



# The Closed-Loop Scoop

Washington State Department of Ecology, Solid Waste & Financial Assistance Program

August 2005

Publication No.  
05-07-005

## Big Waste or Big Opportunity?

*Finding recycling solutions in Skagit County*

Lake Cavanaugh is a lovely area in a remote part of Skagit County. The lake is ringed with some year 'round homes and many vacation cottages. There is an active Community Improvement Association that sponsors yearly road litter clean up days, potlucks, garage sales, and environmental educational events.

Several years ago a TV cable company came in and strung heavy duty cable all around the lake. About 10 miles of cable, in fact. Many of the residents rejoiced as the surrounding hills blocked television reception by antenna. Sadly, the cable company went out of business and the community was stuck with lots of cable and no TV. Lake Cavanaugh gets lots of wind and rain and snow which took its toll on the aging cable. There was no one to repair it and no one to remove it as it began to break and hang down, creating driving hazards and visual pollution.

The community group asked Puget Sound Energy (PSE) to help, but it was not their cable and therefore, not their responsibility. Eventually, PSE agreed to help bring down the cable but could not fund the costs of disposal. Barbara Busby, president of the Improvement Association, called Frances Ambrose at Skagit County Public Works (who helped with litter bags and disposal costs of their annual roadside litter clean up project) to see if the County would waive the disposal fees for the cable. Ms. Ambrose assured Ms. Busby that she would look into this request, knowing all the while that it was a highly unlikely prospect. Why should the

public subsidize this particular situation? What sort of precedent would it set? How much would 10 miles of cable weigh? How would they transport it to the Transfer Station? How would it work in the compacting process?

On the way into the boss' office to plead for help for the group, ideas started bubbling about who else might be able to use old cable. No really good ideas surfaced so obviously it was time to call Lois Young at Skagit River Steel and Recycling (SRS&R) who always has creative solutions to odd problems. Sure enough, not only would SRS&R be interested in recycling the cable, they would be happy to provide the drop boxes and the transportation to their recycling yard! And even better, they would pay the group for the material!!!!!!

It took several months to complete the project, but with a lot of hard work by PSE and the Volunteer Fire Department, the cable was on its way to being recycled and the Lake Cavanaugh Fire Department Auxiliary received a check for \$855.00. Happiness everywhere! Lake Cavanaugh residents got rid of their problem, SRS&R got a high quality recyclable material and Skagit County Public Works helped create a solution without using the landfill. A further bit of happiness occurred one day when Ms. Busby arrived with a beautiful bouquet to thank Ms. Ambrose who was so surprised! She just kept saying, "I was just doing my job! It was such a thrill to be able to facilitate a win-win situation."

## Contents

- Ecology Walks the Talk ..... 2
- Puget Sound Recycling Education Campaign ..... 3
- Beyond Waste Activities ..... 4
- New Litter Campaign Materials ..... 6
- King Co. Wins Award ..... 7

# Ecology Walks the Talk

Transporting computers becomes “eco-delivery”



Ecology employees have always pushed the envelope. Now, they're pushing the box – the computer box, that is.

Ecology partnered with Dell Computers, <http://www.dell.com/>, to design a computer-delivery system that would reduce waste and still protect the computers. As the pilot agency for Dell's new Eco-Delivery system, Ecology provided valuable feedback on the design's suitability.

The state Department of Information Services (DIS), <http://dis.wa.gov/>, joined the effort because it purchases many computers on behalf of state agencies and was already working with Ecology employees to ensure that the multi-state contract they use for personal computers included environmental concerns, such as end-of-life management and reduced hazardous materials.

Now, instead of one computer per box, each shipping container holds 20 small desktop units or eight mini-towers, as well as the keyboards, mice and cables. Because an instruction CD and manual for each computer was unnecessary for our needs and was wasteful, one CD and manual set is provided for the entire shipment. The container is returned to Dell and reused for the next shipment.

The containers take up half the space the boxes did and there is no packaging waste for our employees to handle.

Ecology's Waste Reduction and Recycling Committee recognized that there were some opportunities to reduce packaging waste and wanted to recycle more of it. Starting in early 2001, Ecology began recycling the polystyrene packaging material. This interim step helped motivate employees at Ecology to demand a better solution. Recycling polystyrene meant lots of employee time, storage space and expense (it had to be shipped to Texas). This was clearly not sustainable.

Because of Ecology's commitment and persistence, our Dell account representative took our request to Dell executives and design staff to come up with a more sustainable packaging system. Our Dell account representative even featured the Ecology project in a presentation to none other than company founder Michael Dell.

