



Inside this issue:

-	Soils for Salmon Helping to restore salmon habitat with compost soil amendments
-	Where Do Old Computers Go To Die? Computer equipment recycling and reuse pilot project in King County
-	Knock Knockon Wheat Wheatboard – a new product replaces traditional wood particleboard

a showcase for sustainable bu

The New King Street Center Uses Fewer Natural Resources



he Evergreen State just got greener, thanks to King County's new King Street Center office building. Located near Pioneer Square, this eight-story structure harmonizes with the neighborhood's historic architecture while modeling the latest in resource-saving materials and methods. King Street Center is the county's first project built by a partnership of public agencies and private contractors. Cooperation built King Street Center in more ways than one. Realizing that eco-friendly features weren't included in the original design or budget, the two major tenants, King County's Department of Natural Resources and Department of Transportation, enlisted developer Wright Runstad and general contractor Lease Crutcher Lewis to build them in. The result was the area's most resource-efficient building, completed on time and within budget.

The three basic principles of "sustainable" or "green" building are resource conservation, energy efficiency, and enhancement of environmental quality. Here's how King Street Center scores marks for each.

Resource conservation

- Workers salvaged and recycled 80% of all demolition materials at the job site.
- An on-site Water Reclamation System collects rainfall runoff that would normally flow into the combined storm/sewer system, stores it, and uses it to flush toilets. Estimated savings are 1.4 million gallons of water annually, or 60% to 80% of the building's flushing budget. A domestic back-up water system kicks in when rainfall is scarce.
- Elevator lobbies showcase a repertoire of recycled-content wall finishes and flooring, including latex paint recycled by King County's Hazardous Waste Collection Program.
- 32,000 square yards of recycled carpeting (Milliken "Earthsquares") kept 160 tons of carpet from the landfill, saved money, and preserves air quality with non-toxic adhesives.
- Lunchrooms discourage disposable plastics and paper with durable dishware and resource-efficient dishwashers.
- "Clean commuting" is encouraged with an 80-space bike room and showers.

Energy efficiency

• The lighting system uses a lean 0.86 watts per square foot, 28.4% more efficient than codes require.

—see "Showcase" page 5



Additional composting experts in the King County area include:

King County Solid Waste Division
Josh Marx, 206-296-4429
josh.marx@metrokc.gov

University of Washington, Center for Urban Water Resources Mgmt

Derek Booth, 206-543-7923 dbooth@u.washington.edu

University of Washington, Center for Streamside Studies

Chuck Henry, 206-685-1915 clh@u.washington.edu

WA Organic Recycling Council (WORC)

Connie Allison, 360-754-5162 alacarte@olywa.net

Washington State University Extension

David Bezdicek, 509-335-3644 bezicek@wsu.edu

Classic Nursery & Landscape Co. Leon Hussey, 425-885-5678

Horses for Clean Water Alayne Blickle, 425-432-6716

Price-Moon Enterprises
Peter Moon, 360-563-6709

Red Barn Composting
Nancy Churchill, 425-468-9342

Nancy Churchill, 425-468-9342 info@redbarncomposting.com

Rich Landscaping Mike Richards, 425-882-2226

Terra Dynamics
Tina Scoccolo, 206-575-1303
terradynamics@uswest net

Yelm Earthworm & Castings Farm Jim Jensen, 206-352-9565 velmworms@aol.com



soilsosalmon

Composting Reduces Runoff and Pollutants to Improve Salmon Habitat

Signs of autumn are all around us — the rain, the shorter days, and the colorful leaves blanketing the ground. Believe it or not, this soggy, messy yard debris can help restore salmon



Composting experts help farmers set up on-site composting systems to process manure and other organic materials.

habitat. Fallen leaves and branches are key ingredients in compost, a rich, natural soil amendment that promotes both bountiful spring gardens and cleaner rivers for salmon and other wildlife.

According to the Washington Organic Recycling Council (WORC), healthy soil acts like a sponge and faucet, naturally regulating water flow. In urban areas, soils are typically disturbed from human activities like development that cause erosion and compaction. Adding organic matter like compost back into the ground can restore disturbed soil's ability to retain water and nutrients that support plant life. Soil with compost also has improved pollutant-filtration properties that can reduce urban runoff that contaminates nearby streams and rivers. Clean, fresh water is vital to salmon and other wildlife so it is critical that the soil surrounding watersheds is free of contaminants.

