

Watershed *Sentinel*

September/October
2006
Newstand Price \$4.50

Environmental News from BC and the World

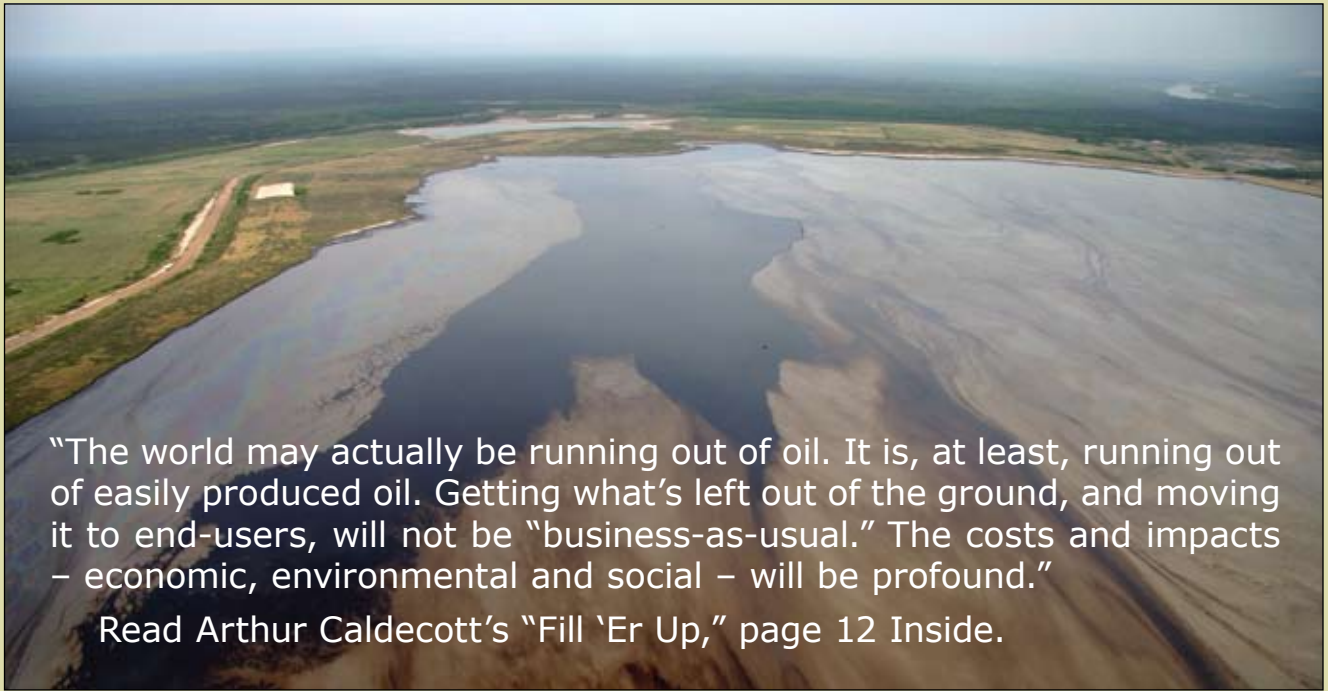
A Strong Spirit

Fill 'Er Up!

Questioning 911

Vol 16 No 4 ISSN 1188-360X


Shipping Out the Tar Sands



"The world may actually be running out of oil. It is, at least, running out of easily produced oil. Getting what's left out of the ground, and moving it to end-users, will not be "business-as-usual." The costs and impacts – economic, environmental and social – will be profound."

Read Arthur Caldecott's "Fill 'Er Up," page 12 Inside.

Sweet Spot
HOLLYHOCK
CORTES ISLAND, BC



- EXQUISITE HOLIDAYS • INTRIGUING PROGRAMS
- RESTORATIVE GETAWAYS

Free Catalogue **800.933.6339** • hollyhock.ca

Below: Syncrude Mine, Alberta Tar Sands.
Above: Tailings pond north of Syncrude Upgrader.
Photos by David Dodge, The Pembina Institute
www.oilsandswatch.org



Watershed *Sentinel*



Printed on 100% post-consumer recycled process chlorine-free newsprint, with vegetable inks since 2002. Cover printed on 100% post-consumer recycled process chlorine free coated paper.

