



Western Washington University  
**Western CEDAR**

---

The Planet

Western Student Publications

---

Spring 2007

## The Planet, 2007, Spring

Shawn C. Query  
*Western Washington University*

Huxley College of the Environment, Western Washington University

Follow this and additional works at: <https://cedar.wwu.edu/planet>



Part of the [Environmental Sciences Commons](#), [Higher Education Commons](#), and the [Journalism Studies Commons](#)

---

### Recommended Citation

Query, Shawn C. and Huxley College of the Environment, Western Washington University, "The Planet, 2007, Spring" (2007). *The Planet*. 49.  
<https://cedar.wwu.edu/planet/49>

This Issue is brought to you for free and open access by the Western Student Publications at Western CEDAR. It has been accepted for inclusion in The Planet by an authorized administrator of Western CEDAR. For more information, please contact [westerncedar@wwu.edu](mailto:westerncedar@wwu.edu).



# THE PLANET

Spring 2007

## *Living in the Woods*

Whatcom County's homeless have a closer relationship with Mother Nature

### **A Working Forest**

Blanchard Strategies Group decides to log two-thirds of the mountain

### **It Ain't Easy Being Green**

Western's newest building will be LEED-certified

### **Eco-Friendly Travel**

A look at U.S. Virgin Islands' environmentally-friendly resorts

**EDITOR IN CHIEF:**  
*Shawn C. Query*

**MANAGING EDITOR:**  
*Kendall C. Farley*

**ASSOCIATE EDITORS:**  
*Codi Hamblin*  
*Katie Mathis*

**SCIENCE EDITOR:**  
*J. Henry Valz*

**ASSISTANT EDITORS:**  
*Page Buono*  
*Devon Fredericksen*  
*Sylvia Graham*  
*Blair Paul*

**DESIGNERS:**  
*Matt Harvey*  
*Joe Shoop*

**PHOTO EDITOR:**  
*Taylor Williams*

**ONLINE EDITOR:**  
*Phil Ashlock*

**PHOTOGRAPHERS:**  
*Brandon Henry*  
*Todd Linder*  
*Mark Malijan*  
*Elisa Weiss*

**REPORTERS:**  
*Peter Jensen*  
*Matt Lawrie*  
*Kelly Lemons*  
*Andrea Magnuson*  
*Emily McMahon*  
*Sam McNeil*  
*Yuki Nakajima*  
*Chris Phillips*  
*Rebecca Rayner*  
*Allie Rock*  
*Colin Simpson*  
*Andrew Spanjer*

**ADVISER:**  
*William Dietrich*

The Planet  
c/o Huxley College  
Western Washington University  
516 High Street, CF 220  
Bellingham, WA 98225  
360.650.3543  
planet@wwu.edu  
<http://planet.wwu.edu>

Cover Photo by Elisa Weiss

This issue of The Planet is printed on Mohawk Options 100 percent PC Cool White Smooth paper. It is made from 100 percent postconsumer waste fiber through non-polluting, wind generated energy and printed with soy-based inks.

Dear Reader,

There's an old saying that what you don't know can't hurt you. Every day, we use chemicals to wash our hair, clean our kitchens and freshen the air. We eat farmed fish and produce treated with pesticides. We aren't aware of the amount of energy we use each day because it's readily available with the flip of a switch. We fill dumpsters with waste that is then trucked out of sight, out of mind. When generating waste is seemingly without consequence, it's easy to live in our culture of consumption.

What would happen if we were all forced to live among the waste we make? Reporter Colin Simpson asked this question as he spent time with some of Whatcom County's homeless. Living in tents in the woods, under bridges and on the street, they cover piles of trash with tarps and abandon old mattresses and rusty shopping carts. The less fortunate don't have the luxury of shipping their waste to the landfill.

This is in contrast to Western students, who fill hundreds of blue bins each day with paper made from fiber that is not recycled. As the piles stack higher, only those working in the Associated Students Recycle Center really know how wasteful we are. Reporter Yuki Nakajima investigated Western's current paper use and the potential to move toward better practices.

When reporter Emily McMahon visited two eco-friendly resorts in the U.S. Virgin Islands, she witnessed tourists using their old cans and bottles to create works of art and jewelry. Taking cold showers and using on-site wind power in their tent cottages, resort visitors can still take in the tropic scene without degrading the features that make it so beautiful.

You don't see the chemical runoff from your favorite fragranced shampoo, or the accumulation of PBDEs in your body from flame retardants used on everything from your computer to your mom's comfy couch, but they are there. Your task is to stop being oblivious. Stay informed. Because as it turns out, what you don't know can and does hurt you and the Earth.

The stories in this issue will give you a starting point for becoming more aware of the waste we as individuals and as a society create, and the resources page will give you additional places you can go to stay informed.

As myself and the rest of the editing staff graduate this spring, we think back on our year of producing this magazine fondly. We hope our hard work throughout the year inspires you to be an advocate for the environment in your own way. Thank you for supporting The Planet with your readership.

Sincerely,



Shawn C. Query

*Special thanks to Bill for strengthening our program and being our mentor and advocate. Our friends and family for their constant support. Terrence Nowicki for the cartoon on the Resources page. Seth Vidaña for being a helpful, reliable source. Chris Baker and the printshop team. Last but not least, Catman for helping us make it through the night.*

## 2 Green Light for Logging

Blanchard Mountain is near to the hearts of many in Whatcom and Skagit Counties. So when a strategy group of environmentalists and timber industry representatives decided to log two-thirds of the mountain to discourage development, community members and area biologists disagreed.

## 5 Sharing the Road

Once each month, a pack of Bellingham cyclists convene to ride through town. Rides like this occur across the country in an effort to promote alternative transportation and generate respect for cyclist's rights to share the road.

## 8 Traveling Lite

The U.S. Virgin Islands teem with tropical beauty and diverse ecosystems. On her recent trip to the islands, Emily McMahon stayed in two eco-resorts where tent cottages, spring-loaded faucets and unique recycling programs aim to reduce the impact of tourism in the Caribbean.

## 12 Taxpayers' Toxic Burden

The Environmental Protection Agency created the Superfund to clean up toxic waste sites across the United States. Now that the fund is bankrupt, taxpayers must foot the bill for projects such as the historical pollution of Bellingham's own Oeser Cedar Company.

## 14 A Paper Thin Margin

Despite Western's image as a green campus, last year the university purchased 4,031 cases of predominantly un-recycled paper. Numbers show Western can afford to purchase slightly more expensive, but recycled paper, but doesn't plan to do so unless students speak up.

## 16 The Ballad of the Green Destitute: Poverty and the Environment

In a patch of woods nestled between Interstate 5 and Fred Meyer, tent camp residents cover trash heaps with tarps, but these nomadic citizens often find themselves more comfortable living under trees than inside shelter walls.

Corrections: *In the winter 2007 issue, Charles Beall's name was misspelled in the Outdoor Elementary story. A photo in "Una Flor Toxicia" was mislabeled as being taken at Pike Place Market. The photo was taken at New Leaf Flowers.*

## 20 Sea-ing Thought the Labels

While everything from apples to T-shirts now dons the "organic" badge, another lesser-known label informs consumers that their seafood was sustainably harvested. In an industry where organic practices are difficult to standardize, The Marine Stewardship Council and Sustainable Fisheries Advocates are working to make purchasing seafood more environmentally responsible.

## 22 Igniting Change

Fire retardants save lives by allowing people time to escape flames, and manufacturers drench products like furniture and electronics with the chemicals. But politicians in Washington state's legislators concerned about human and environmental health are working to ban the polybrominated diphenyl ethers (PBDEs) they contain.

## 24 Concrete to the Contrary

Stormwater runoff carries pollutants like anti-freeze and heavy metals into Bellingham Bay and watersheds. Local developers are now using a new type of concrete that absorbs stormwater and reduces contamination.

## 26 Burying the Past

The Port of Bellingham capped Georgia Pacific's mercury pollution in Bellingham Bay with sediment, a temporary solution that is now leaking. Environmental groups and Port officials debate the effects of further capping versus permanent removal.

## 28 Heritage Land

A group of Skagit County farmers works to preserve the farming culture of the valley while maintaining its surrounding ecosystems.

## 30 Green Living: Bathroom Edition

You might be thinking about taking The Planet with you to the loo. Here are some tips to keep your bathroom "green."

## 31 If Western LEEDs, Who Will Follow?

Following student protest, Western officials decided the new Academic Instruction Building, now in mid-construction, will be built with green standards in mind.



# GREEN LIGHT for LOGGING

by Sam McNeil

photos by Todd Linder

San Juan Islands seen from Blanchard Mountain  
in Skagit County.

Jason Brown drove to the top of Blanchard Mountain to soar with the eagles. From his launching point, the sun shone on ships in Samish Bay, the San Juan Islands and lower Skagit Valley farmland. It was a perfect day to jump off a mountain.

"Radio check for Jason," a radio in Brown's parachute backpack squawked. His instructor, 13-year gliding veteran Lawrence "Mr. Good-launch" Wallman, was testing their link.

Brown's helmet shook as he refused an offered beer – this was his first time jumping off Blanchard. An immature bald eagle flew over the team.

"He's leading your path," said 'bi-wingal' glider Rita Fleming.

Brown tugged at the rainbow-colored strings controlling his chute, pulling them taut as his blue and white glider caught the wind. He leapt and was off after the bird, towards the sun.

"It's gorgeous, with the eagles, the scenery and the islands," Wallman said.

Brown and Wallman weren't alone enjoying Blanchard Mountain that day. Three dogs panted in the shade, hikers geared up and families gawked at the expansive view. They are examples of the 45,000 people who recreate on Blanchard a year, said Rose Oliver, staff member of Conservation Northwest, a nonprofit organization that works to protect old-growth forests and wildlife across Washington state.



Delvin Crabtree readies his chute before launching off Blanchard Mountain in Skagit County.

Blanchard is a playground for many who value the mountain's second-growth forests, staggering vistas, and diverse possibilities. Others, however, value its board-foot dollars. This is Blanchard's 100-year-old tradition: a duality

of utopian ideals and capitalist necessity.

In January, a select group proposed an agreement to log two-thirds of the mountain. The Blanchard Strategies Group (BSG) included representatives from the timber industry, local businesses, the Washington state Department of Natural Resources (DNR), and four prominent environmental groups. Combining multiple prejudices, values and needs, they forged a new axe for Blanchard's forests.

The mountain has been a "working forest" since the early 1900s, which means that the DNR is required to log it. Since 1989, 445 acres have been cut to fund the Burlington-Edison School District, Skagit County, the DNR and the state.

Blanchard is a unique geological formation that rises out of Puget Sound, bristling with 4,827 acres of forests that connect the ecosystems of the Sound, the Cascades, and the Chuckanut Mountains. It is a "green jewel" whose teeming environment is home to the threatened bald eagle and the endangered marbled murrelet, according to Oliver and Conservation Northwest publications.

Blanchard is flanked by encroaching development on its southern and eastern slopes. The U.S. Department of Agriculture (USDA) designated the region as one of the most threatened by development in America.

Endangered or not, the axe will fall on Blanchard.

On April 24, 2006, Washington State Public Lands Commissioner Doug Sutherland formed the 10-person BSG to decide the fate of Blanchard. Members differed on strategies, but acknowledged the mountain's range of values for different communities.

"From the very first moment we had an understanding that this is a wonderful area," said Ken Osborn, a forest manager for Arbor-Pacific Forestry Inc. and BSG member. "We were down to wrestling with how much to manage, and how much not to manage."

After nine months, the BSG reached a compromise. A "core" area of 1,600 acres will cap Blanchard, designated for recreational use and ecological management. The core connects to Larrabee State Park, with the possibility of extension to the Mount Baker ecosystem, Oliver said.

The remaining 3,227 acres of Blanchard will be logged at a rate of 2 percent each year, and will be subject to DNR environmental regulations regarding endangered species, sustainable forestry and water quality.

"You are not going to see the big rectangular clear-cuts like you once did," said Bill Wallace, BSG member and northwest region manager for the DNR.

The DNR's management of working forests has greened and intensified since the 1980s. It develops a harvest plan for the working forest that private loggers bid on.

While Sutherland approved the plan on April 27, the Mount Baker Sierra Club and the North Cascades Conservation Council labeled it a "sell-out" agreement.

"This is not a breakthrough, it's a brainwash," said Ann Eissinger, owner and principal wildlife biologist for the Nahkeeta Northwest Wildlife Services.

She rejects the plan, citing the lack of biologists on Sutherland's team.

"Few, if any, have spent time on Blanchard Mountain. But they were chosen to decide the future of that land," she said.

Eissinger has studied Blanchard since 1992, co-authored a 2004 environmental assessment of the mountain, and advocated a 3,000-acre core.

"What gets me is that it's claimed as a victory," said Paul Haskin, publisher of Adventures NW, a regional outdoor recreational magazine. "More, perhaps, could've been done. It's a place of beauty I feel strongly about protecting."

Forest board trust land like Blanchard must produce profit. Skagit County needs the timber revenues, and doesn't have substitute forests to log, Oliver said.

"If Blanchard could've been wilderness, we would've snapped that up six years ago," Oliver said. "But because they are Skagit Forest Board Lands there are legal constraints that govern those lands that say they cannot be sold."

No one is willing to pay outright for Blanchard either, according to a joint study by the DNR and Conservation Northwest (then Northwest Ecosystem Alliance). The study found the Skagit public valued Blanchard's recreational uses over its timber revenues, but would only pay \$8.5 million for Blanchard – negligible when compared to \$1.6 million to \$3.1 million potential annual harvest.

"There is not enough money to buy it all up and put it into parks," Wallace said.

An even graver threat forced the hand of the BSG, Oliver said.

"We found out that the private timber owners in the lands surrounding Blanchard Mountain – if Blanchard Mountain had become protected – would likely sell off their rights for their lands to become developed," Oliver said.

The threat of development unified the strategies group, said Molly Doran, the executive director of the Skagit County Land Trust and BSG member.

“We all have this very common focus that we need to protect the Cascade to Chuckanut Core in some fashion or another, and not let it be fragmented by houses all up through that area,” Doran said.

According to the USDA, 6,000 acres of American open space are lost each day – or four acres every minute – to development.

Brotherhood of the Co-Operative Commonwealth” established the Equality Colony next to Blanchard. These were men and women disillusioned from the Civil War, continuing the Anglo-American tradition of settling the ethnically cleansed West to manifest their destiny.

In a decade, dissension destroyed Equality Colony. Blanchard’s mill closed in 1928. The land lay barren, the timber boom and the communitarian bloom busted.

While today they lie in coffins, what the loggers and utopians repre-



(From front to back) Brady, Victoria, Larry, and Julie West hike back to the trailhead from the Batcaves on Blanchard Mountain.

“Looking at fairly sustainable logging practices compared to pavement and homes, I think it’s pretty clear what is the better option,” Oliver said. “Development really is the enemy these days, and [the BSG proposal] really is a way to ward against that.”

April 26, the state legislature allotted \$4 million in funding to purchase lands surrounding Blanchard from timber owners, a first step in enlarging the working forest to \$12 million worth of lands, Oliver said.

“They did an outstanding job,” Sutherland said a day later.

Sutherland’s approval means after 80 years, trees will fall again on Blanchard, in a compromise of natural resource economics and protective environmentalism. This duality has roots on Blanchard, wrote Bellingham author JoAnn Roe in her book *Ghost Camps and Boom Towns*.

The mountain’s namesake is George Blanchard, who logged the mountain nearly bald in the late 1800s, and early 1900s. Using mules to pull logs on 40-pound steel rail roads, and paying his 100-man crew \$200 a day, Blanchard harvested 20 million board feet in 1889 alone.

While Blanchard’s men dragged logs to Samish Bay, a radically different clan lived amidst the trees.