*“Without the cooperation and partnership between Ecology, DIS and Dell, this would not have been possible,”* said Carol Fleskes, Ecology's Administrative Services manager.



# Puget Sound Recycling Education Campaign

Government and business partner to increase public awareness



Jones Soda Co. and Seattle Public Utilities have partnered this year to increase public awareness of recycling, and together encourage consumers to recycle Jones Soda products. The campaign is funded in part with a Coordinated Prevention Grant to Seattle for a Puget Sound education campaign for recycling.

- Recycle your aluminum Jones Soda can today, and it 'can' come back to you as a brand new can in 60 days.
- A recycled aluminum can of Jones Soda can be made into car parts, appliances, window and door frames, and of course, new cans of Jones Soda.
- Recycling one Jones Soda can save enough energy to power a television or computer for three hours.
- Recycling a six-pack of Jones Soda saves enough energy to drive a car five miles!
- Recycling one glass bottle of Jones Soda saves enough energy to light a 100-watt bulb for four hours.

As a part of the recycling campaign, Jones will be featured in two brand spankin' new commercials, which began airing all over Western Washington State in July 2005. For more information, visit Jones Soda's website at [http://www.jonessoda.com/files\\_new/recycle.html](http://www.jonessoda.com/files_new/recycle.html).

## Sustainable Schools Awards

2005-06 program kick-off!

It's time again to kick off the Sustainable Schools Awards Program. The schools in your area could receive a cash award from Ecology for school waste reduction, recycling and resource conservation and sustainability activities.

The Terry Husseman Sustainable School Awards program recognizes Washington State Public schools (K-12) for their successes managing materials in a sustainable fashion. Schools can win in three categories: Sustainable School Program, Seed Award, and Creative Environmental Curriculum. Ecology is pleased to honor the initiative, creativity, and vision of public school students, faculty, and staff to move our state toward greater environmental responsibility.

Ecology will distribute as much as \$30,000 among the winners this year. **Applications are due February 28, 2006.** The winners will be announced in April. The awards are presented at a ceremony hosted by Ecology in early May.

Additional details can be found in Ecology's *A Guide to Achieving Sustainability in Your School*, publication number 02-07-022, <http://www.ecy.wa.gov/biblio/0207022.html>. For more information on the awards program, criteria, or ideas to foster sustainability in your school, contact our Awards Coordinator, Michelle Payne, at 360-407-6129 or [mdav461@ecy.wa.gov](mailto:mdav461@ecy.wa.gov), or visit our website at <http://www.ecy.wa.gov/programs/swfa/terryhusseman.html>.

# Survey on Home Composting Shows Much Success

## *And points to future opportunities*

A survey of community home composting activities conducted this spring yielded a high response rate and some valuable information. From the 40 responses (33 counties, one city and six non-profit groups), the following conclusions can be drawn:

- Home composting programs are active in many areas of the state
- One size does NOT fit all
- Funding is an urgent need for many struggling programs
- Opportunities to share information are needed
- Compost bin sales and home composting workshops seem to be factors in successful programs

The survey revealed that many programs involve partnerships with other agencies, non-profits or businesses to help spread the word and share the financial burden of creating outreach materials and providing composting workshops. A statewide network would allow each of these unique programs the opportunity to share their outreach materials, innovative ideas and demonstrate examples of partnerships ~ creating stronger programs statewide.

Ecology contracted with RIDOLFI Inc. to conduct the survey as a means of gaining a statewide picture of home composting activities and results. This information will help identify next steps to help meet the 5-year milestone of having active home composting programs in every community throughout the state. This is one of the priority Beyond Waste plan goals.

Expanding home composting will have compound benefits, which include:

- Fewer organics will be disposed of
- As people create and see value in their own compost, they will also demand more compost commercially
- An awareness of healthy soils will increase, creating a demand for developers, landscapers and contractors to use a “green” approach to development and maintenance
- People who incorporate compost in their own yards will use less water and fewer pesticides and commercial fertilizers to maintain their landscapes

One step toward achieving the home composting milestone has been taken by respondents completing the survey ~ many thanks to those who made time for this step. Another step could be taken by coordinating opportunities and forums to share information with partners from around Washington. This could help create a statewide network for home composting programs.

Please take a moment to give us feedback on opportunities for networking... do you feel this would be useful? Call or email Chery Sullivan, Beyond Waste Organics Specialist, at 360.407.6915 or [chsu461@ecy.wa.gov](mailto:chsu461@ecy.wa.gov). She hopes to hear from you!