Four basic ingredients are needed to make compost: green or nitrogen-producing materials (such as green grass, kitchen scraps and manure), brown materials (such as mulched

leaves, hay, and sawdust), water, and oxygen. Millions of microorganisms break down the materials and release energy that heats up the pile. The goal is to heat the pile to 160 degrees to kill any disease-causing pathogens. After about 2 to 12 months — depending on air and water levels — a pile reduces in volume by about 50% and a rich, earthy humus will be ready for use as a soil amendment.

Businesses can reduce waste management costs through composting while helping to create a nurturing and valuable resource for the environment. Unmanaged debris and manure piles can contaminate groundwater and streams. When done correctly, composting breaks down the organic material into a more stable, odorless form that is beneficial to environment.

The City of Redmond added compost to the soil when it constructed its Skateboard Park.

By using a mix of half sand and half compost, the City reduced summer irrigation, minimized storm water run-off, and improved the turf aesthetics of the park. The Washington State Department of Transportation also added compost at the interchange of the 405 and 520 freeways to manage storm water.

Through the "Soils for Salmon" project offered through WORC, businesses can learn more about the benefits of composting and can receive lists of companies that provide composting services. Horses for Clean Water, Red Barn Composting, and Price-Moon Enterprises (see sidebar) are some of the organizations that conduct classes for farms and businesses such as landscape contractors or golf courses that want to learn how to better manage their organic waste piles. •



In Action: Distinguished Businesses in the Green

Bellevue Nissan

Bellevue Nissan uses recycling and waste prevention to get maximum mileage from all kinds of products used at the dealership. While most

Bellevue Nissan

of their recycling volume consists

of unusable auto parts, their programs for paper, glass, scrap metal, and cans drive their recycling rate to 71%. Bellevue Nissan uses returnable shipping containers for transmissions and automotive parts, and closes the loop with recycled-content letterhead, garbage bags, and office supplies. For more information, contact David Woodside, Service Manager, at 425/649-2211 ext. 200.

Davis Wright Tremaine LLP

Law firms produce reams of motions, orders, and briefs, many of which are confidential. Add to that the revealing documents they receive from



clients, and recycling can get sensitive. To address the special

waste and recycling issues at law firms, Davis Wright Tremaine joined with another firm in creating the Law Firm Waste Reduction Network. As part of their leadership role, Davis Wright Tremaine started cutting waste in their own offices. First, they put a restraining order on single-sided documents. Word processing now prints all documents on both sides unless the order specifically asks otherwise. Surplus and reusable office products are stored in a designated area for easy use. To keep everyone on the same page, the firm sends weekly "Enviromails," employee emails featuring environmental news briefs and waste-reduction tips of special interest to law firms. For more information contact Kathy Swihart at 425/646-6100.

Elkay Plastics, Inc.

Elkay's 22,000-square-foot warehouse bustles with recycling activity. This distributor of plastic bags manages to recycle 94% of warehouse waste — saving \$500 annually. Some of their waste-wise habits: when re-used pallets get beyond repair, they're donated to Camp Long as kindling; sur-

plus and mis-sized bags are donated to food banks; and stretch wrap is recycled through the Boise Cascade Recycling Program (truckers have even started saving it and turning it in to Elkay).



The warehouse cuts energy use with battery-operated forklifts that cost the company 86% less than propane. For recycling coordinator and warehouseman Paul

Korbuszewski, recycling is a mission. "I don't like to preach," he says, "but recycling is an important message to get out there. We see other companies throwing their pallets and cardboard into the garbage, and just wonder, 'what are they thinking?'" For more information contact Paul Korbuszewski at 425/656-8822.

Port Chatham Smoked Seafood

Port Chatham sells smoked seafood and other gifts in its Bellevue Square store. Management takes advantage of its mall location to reduce

Port Chatham Gourmet Smoked Seafoods

waste by encouraging customers to put their pur-

chases in shopping bags they're carrying from other stores. Employees bring their own reusable mugs when purchasing soda or coffee from mall vendors. Durable cups, utensils, and dishware are the default at Port Chatham, both in the kitchen area and by the water dispenser. The company also purchases its store supplies in bulk, using refillable containers. Thanks to Port Chatham's daily efforts to recycle cardboard and packing materials, the store boasts a 67% recycling rate. For more information, call store manager Samina Hameed at 425/453-2441.

Torr Technologies, Inc.