In 1887, a mix of libertarians, anarchists and socialists called “The

sented haunt Blanchard. Equality’s ideals sprouted strong local environmental organizations, and the environmental havoc of Blanchard’s crew has evolved into “fairly sustainable logging practices,” Oliver said.

For eight decades the forest was virtually left alone, and evolved into a second-growth beauty, wildlife refuge, and recreational and devotional nexus. The underlying ethic of the BSG is that this was malpractice. Human management would have matured the ecosystem faster and made money. The hand of the DNR is superior to wilderness.


“We’re trying to help Mother Nature along a little bit,” said DNR compliance forester Bernie Strachila.

“That’s a bunch of crap,” Eissinger said. “Nature does its pruning; we don’t need to do that.”

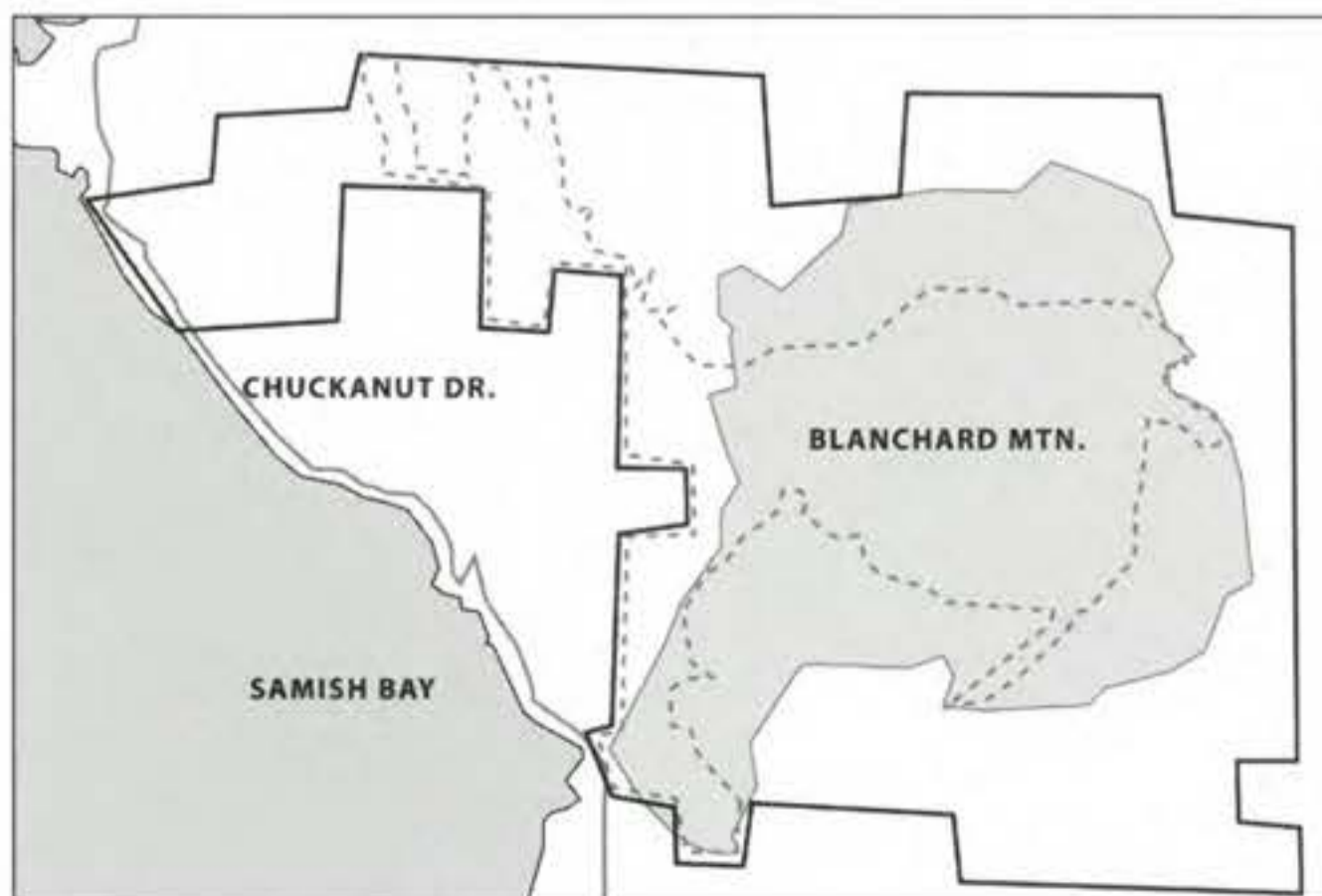
Stopping a forest fire is ecological management, Osborn said, no different than thinning a forest. With humanity at the helm, the forest’s fate will rely less on nature’s chance by replacing windstorms and lightning fires with chainsaws.

“When I see a sign on somebody’s car that says ‘Save Blanchard Mountain,’ I know what they mean: they mean no timber harvest there,” Osborn said. “But I want to ring their necks sometimes, because I don’t think they have the proper broad perspective and understanding of the full ecology and cycles and dynamics of a healthy forest.”

Osborn’s view is not representative of the entire BSG, but it is the foundation of their compromise. Logging, if done right, doesn’t have to destroy ecological or recreational value in a forest. The coalition formed out of the BSG is indicative of partnerships necessary for the future, Doran said.

The compromise attempts to balance the reality of financial need with environmental ethics and science. But when the chainsaws descend on Blanchard Mountain, above the bones of communitarians and loggers, will the ghosts of Equality or Blanchard roll over in their graves? 

Senior Sam McNeil is a Fairhaven student studying environmental convergence journalism. He has been published in *The Planet*.



The area within the solid black line is Department of Natural Resources land. The area within the dotted line represents the proposed “core.”

# Sharing THE ROAD

by Marinda Peugh  
photos by Mark Malijan

Two dozen cyclists, cheeks rosy from the cold, circled the Depot Market Square parking lot. Spontaneous rain showers could not stop Bellingham's Critical Mass from its monthly ride. Motorists slowed down, unsure of what to think about the pack swarming the pavement. Between the weather and lack of publicity, this month's ride was small, but still effective.

There is an ongoing battle between America's motorists and cyclists, Bellingham Critical Mass rider Kerstin Anderson said. Critical Mass attempts to create peace between the two by making motorists aware of cyclists and creating safer roads for riders. Formed in 1992, Critical Mass is a loosely structured group that started in San Francisco with the goal of making cars the alternative form of transportation, San Francisco Critical Mass rider Jake Arnold said. In cities around the world, Critical Mass groups gather once each month and ride through their town, demonstrating they too are a part of traffic, Arnold said.

Arnold rode his bicycle with Critical Mass in New York, Washington and California. He said the crowds consist of a colorful mix of riders from grandmas and children to serious cyclists, and everyone is welcome to join in.

In San Francisco, motorists are more conscious and respectful of cyclists and give them space, Arnold said. When he was in Washington state he said he didn't feel safe riding and chose to drive a car.

Bellingham's Critical Mass meets the last Friday of every month at 5:15 p.m. at the Depot Market Square parking lot on Railroad Avenue.

Jesse Jaroz, who rides with Critical Mass, said he has seen more than 200 people riding in Bellingham's Critical Mass. The group usually follows the bicycle lanes on the main streets of town from Fairhaven to Boulevard Park, up to James Street and back to State Street. One rider leads the group and participants can always pull off if they feel unsafe. The rides with the biggest

The Critical Mass bicycle ride started in San Francisco in 1992. Bellingham's Critical Mass meets the last Friday of each month.



Welcome to Bellingham  
Now Get on Your Bike!  
www.mtbakerbikeclub.org





turnouts are those advertised around town for specific events. Last Halloween most participants rode in full costume, Jaroz said.

Cyclists ride with Critical Mass for various reasons, Arnold said. These include the opportunity to ride with a group, to feel connected to other riders, to promote action to stop global warming and to show cars that riders also have rights to the road and need to feel safe around cars.

"Critical Mass has a large environmental component to it," Bellingham Critical Mass rider Emily Roeder said.

She said cars need to become the alternative form of transportation. Also, she said the United States has to change the way it designs its cities.

"I've been to other countries where bikes are their main form of transportation," Roeder said. "Here the cities have these fat, obese roads and still block bike traffic out."

On National Day of Climate Action, April 14, local politicians, organizations and community members gathered to discuss what Bellingham must do to reduce the effects of global warming. The biggest issue addressed at the event was using alternative forms of transportation. All the speakers agreed that in order for Bellingham to become more bicycle-friendly, motorists and riders must work together to create a safe environment. A consensus from the speakers was that in order to achieve this, individuals must be cautious of riders and the city needs to create more bicycle lanes.

Bellingham city councilman, Terry Bornemann, began his speech at the event by quoting John Lennon, "Maybe we are wrong. Maybe we can't change the world. But all we can do is try."

Bornemann said the city of Bellingham has 23 miles of bicycle lanes, 20 percent of the roads have trails and every new road created must legally include bicycle lanes. He said this shows the city has the right idea, but still has a ways to go.

Whatcom County councilman, Carl Weimer, shared ideas on how individuals can help make a difference, such as working from home, walking more, riding the bus, driving more efficient vehicles and using biofuels and alternative forms of energy such as solar power.

"The government doesn't lead," Weimer said. "It takes people to get pissed off at the government to run for office so we can get something done. It's rare for the government to come up with a good idea on its own. It is up to us to keep thinking about the salmon and the cedars instead of our human needs."

Critical Mass takes the politician's ideas and attempts to put them into action.

"It's about impressing on you that we are out there and we need space," Jaroz said. "An it's stressful when we are out there with a lot of heavy cars," Jaroz said.

He said some residents are supportive, but the culture here is ever-shifting, with new students and new residents moving in. With new people constantly coming to town, Critical Mass is a great way to inform newcomers

they must respect riders and watch for them. By creating a more bicycle-friendly city, fewer cars will be on the road and riders can feel safer, Jaroz said.

"Bellingham has a long ways to go before it feels bike-friendly," Anderson said.

The only safe lanes are on State Street and around Western, he said.

"I don't feel safe riding my bike in Bellingham," Anderson said. "I can recount a time where I almost died every time I've ridden. It's nice to ride with the group and feel safe, but I



wish it was more than once a month.”

In order for Bellingham to become more bicycle-friendly, cyclists must obey the traffic laws and gain the respect of motorists.

“Bikes would like all the perks of a pedestrian without obeying the laws of cars,” said Brian Augenthaler, a student at Western who drives his car. “If you are in a car you must treat a pedestrian on a bike the same as you would treat another car.”

Both parties must work together for the safety of riders and for the future of our air quality, Jaroz said.

Julia Marquand, a motorist, said she doesn't feel safe riding her bike in Bellingham.

“I rode my bike to work the other day and some guy honked and told me to use the sidewalk,” Marquand said. “He didn't think I was suppose to be on the road. People don't recognize bikes as vehicles.”

For the most part, riders stay in their lanes and obey the traffic laws, but there are always a few cyclists that cause problems, Jaroz said. One local man usually drives along with the Critical Mass rides as a witness to document accidents and talk to the police.

Police made a few arrests during Critical Mass rides in the past, but it has been a while since the police received any complaints about the group, said Lt. Slo Simon of the City of Bellingham Police Department. The police do not escort the riders because the group never obtains a permit to ride as an event. As long as they refrain from obstructing traffic and stay in the lanes the police leave them alone, Simon said.

LEFT: Critical Mass riders hit the street on the last Friday of every month regardless of rain. BELOW: A Critical Mass rider prepares for the wet journey through Bellingham streets.

Jaroz said in order for everyone to share the road, those riding must respect cars and the law to gain the respect of motorists.

“We all risk our lives every time we ride our bikes,” Roeder said. “It's nice riding as a group in solidarity so we can say, ‘Hey, we're here. Please slow down.’”

Senior Marinda Peugh studies journalism/public relations. She has been published in The Western Front and Klipsun Magazine.

## Mount Baker Hill Climb

by Andrea Magnuson

Mount Baker has only one access road; state Route 542 is a wooded, scenic and breathtaking stretch of highway up the mountain. But every Sept. 9, hundreds of cyclists push themselves 24.5 miles and 4,300 feet up the highway for recreation and environmental activism.

This is Ride 542, a “green” bike climb up the Mount Baker Highway that neutralizes its carbon impact by funding renewable energy. The ride begins in the town of Glacier and ends at Artist's Point at the end of Highway 542.

Charlie Heggem is an ex-professional cyclist and owner of NorKa recreation, an organization dedicated to promoting active lifestyles. As a youth in Maple Falls he developed the idea for a bike race up the Mount Baker Highway.

Heggem teamed up with Paul Clement, director of the Ken Meyer Memorial Foundation for cancer research, who had already started organizing

cycling events to support the foundation. Ken Meyer was a renowned local cyclist who died in 1999 from cancer not long after the foundation formed.

The Mount Baker Hill Climb was launched in September 2003 with 60 cyclists, including both professionals and amateurs. Since then the group has doubled annually and is expected to reach 750 participants this year. Heggem said he wanted to reduce the environmental impact of commuters and spectators during the climb.

“Impacts we have on the environment are huge,” Heggem said. “I thought ‘how can I get people to reduce, reuse, and recycle and recreate?’”

To offset carbon released by vehicles making the hill climb, each rider is charged a two-dollar registration fee to cover Green Tags purchased from Bonneville Environmental Foundation. Green Tags are purchased by individuals or groups, and used to offset carbon dioxide production by subsidizing renewable energy sources. Heggem said he estimates the climb will create about the same amount of carbon expelled by 30,000 miles of driving, which includes those who fly in for the event. He decided to purchase twice as many Green Tags as he believed the event would emit.

“This is the first active event meant to persuade [recreationists] to offset their usage,” Heggem said. “It is a sort of self-imposed tax and I hope it creates dividends in the long-run.”

Ride 542 is merely the beginning for Heggem, who has much bigger plans.

“This will hopefully be an anchor to expand to a weekend of activities and opportunities for recreation,” Heggem said.





As I stepped off the plane a warm, salty breeze encompassed me. Vibrant colors, the turquoise waters contrasting with sweeping green hillsides, filled my eyes. It didn't take long to realize I had reached paradise. With an average annual temperature of 80 degrees, it is no wonder more than two million people visit the U.S. Virgin Islands each year. But behind the white sand beaches and piña coladas is a sight many tourists overlook – a paradise in peril.

The three major islands, St. John, St. Thomas and St. Croix, have a combined area approximately the size of Portland, Ore. As a result of tourism, these tropical islands are experiencing environmental degradation. Depletion of natural resources, pollution, unsustainable land use and over-visitation of fragile natural areas are tourism's largest impacts on the environment, according to the U.N. Environmental Program.

Here on the islands, and throughout the

**TOP TO BOTTOM:**

Bananaquits look for food on the deck of a tent cottage.

A view of a beach on St. John.

Jeff Miller surveys the canal off the St. John coast. He monitors the canal on a regular basis to help keep pollution in check.

Bottom Photo Courtesy of Jeff Miller.

# TRAVELING

Reporter Emily McMahon packed her environmental ethics with her on a trip to Virgin Island eco-resorts



story and photos by Emily McMahon

world, the growing trend of eco-tourism is attempting to reduce tourism's impact on the natural world.

While visiting the U.S. Virgin Islands over spring break, I stayed in two eco-tourism resorts: Virgin Islands Campground and Maho Bay Camps. I witnessed both the destructive effects of tourism and how eco-tourism resorts are trying to counteract them.

Dr. Ellen Rudolph, at the U.N. Atlas of the Oceans, said the most visible impacts of tourism are the large amounts of garbage left behind.