## **Beyond Waste Action & Implementation**

To date, 16 Beyond Waste implementation projects are in the planning stages, are underway or have been completed. Many partner organizations are involved in implementation projects, and more are considering future projects. Legislative appropriations for the 2005-07 biennium are helping a great deal, with a total funding package of 8.2 FTEs and \$1,550,000 for contractual projects in both solid waste and hazardous waste.

A number of starting point projects were identified as priorities for implementing Washington's Beyond Waste Plan. View the plan at [http://www.ecy.wa.gov/beyond\\_waste/finalplan.html](http://www.ecy.wa.gov/beyond_waste/finalplan.html).

An implementation status report is updated every other month, and includes all of the starting point projects. It may be viewed at [http://www.ecy.wa.gov/beyond\\_waste/ImpStatus.html](http://www.ecy.wa.gov/beyond_waste/ImpStatus.html)

A Beyond Waste implementation project will be featured in this and future Closed Loop Scoop Issues.



**New Built Green WA Website launched!** Check out this new site at [www.builtgreenwashington.org](http://www.builtgreenwashington.org). It unites the residential Built Green™ programs across the state, so prospective home owners and builders can get information easily on **how to save money and natural resources by building green**. Site users can view the latest news, current events, resources and case studies across the state regarding high-performance homes. Tour the [Seeing Green Gallery](#) for ideas and download the PDF on [finding a green builder](#), too! The site was developed as one of the Beyond Waste Plan priority implementation activities, through a partnership of Ecology's Solid Waste Program, Master Builders of King and Snohomish Counties, O'Brien & Company, and Coryography Web Design. Contact Vicki Colgan at [vcol461@ecy.wa.gov](mailto:vcol461@ecy.wa.gov) for more details.

# New "Secure Your Load" Materials Available

as part of "Litter and it will Hurt" Campaign



Ecology's "litter and it will hurt" campaign is based on research showing that the best way to get people to stop littering is to make them aware of the consequences. Three years ago, the campaign began by focusing on the fines associated with litter. You may remember the Torquemada commercials that sent the message that litter fines could "hurt" your wallet.

Last year, national attention was brought to the real danger posed by litter and road debris. A report by the AAA Foundation stated that there were 25,000 accidents involving road debris in North America each year – nearly 100 of them fatal.

Here in Washington several serious accidents received media coverage – including the terrible accident that blinded Renton-woman Maria Federici. In response to these accidents, Ecology introduced new commercials last year – focusing specifically on two littering incidents believed to pose serious hazards – failure to properly secure a load, and tossing lit cigarettes. The commercials can be viewed at [http://www.ecy.wa.gov/programs/swfa/litter/c\\_media.html](http://www.ecy.wa.gov/programs/swfa/litter/c_media.html).

Governor Gregoire recently signed legislation increasing the penalties associated with "unsecured loads." An unsecured load violation still carries the \$194 fine, but if the incident causes property damage or bodily injury, the driver may be charged with a misdemeanor or gross misdemeanor.

To help get the word out, Ecology has produced two videos and a companion brochure. One video is specifically tailored to the law enforcement community; encouraging them to play a roll in preventing accidents by strictly enforcing litter laws. The other video is geared toward the general public and includes tips for how to properly secure a load. The public video and brochure can be viewed at [www.ecy.wa.gov/programs/swfa/litter](http://www.ecy.wa.gov/programs/swfa/litter).

Ecology intends to share these materials with our local government and state agency partners. The real-world examples used in the "secure your load" materials demonstrate exactly how "litter will hurt" in an attempt to grab people's attention and persuade them to prevent litter.

For more information about how to receive these materials please contact:

Megan Warfield, Litter Programs Coordinator  
360-407-6963 or [meth461@ecy.wa.gov](mailto:meth461@ecy.wa.gov)

Dawn Drake, Assistant Litter Programs Coordinator  
360-407-6112 or [ddra461@ecy.wa.gov](mailto:ddra461@ecy.wa.gov)

## Outreach documents now available in Spanish!!

Now we can share printed information about waste reduction, composting, recycling, and household hazardous waste with Spanish-speaking audiences statewide. There are several newly updated SWFAP education and outreach materials available in Spanish that you can download and print from the Ecology website. The documents have recently been updated by SWFAP staff and translated by Ecology's Spanish Translation, Interpretation and Review Team (STIRT). English and Spanish versions of the documents are available on the SWFAP website:

<http://www.ecy.wa.gov/biblio/swfa.html> .



# King County Wins Award for Fuel Cell Demonstration Project

Local wisdom wins national praise

A King County project that generates electricity using methane gas from sewage treatment has earned the 2005 National Environmental Achievement Award for excellence in research and technology from the National Association of Clean Water Agencies, or NACWA.