No matter where on Earth we live, we are all residents of a watershed. Throughout history clans, tribes and all organized groups have endeavoured to protect their home watershed or territory. Sentinels were stationed throughout the highlands of a watershed to herald the coming of friends or of threats in the form of encroachment, floods, fire or hostile armies.

Threats to our watersheds exist to this day whether they come from careless individuals or insensitive corporations. The *Watershed Sentinel* keeps watch and informs.



Don Monet

**Not a Subscriber Yet? Look for the
Subscription Form inserted for your
convenience! Subscribe. Thank you!**

Sept-Oct 2006

Energy & Climate

- Fill 'Er Up 14
Arthur Caldicott explores the pipelines planned to take the oil away

The Land

- Clayoquot Logging Update 7
East Creek on the Cutting Block 8
In BC's Forests This Year 9
Cooperman on state of the woods
Coastal Environment Snapshot 22

Food & Water

- Tofino On the Edge 13
Time to conserve

Toxics

- Harper's Mystery Action Plan 3
Arsenic Poisons Wildlife 3

Society & Technology

- Kids Power Up Solar 21
The First Time is Scary 28
Betty Krawczyk on Law and Respect
Questioning 911 31

News and Regular

- Letters 4, 12
News Briefs 5, 10, 19, 31
Toxics Ink 11
A Strong Spirit 6
Joe Foy's Wild Times for parks
Friends of Cortes Island 24
An Energy Descent Action Plan?

Cover Photo: Kinney Lake, Mount Robson Provincial Park, by Joe Foy



Watershed *Sentinel*

Editor Delores Broten
Publisher Watershed Sentinel
Educational Society
Associate Editor Don Malcolm
Cover and Graphic Design Ester Strijbos
Advertising

Special Thanks to Horizon Publications, John Hummel, Hugh McNab, Maggie Paquet, Jim Cooperman, Julie Williams, Norberto Rodriguez dela Vega, Susan Yates, Peter Ronald, Clara Broten, Kathy Smail, Tony Tweedale, Will Horter, the writers, advertisers, distributors, and all who send information, photos and ideas.

Published five times per year
Subscriptions \$20 one year,
\$30 two years Canada, \$26 US one year

Distribution by subscription, and to members of Friends of Cortes Island and *Reach for Unbleached!* Free at Vancouver Island and Vancouver area libraries, in BC colleges and universities, and to sponsoring organizations.

Member British Columbia Association
of Magazine Publishers
ISSN 1188-360X

For photocopy reproduction rights, contact
Access Copyright, 1 Yonge Street, Suite 800
Toronto, Ontario M5E 1E5
Ph: 416 868-1620

Publication Mail Canada Post Agreement



PM 40012720

Return Undeliverable Canadian Addresses to:

Watershed Sentinel
Box 39, Whaletown,
BC, Canada V0P 1Z0
Ph: 250 935-6992

Email editor@watershedsentinel.ca

<http://www.watershedsentinel.ca>

FROM THE EDITOR

Road Sense



Many motorists on the streets and highways today will remember with fondness, the motor vehicles of the past half century. Perhaps many will recall the advertising extolling the beauty, dependability and safety of all the new models. Those who could afford new cars happily drove the dream-machines of their choice away from the show rooms. Throughout the lifetimes of those cars, ownership might change many times until they were worn out and recycled.

In recent years the automotive industry and the advertising that supports it have taken some dramatic turns. Newspapers, magazines and billboards continuously display pictures of vehicles at the tops of impossibly steep mountains, the captions accompanying these photographs suggesting that no human being could possibly attain such heights without such magnificent machines. Television commercials employing trick photography, present scenes of family-type automobiles speeding through urban areas, the buildings in their wakes being sucked into the vortex of such awesome power. Surely many are embarrassed or angered by the suggested gullibility being thrust upon them while trying to enjoy entertainment.

To drive the multi-lane highways leading in and out of major cities can be a frightening experience. Getting out of a rapidly ending merge lane can be quite like entering an on-going car race. The driver on the left of the merging vehicle is reluctant to ease off slightly for fear the car on his/her left will win the race. The only option for the driver whose merge lane is ending is to engage the left-turn signal and start slowly crowding leftward. Eventually some driver a couple of cars back in the through lane will notice that the fool in the ending merge lane will run into him if he doesn't back off a little. To slow down in the merge lane to wait for a break in the traffic screaming by on the left is to invite tons of metal to pile up on rear bumpers.