St. Thomas is the most populated of the islands, and also the most visited port in the Caribbean, especially by massive cruise ships. According to the U.N. Environment Program, ships visiting the region generate 82,000 tons of garbage, equivalent to the weight of more than 500 Boeing 747 airplanes. Approximately three-quarters of all ship waste comes from cruise ships and each passenger produces about four times more waste than the average resident on shore.

"The cruise impact is amazing. These mega cruise ships come in and they are essentially floating cities that are unregulated," said Jeff Miller, a fisheries biologist stationed in the Virgin Islands National Park on St. John. "It's

a remote place, the waste created here has to be dealt with here. Everything is imported. Waste stays and adds up."

Virgin Islands Campground on Water Island, located near St. Thomas, was the first eco-resort I visited. This quiet, 500-acre island is home to 161 residents, according to the 2000 census, and has several rental homes but no major hotels.

The campground opened in March 2007 and has already accommodated more than 50 visitors. The owners, Deborah and Paul Quade, built the four cabins that make up the resort and said they plan to add more. Deborah said they have had early success because of the low price and the camp's eco-friendly practices.

"I think that our clientele are here for several reasons, and being environmentally friendly is one of them," she said. "If they're not practicing the [sustainable] concepts themselves, they're interested in them."

The canvas cottages have screens extending from the middle of the wall to the roof, allowing the trade winds from the ocean to blow through for natural air-conditioning. Each tent has a single light powered by on-site wind turbines and a standard electrical outlet for appliances. The shared bathhouse has spring-loaded knobs for the faucets and showers, which don't allow flow without constant pressure, to reduce water use. Since the camp does not use electricity to heat the water, guests generally take shorter showers.

The facility also has composting toilets that use bacteria to break down waste in a holding tank, like in a back-

yard compost pile, until it is available for use as fertilizer. According to Sun-Mar, a composting toilet company, an average household uses 87.5 gallons of water per day flushing the toilet — composting toilets use no water at all.

Of all their green amenities, Paul said the composting toilets are the most effective at reducing the resort's environmental impact.

"The island is solid rock, so [sewage] all ends up in the ocean eventually and kills the reef," Paul said. "With composting toilets it ends up as nutrients and fertilizer for the garden."

Water is a scarce resource on the island during the dry season, so conservation methods at the camp are important. Locals try to spare water wherever they can; the bathroom at Honeymoon Beach on Water Island has a sign urging users not to flush the toilet with every use. According to the European Environment Agency, a tourist staying in a conventional hotel uses, on average, 33 percent more water than a local resident.

Deborah said the appliances they purchased that run on wind power cost more, but are part of their commitment to sustainable tourism. For example, they recently paid \$1,200 for a 7-cubic-foot refrigerator that runs off wind power. A normal 18-cubic-foot refrigerator costs only \$500. But overall, they save money on electricity by conserving and utilizing the power from their wind turbines.

"It's expensive to go green," Deborah said. "But we feel good about ourselves because we know it's a good thing."

Deborah said she visited other remote Caribbean islands that have barely any tourism and the environment is noticeably healthier. The islands have more fish, healthier coral and cleaner water.

Only a 30-minute ferry ride from the bustling and highly developed St. Thomas is the island of St. John, where I spent the second half of my nine-day trip. St. John is the least popu-



One of the 114 tent-cottages at Maho Bay Camps. The elevated walkways that connect all the tent cottages at Maho Bay prevent underlying plants and animals from being disturbed by the camp's visitors.

lated of the three major islands because 56 percent of it is Virgin Islands National Park. But even here, under the National Park Service's watchful eye, tourism is wreaking havoc. A daily influx of visitors and a fleet of diesel taxicabs transport the swarms of people between beaches and plantation ruins.

The lush forests that cover the island are amazing. Hiking through the foliage to the beach had all the allure of a deep interior rain forest, including tropical birds and the occasional mongoose. But St. John's true gem lies under the surface of the blue crystalline waters. The extensive coral reefs are vital to the fish and other sea life, providing them with both food and shelter. The reefs also provide a buffer for wave action; ensuring the white sand beaches aren't washed away.

While snorkeling, I saw coral gardens teeming with an array of brightly colored fish. Little did I know snorkelers and divers aid in the destruction of St. John's coral gardens. According to a study by Dr. Caroline Rogers, a marine ecologist for the U.S. Geological Survey, snorkelers cause considerable damage to corals by accidentally bumping into or standing on them. Boaters also occasionally drop anchors on reefs, destroying several hundred yards of coral, which can take more than 50 years to recover.

"It's a lack of awareness that leads to this kind of damage," said Miller, who has monitored the reefs around St. John for several years.

He said natural and human-related stresses

cause an unprecedented amount of coral mortality. Sedimentation from construction, sewage input, over-fishing, increased ocean temperature and physical contact all contribute to the reef's decline.

"There are natural sources of impact, reefs come and go," Miller said. "But the reefs have never been in such dire straits."

According to a study by Miller and his colleagues, record high seawater temperatures caused the bleaching of more than 90 percent of the coral in 2005. Despite cooler subsequent temperatures, some corals remained discolored and susceptible to disease. As of July 2006, coral cover had declined by nearly half at their long-term study sites.

**The average daily water consumption at Maho Bay Camps is approximately 25 gallons per guest, compared to a typical resort, which uses as many as 300 gallons per guest.**

source: Maho Bay Camps Web site

Miller said tourists can help reduce their impact on the reefs by making sure seafood they eat is from a sustainable fishery. Tourists can also decrease damage to coral by avoiding contact with the fragile reefs.

Miller said people need to evaluate the "greenness" of any resort they visit, but eco-tourism destinations have less impact on the reefs than a normal resort.

On St. John I stayed at Maho Bay Camps, the largest and longest standing eco-resort in the Virgin Islands. The camp has 114 tent cottages similar to those on Water Island. They are

connected to the bathrooms, restaurant and beach by a series of elevated stairs and walkways. The maze of stairs is designed to reduce impacts on the native vegetation. Tents are tucked under the trees and at night it was easy to forget there were walls between me and the chorus of creatures outside.

Maho Bay Camps opened in 1976 and has since added two sister resorts on the island, Harmony Studios and Estate Concordia. The units are constructed of sustainable and recycled building materials and the newer resorts use solar power.

"Concordia's 24 eco-tents are completely solar-powered, including fans, outlets, refrigerators, lights and hot water," said Melody Smith, Maho's marketing manager.

Maho uses biodegradable soaps and detergents and has features that reduce water consumption. According to the Web site, the camp collects approximately 345,000 gallons of rainwater each year. Spring-loaded faucets along with low-flow and composting toilets reduce water usage. The average daily water consumption at Maho is approximately 25 gallons per guest, compared to a typical resort, which uses as much as 300 gallons per guest.

Maho reduces its environmental impact the most with its Trash to Treasures Art Center, Smith said. The center collects aluminum cans and glass throughout the resort and recycles them by turning them into art. Selected glass bottles are used to make glass-blown art and the remainder is crushed and offered to

The structures on the lower peninsula at the Maho Bay Camps.





Wind turbines harness trade winds to power the communal refrigerator and lights in the four tent-cottages in the Virgin Islands Campground, Water Island, USVI.

local builders for aggregate. Aluminum cans are melted down and made into jewelry. Used office paper is utilized for handmade paper or shipping material.

People flock to the Virgin Islands because of their renowned beauty, but often don't realize that by not making sustainable choices they are destroying that beauty. Even though I was only one of the 2.6 million people that visit each year, I was satisfied because I made a conscious effort to reduce my impact on its fragile ecosystem. If travelers started making better choices

wherever they vacation, it would be a positive step toward undoing the global impact irresponsible tourism has caused. ●

Junior Emily McMahon studies environmental journalism. She has been published in *The Planet* and *The Western Front*.

## Whistler, Vancouver Hilton Offer Eco-Options

You don't have to fly to the Virgin Islands to experience eco-tourism. No matter where you're headed, you can travel without leaving your environmental ethic behind. Two leading local examples of sustainable tourism are the Whistler Blackcomb Ski Resort and the Hilton in Vancouver, Wash.

Whistler Blackcomb won both the First Choice Responsible Tourism Award for 'Best in a Mountain Environment,' and the British Columbia Tourism Award for Excellence in Environmentally Responsible Tourism in 2007. The resort has won an additional 12 environmental awards since 1998.

According to a document by the ski resort, the resort recently implemented an energy conservation program, which resulted in continuously saving 342 kilowatts, enough to power over 300 homes. Whistler currently has a pilot program that uses wind power for lights, heat at the Symphony chair lift station and is evaluating what the potential for wind power is in other areas.

The resort added low-emission snowmobiles and snow cats with 18 percent lower fuel consumption to their fleet

of vehicles. Through recycling and composting programs they reduced their waste by 59 percent between 2001 and 2005.

The Vancouver Hilton, which opened in 2005, is the first Hilton to earn the Leadership in Energy and Environmental Design (LEED) certification. The hotel was built with recycled steel and 75 percent of the waste from construction was recycled.

The hotel is equipped with carbon dioxide sensors that recognize when hallways and rooms are empty and turns off lights and air-conditioning. Fueling stations are available for electric cars and minimal parking spaces are provided to encourage people to carpool or use alternative transportation.

Other hotels have programs that help protect the environment. In order to conserve electricity and water, some hotels provide customers with the option for housekeepers to not change guest's sheets and towels daily. When choosing a resort, it is important to ask if they have recycling, and if they don't, ask why; after several guests ask about a recycling program they may consider starting one.



# TAXPAYERS' TOXIC BURDEN

by Rebecca Rayner photos by Brandon Henry

There is no more money in the bank. The trust fund has been emptied. The Superfund is bankrupt.

Superfund is an Environmental Protection Agency (EPA) program that cleans up hazardous waste sites around the country that are toxic to humans and the environment. The agency tries to find the party responsible for the waste, but is often unsuccessful. In these instances, funding for cleanup previously came from a federal excise tax on crude oil and chemicals, as well as a corporate environmental income tax, which went into a trust fund. However, that tax lapsed in 1995 when the newly elected Republican Congress allowed funding to run out.

The Superfund Trust Fund went bankrupt in 2003. Consequently, clean up of Superfund sites throughout the country, including one in Whatcom County, are now funded by American taxpayer dollars, rather than the industries that produced the pollution.

Whatcom County is experiencing this shortage of government funding firsthand. The Oeser Cedar Company in northwest Bellingham was designated as a Superfund site 10 years ago. More than \$14 million went into cleanup, and although it was clear Oeser caused the contamination, taxpayers have still footed more than \$5 million of the cleanup bill. The American public has paid for this kind of cleanup since 2003, and this toxic burden doesn't appear to be going away anytime soon.

In order to reinstate the tax on the producers of toxic chemicals called the Polluter Pays Tax, Congress must authorize a federal budget that includes the tax. Although Congress refused to reauthorize the tax in 1995, the Bush administration is the first since the inception of the Superfund under President Jimmy Carter that hasn't presented a budget that includes the Polluter Pays Tax. Even if a budget did include the tax, it would take a long shot to obtain approval from a divided Congress, said Ed Hopkins, director of Sierra Club's Environmental Quality Program.

"I don't think there's enough support in the Senate to authorize it," Hopkins said.

Under the Clinton administration, approximately 85 sites were designated "construction complete" per year. According to the EPA, this means the construction of cleanup systems are completed, immediate threats are addressed, and long-term threats are under control.

Current funding policies for Superfund sites have fallen short of that mark.

"Since the Bush administration has come in, the construction complete sites have fallen by half," Hopkins said.

Half is a generous estimate. The actual number of construction complete sites per year is now only 40. Hopkins said the Bush administration claims only the most difficult and expensive cleanup projects are left, so it only makes sense they would clean up fewer each year. There are difficult sites to clean up, but that is not a valid excuse, he said, since big, expensive sites were cleaned up years ago.

"The program's progress has lowered since the trust fund went bankrupt," Hopkins said. "In general, the more chemicals migrate away from the site, the more expensive it will be."

The EPA, Hopkins said, is told by the White House not to raise alarm by admitting they have to almost rely solely on tax dollars

The Oeser Cedar Company plant is located in Northwest Bellingham and has been a Superfund site for 10 years.

to properly restore Superfund sites around the country. The money allocation system for these sites is complicated, but that does not justify secrecy regarding the allocation of federal tax dollars, he said.

"Some members of Congress have tried to force the EPA to be more public about funding," Hopkins said.

As a result of the Superfund Trust Fund going bankrupt, the cleanup costs imposed on taxpayers increased dramatically. According to the Sierra Club web site, Washington state residents are now paying four times as many tax dollars to clean up Superfund sites as they did in 1995. The spending power of the money has also declined, as the cleanup costs have risen. For every dollar spent in 1995, three dollars would have to be spent in 2003.

The cost of Superfund cleanup has shifted from the producers of toxic chemicals to taxpayers, a burden largely perpetuated by the lack of a Polluter Pays Tax, in any Bush administration budget.

According to the Sierra Club web site, reinstating the Polluter Pays Tax would raise at least \$14 billion over the next 10 years to clean up hazardous waste sites all over the country, and would free up tax money that is now going to Superfund cleanup to be used elsewhere.

Mark Masarik, the EPA public liaison for Region 10, said Washington has its own guidelines for hazardous waste cleanup, which helps free up resources for the state's federal Superfund sites. These state sites, called Toxic Cleanup sites, are overseen by the Department of Ecology. Shannon Sullivan of Ecology said funding for toxic cleanup sites comes from the Model Toxic Control Act, which established strict rules for Washington state to identify, investigate and clean up toxic waste sites.

Even so, Washington has been unable to completely escape the Superfund issues. Oeser Cedar Company opened in 1939. Until 1973, Oeser used creosote and pentachlorophenol to treat wood, according to the EPA Web site. Both of these chemicals contaminate groundwater and soil and may

cause human health issues, according to the Agency for Toxic Substances and Disease Registry. In October of 1997, Oeser was added to the National Priorities List of Superfund sites in because enough contamination from these chemicals was present to harm humans and the environment.

With a Superfund grant from the EPA, a group of citizens living near the Oeser site formed the Oeser Cedar Cleanup Coalition. They hired a consultant to help them understand the technical terms and chemistry involved in the EPA's investigation and subsequent report. Unfortunately, the cleanup didn't last.

"The EPA kinda blew it," said Jack Weiss, executive director of the Oeser Cedar Cleanup Coalition. "They took forever and a day."

Weiss said the cleanup should have happened much more quickly and efficiently. Not only is the EPA still struggling to finish the cleanup at the Oeser site, but the agency also broke promises to surrounding residents, resulting in two big issues for the coalition to handle.

The first problem, Weiss said, is that at the time of the EPA's original investigation, the agency promised to continuously monitor deep-water wells on-site, which drain into a nearby ravine, and then into Bellingham Bay. Weiss said the EPA didn't follow through.

The second major issue is that the EPA found dioxins in the soil on the Oeser site, Weiss said. According to the EPA Web site, dioxins can be harmful to human health, decompose slowly, and are easily spread by wind.

Chris Seacrist, owner of Oeser Cedar Company, said the company plans to cover the most contaminated areas with nearly impermeable asphalt, which would retain any toxins in the area and prevent them from traveling.

The EPA planned to put an asphalt cap over the entire contaminated area to help

stop the dioxins from spreading. But rather than the asphalt cap that was promised, Weiss said the EPA put down a piece of synthetic fabric and covered it in gravel, a cheap solution that is supposed to last forever. He said this solution is less effective than the promised asphalt, and far less effective than the most desirable solution of removing all the contaminated soil. Weiss said he is concerned the dioxins will continue to spread and contaminate the area



Logs sit in a pile and wait to be treated at the Oeser site in Bellingham.


around the Oeser site.

