.

Departments are encouraged to hold annual waste reduction training. Topics include waste reduction, recycling, green cleaning, organics management, environmentally preferred purchasing, and product stewardship.

Next steps: Staff will explore partnering Waste Wi\$e Kitsap with the Energy Committee for training and outreach.



Community Involvement

Kitsap County is an Endorser for the USEPA's Waste Wise program. As an Endorser, Kitsap County serves as a mentor to organizations referred by the USEPA and to local and regional businesses, organizations, and local governments. Technical assistance includes presentations, sharing posters and handouts, and information on how to implement an internal waste exchange and organize a program with many departments and employees.

To build on the successes of the Waste Wi\$e Kitsap program, the innovative Waste Wi\$e Communities brand was developed for community outreach and education initiatives. These include multi-family recycling, newsletters, and print ads for the Solid Waste Division and the Surface and Stormwater Management Program. Residents are encouraged to sign up for periodic Waste Wise Communities emails, which include press releases and other updates about solid waste issues.

The Solid Waste Division will continue to partner with Surface and Stormwater Management to provide the county-wide newsletter, *Waste Wi\$e Communities*, to all households. Staff will work to increase awareness, membership, and participation in the US Environmental Protection Agency's Waste Wise program.

Next steps: Staff will continue to provide technical assistance to local jurisdictions by providing sample policies, information about all aspects of the Waste Wi\$e Kitsap program, and referrals to the USEPA Waste Wise program. Staff will mentor other waste wise partners by sharing tools, strategies, processes and goals, and will assist in preparing Waste Wise reporting.



Awards

The USEPA inducted Kitsap County into the Waste Wise Hall of Fame, highlighting Kitsap County's accomplishments and program contributions.



Waste Wi\$e Kitsap

2010 Guidelines for Reducing Waste

These departmental activities support the goals and objectives identified in Prevention of Waste in County Government Ordinance No. 1999-233.



Goal: Reduce Waste

Departmental activities:

- Hold departmental training.
- Use Wa\$te Exchange.
- Print and copy double-sided.
- Stop junk mail and spam faxes.
- Scan documents for archiving.
- Eliminate printing agendas when possible.
- Use durable dishware in breakrooms and meetings.
- Use higher level of recycled-content office paper and janitorial supplies when economically feasible.
- Avoid printing email.
- Use E Contracts.
- Waste Wi\$e staff continues to promote the use of reusable drink containers.
- Solid Waste Division staff develops improved tracking for garbage and recycling.
- Expand and promote usage of Kitsap 24/7 webpage.
- Administrative services continues to promote greener meetings for County boards and advisory committees.



Goal: Increase Recycling

Departmental activities:

- Recycle plastic bottles, jars, jugs, and dairy tubs.
- Recycle paper and cardboard.
- Recycle glass jars and aluminum cans.
- Recycle toner cartridges.
- Place recycling containers at North and South Pavilion doors year-round for all events.
- Recycle beverage containers at Parks and ballfields.
- Promote cardboard recycling by fair vendors.
- Public Works Department will:
 - Recycle ferrous metal and aluminum road signs.
 - Recycle/reuse asphalt and road sand.
 - Recycle tires.
 - Recycle concrete.
 - Explore opportunities for recycling biosolids.
 - Conduct recycling site visit at Jail kitchen.
 - Promote waste reduction through water bottle incentives for training.



Goal: Green Building

Departmental activities:

- Department of Administrative Services staff will promote environmentally preferred products such as low VOC paint, recycled-content drywall, recycled-content carpet or carpet tiles when remodeling or for new projects.



Goal: Increase Environmentally Preferred Purchasing

Departmental activities:

- Use recycled office products when economically feasible.
- Use remanufactured toner cartridges when possible.
- Choose durable products that will last longer and are repairable whenever possible.
- Administrative Services and Parks will use less toxic cleaning and landscape products.
- Solid Waste Division staff will develop improved tracking for garbage and recycling and the purchase of environmentally preferred products.



Goal: Conserve Resources

Departmental activities:

- Support energy conservation committee.
- Public Works continues to track fuel usage.
- Purchase resource efficient products.
- Close shop doors at all facilities whenever possible.
- Incorporate Commuter Trip Reduction program in outreach efforts.
- Public Works obtains any new info on savings from LED lights.
- Public Works continues to purchase re-refined motor oil and ultra low sulfur deisel.
- Public Works continues to explore use of biodiesel and ethanol.
- Public Works continues to evaluate alternative vehicles, using EPA Green Vehicle Guide.
- Upgrade energy efficient lighting and windows at the Courthouse.



Goal: Protect Climate

Departmental activities:

- Consider carbon footprint when siting capital projects.
- Study current latex paint management program for ways to reduce carbon footprint.
- Eliminate vehicle idling.
- Post EPA climate profile on County website and intranet.
- Energy Conservation Committee will consider GHG emissions and identify potential reduction.
- Waste Water explores heat exchange at wastewater treatment plants.
- The Solid Waste Division incorporates climate protection into the Comprehensive Solid Waste Management Plan.



Goal: Prevent Pollution

Departmental activities:

- Recycle small batteries, fluorescent tubes and bulbs.
- Recycle monitors, TVs, CPUs, laptops, and cell phones.
- Take paint, paint-related products, solvents, cleaners, lawn and garden chemicals and automotive products to Small Quantity Generator (SQG) Collection or have hauler properly manage.
- Take mercury-bearing products (such as thermostats) to SQG Collection or have hauler properly manage.
- The Solid Waste Division updates Parks Solid and Hazardous Waste Management Plan.
- Parks continues to submit annual pesticide usage reports to Solid Waste Division.
- ER&R replaces lead wheel weights with steel.
- Public Works staff provide site visits and training to Parks, Road Shops, Treatment Plants and Maintenance Facilities.

For more detailed information about Solid Waste Programs:



Kitsap 1

360-337-5777

solidwaste@co.kitsap.wa.us

www.kitsapgov.com/sw

USEPA Waste Wise
800-EPA-WISE (800-372-9473)
wastewise@icfi.com

www.epa.gov/osw/partnerships/wastewise