The automobile, in its century of existence, has proceeded from the butt of jokes to iconic status. But it has cost humanity dearly. Billions of hectares of land with food producing potential have been sacrificed to its progress. Now, scientists are warning that the burning of fossil fuels to power our motor vehicles is contributing to global warming, the melting of polar ice-caps, and the rising of ocean levels which would flood our streets and highways.

Except for the inundation of our food producing farmlands, what's the problem?

Don Malcolm, Comox BC

When you want your message to reach thousands of concerned and active readers, please contact us for our rate sheet and media kit, at ads@watershedsentinel.ca or phone 1-250-935-6992. Next issue ad deadline: October 25th.

Mystery Action Plan on Toxics

Now you see it, now you don't, but the Harper government says its got a plan to deal with greenhouse gases and toxic pollution. Trouble is, no one knows what the plan is, when it will take effect, or who's going to make it happen.

The minority Conservative government in Ottawa has been dropping coy hints for months about a “made in Canada” plan to reduce greenhouse gases and asthma-aggravating air pollution. In September, as the House of Commons re-opened for the fall session, the speculation about a new Green Plan and a Clean Air Act came fast and furious.

A series of briefings has been held with industry, provincial governments and a few prominent environmental organizations but according to all accounts, details were slim. Rick Smith of Toronto's Environmental Defense says that the top level bureaucrats from Strategic Planning at Environment Canada were “scrupulous” in showing the same eight overhead slides to all parties.

Those overheads were apparently short on detail, but did emphasize that the federal priorities will be climate change, smog and toxics, and that there will be federal regulatory action. However, says Smith, there was no indication “whether the priorities will be dealt with separately or as one package,” nor the “extent of the federal ambition” with regard to regulation. From all accounts, the most likely outcomes will be an emissions trading scheme and enforcement of standards left up to the provinces.

Lee Thiessen, Manager of Climate Change for BC Environment, noting that the province had been asked to one meeting on one week's notice, also noted dryly that local air emissions were “a provincial responsibility.”

Not only do the provinces and industry not know what the action plan is, neither do the staff at Environment

Canada. When the Domestic Substances List categorization was completed on September 13th, as required by law, the overall results showed that about 4,000 chemicals and compounds — one-sixth of those examined — could be considered toxic, persistent and/or bioaccumulative. Embarrassingly, the government not only had no action plan, they had no list of top priorities, because everything was on hold for the “green plan.”

The lack of an action plan astonished environmentalists who had

monitored the process since 1999. “It's surprising,” huffed Rick Smith. “When faced with a deadline that has been seven years in the making, one would have expected more.” “Among the list of 4000, about 400 are the most toxic - they are persistent, bioaccumulative and inherently toxic. It is time to ban the worst and regulate the rest, with the goal of replacing them with safe substitutes,” said Hugh Benevides, Counsel with the Canadian Environmental Law Association.

—Delores Broten



Deregistered Arsenic Pesticide Poisons BC Wildlife While Foot-dragging in the Forest Continues

A new Canadian Wildlife Service (CWS) study reaffirms that Canadians are being failed by federal and provincial pesticide registration and use permit processes, says an activist who led a successful public effort to end the use of monosodium methanearsonate (MSMA) as a beetle-control method in BC forests.

“Poisoning wildlife is illegal in Canada,” says Dr. Josette Wier from her home in Smithers, BC. “But this study shows that it's happening, as a result of the expensive, long-lasting toxic legacy that government inaction has created in BC.” From 2002 to 2005 half a million trees were injected with the arsenic-based pesticide in an attempt to control pine beetle, and government has formulated no plans to deal with the toxic leftovers.

MSMA was approved by Health Canada until December 2004 despite new knowledge that showed it to be far more toxic than previously understood – capable even of causing genetic mutation.

The CWS determined MSMA was unreliable as a beetle-control method in BC forests. It also found that MSMA has been harming birds who feed on beetles in MSMA-poisoned trees, and it is entering the food chain.

The study's authors, who include a world-renowned expert on arsenic, recommended against using MSMA or leaving MSMA-poisoned trees, standing or fallen, in BC forests. The findings were communicated at an international science conference in late 2004, a detailed workshop attended by committee members in January 2005, and again by letter in February 2006. It was only at Wier's insistence that BC forest ministry staff agreed to reconsider its draft policy in light of the CWS research, leading to postponement of the next planning committee meeting until January 2007, two years after the CWS first reported its findings.