Mary Jane Nearman, Superfund project manager for the Oeser site looked carefully at the dangers of dioxins, as well as the amounts present. She said the fabric and gravel take care of the dangers from the current levels. Seacrist said 90 train cars worth of dirt were removed from the site, and that only the lightly contaminated areas were covered by gravel, with the rest capped in asphalt.

Nearman said the 10 years it has taken to get this far in the Oeser cleanup is typical. In addition to the actual cleanup, the EPA is involved with investigations, negotiations and legal processes that take time.

Countless taxpayer dollars are spent every year on lengthy Superfund cleanups, a process that used to cost taxpayers nothing—as it shouldn't, because taxpayers are not the polluters, Weiss said.

"It's ridiculous," he said. "The amount of money they've spent is really ridiculous too."

Nearman said the EPA has the same amount of funding for Superfund cleanup now as it did under the Polluter Pay Tax. This means taxpayers are paying to clean up anything the polluter won't. Cleanups that the average American did not cause should be funded by the industries and companies causing these toxic waste sites. 

**"The EPA kinda blew it. They took forever and a day."**

**JACK WEISS, DIRECTOR OF OESER CEDAR CLEANUP COALITION.**

Sophomore Rebecca Rayner studies environmental journalism. This is her first published piece.



# A PAPER THIN MARGIN

An investigation into Western's paper use

by Yuki Nakajima

photos by Brandon Henry

Each year Western students use and throw away a stack of paper almost twice as high as the Space Needle. Most of the waste paper is made from newly logged lumber even though Western can afford to buy recycled paper. Many trees are cut because of Western's paper use.

Western Washington University (WWU) makes an effort to save copy paper and recycle as much as possible. However, the majority of the university's departments use sheets that are not from recycled materials. Campus officials don't plan to use recycled paper instead of virgin stock because recycled paper is more expensive. However, a press release from the Associated Students board of directors 100 percent states recycled paper is affordable, especially in large quantities. It is up to students to ask their departments to buy it.

Western literally uses tons of paper, especially in its computer labs. There are more than 600 recycling bins in Western's 74 buildings. Richard Neyer, AS Recycle Center coordinator, along with student workers and volunteers, picks up the paper, cardboard, glass and plastic at each building. According to the AS Recycle Center, the total weight of paper collected from

July 2005 to June 2006 was 25 tons, including mixed waste paper, colored paper, envelopes and newspaper. Cardboard, the second heaviest material, totaled 275,580 pounds.

Next, trucks retrieve the materials and take them to Northwest Recycling. Marty Kuljis, a Northwest Recycling employee, said the center separates the paper into three piles: newspaper, office paper, and mixed paper. As the piles grow, the loader dumps them onto a conveyor belt and compacts the paper into a cube, called a bail. A bail ranges from 1,100 pounds to 1,500 pounds, depending on the material. The newspaper and mixed paper bails are sent overseas to make apple trays and cardboard. Office paper bails are sent to Oregon to make toilet paper.

At Western, students using computer labs produce the most paper waste. Rick Nichols, Help Desk manager of Academic Technology and User Services (ATUS), works to prevent excess paper waste in computer labs. He said ATUS labs went through about 3.5 million sheets from fall 2005 to summer 2006. This year, the paper use decreased by approximately 50,000 pages, he said.

One cause of this decrease is changes in the computer labs' printing methods. The computers in Western's labs operate with a system called Pcounter, which counts the number of pages each student used and lets them know how many they have left. ATUS limits each student to 500 pages per quarter, and if students need more than the allotted amount, they must get permission from the Help Desk. Nichols said the Help Desk usually gives extra paper to students who require it for classes.

The problem with the Pcounter system was when students clicked on the print icon on their computer screen, the printer automatically printed the documents. However, this system was not efficient because students often accidentally printed more copies than they needed. To save paper, ATUS added a new system last year called a print release station. Instead of printing automatically, students choose what they want to print at a print release station. This system prevents students from printing unnecessary documents. These stations are located in

Miller Hall, Engineering Technology, Arntzen Hall, Communication Facility, and all the labs in Haggard Hall.

"The print release stations do save paper," said Rob Galbraith of Interim Services of ATUS. "The recycle bins don't fill up nearly as fast anymore."

Printers in the computer labs are capable of double-sided printing. Nichols said 94 percent of computer lab users print double-sided pages, and Western students value saving copy paper as much as the Help Desk does.

ATUS is successful at saving copy paper, but there is an issue that hasn't been solved yet. Most departments buy virgin stock paper instead of recycled paper.

All departments at Western buy their paper from Central Stores, and each department orders its paper separately. According to Central Stores' paper consumption report for 2006, Western bought 4,031 cases, which cost \$119,536. Central Stores offers three paper types: 100 percent post-consumer recycled paper, 30 percent recycled paper, and virgin stock paper, which contains no recycled material. Among these paper types, virgin stock paper is the most commonly used paper at Western.

Virgin stock paper is made from newly logged lumber, while post-consumer recycled paper is made of used paper. The used paper is cleaned and the colors removed, and then a manufacturer makes new paper.

"All waste paper has to be sorted and cleaned before being reused in making recycled paper," said John Zuzarte, manager of BFA support services. "This extra step makes recycled paper expensive."

The university used to have a problem with using recycled paper because of the poor quality of the paper. Nichols said the old recycled paper produced dust that fouled the internal workings of printers, but the quality of recycled paper has improved a great deal in recent years.

"We would like to buy recycled paper for the computer labs if it becomes cost-competitive because recycled paper is a more environmentally sustainable long-term solution," Nichols said.

The A.S. board of directors has already

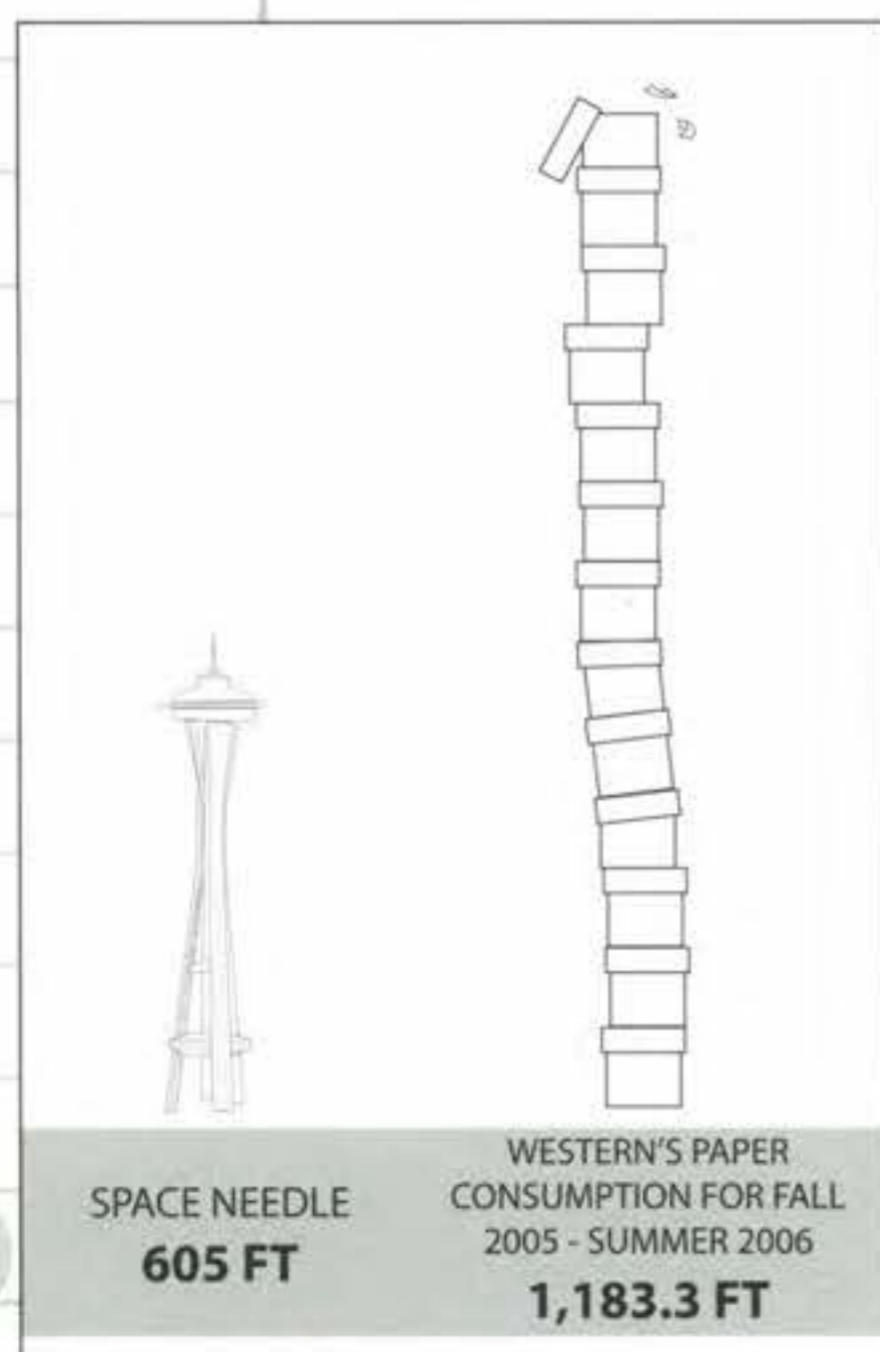


Illustration by Matt Harvey



PAPER TYPE	COST PER CASE
100% Recycled Paper	\$35.80
30% Recycled Paper	\$38.41
Virgin Stock Paper	\$27.52

stated that quality 100 percent post-consumer paper is available on the market at a competitive price. In 2003, the A.S. approved a resolution that all main offices in the Viking Union, except the A.S. Publicity Center, should use 100 percent post-consumer paper. The resolution also encourages all Western administrative offices, colleges, and departments to use 100 percent post-consumer non-chlorinated paper. The price of 100 percent post-consumer paper decreases if Western orders larger quantities.

Seth Vidaña, campus sustainability coordinator, said the Office of Sustainability is starting to delve into the issue that most campus departments don't use recycled paper. His office is testing recycled paper, which is 100 percent post-consumer and chlorine free.

The recycled paper is also made with 100 percent renewable energy. The energy is produced from biomass, such as rotting food or

cow manure, instead of fossil fuels.

Copy services is also testing this paper by using it in all of the paid copy machines and copy centers students use.

"The best way to get more recycled paper on campus at this point is to have individual departments and colleges decide to purchase 100 percent recycled paper," Vidaña said. "That will come about much easier further down the road."

Making the switch to recycled paper is up to students and faculty. Individuals' actions can change Western's paper use and protect the environment. Western could save a lot of trees - but only if students and faculty speak up. ●

Junior Yuki Nakajima studies environmental journalism. She has been published in *The Planet*.



Malia Hieb stands on top of cardboard on its way to be recycled at the Associated Students Recycle Center.

According to Central Stores' paper consumption report for 2006, Western bought 4,031 cases, which cost \$119,536.



# The Ballad of the Green Destitute

**POVERTY & THE ENVIRONMENT**

by Colin Simpson photos by Elisa Weiss

Thick raindrops, the kind that bead up beneath a smooth concrete surface, drip below the Bay Street bridge where Mike Cobb lived in a tent for six years. The sea swells against the tiny shore under the bridge, a back and forth motion splashes the cold Bellingham Bay water against the concrete pylons. A rusty shopping cart lies on its side just above the shoreline.

The bridge protected Cobb and others from snow and rain – except for the thick drops from a serrated metal grate above. But the wind, the notorious Bellingham wind, shot off the bay and between the corridor of concrete pilings suspending the bridge. Litter is strewn about the beach, each wave pulling more of the jetsam out to sea. Further down the beach, homeless dig for clams and oysters.

Whatcom County's 2006 Point-In-Time study, an inventory of the homeless and their living status, indicated roughly 14 percent of the county's homeless, about 110 people, live "on the street" This literally means they live beneath bridges, in tent camps, or in cardboard boxes. They aren't in homeless shelters or low-income housing; they're in the splinters and in the shadows.

These people have fallen between the cracks.

While those living "on the street" rely on Mother Nature the most to protect and provide where human institutions have failed, they feel her effects the most. Despite this relationship, to the homeless, environmental concerns pale little in comparison to hopes of surviving the night.


"When you have an affliction, as many homeless do, you don't try to pamper everything around you," said Will Roberts, a recovering drug addict who was formerly homeless.

"You only try to pamper yourself."

Last November, a warehouse on the corner of Cornwall Avenue and Pine Street burned to the ground, throwing chunks of flaming embers into Bellingham Bay and exploding several power transformers. Police suspect homeless started the fire trying to get warm on a particularly cold autumn night.

The warehouse fire was unintentional, but it exhibits the environmental impact the homeless, particularly the ones on the streets, can have when they're only trying to survive.

Doug Lang works with Salt on the Street, a group that walks "the cracks" every Saturday night to pass out lunches, clothes, toothbrushes and blankets. He said homeless look for spots that are private and protected from the weather and invisible from roads and walking paths. He said he's found homeless in tents, bushes, under bridges, in a collapsed silo and in a garbage truck trailer. He's even seen homeless sleep in



*Blue jeans are left to dry in the sun for the day on a clothesline at the Fred Meyer tent camp.*

more than two feet of garbage.

"Everything imaginable was in that pile [of trash]," he said.

The worst conditions, Lang noted, are at the Fred Meyer tent camp. Located between Lincoln Street and Interstate 5, the Fred Meyer camp is known as one of the more dangerous camps in Whatcom County.

Johnny and Cory have lived at this site since December. Their doublewide tent, dubbed the "Taj Mahal" by other camp-dwellers, is set up along the edge of the interstate, but tucked into the woods. The more anonymity the better, they said.

"By now I'm used to all these cars," Cory said. "It lulls me to sleep. Kind of like a white noise."

"Well, I still need ear-plugs," Johnny said, smoking a rolled cigarette on "The Front Porch" – a fruit crate base at the front flap of the tent.

The Fred Meyer camp is not so much a centralized camp or shanty-town, but rather pockets of homeless dwellings (about 18 in all) tucked into the crevasses of this thicket. Some sleep in tents while others sleep on mattresses in forest clearings. Paths snake through the forest, wooden planks and old bed frames forming small bridges over the tiny creek that runs through it.

The camp has the smell of use: thick and musky, with the essence of the forest.

A clearing above the creek is filled with trash, a mark upon the earth that is perhaps the most visible and extreme instance of the homeless' environmental impact. The trash in the clearing displays layers of degradation and decomposition from the different groups of people who have inhabited the site over past years. Everything imaginable is out there: clothes, newspapers, food, cans, pills, beer bottles, Christmas ornaments and shopping carts.

Johnny said some of the campers are heavy drug-users, and that's probably why they keep their places so dirty. To them, it's a place to sleep and nothing else.

Johnny is more invested in his site. He and Cory keep it nearly clean, although it could be cleaner by Johnny's standards. Light trash rests in the surrounding bushes, leftover from previous occupants, while Johnny's contribution is an organized stack of bottles and cans next to the tent. He said he'll make an effort to completely clean the place up when he knows the spot will be permanent.

"All of us out here wish we could have an apartment or house, or a nine-to-five job," Johnny said. "And the shelters, they're just institutions, too many rules. A lot of people out here just feel freer."

Another camp down the path from Johnny has signs of longevity. It features neatly arranged knick-knacks and collectibles around the site including old coasters, Halloween masks, a shoe buffer and spare bike tire tubes. The garbage collects in a growing pile next to the tent, the rest of the site is spotless.

These are instances of the long-term residents preserving the environment they live in. Johnny said that camp even has its own "police force" – two longtime residents who maintain a street justice within the area. He said they have forced people out of the camp before.