King County uses the electricity to run some treatment plant equipment, cutting power costs about 15 percent. The molten-carbonate fuel cell, largest of its kind in the world, began operating in April 2004.

King County's Wastewater Treatment Division received the award for its Fuel Cell Demonstration Project at the South Treatment Plant in Renton. Using gas from wastewater-solids digesters at the treatment plant, a fuel cell power plant produces up to 1 megawatt of electricity, or enough to serve 800 households.

If the demonstration project is successful, King County will continue to use the fuel cell to produce energy for the treatment plant. The U.S. Environmental Protection Agency and Fuel Cell Energy Inc. of Danbury, Conn., are partners in the project.

"To reduce energy costs and air emissions, King County is searching for innovative ways to provide electricity for its wastewater treatment plants," said Wastewater Treatment Division Director Don Theiler.

"Our demonstration project moves the county into the 'green' power arena," Theiler said. "Power generated from the fuel cell will be green in at least three ways; it uses a renewable fuel, wastewater digester gas, it produces power efficiently, and it emits fewer pollutants than combustion engines."

NACWA, formerly the Association of Metropolitan Sewerage Agencies, gives annual environmental achievement awards to people and member agencies that make outstanding contributions to environmental protection and wastewater management. NACWA presented the award May 2 at its national conference in Washington, D.C.

The research and technology award is given to agencies that develop technological innovations in wastewater treatment or biosolids use and disposal. The research project or technological innovation must have practical application and relate directly to the collection, treatment, reuse or disposal of wastewater or biosolids.

Fuel cells are electrochemical devices that convert chemical energy from fuels containing hydrogen directly to electricity and heat. Combustion is not needed.

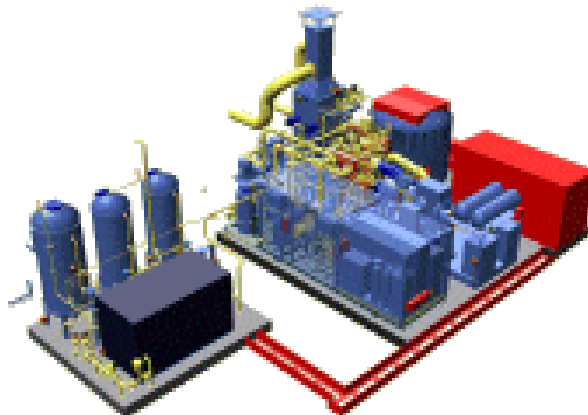
Similar to a battery, the fuel cell at the King County plant has hundreds of individual cells. Cells are grouped to form a stack. Each fuel cell contains an anode, cathode and electrolyte. Methane gas, a hydrogen-rich fuel, enters each stack and reacts with oxygen to produce electricity.

More information about the project is available on the county Web site <http://dnr.metrokc.gov/wtd/fuelcell/>.

King County's Wastewater Treatment Division protects public health and water quality by serving 17 cities, 17 local sewer agencies and more than 1.4 million residents in King, Snohomish and Pierce counties. Formerly called Metro, the regional public utility has been preventing water pollution for 40 years.



*"... a major milestone in making energy generation using fuel cells an attainable and attractive alternative for wastewater utilities."*



---

## From Waste-to-Worth: Why? Part 4

*Jay Shepard, Sustainability Strategist*

As professional practitioners in solid waste management, we are well versed in disposal and recycling systems. When it comes to the vexing issue of waste reduction, we have a pretty good idea that a big problem in our culture is overconsumption. Indeed the work of Mathis Wackernagel and others have demonstrated the global impacts of American consumption. However, we haven't really come up with methods to effectively encourage waste reduction and the behavioral changes that are needed to make it happen.

Here is where we need to defer to the social sciences. In the last issue, I discussed Maslow's hierarchy of needs in relation to consumerism and that consumerism fills unmet needs. For many, overconsumption is significant. If we examine consumerism thoroughly, we would find that most of the U. S. population are large consumers. For professional practitioners in solid waste management, that presents many problems. Among them:

- Consumerism is a behavior that is widely accepted and encouraged. It is not until it gets to an extreme where people can't pay for their habits (the indicators are poor credit, collections, foreclosures, and bankruptcy) that we even give it a second thought that the behavior might be out of hand.
- There appears to be a systemic denial that we have a problem with over-consumption. How can something that is an integral part of the economy be bad? People need to buy products in order to maintain the economy, support jobs, and create wealth. Right?
- There is confusion between needs and wants. The advertisement says that if the consumer has the perfect car, beer, or aftershave, these things will attract the perfect mate. The desire is to meet needs for inclusion and affection. The products are offered as a means to that end. As we visualize the basic need getting met, we integrate the product into that vision. We transform the product from a want to part of the need.
- We are enabled to continue the behavior. Advertising not only tells us that the products are available, but leads us to believe that we must have the products. Consumption has never been easier; credit cards, extended payments, and no interest offers all create an illusion of getting things for free.