Next time you put your luggage in the overhead compartment of an aircraft, think of Torr Technologies. This 10-person shop makes tools



and hardware for manufacturing com-

posite parts and laminates. In making a piece like an overhead luggage compartment, manufacturers routinely disposed of tons of plastic film that was used to pressure- and heat-cure the laminates into a solid piece. With Torr's help, manufacturers worldwide are switching to a system that can reuse the film 300 to 500 times before being recycled. This small company helps customers change from a throwaway process to an innovative, low-waste one — and saves them 90% on labor costs.

President Greg Lindstrom is an advocate for product stewardship. Torr encourages customers to save the durable shipping crates for storing the product; then when it's time to replace or recycle worn parts, the crates can then be reused for returning the product to Torr. The company recycles everything from scrap silicone rubber to scrap paper, from aluminum parts to aluminum cans. It adds up to a remarkably low 1.2 cubic yards of recycling and garbage each week. For more information contact Greg Lindstrom at 253/735-9115.

New Members

- Al's Auto Supply, Bellevue
- Andrew's Hallmark Gold Crown Store, Bellevue
- Bastyr University, Bothell
- Billy McHale's Restaurant, Renton
- Boston Sox, Bellevue
- Casual Corner, Seattle
- City of Bellevue Fire Department, Station 5
- City of Bellevue Fire Department, Station 6
- Cohanim Smileworks, *Seattle*
- Foster Pepper & Shefelman, *Bellevue*
- Harper Brush Distributors Inc., Renton
- Hughes Studio Architects, Seattle
- Ivey Seright International, Seattle
- Jeppesen Gray Sakai PS, Bellevue
- Marston & Heffernan, Bellevue
- Lake City Florist, Seattle
- Norman Brook Farm, Inc., North Bend
- Peterson Russell Cofano PLLC, Bellevue
- San Francisco Music Box Co, Bellevue
- Smith & Zuccarini PS, *Bellevue*
- Steve Carstensen DDS, Bellevue
- Treacy Law Group PLLC, Bellevue
- Val Pak Of Western Washington, *Kent*
- Waldenbooks. Seattle

Renewals

- EcoGraphics, Woodinville
- Group Ĥealth Riverton Operations Center,
- Inprints Southcenter Mall, Tukwila
- Sound Laser, Seattle

The new computer you purchase today may become obsolete in as little as a year and a half. All over the United States these old, but often functional, computers and monitors are being dumped into municipal landfills. In fact, an estimated 335,000 computers may end up at King County's Cedar Hills Landfill by the year 2005.

Computer equipment contains metals and other materials that could be reclaimed and

reused. Government organizations and businesses across the country developing reuse recycling and options to keep computer equipment out of the landfill. In 1998, Massachusetts became the first state to ban cathode ray tubes (CRTs), a major lead-containing component in computer monitors and TVs, from their landfills. Other states are considering similar legislation. South Carolina has proposed legislation that would place a fee on equipment that contains CRTs and the money will be used to set up

Alternatives to Landfilling Your Old Computer

Where do old

a recovery system. This approach is similar to Washington State's core charge on lead-acid car batteries. When car batteries are purchased, the consumer is charged \$5.00. The money is put in a fund and used to foster proper recycling. If the old battery is returned when the new battery is purchased, the fee is not charged.

Some states such as Minnesota, Florida, and California are running pilot projects to test different ways to recover and recycle used computer equipment. Here in King County,

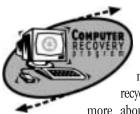
the Solid Waste Division and the City of Seattle are working on a pilot program to collect used computer equipment for reuse and recycling. They will partner with local firms and computer manufacturers to provide drop off sites for the computer equipment. The equipment will be refurbished, reused or if the equipment it no longer working, it will be recycled. The service will be available to both residents and businesses in King County and will be offered

in mid-2000.

Currently, there are local businesses that accept old computer equipment for recycling and reuse. Re-PC, 2nd Byte Computers, and Computer Renaissance are a few of the companies that will take certain models of computer for resale recycling. Computer Bank Charity, a local volunteer organization, refurbishes old Macs and 486 systems to donate to disabled citizens and children in need. With minimal effort and planning, businesses can give old equipment

old equipment new life and free up valuable storage space without contributing to our growing landfills.