Gary Williams, director of Human Services at the Bellingham Health Department, said while "naturalist" living can be idealized, the tent camps can be unruly places with crime, trash and fires. Williams cited an incident at a tent camp on Marine Drive along the Nooksack River where a man was killed in a drug-related incident. Last December, a

"When you have an affliction, as many homeless do, you don't try to pamper everything around you, you only try to pamper yourself."

Will Roberts  
Formerly homeless

fight erupted in a camp north of town that sent one homeless man to the hospital for facial injuries while his tent (and all of his belongings) burned to the ground. A couple of years ago, a SWAT team was called to a small camp in Fairhaven after a man arguing with his wife started brandishing a shotgun.

Residents of camps have noted the police do routine check-ups, but sometimes they will head to the camps first when looking for stolen property or a violent incident relating to the homeless.

Cobb noted a time when police came to the Bay Street bridge looking for him after he got in a fight downtown. Other times, police will break up the camps if too many people are living there.

"The cops know they have the right to do it," Cobb said. "They'd roust people out from under the bridge about once a month. 'Pack 'em up and move on through!' they'd say."

Cobb said people wonder why the homeless don't go to a shelter, why they have to live outside.

"Campers aren't cattle," Cobb said. "[In the shelters] they always tell you what to do, they treat you in very demeaning ways."

Some cities take a different approach to the homeless and have administered tent camps. Tent City 4 in Seattle and Dignity Village in Portland have Environment Health Department officials that inspect sanitation, water potability, and food handling practices. They also prohibit campfires and littering. This creates a fairly safe environment for the street population.

In 2004, The Interfaith Coalition attempted to construct a tent city in Bellingham. Although it was backed by a few area churches, the initiative did not receive enough support to remain stable.

Despite the city's stance on the issue, tent camps in Bellingham persist. The large Fred Meyer camp, as well as growing sites north of Wal-Mart and

along the Guide-Meridian, have thrived for years. Small sites can easily appear within the tiniest, out-of-the-way areas.

"The city wants to act like they have a quaint little place so they kick 'em out and pretend like they don't have a problem," Lang said. "Wrong. They have a problem, they have to face it."

While the homeless' environmental impact appears large, this is only because it is more visible and localized. Without houses or cars, they have relatively little effect on the environment compared to most Americans. Global warming, over-population, and deforestation often don't concern them because they don't have much of a relationship with those issues. To the impoverished, environmental concerns are strictly local: trash, climate, and urban development.

And to those who want to take care of the problem, they find ways they can.

Abby and John Jay found a sliver of forest between downtown and the former Georgia-Pacific site that might not remain long with current waterfront development projects.

"I guess we'll just move and find another slice of land for us," Abby said.

The Jays survived last winter's heavy weather at the Fred Meyer camp, although their tent collapsed several times from the snowfall. They decided to leave the camp because of the trash and violence.

"Some people would just come through and start trashing campsites," Abby said. "Making noise. Causin' trouble. Me and my man decided to get our own place. We try to keep this one clean, quiet."


Their camp is situated at the edge of an abandoned parking lot, a thick cluster of forest forms an almost straight line along the edge of the lot. Through a thicket of brush and past a security system consisting of empty beer bottles attached to strings is the Jay's camp. A pile of garbage is at the



**Left:** Doug Lang prepares to go "on the street" to bring food and drink to the homeless in their camps around town.

**Far Left:** An abandoned boot lies among piles of trash near the campsite below the inter-urban trail.

**Background:** Two transients, who preferred not to give their names, watch the sunset over Bellingham Bay.



edge, litter left by previous residents. The Jays can't afford to bag it up and take it to the dump, so they secured it under a blue tarp.

"If people see us carrying all this trash and throwing it in a dumpster, they'll think it's ours," said Abby, who has lived in a tent for the last nine months. "Especially the cops."

In "The Yard" – the brush clearing of the camp – a garden of basil, sage, crest and bean sprouts grow. "The Compound" is the cooking and cleaning area, a structure of discarded bicycle frames covered with a tarp forms the walls for the propane stoves and dishwashing buckets. "The Pen" is the Jay's home, a tent containing a torn couch and sleeping bags.

John is well versed at tuning old bicycles; friends will stop by and want him to work on old bikes found in the woods nearby. They have an old car parked a few streets down, although it has problems running properly so the Jays usually ride their bikes everywhere.

"Think of the horse and buggy days," said John. "That's just kind of what we're doing here."

The Jays said they feel more at peace there, living in nature. They said keeping it clean is just another way to preserve their site, their home.

"None of us are druggies or anything. We may drink some beer and smoke some weed, but who doesn't?" Abby said. "I guess we're kind of like hippies. We just like chillin' on the beach, hanging out in the woods," she said with a laugh.

Her expression turned serious for a moment.

"But a lot of us who are homeless have had a lot of bad stuff happen to us that we can't get over," Abby said. "The high society can be belittling. Maybe something keeps us from them, but...we all have the same freedoms."

Nobody lives under the Bay Street bridge anymore; city officials stenciled "no trespassing" signs on it. When the new waterfront boardwalk is

built, the Jays will probably have to move along. No one is certain what will happen to the Fred Meyer site – Johnny thinks it's federal land, but he's not sure.


Lang is planning a Salt on the Street assistance program that will go to the Fred Meyer camp. He said they won't go at night, and they don't want to take any women with them. He said he realized it will be harder than passing out lunches and sweatshirts.

"I want to go in and teach 'em how to pick up their garbage," Lang said. "I've got a truck, figure I can go in and help them bag it up and get some of it out of there."

Those living on the street usually don't choose to be in the position they're in. Some say it's an easier, freer lifestyle on the street. Some say the shelters are a last resort and they would rather sleep under a loading dock. But the homeless still have choices they can make – to retain their humanity, to preserve their environment, to do their part. Choices that Mike, Johnny, Cory, Abby, and John made.

"Look at the Native Americans. Their whole history they've been a culture outside," Roberts said. "Some people see them and judge them, but they just might be more comfortable out there."

As the sun began to set at the Fred Meyer camp, Johnny sat on his stoop watching the light bounce off the tree tops. The homeless life is an unreliable living, the next day could bring rain and hunger. Johnny sighed.

"This place, Bellingham, the green, the hills; it's beautiful," he said. 

Junior Colin Simpson studies journalism. He has been published in The Western Front, Whats Up! Magazine, and The Progress.



# Sea-ing Through the Labels

by Matt Lawrie photos by Elisa Weiss

Melinda Sweet and her husband Bob Gudmundson sold wild salmon every weekend from their gill-netter *Desire* since returning from Alaska last fall. They can't be found there anymore though; they're all sold out.

Sweet said interest in their product has recently grown as consumers increasingly look for sustainably harvested seafood. The Desire Fish Company harvests salmon according to the owners personal ethic of environmental and social responsibility. The company also offers a product that Sweet said is created with the resource and consumer in mind.

"We make a living by harvesting a renewable resource, so [sustainability] is everything," Sweet said.

In 1826, gastronome and author Anthelme Brillat-Savarin wrote, "Tell me what you eat and I will tell you what you are." Sweet and others in the seafood business said this statement has never been truer than it is today. Beyond physical and mental health, diet is becoming increasingly associated with civic responsibility. Choices at the grocery checkout are shorthand for environmental consciousness.

In this climate of increasing consumer awareness and ethics-based

consumption, a growing demand has developed for accessible information. Both public and private efforts have been made to meet this demand, and the results can be seen nearly everywhere on today's grocery store shelves.

The most common and recognized badge of responsible food production is the U.S. Department of Agriculture's organic label, said Rebecca Meredith, grocery manager for Terra Organica, a natural food store in Bellingham. While the label is on everything from fresh produce to Mac 'n' Cheese and Rice Krispies, one place the organic label isn't found is the seafood case.

Both wild and farmed seafood harvesters have attempted to lay claim to the coveted organic label, but neither have been successful to date, leaving a void in information for consumers. On the one hand, seafood is lauded as a source of healthy fats and protein, while on the other hand, production methods are derided as unsustainable. The result is consumer confusion.

According to the United Nations Food and Agriculture Organization (FAO), approximately 24 percent of the world's stocks are over-fished. Though aquaculture has the potential to alleviate some of the pressure on wild stocks, many of the world's fish farming operations have problems of their own, such as habitat destruction, pollution, and increasing pressure on forage fish, like herring and anchovy.

An FAO report showed the world's seafood consumption increased by more than one million metric tons from 2004 to 2005.

While meeting that demand is an important global challenge, equally important is doing so in a sustainable manner, said Russ Casteel, seafood merchandiser for Haggen Food and Pharmacy.

As in agriculture, there is a disconnect between fisheries practices and their implications for global fish stocks.



**Left:** Federal law requires the country of origin and method of harvest to be clearly printed on all packaged seafood.

**Background:** A dock on the industrial waterfront stretches onto Bellingham Bay at the location of the Seafood Producer's Cooperative office.

## When Choosing Fish...

### Best Choice:

- Halibut (Pacific)
- Herring (Pacific)
- Mussels (Black, Green-lipped)
- Pacific Black Cod (sablefish)
- Salmon (Wild Alaskan)
- Tuna: Pacific Albacore

### Good Alternatives:

- Flounder
- Mahi Mahi or Dorado
- Rainbow Trout (farmed)
- Salmon (wild from WA, OR, BC Canada)
- Salmon (farmed from Chile or WA)
- Tuna: Yellowfin or skipjack

### Avoid:

- Atlantic Cod
- Halibut (Atlantic)
- Pacific Rockfish (Rock Cod)
- Red Snapper
- Shark: all species
- Tuna: Bluefin

Source: Monterey Bay Aquarium

This is why labeling is so important, said Jeff Reynolds, sales manager for Seafood Producers Cooperative in Bellingham. The choices consumers make when purchasing seafood influences the choices producers make when harvesting seafood, he said.

So what's a sustainably minded consumer to do? While the USDA's National Organic Standards Board (NOSB) develops organic seafood criteria, Reynolds said he fears labeling seafood as organic may undermine the efficacy of the label instead of reassuring customers of the sustainability of their purchases.

While both wild and farmed seafood have the potential to be sustainably produced, neither fit the organic standards created by the NOSB, said Rhonda Belluso, with the Pure Salmon Campaign, a group dedicated to improving fish farming practices.

Because wild seafood is not raised in a closed system, it cannot be certified organic. Aquaculture often uses pesticides and growth hormones.

"As farmed salmon is produced right now, it would be impossible for it to be produced organically," Belluso said.

Though some government efforts have improved consumer information, like the Mandatory Country of Origin Labeling Act, these laws do little to address the health, ethical, or environmental concerns consumers face when purchasing seafood, said Glenn Spain, from the Pacific Coast Federation of Fisherman's Associations.

"It's a beginning," Spain said. "It is not a complete picture though."

Sweet said she agrees that labeling is encouraging awareness among

geared toward retailers and wholesalers.

SFA works with the Monterey Bay Aquarium, an internationally renowned institution of education, research and conservation advocacy. Together they provide consumers a way to understand and assess their consumption choices based on scientific research. The result is a series of placards, labeled with the country of origin and harvest method, and color coded to indicate 'Best Choices' (green), 'Good Alternatives' (orange), and 'Avoid' (red). The FishWise program also provides information indicating a species' mercury content.

The FishWise program gives businesses the opportunity to do the right thing, said Tobias Aguirre, of the FishWise program. And according to a study commissioned by SFA, doing the right thing pays. The businesses that have taken part in SFA's labeling program have seen an 11 percent increase in seafood sales since starting the program, which Aguirre attributes to increased consumer education.

In contrast to a ranking system, MSC offers solutions for sustainable fisheries to gain recognition by undergoing a voluntary audit process. This process is based on four guiding principles, which are evaluated on a number of criteria to determine compliance. At present, 22 fisheries throughout the world are certified under the program with another 21 under review. By only labeling products subjected to their certification process, MSC sets a bar that other producers can strive for.

The MSC program has been successful in Europe and is beginning to make waves in the United States, Reynolds said. Whole Foods is push-

**"As farmed salmon is produced right now, it would be impossible for it to be produced organically."**

-Rhonda Belluso  
Pure Salmon Campaign

consumers and harvesters alike, but personal responsibility plays a primary role in Desire Fish Company's sustainable harvesting practices.

"You can't legislate awakening," Sweet said. "I'm looking for integrity to guide me."

In an effort to supplement mandatory labeling and encourage sustainable fisheries practices, some private organizations have started their own certification and labeling programs. By informing consumers, organization members hope to increase demand for sustainably harvested seafood and create incentives for fisheries to harvest their stocks sustainably.

Two big names in sustainable seafood labeling are Sustainable Fisheries Advocates' (SFA) FishWise program and the Marine Stewardship Council (MSC).


While FishWise is mostly a regional effort focused on consumer education, MSC's program is international in scope, and

ing the brand and Wal-Mart recently committed to sourcing all of its seafood from sustainable fisheries in three to five years.

Casteel said Haggen is planning on carrying more MSC labeled seafood, though it is unlikely it will go 100 percent.

"[Labeling] is becoming a bigger deal [in the US]," Reynolds said. "It is a big deal in the U.K., the Germans are starting to care, the French don't really care and the Japanese really don't care. They're still eating whales."

Aguirre said as labeling programs inform consumers about the importance of the world's fisheries, those working towards that goal hope consumers will begin to help shape the way seafood is harvested in the future.

"When people understand that [seafood] is a sustainably harvested resource, they are going to feel a greater link," Sweet said. 

Senior Matt Lawrie studies economics and environmental studies. This is his first published piece.



# IGNITING CHANGE

photo and story by  
**Peter Jensen**

As he sits on a couch with April sunlight streaming through his office window, Washington state legislator Ross Hunter can't see the synthetic – and potentially toxic – chemical fire retardants called PBDEs that surround him. But he knows they are there.

"This couch certainly has PBDEs in it," said Hunter, a Democratic Representative from Medina. He stands to refill his mug with tea and looks around to determine if more of his furniture is possibly poisonous. "That chair has it. I don't think we found any in this chair. And the laptops definitely have it in their casings."

PBDEs, short for polybrominated diphenyl ethers, are a class of fire retardants found just about everywhere. They're in the plastic of televisions and computers, in cars, carpets and furniture. U.S. citizens purchase roughly half the world's PBDE-containing products, according to a 2006 report from the Washington State Department of Ecology and Department and Health (DOH).

To firefighters, the chemicals are lifesavers. They slow the ignition of a fire, allowing people more time to escape and firefighters more time to extinguish the flames.

To manufacturers, PBDEs are an effective safeguard and they saturate products with them. The chemicals alone can make up 30 percent of a product's weight, according to the 2006 Ecology report.

To Rep. Hunter, however, PBDEs pose a health risk potentially as harmful as lead poisoning. His belief hinges on a simple fact: while the chemicals are everywhere, they're also in *everyone*.

"They're a poison," Rep. Hunter said during a House floor debate in the Legislature in February. "They're seeping into our soil, into our drinking water, into our homes and into our bodies. And more importantly into our children."

The chemicals spread because they are not bound to their products and inevitably leak. Scientists have found traces of the chemicals in house dust, streams, rivers, soil, animals and fish.

U.S. citizens have levels of PBDEs in their blood, tissue and breast milk that are at least 10 times higher than people in Europe and Japan, according to the Ecology report.

Scientists have exposed lab rats to high levels of PBDEs and are certain the chemicals pose a health risk. The animals were exposed to the two forms of PBDEs proven to be toxic, penta and octa, which caused damage to their livers and thyroids, and to babies developing in their wombs, according to the Ecology report. Scientists are less certain about harm to humans. If exposed to high levels of the chemicals, as the rats were, humans could be harmed.