How does someone go about influencing a behavior that is so integrated and intrinsic to our culture and maintain credibility at the same time? What steps might work?

These behaviors won't change until the person decides that the behavior no longer serves them and enough is enough.

Like overeating, consumerism is a double-edged sword. A person needs to eat. The need for nutrition will always be part of a person's life. The task of the recovering overeater is learning a healthier way to meet the different, non-nutritional needs that overeating is intended to soothe.

Some behaviors that people indulge in are seen as socially acceptable. Others are not. Consumerism is accepted.

So, the challenge is huge in relation to consumerism. We are unlikely to convince people that their behavior is bad. We can't tell them that fast food is bad, when it tastes so good; that

wearing the latest fashion is a waste of money, when they are the envy of their classmates.

What we can do is demonstrate alternative and healthy ways to get needs met. We can lead by example. We can talk about hope in the future with examples of realizing that hope.

The strongest product advertising method is word of mouth. Consumers are most likely to buy a product endorsed by a person they know. (That is why a well-known personality is often used to pitch products.) How products catch on in a mainstream way is through social pressure or social identity with others in the immediate circle of friends. Can we use social pressure to pitch a healthier lifestyle?

The Society for the Psychological Study of Social Issues suggests a four-step marketing method<sup>1</sup> to influence attitudes and behaviors. Check out their website for full details.

Quoting the Society, the four steps are:

1. **Open the Door:** Establish a favorable climate for discussion and lay a foundation for further communication.
2. **Meet one another:** Show others who you are and learn about their concerns.
3. **Talk to each other:** Influence opinions with an effective, concise message.
4. **Work together for change:** Lead others to actual involvement by encouraging, reinforcing, and supporting their active political participation.

As practitioners in solid waste management, we should develop a coordinated approach to the issue of overconsumption. Collaboratively, we will realize the greatest change in the shortest amount of time.

Collaborative approaches, building and sharing consistent messages, for example, could maximize resources and reinforce the message throughout a broader geographic area. Building coalitions and finding agreement with your peers on what the message is, whom does it target, and what are the most influential leverage points are key to success. Random, isolated approaches, while potentially effective initially, will likely result in a lapse to the former behavior when the target audience is exposed to influences outside the area.

We need to work together, build partnerships, share information, and give credit to those whose behavior has changed. They are the ones that will be doing the really hard work and making the difference at the end of the day.

---

<sup>1</sup> "PRINCIPLES FOR PROMOTING SOCIAL CHANGE: Effective Strategies for Influencing Attitudes and Behaviors," by Neil Wollman, Margaret Lobenstine, Maria Foderaro, & Stephen Stose <http://www.spssi.org/ppsc.html>

**Department of Ecology**

*The Department of Ecology is an equal opportunity agency.*

*Printed on 100% recycled paper, containing 50% reclaimed sugar cane fiber and 30% postconsumer waste, using vegetable-based ink.*

**Read this newsletter online!**

*The Closed-Loop Scoop* newsletter should not create waste. If you would like to receive a copy of the newsletter via e-mail please send a message to [jbil461@ecy.wa.gov](mailto:jbil461@ecy.wa.gov) with the subject line reading "Subscribe Closed-Loop Scoop." To make changes to our mailing list, please contact Jim Bill at 360-407-6125 or [jbil461@ecy.wa.gov](mailto:jbil461@ecy.wa.gov)

If you require this publication in an alternate format, please contact the Solid Waste & Financial Assistance Program at 360-407-6900. For persons with a speech or hearing impairment call 711 for relay service or 800-833-6388 for TTY.

**Give Us the Scoop!**

If you see news happening, or if you make news yourself, please let us know. You can submit articles or notices to the editor by regular mail or by e-mail.

We eagerly await your news.

**Newsletter Editor:**

Jim Bill  
SWFAP  
Dept. of Ecology  
P.O. Box 47600  
Olympia, WA 98504-7600  
360-407-6125  
[jbil461@ecy.wa.gov](mailto:jbil461@ecy.wa.gov)

FIRST CLASS  
U.S. POSTAGE PAID  
WASHINGTON STATE  
DEPT. OF PRINTING