To receive a list

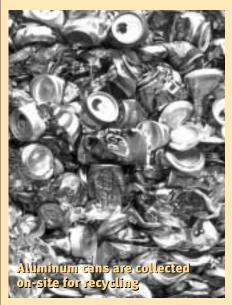


of companies
that accept used
computer equipment for reuse or
recycling, or to learn
more about the Computer

Recovery Project, call 206/296-8800 or visit our website at www.metrokc.gov/dnr/swd/bizprog •

The Business of Recycling

A Quarterly Profile of Your Local Recycling Service Providers



Pacific Northwest Recycle, Inc.

Since 1989, Seattle-based Pacific Northwest Recycle, Inc. (PNR) has collected recyclable materials from businesses throughout King County. Depending on the type of business and materials collected, PNR sometimes offers their recycling services free of charge or at minimal cost. PNR's office recycling program collects:

- All office & mixed waste paper
- Blueprints
- Carbonless forms
- Newspaper & Magazines
- Broken-down cardboard
- Glass
- Aluminum cans
- #1 and #2 Plastics (milk jugs and juice containers)

Pickup is scheduled to suit customers on a weekly, bi-weekly or monthly basis. Businesses can choose from a variety of bins and dumpters provided by PNR free of charge. Companies of all sizes can receive on-site consultations to help set up their recycling programs or to increase the level of recycling that is currently being practiced.

PNR donates a portion of its profits to programs that serve women and children who have survived sexual abuse. PNR funds services and offers job training and work therapy at a long-term treatment center for patients. For more information on Pacific Northwest Recycle, Inc., please call 206/322-8461.

Knock Knock...on wheat?

New Product Called Wheatboard Replaces Wood

Wheat: it's in your breakfast cereal, it's in your dinner roll, and now you'll even find it in your office furniture — and it isn't in the form of crumbs from that afternoon bagel. Wheatboard, also called strawboard, is gaining popularity as a sustainable alternative to traditional particle board made from wood fiber.

Made from leftover parts of the wheat stalk after the grain has been removed, wheatboard is derived from an agricultural by-product usually burned or plowed back into the soil after the harvest. While it can take decades for trees to grow, wheat — a sustainable resource — can be harvested after a three-month growing period. One field can yield two to three crops a year. Wheatboard manufacturers are currently trying to figure out how to keep their supply of wheat available during winter months.

Auburn-based Brandrud Furniture recently started using wheatboard for the non-weightbearing interior framing of some of their furniture. Brandrud's production managers purchased

wheatboard in February 1999 initially as a cheaper alternative to traditional wood products. Workers found the wheatboard was easier to cut than



oriented strand board (O.S.B.), another pressed wood product used in furniture. Brandrud decreased the wear-and-tear on their machines and tools. Wheatboard offers the same strength, flexibility, impact resistance and screw-holding power of real wood and the extremely flat surface is ideal for lamination.

Using wheatboard yielded another unexpected bonus for Brandrud Furniture. Although wheatboard raises super-fine dust when cut, it does not produce the eye-watering, nose-searing fumes of traditional particleboard. Since wheatboard

does not contain any toxic chemicals — such as formaldehyde — often found in particle boards, Brandrud Furniture now offers a "specialty" line of furniture to clients that need chemical-free environments. Schools, nursing homes and hospitals such as Swedish Medical and Virginia Mason have rushed to fill their waiting areas and lobbies with Brandrud's non-toxic furniture. Now an estimated 20% of all Brandrud Furniture pieces contain wheatboard.

As wheatboard gains popularity in the furniture industry, other applications for wheatboard have also emerged. Doors, floorboards and building sheets are now being produced from wheatboard. Neil Kelly (www.neilkelly.com) based in Portland, Oregon, offers wheatboard cabinets. An Australia-based company, Solomit (www.solomit.com.au), even offers wheatboard acoustic ceilings and a funky product they call "brush fence," where tightly-bound stalks of straw are tied together into a fence to serve as a rustic alternative to traditional chain link fences.

For more information on Brandrud's use of wheatboard, contact Jan Nix, Environmental Resource Coordinator at 253/838-6500.