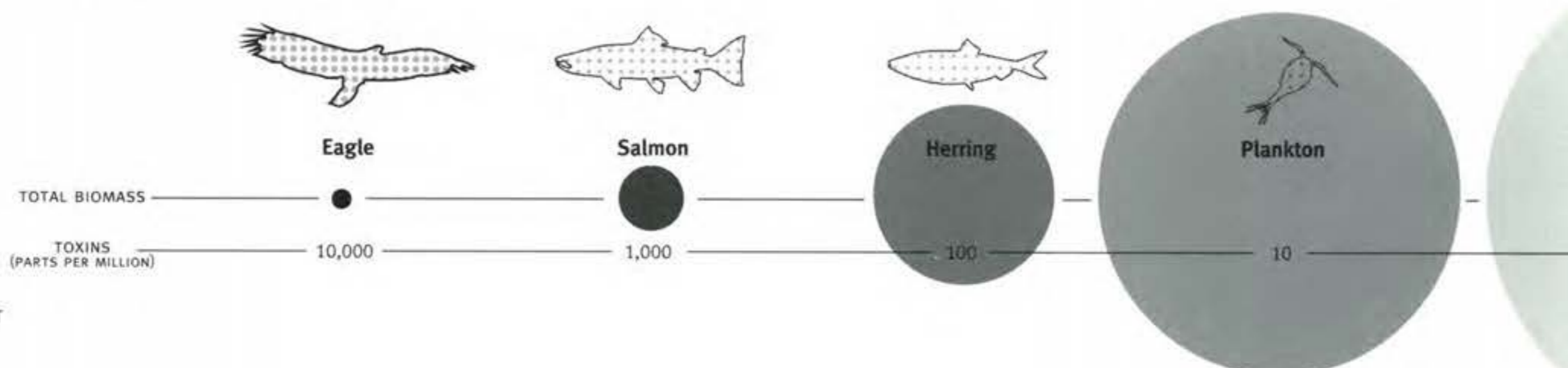
In April, the Legislature passed a bill sponsored by Rep. Hunter that, at least conditionally, bans all forms of PBDEs from commercial products. The bill, named House Bill 1024, passed easily. The Senate also passed the bill and Gov. Christine Gregoire signed it into law April 17.

Washington is the first state to ban all forms; eight states have banned penta and octa.

What makes the Washington legislation unique is the conditional ban of the third form of PBDE used in products, deca. This form was considered safer than the penta and octa forms, yet just as effective in preventing fires. The ban won't begin until an alternative fire retardant that is just as safe as deca is identified. And the deadline for determining that alternative isn't until 2011.

This part of the bill caught the ire of the Republican caucus, currently the minority in both the House and the Senate. Rep. Dan Newhouse, a Republican from Sunnyside, didn't want to ban a safe and effective chemical fire retardant, while pressuring the chemical industry to use alternatives without proof of their reliability.

In the process of Bioaccumulation, a toxin like PBDEs, which are stored in fatty tissue, move through the food chain. At each level of the chain the parts per million of the toxin increases.



"It's legislation that most people will read in the headlines and say, 'oh yeah, that's a great deal,'" Rep. Newhouse said. "But dig down deeper into the details and you will see that this is a step that we probably didn't need to take."

Understanding this bill involves a story of science, government and the complicated relationship they share.

The story of House Bill 1024 does not begin in Rep. Hunter's office or even in the Capitol Building. Rather, it begins three years ago in Ecology's Olympia headquarters, located approximately five miles east of the capitol campus. It was here in 2004 that department researchers began investigating PBDEs. Working with the DOH, Ecology scientists spent two years researching and published a report in January 2005 outlining the threat deca poses.

Since 2004, when manufacturers stopped using penta and octa, deca has accounted for 100 percent of PBDEs used in new products. Despite the increase in use, blood and fat tests in humans have revealed relatively low levels of deca, at least compared to penta and octa. And in the similar experiments on rats and mice as the penta and octa tests, exposure to deca resulted in little to no harm.

The threat, according to the Ecology report, is deca chemically degrades in the environment and has the potential to transform into the more toxic and more harmful penta and octa.

"There's a lot we know, and there's a lot we don't know about (deca)," said Ted Sturdevant, the director of government relations for the Department of Ecology, at a January House committee meeting on HB 1024. "But the more we learn, the more we know that deca is more and more toxic."

Experiments proved that when exposed to light, deca loses bromine atoms, and transforms it into the penta and octa forms, among others.

Scientists in Sweden spiked house dust with high levels of the deca

**"There's a lot we know, and there's a lot we don't know about [deca], But the more we learn, the more we know that deca is more and more toxic."**

-Ted Sturdevant  
*Department of Ecology*

form and placed the dust under sunlight for 90 hours. As a control, the scientists also took house dust spiked with deca and put it in the dark for 90 hours. At the end of the experiment, the deca that was exposed to sunlight degraded, but the control did not.

Scientists from the chemical industry criticized the experiment's conclusion that the degradation poses a threat.

Deca will degrade into penta and octa, but only rarely, said Ray Dawson, a scientist with the Bromine Science and Environmental Forum. More often, he said, deca will degrade into other forms of PBDEs, such as tetra and hexa, whose toxicity has not been tested.

The Ecology report convinced Rep. Hunter of the health risk deca PBDEs posed, and he introduced a bill to the Legislature in 2005 similar to HB 1024 that would ban the chemicals. Convincing other legislators to support his bill proved difficult.

When he first introduced the bill, Rep. Hunter was a sophomore representative learning how the Legislature worked. Although his party, the Democrats, had a majority in the House and the Senate that year, Rep. Hunter's bill did not garner much support initially. Many legislators, he said, were unwilling to trust the science he presented and even more unwilling to appear to jeopardize fire safety.

"When we banned DDT, we could show that the negative health effects on people and especially children," Rep. Hunter said. "But with [PBDEs], we just don't have the info."


His first bill never made it to the House floor, although Rep. Hunter thought he had enough votes to pass it. The House majority leader that year, Rep. Lynn Kessler, a Democrat from Grays Harbor, did not like the bill and did not put it on the floor calendar.

In the 2006 session, Rep. Hunter amended the bill to appease Rep. Kessler, and the bill passed the House without incident. In the Senate, however, it ran into the same roadblock. The leadership never let it reach the floor before the session ended.

Rep. Hunter said by 2007 he was getting smarter. He rewrote the legislation and added a portion about finding alternatives to deca, which convinced the Washington Fire Commissioners to support the bill. He introduced HB 1024.

"I'd be astounded if there were two people in this entire place that read and understood the science," Rep. Hunter said. "Most [legislators] have about 15 minutes to figure out this bill. They basically decide on who they trust."

After three years, Rep. Hunter said he convinced enough of his fellow legislators to trust him, and the bill passed.

"The point in passing this bill was not to respond to someone who has died," said Sen. Debbie Regala, a Democrat from Tacoma. "The point with this bill was to prevent anyone from dying at all." 

Junior Peter Jensen studies journalism. He has been published in The Western Front.



*Governor Gregoire finished signing a Bill at a signing ceremony on April 17. House bill 1024 was signed during a similar ceremony the previous day.*

# CONCRETE TO THE CONTRARY

BY CHRIS PHILLIPS

Spring is here and the cherry trees are blooming. A gentle breeze spreads the petals beneath the trees, carrying them far and wide. Rainshowers wash the fallen pink petals into stormdrains. But the rainwater has lost its purity. A foul mix of pollutants carries the petals from the roads to the waterways.

Lead, copper, zinc, motor oil and antifreeze collect on streets and in parking lots. The rain eventually washes the poisons, along with the cherry blossoms, into streams, lakes and bays. By law, all runoff in the city, called stormwater, must discharge to the nearest body of water, said Jason Porter, storm and surface water engineer for the City of Bellingham.

Streets and parking lots are traditionally paved with concrete or asphalt, make for a tightly sealed surface. However, a new version of concrete has been developed that allows rainwater to quickly pass through its surface. Called permeable concrete, it has open spaces that allow as much as 250 inches of rain to pass through in an hour, according to the Puget Sound Action Team Web site.

"It looks like a Rice Krispy treat," said Kym Fedale, an environmental education specialist for the City of Bellingham.

Permeable concrete gives engineers, cities and builders a new tool for managing the environmental and financial problems associated with stormwater runoff. Porter said using permeable concrete allows rainwater to pass through the paving layer where it is distributed through the ground at a slow rate. This allows for natural filtration of solids and gives soil bacteria a chance to remove organic toxins from the water.

Kurt Nabsfeld, of the Bellingham Planning Department, said porous concrete was first used in Florida, where storm waves flooded coastal roads.

Because the permeable concrete drains immediately, safe travel was possible on the roadways that would otherwise have been impassable.

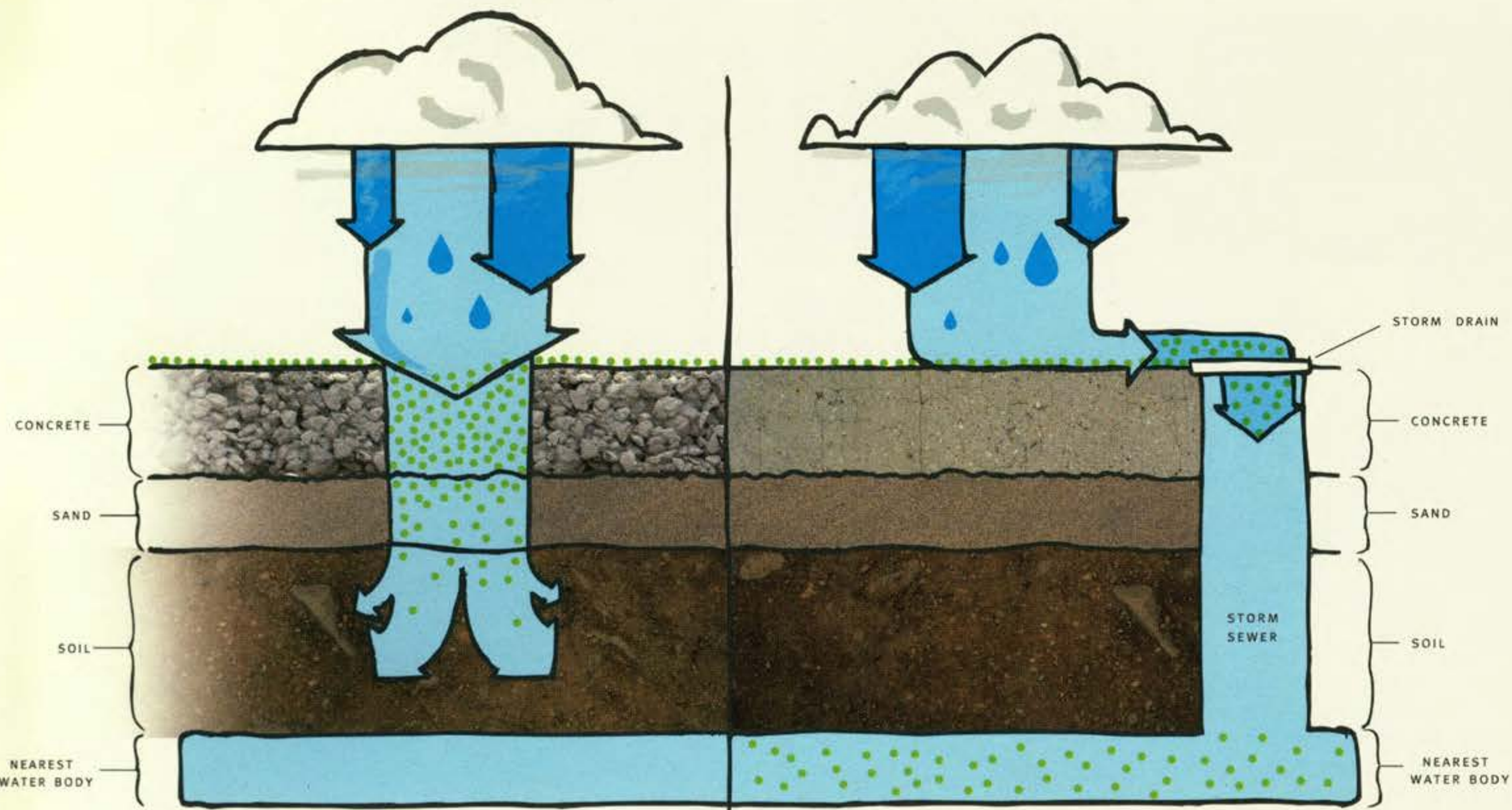
By eliminating the fine sand normally used in concrete production and using three-eighths-inch-wide stones with quick-setting cement, engineers created the new concrete mixture. This results in concrete with an open space of 15 to 25 percent, said Steve Cowden of Cowden Gravel & Ready Mix. Permeable concrete must be poured by a certified contractor and requires more skill to work with than ordinary concrete. An inspector must also be on hand during a pour, Cowden said.

A recent tour of new construction called "Low Impact Developments," sponsored by Bellingham's Sustainable Connections, featured permeable concrete parking lots and strategies for handling rainwater. Participants examined several sites where permeable concrete was used. The concrete looked like a pebbled surface with a slightly lighter shade of gray. Tour guides sacrificed several bottles of water to show the flow-through capabilities, with no hesitation or puddles. The tour brought together officials, builders and designers from three counties said Nick Hartrich of Sustainable Connections.

Chris Webb, of Chris Webb and Associates, said compared to standard concrete, more engineering goes into the successful use of porous concrete. A bed of supportive material with good drainage characteristics must also

PERMEABLE CONCRETE

NON-PERMEABLE CONCRETE



Permeable concrete is designed to let stormwater pass through the pavement. Contaminated runoff is naturally filtered and breaks down in the soil before reaching the aquifer.

Traditional concrete does not absorb stormwater. Instead, the water collects pollutants as it runs into storm drains and directly into waterways. The speed of the water flow causes more erosion to streambeds and soil.

be prepared to handle the rainwater that passes through the permeable concrete. In areas of poorly drained soils, piping must also be laid to carry away excess water. The bed beneath the paving acts as part of the overall stormwater plan for the site.

Permeable concrete costs approximately 20 percent more than traditional concrete. However, it pays for itself in reduced size and the elimination of retention ponds. Permeable concrete allowed a recent project to save \$300,000 to \$400,000 by eliminating stormwater retention ponds, said Mark Buehrer, director of 2020 Engineering.

“Retention ponds in a project eat up land that could be built on,” said Sanja Barsic, engineering technician at Whatcom County Public Works Department.



Barsic said commercial developments in the county began using porous concrete in 2008, and it is widely used for developments today. However, Whatcom County does not require its use except in special watershed areas.

A quarter shows the large gravel used to produce porous concrete.  
photo by Chris Phillips

Developers and home owners aren't going to use it if they don't have to, said Wain Harrison a supervisor for Whatcom County Planning & Development Services. The concrete is perceived as more complicated and labor intensive.

Ten years ago, Webb and Beuhrer were partners in a fledgling engineering firm based on sustainable building practices. Webb said they lived month-to-month on credit cards for four years as the recognition for comprehensive stormwater site engineering slowly grew. Now they each have their own design firms. Their experience of combining permeable concrete with other design elements for stormwater management is in high demand throughout the region.

According to the National Ready Mix Association, permeable concrete lasts 20 to 40 years with minimal maintenance. The surface needs to be vacuumed every couple of years to keep the pores open. It can be used for residential roadways, parking lots, sidewalks, driveways, and wherever a durable surface is needed drain naturally.

We used to sing about paving paradise and putting up parking lots. Now, nearly four decades later, the least we can do is use permeable concrete. ●

Post-Baccalaureate Chris Phillips studies urban planning. This is his first published piece.

Burying  
the  
Past

by Andrew Spanjer  
photos by Brandon Henry

In downtown Bellingham sits a mess of smokestacks, rusting containers, and abandoned buildings. This monument to commerce was once one of Bellingham's biggest sources of prosperity. As the structures block the view of the bay from downtown, they hide its contamination of a once pristine waterway.

Georgia-Pacific's dumping of contaminants, primarily mercury, into Bellingham Bay caused an ecological and management nightmare. With the proposed future development of the waterfront, these contaminants have to be cleaned up, either through removal or burial.

Between 1965 and 1971, the GP pulp mill released thousands of tons of wastewater into the bay. The mill operated a chlor-alkali plant using mercury to produce chemicals for bleaching paper pulp. The mercury used during this process seeped into the wastewater that dumped into the bay, according to the Environmental Protection Agency (EPA) Web site.

In 1979, GP began pre-treating wastewater to reduce the amount of mercury released into the bay but did not clean up the toxins already settled there.

"Mercury never breaks down; it's not one of those chemicals that naturally starts to dissipate after a number of years," said Elizabeth Britt, Bellingham Bay Foundation board member and former GP employee.

The Port of Bellingham acquired the former GP site in 2001, assuming responsibility for the cleanup of the Whatcom waterway. Since then, the Port worked with the Washington State Department of Ecology, the City of Bellingham, and others to draft an initial cleanup plan.

"This is a very highly impacted industrial site," said Mike Stoner, Port environmental director.

The initial plan the Port and Ecology released calls for capping, a process where clean sediment is used to cover the contaminated areas. Stoner said capping prevents the future release of mercury into the ecosystem by trapping it under a buffer zone.

"Capping is not a good long-term solution for the waterway," said Frances Badgett, Bellingham Bay Foundation board member. "For long term safety, for long term health of the bay, we believe that more removal is necessary."

The Bellingham Bay Foundation began in 2005 to engage the community in issues regarding waterfront development. Pushing for a more thorough cleanup of the waterfront is at the top of the foundation's agenda.

Last November, the group introduced an initiative requiring the Port to dredge the bay and remove contaminated sediments from the seabed to be buried in an upland fill site.

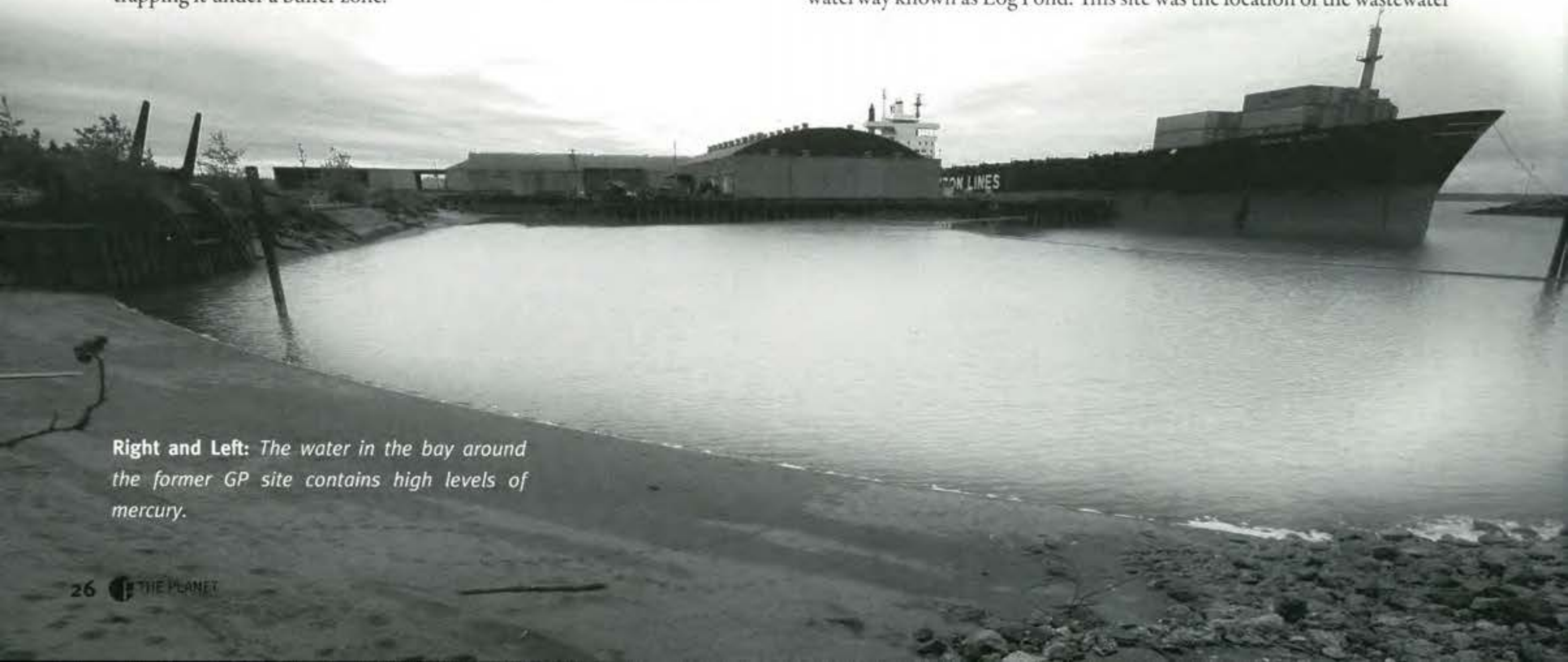
Stoner said dredging the bay would create a large amount of contaminated sediments that would have to be dealt with creating a costly dilemma.

"If you dredge it, you disturb that environment," said Dr. Ruth Harper, associate professor of toxicology at Huxley College. "You could take something that is not a problem and make it a problem again."

In Ecology's study of cleanup alternatives, dredging the bay would cost taxpayers approximately \$146 million and take up to 13 years to complete. The Port's preferred capping solution, in comparison, would cost approximately \$44 million and take five to six years to complete.

The foundation's initiative never made it to voters because it was blocked in a lawsuit on the grounds that it was too administrative in nature, Badgett said.

In 2001, the Port used capping to contain sediments in a section of the waterway known as Log Pond. This site was the location of the wastewater



Right and Left: The water in the bay around the former GP site contains high levels of mercury.



discharge from the chlor-alkali plant and had such high levels of contamination that it required immediate action.

The Port points to this section of capping as a model of success for the rest of the area, yet a five year follow-up evaluation of the site by Ecology shows the cap is eroding and mercury has once again risen to the surface.

"What they have found with the Log Pond site is that in areas where the cap is thinned out there has been some erosion," said Lucy McInerney, Ecology site manager.

Mercury itself poses a severe threat to marine ecosystems, according to the United Nations Environmental Program. Mercury is a heavy metal that accumulates in the tissue of marine animals, including fish.

**"If you dredge it you disturb that environment, you could take something that is not a problem and make it a problem again."**

-Dr. Ruth Harper

Associate Professor of Toxicology

"[Mercury] can do a few things, depending on the form that is present," Harper said. "It can cause developmental abnormalities, affect the immune system, and cause organism death."

Harper said fish can absorb mercury directly through their gills if it is present in the water. Mercury also enters the food chain when fish and other animals eat exposed organisms.

Mammals that eat contaminated fish are at risk for a number of neurological disorders. In birds, mercury affects the ability of flight and can cause other abnormal behaviors. Of particular concern is the effect mercury can have on fetuses' vulnerable, developing nervous systems.

These same effects occur in humans who eat contaminated fish. Continual exposure to contaminated fish causes problems with walking, vision and hearing. Pregnant women who eat large amounts of contaminated fish are at risk of having children with life-long learning disabilities.

"You have to have exposure to the right level and right type of mercury

before any of that can happen," Harper said.

Mercury accumulates in fish when it is in the form of methyl-mercury. Harper said if the conditions are right, inorganic mercury can become methylated and pose a threat to marine organisms.

If capping fails, these are risks members of the Bellingham Bay Foundation are not willing to take.


Not only is the lack of removal a concern for the group, but also the lack of monitoring Ecology requires for the site. Ecology monitors a site for 10 years following the initial cleanup.

"At year five and 10 it is evaluated whether there needs to be more monitoring in the future," McInerney said.

If Ecology decides no more monitoring is necessary, then future erosion of the capping will not be closely watched. With the Log Pond site already showing signs of failure, this lack of long term monitoring is objectionable, Badgett said.

"If you leave the mercury you better stick around," Badgett said. "Monitoring should be much longer than 10 years."

The clean-up plan is in a phase of public discussion and review. If the plan succeeds, the process would begin in the next 18 to 24 months, Stoner said. Once initiated, the construction phase of the clean-up will take another four years.

"I'm aware at some deep internal level that there was a great amount of pollution that went into the air, went into the water, and probably still to this day stays on the land," Britt said. "For future generations, your children and mine, I'm not sure capping is the right answer." 



# HERITAGE LAND

by Allie Rock

Every morning Alan Mesman and his two employees herd his 100 cows into the barn for milking. The cattle are free to roam the pastures of the Mesman family farm until 4 p.m. when they are herded in for a second milking. The cows follow each other without guidance, filing back into the pastures until the next day. Milk distributors will arrive at the Mesman Farm around 2 a.m. to pick up over 1,100 gallons of milk to be bottled and shipped around the country.

**Left:** A cow rests after a milking session on Alan Mesman's organic dairy in Skagit County.

Photo by Mark Malijan

Mesman is the third generation in his family to run this farm, which has been a certified organic dairy for the past seven years and is part of Organic Valley, a nation-wide food co-op.

As president of Skagitonians to Preserve Farmland, a nonprofit farming protection organization, Mesman knows the importance of conserving agricultural land. Since 1989, members have successfully protected more than 5,000 acres of farmland from development in Skagit County, while finding time to protect salmon runs and wetlands, and create programs to deliver fresh food to local restaurants, hospitals and schools.

The organization evolved from 31 members with no funding to more than 600 members and three full-time staff. The group's mission has also changed. From its humble beginnings, the goal was to stop companies from bringing urban development into farmland. The first success was preventing the Trillium Corporation in Whatcom County from building an amusement park in the valley.

Skagit Valley is home to some of the richest and most viable soil in the world. The creation of the valley took approximately 10,000 years, and in that time the soils stayed fertile, and are now rich enough that farmers will still be able to work the land long into the future, said Dave Hedlin, a farmer in Skagit County and member of the organization.

"This land is sustainable now, and will be for 100 years to come, 100 years after that, and hundreds of years after that," Hedlin said. "There is a lot of farmland, but there is not a lot of farmland like this. It really is the magic Skagit."

Not long after the group's inception, its members realized protecting wildlife and habitat was just as important as preventing development. Hedlin and his wife, Serrina, are two of the 31 original members of Skagitonians to Preserve Farmland. Their family farm produces dozens of crops from artichokes to zucchinis and has devoted 18 years to help create and progress the organization's program.

By protecting an area, the land owner gives up the rights to sell land parcels for commercial and residential use. But the protection goes further: the land easements ensure their property will always be used for farming, much like protecting a national forest.

The ongoing three-year study involves Mesman and Hedlin putting some of their farmland through a three-stage rotation. The cycle begins with growing grass in a field, which they will flood to allow birds to use as a natural wetland for the season. Next they will graze their organic dairy cows on the field, and finally mow it to be flooded again. This rotation creates a habitat that is both good for the wildlife and good for the farmer, and allows the sustainability of Skagit Valley to continue, Hedlin said.

The land being used is ideal because it is separate from other farms, so farmers can experiment with it, Hedlin said. The migratory shorebirds will benefit from the creation of these wetlands, which will also keep the nutrients in the soil for other native animals and salmon runs. The best part of this is farmers, scientists and conservationists are working together to save this complex natural place that provides farmers with so much, said Kevin Morse, Skagit Delta manager for The Nature Conservancy.

Through grants and one \$200,000 private donation from a local family, Mesman and Hedlin are compensated for the loss of profitable use of the land while it serves as habitat.

"It is truly a public value, and they should be compensated," Rosema said. "Our objective is to make working farmland not just for agriculture but for wildlife as well."

The hope is that in the future the community will recognize the project as a valid investment for tax dollars, said Bob Hart, vice president of Skagitonians. After conducting a survey the members found 86 percent of the community supports preserving farmland. This is an encouragement for members as they work with the government to get public money, Hart said.

"It is a very rare farmer who will say 'no way' to the environment," Rosema said. "Everyone wants to help but they can't do it on their own dime, they need our help."

The organization is also working on the economic value of farmland. As residential developers survey the area, farmers know they can sell small parcels of land for a higher profit than they would make farming it. The county now gives farmers the opportunity to sell the development rights to their land. By selling these rights farmers are compensated for profit they would have earned if sold.

**"It is a very rare farmer who will say no-way to the environment, everyone wants to help but they can't do it on their own dime, they need our help."**

-Allen Rosema  
Director of Skagitonians  
to Preserve Farmland


The group also created a program that is implemented throughout the county and requires a landowner to own 40 acres before building a new residence. Hedlin said the land in Skagit County is rare and it would be devastating for farmers to lose it.

The valley is a resting place for 14 species of migratory shorebirds, such as the Lesser Yellowlegs and Least Sandpiper, that fly from South America to Alaska every year. The valley is an important stop for these birds, but the wetlands these migratory birds rely on are disappearing as a result of clearing land for farming.

To help alleviate this problem, Hedlin and Mesman have teamed up with Washington State University, the Environmental Protection Agency (EPA), Skagitonians to Preserve Farmland, and Western Washington Agricultural Agency to form the "Farming for Wildlife" project. The biggest threat to farmland and wildlife is conversion of the farmland for other uses, said Allen Rosema, executive director of Skagitonians to Preserve Farmland.

Much still needs to be done through legislation and educating the public on the importance of farmers, Hart said. The organization now works to inform others of the economic and environmental benefits of buying locally grown food.

Over the years the organization achieved its goals because farming is not only the members' job but their life. The passion makes this work, Hart said. Hart, like most in the Valley, took over his parents' farm and has grown a number of crops, but now raises nursery plants. As the fourth generation on his land, and after his term as a Skagit County Commissioner, he became involved with the nonprofit.

Hart encourages young people to become interested in farming and working with the government to find funds to support farmers. In the future, Skagitonians to Preserve Farmland and their partners will continue to ensure the area will be viable for farmers for many generations to come. 

Junior Allie Rock studies public relations. She has been published in the Western Front.



# GREEN LIVING: The Bathroom Edition

Instead of using products that contain harsh chemicals and are produced with petroleum, try these earth-friendly products:

Seventh Generation  
Mrs. Meyer's  
Earth Friendly Products  
Simple Green  
Avalon Organics

Kiss My Face  
Trader Joe's  
Burt's Bees  
Tom's of Maine  
**Or**

## Make Your Own All-Purpose Cleaner:

Use a simple mixture of **1 part white vinegar to 3 parts water** for cleaning smooth surfaces such as glass and countertops.

## Shower Curtains:

Vinyl contains harmful dioxins. Instead, use cotton, hemp or another fabric with a nylon liner.

## Shampoo and Soap:

Use the whole product to avoid waste. Cut it open when it is almost empty and buy products with less packaging.