Wheatboard Manufacturers

- Alta Goldboard Development
 Alberta, Canada.... (403) 440-3320
- CEN-KANHuchinson, KS (316) 665-7000
- Isoboard Enterprises, Inc.Elie, Manitoba (416) 960-8284
- Naturall Fibre BoardMinneapolis, KS.... (913) 392-9922
- Neil KellyPortland, OR (503) 288-6345
- Phenix BiocompositesMankato, MN (507) 931-0316
- PrimeBoardWapheton, ND (701) 642-6026
- Weyerhaeuser (local distributor)Kent, WA (253) 854-3500or 1-800-562-0908

New Recycling Database

King County businesses and residents can quickly find answers to common recycling questions, thanks to a new online database www6.metrokc.gov/dnr/swd/recycle/ recycle.asp offered by the King County Solid Waste Division. The database includes information on the reuse and recycling of over 70 types of materials—from office waste such as paper, glass and aluminum, to industrial and construction waste like concrete and lumber. The database also lists a growing number of reuse opportunities for products such as furniture and used toner cartridges. Since the database will be updated several times a week, users will receive current and accurate information.

For more information contact Alexandra Scott at 206/296-8454.

Showcase

- —continued from page 1
- Strategic light placement, occupancy sensors, and dimmers automatically respond to the number of workers in an area and the available daylight.
- Heating, ventilating and air conditioning (HVAC) units operate on variable speed drives for maximum efficiency.

Indoor air quality

- A roof-top enhanced air filtration system provides 60% outside air filtration—nearly double that of the average office building.
- "Stacking" copy rooms in the same location of each floor and continually ventilating them to the outside eliminates copier toner particulates.
- Interior designers avoided materials that off-gas into the air, instead choosing lowvolatile organic compound (VOC) adhesives, and low-VOC latex paints.

For more information about King Street Center, contact Bob Burns at 206/296-3748 or visit www.metrokc.gov/market/ map/kingst.htm. For information on sustainable building, visit www.metrokc.gov/ market/map/sitelist.htm

Green Works?

Green Works is a waste prevention and recycling assistance program for businesses. It is sponsored by the King County Solid Waste Division, the Business and Industry Recycling Venture of The Greater Seattle Chamber of Commerce, and King County suburban cities. If your business needs help reducing waste or finding a company to recycle your office paper, aluminum cans or even used office equipment, give us a call.

Businesses can become Green Works Members by recycling at least 40 percent of their waste, using three waste reduction practices, and using three recycled products in the work place. Each Green Works Member receives free, positive publicity in this newsletter, on the radio, and in local newspapers and publications. For assistance or to become a Green Works member, you may call us at 206/296-8800 or 1-800-833-6388 (TTY Relay); email us at greenworks.swd@metrokc.gov; fax us at 206/296-0197; or visit our web site at www.metrokc.gov/greenworks.

Recycling Works

Recycling Works is a quarterly newsletter written and produced by the King County Solid Waste Division. Inclusion of a business, product or service in this newsletter does not constitute an official endorsement or sponsorship by the Solid Waste Division or King County. Send us your questions, story ideas or suggestions!

Receive Recycling Works by Email

Cut down on waste and receive *Recycling Works* via email. We'll send it to you in Portable Document Format (PDF) that's read with Adobe's Acrobat Reader. Email your name, company name and your email address to: greenworks.swd@metrokc.gov. You may also fax your request to 206/296-0197, or call us at 206/296-8800; 1-800-833-6388 (TTY Relay).

This material will be provided in alternate formats upon request.

Enviro Expo

Exhibit Your Environmentally-Friendly Products and Services

his year is the 30th anniversary of Earth Day and to celebrate this pivotal event, the King County Department of Natural Resources will hold its second annual EnviroExpo on April 1st—2nd, 2000. This is an excellent opportunity for businesses to display their environmentally-friendly products or services to a very receptive audience. All products and services that use fewer resources, are less toxic, are recyclable or reusable, create less waste and generally have less of an impact on the environment are welcomed.

Some of last year's products and services included:

- WashWise-certified washing machines that use less water and less electricity
- electric mulching lawn mowers
- residential cleaning systems that feature less toxic cleaning solutions
- socially-responsible financial products and investing
- low toxicity water sealers and coatings
- shade-grown organic coffee
- building products that contain recycled materials



The EnviroExpo will be held at the brand new Stadium Exhibition Center located next to Safeco Field. Booth space is still available at a cost of \$500. Contact Dan White at 206/296-4430 or Melissa Wangen at 206/296-0234 to register for a booth. For more information check out the web site at www.metrokc.gov/market/expo2ooo.htm. See you there!

Printed on Spicer Paper's Endeavour Gloss, a recycled paper containing 15% post-consumer content.