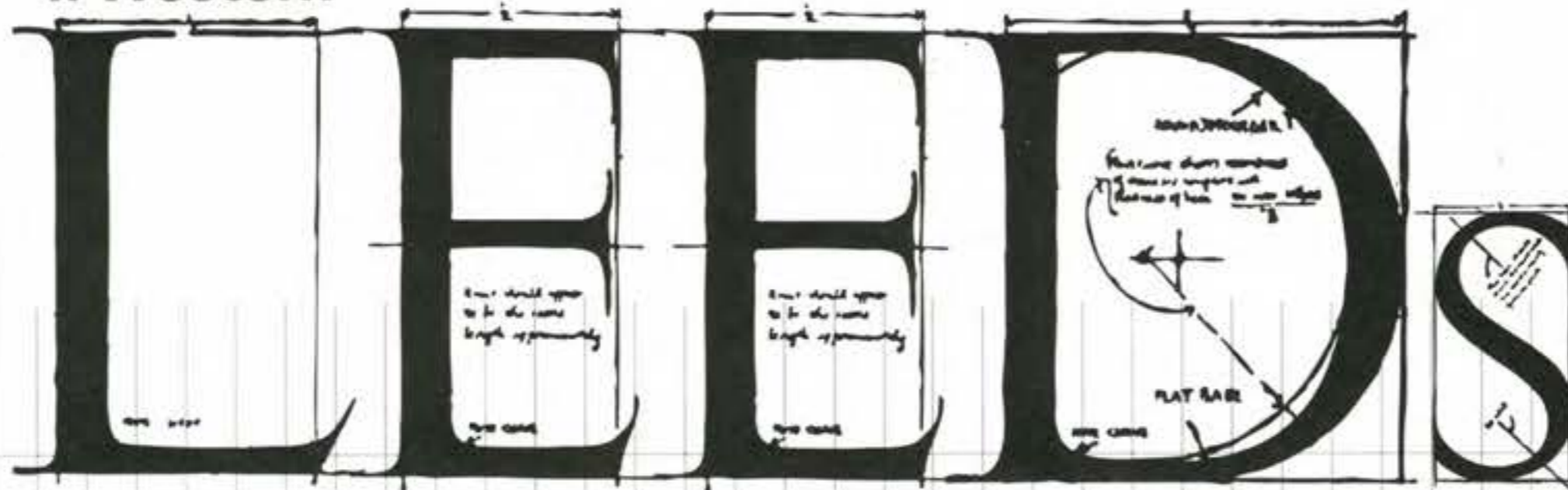
## Reduce Water Use:

Use a low flow toilet or showerhead (low flow toilets save up to 6 gallons per flush). Fill a milk jug with water or rocks, place it in the tank to save about 1 gallon each time you flush.

## Recycled Toilet Paper:

If every American household replaces one regular 500 sheet roll with one that is recycled, it would save **423,900** trees.

## If Western



by Kelly Lemons    Photos by Elisa Weiss

## Who Will Follow?

The Academic Instructional Center (AIC) has an identity crisis, or at least had one. When the building was first designed the plans were turned down, then redesigned, tweaked, and finally accepted. The building plans lost some square footage here and there, and still couldn't satisfy expectations. On the drawing board, the AIC had design features that were considered pretty green at the time. But once the construction began, the designs for the AIC were already old fashioned, outdated and definitely not considered "green" anymore.

On May 9 at a meeting called an eco-charette, builders and administration officials decided the AIC could and should meet new state regulations known as Leadership in Energy and Environmental Design, or LEED certification. Washington state adopted LEED as a measure to lower greenhouse gas emissions by designing new buildings that need less energy to operate and fewer raw materials to build.

The meeting included a cadre of consultants, including the building's architect, and decided to revise the design plans to formally identify the AIC as a LEED certified building. No one wanted the AIC to contradict Western's commitment to sustainability or threaten its reputation as a green campus.

LEED certified buildings can use up to 50 percent less energy and 30 percent less water, said Stacey Glenewinkel, president of Western's Emerging Green Builders. In the long run, Western will save money if the AIC meets LEED standards, she said. Her club is Western's chapter of the U. S. Green Builders Council that developed LEED certification.

Glenewinkel said she wrote a letter to the Western Board of Trustees

criticizing its decision to build without LEED certification. The letter she read to the board stated Western was not delivering on its promises toward a sustainable campus. Some suggested the eco-charette might not have happened if it weren't for Glenewinkel's letter.

Gil Aiken, Western's project manager for Facilities Management, said in an e-mail he and others took it upon themselves and began looking into the AIC certification after receiving Glenewinkel's letter.

Glenewinkel said she gave up on the AIC in April and didn't think it would receive certification. At the time, the idea was to submit the AIC for an Existing Building LEED Certification after a two-year occupancy period. The costs associated with tearing apart a new building for the elements needed for certification didn't make any sense to her. So when she received a notice on May 2 inviting her to the eco-charette, Glenewinkel said she was surprised because charettes are normally held before construction begins to keep costs down.

Until now, the only consistency about the AIC design and building process is that it has been inconsistent.

Tim Wynn, Director of Facilities Management, said the AIC's \$45 million contract was never designed to achieve the new standards green critics wanted the building to meet. He said legally, the AIC doesn't have to comply with new state law because the design phase began in 2001, before regulations were adopted in 2005.

The state would not supply money for the 1 to 2 percent cost increase associated with LEED or any other green construction designs at the time. However, the university decided to include as many LEED elements into



**Previous:** The newly LEED-certified Dawson site will provide jobs for construction workers until at least late 2008.

**Right:** Bundles of rebar are the sturdy framework of the new Academic Instruction Center.

**Below:** Concrete columns stand bare but will soon support the new campus facility.



## “LEED is not a magic wand.”

-Seth Vidaña

Coordinator for Western's Office of Sustainability

the AIC as it could afford. But when the Washington State Office of Financial Management balked at the original \$44.9 million bid last year, the designers were forced to eliminate more efficient temperature controls with a redesign package that was supposed to save \$3 million.

Nevertheless, Wynn said certification would be impossible if not for the features Western wanted to include from the beginning. Solar shading, natural ventilation, and other energy efficiencies are making Western's late attempt for certification possible.

To be certified, the AIC must receive at least 26 out of a possible 69 credits during evaluation. Credits are awarded based on sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

The committee developed a list of 33 possible points for certification, and estimates Western can receive certification for the new building for approximately \$250,000. Some construction efforts and design elements in place could now account for 22 points. For example, the wood and steel used during construction is recycled, remains from tennis courts that once occupied the site were shredded to make temporary paths, and branches and bushes from the area were mulched into chips for a parking space. Dawson's Project Manager Don Lindsay listed these as sustainable efforts that should be enough to earn the AIC one out of 13 points from the material selection section of certification criteria.

More needs to be done, but it remains unclear what changes Western can afford to make to the AIC design in order to meet LEED certification.

“We're probably going to squeak by like we did with the rec center,” Glenwinkel said.

The Wade King Recreation Center was awarded LEED certification April 17, 2007, receiving the minimum 26 points needed for certification.

Seth Vidaña, coordinator for Western's Office of Sustainability, attended the meeting and said he is pleased with the decision to pursue certification. Vidaña said the decision ensures Western will have an efficient building, and that the certification symbolizes Western's willingness to take steps toward implementing less wasteful infrastructure.

As part of a one-year pilot program, Vidaña's office is conducting a Building Assessment Study to determine how the campus can become more energy efficient and meet the ambitions of President Karen Morse's Climate Initiative. The initiative seeks to make Western a carbon neutral institution that does not contribute carbon to the atmosphere. In order to do that, Western needs to figure out how to use less energy, plant trees (which remove carbon from the air), and find other green energy sources to offset Western's annual carbon emissions.

The study is creating an energy profile to determine how much steam, gas and electricity each building uses per square foot. According to the as-


essment, the entire campus emits 3 million pounds of CO<sub>2</sub> each year from fossil fuels burned for electricity and heat.

Plumes rising from the Conoco Phillips oil refinery on Cherry Point can be from Vidaña's office where he works with the lights off. He said the goal of the assessment is to create a renovation model attaining the most conservation for the least amount of money, which can be used on any university building.

“LEED is not a magic wand,” Vidaña said.

LEED certification is a great way to start but is not necessarily synonymous with energy efficiency, he said. For instance, Western's only LEED certified building, the Wade King Recreation Center, is the second largest consumer of energy on campus and fifth in energy use per square foot.

“I don't want someone to walk into a building, see the LEED plaque and say ‘WOW! We did everything we can do,’” Vidaña said. “Instead we should walk in and say ‘why is the building LEED certified and what else could be done?’”

As the AIC changes to keep up with a campus that is constantly re-evaluating the environmental terrain upon which it stands, it seems even a green AIC just can't catch a break. 

Senior Kelly Lemons studies environmental journalism and creative writing. He has been published in *The Western Front* and *The Blooming Wisteria*.



## ADDITIONAL RESOURCES

### Green Light for Logging

[http://www.dnr.wa.gov/hdocs/adm/comm/2007\\_news\\_releases/nr07\\_003.html](http://www.dnr.wa.gov/hdocs/adm/comm/2007_news_releases/nr07_003.html)  
<http://www.conservationnw.org/oldgrowth/blanchard-mountain-agreement>  
<http://www.blanchardmountain.org/map.html>  
[http://whatcom.kulshan.com/Washington/Whatcom\\_County/Bellingham/Chuck-anut\\_Drive/Outdoors/Blanchard\\_Mountain.htm](http://whatcom.kulshan.com/Washington/Whatcom_County/Bellingham/Chuck-anut_Drive/Outdoors/Blanchard_Mountain.htm)

### Sharing the Road

*Bellingham's Critical Mass meets at 5:15 p.m. of the last Friday of every month in the parking lot of the Depot Market on Railroad Avenue.*  
<http://www.critical-mass.org/>  
<http://critical-mass.info/>  
**Ride 542:**  
<http://www.norkarecreation.com/hcinfo.htm>

### Traveling Lite

<http://www.maho.org/>  
<http://www.virginislandscampground.com/>  
<http://www.ecotourism.org>  
<http://www.nps.gov/viis/>

### Taxpayers' Toxic Burden

*Locate Superfund sites:* <http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>

### A Paper Thin Margin

<http://recycle.as.wvu.edu/guides.php>  
<http://west.wvu.edu/atus/helpdesk/>

### Sea-ing Through the Labels

*Print your own seafood card:*  
[http://www.sheddaquarium.org/pdf/cons\\_rightbite\\_seafood\\_card.pdf](http://www.sheddaquarium.org/pdf/cons_rightbite_seafood_card.pdf)  
<http://www.mbayaq.org/cr/seafoodwatch.asp>

### Igniting Change

*Find your legislator:* <http://apps.leg.wa.gov/DistrictFinder/Default.aspx>  
*Ross Hunter:* <http://www.leg.wa.gov/house/hunter/>  
*House of Representatives Committee on Environmental Health:*  
<http://www.leg.wa.gov/House/Committees/ENVH/>

### Concrete to the Contrary

*Sustainable Connections:* <http://www.sconnect.org/>  
*Chris Webb and Associates:* <http://www.christopherjwebb.com/>  
*About permeable pavement:* [http://www.psat.wa.gov/Publications/LID\\_studies/permeable\\_pavement.htm](http://www.psat.wa.gov/Publications/LID_studies/permeable_pavement.htm)

### Burying the Past

<http://www.portofbellingham.com/>  
*Whatcom Waterway:* <http://www.ecy.wa.gov/programs/tcp/sites/whatcom/ww.htm>

### Heritage Land

*Skagitonians to Preserve Farmland:* <http://www.skagitonians.org/>  
*Hedlin Farms:* <http://www.farmingandtheenvironment.org/marketplace/Profiles/Hedlin>

### Green Living

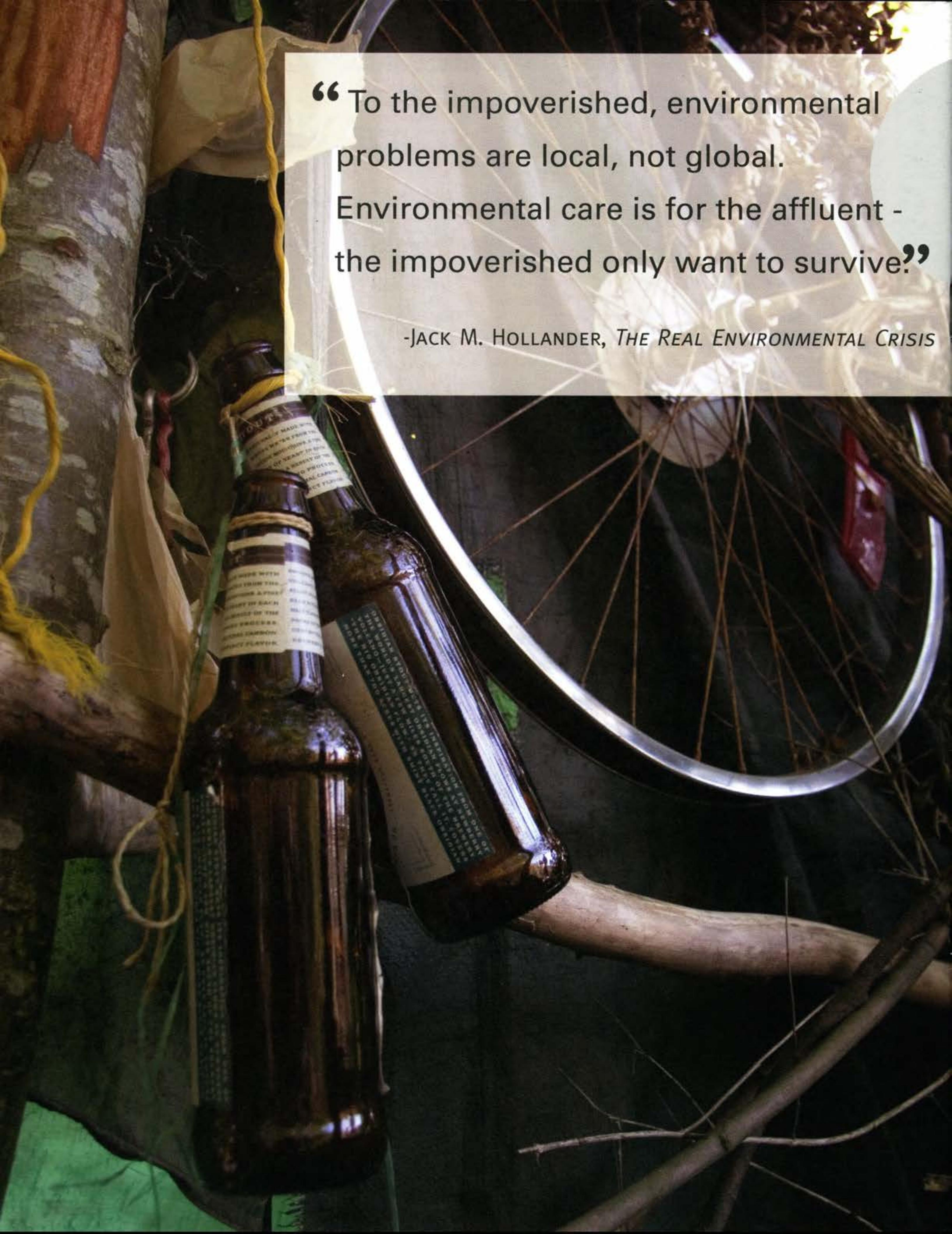
*Get tips for green living in your e-mail:* <http://www.idealbite.com>  
*Seventh Generation Products:* <http://seventhgen.com/>  
*Mrs. Meyers cleaners:* <http://www.mrsmeyers.com>

### If Western LEEDs Who Will Follow?

*Information on LEED:* <http://www.usgbc.org/>  
*Minutes from the Board of Trustees meeting:* [http://west.wvu.edu/trustees/minutes/February\\_9\\_2007\\_Approved.pdf](http://west.wvu.edu/trustees/minutes/February_9_2007_Approved.pdf)  
*Emerging Green Builders e-mail:* [Bellingham\\_EGB@yahoo.com](mailto:Bellingham_EGB@yahoo.com)



**MOTHER EARTH: WE PROBABLY COULD HAVE SAVED HER, BUT WE WERE JUST TOO DAMN CHEAP.**



“To the impoverished, environmental problems are local, not global. Environmental care is for the affluent - the impoverished only want to survive.”

-JACK M. HOLLANDER, *THE REAL ENVIRONMENTAL CRISIS*