—Josette Wier, Smithers BC

From Our Readers

Re: Our Common Foe

I refer to your Guest Editorial “Our Common Foe” by Neil K. Dawe of the Qualicum Institute.

True. Our economic paradigm of growth is failing us and threatening all of life on earth. But abandoning the hallowed growth objective is a very scary notion to our politicians, economists and bankers. We had better think through our message carefully. It seems to me the parameters that we must not allow to grow are use of energy, the extraction of materials from the earth and the harvest of life forms from natural ecosystems. In fact, in Canada we should be aiming for a reduction from our current levels of resource use.

This is also an excellent time to examine the need for population growth. As our birth and death rate curves cross we can see the possibility of a stable population in our future. We should be asking the demographers how best to achieve that.

It is certainly time to discredit the Gross National Product as a measure of desirable progress. My first step in trying to analyse this situation was to list some human activities in two columns, side by side. To the right I wrote items that use gross amounts of energy and materials. These activities will have to be downsized. In the left column I wrote things that I thought should be increasing. It is not, of course, a complete list.

<i>Could be growing</i>	<i>Must be reduced</i>
Travel by bicycle, train, ship	Travel by automobile, aeroplane
Education, The Arts	
Care services	
Spiritual practices	
Gardening	
Small, energy efficient houses	Monster houses, 2nd, 3rd (and 4th or more) homes,
Vegetarianism	Meat-intensive diets
Local organic farming	Long distance food transport, Artificial fertilizers
Recycling	Disposable consumer items
High quality products	Early obsolescence of appliances, furnishings, clothing
Manufactures of Natural fibres, wood,	Plastics

I was intrigued to see that the left side items contribute largely to what I consider a higher quality of life.

The Watershed Sentinel welcomes letters but reserves the right to edit for brevity, clarity, legality, and taste. Anonymous letters will not be published. Send your musings and your mis-sives to: Watershed Sentinel, Box 39, Whaletown, BC V0P 1Z0 editor@watershedsentinel.ca

Neil Dawe wrote: “If ever we hope to become a sustainable society, we must move from an economy based on economic growth to a steady-state economy that is in balance with the carrying capacity of the planet”. I agree, with the exception that the ‘steady state’ refers to consumption of resources not to a moribund culture, which could rather be evolving to provide an ever richer life experience.

Simply put my message to the politicians, bankers and economists is that we need a reduction in the Gross National Product and an increase in quality of life parameters. I do not think these two needs are incompatible.

John Millen, Denman Island BC

What One Person Can Do

Can ordinary citizens rally the media to rally citizens?

Do 10s and then 100s and then 1000s of folks going to solar power in their homes, and cutting back on consumption make a difference? Does the fact that the waiting list for Smart cars only continues to grow make a difference?

You bet! One person can always do what one person can do.

Years ago during the cold war when it looked like insanity really was going to prevail and the world would end in a nuclear holocaust, members of the peace movement began to despair, and lose the will to persevere. A number of folks got together and produced despair and empowerment workshops for members of the movement.

Rather than running from their despair and burning out, folks were encouraged to face their despair head on and grieve the possibility that they could very well fail, and the world might indeed come to an end. From there the next question was “So then now what?”

Once again we are confronted with the reality that life as we know it might end on this planet. So then now what?

I choose to go on in the face of my grief, and in spite of despair, because it is the only path of honour, and the only possible hope for the survival of my beloved nieces—who are my hostages to the future. And one of the ways I go on is by remembering that a small group of determined people is all that ever changes the world.

For Peace, Truth, and Justice, AND for Generation 8.

Chris Bowers, Gabriola Island BC



Around The World

US Rice contaminated with GE variety, Government asked to rubber-stamp

The US Department of Agriculture (USDA) has initiated fast-track market approval of an illegal, genetically-engineered (GE) rice variety that has contaminated long-grain rice throughout the US South and probably the North American market. Bayer CropScience developed the rice, known as LL601. Bayer field-tested LL601 from 1998-2001, but for unknown reasons never applied to USDA for market approval.

Though LL601 is illegally present in rice supplies, and has not undergone meaningful reviews for potential health or environmental impacts, US authorities have failed to recall LL601-contaminated rice supplies or food products. In contrast, Japan has banned US long-grain rice imports, and the European Union is testing all US rice shipments and rejecting those that contain LL601.

Bayer is now asking USDA to grant retroactive market approval of the illegal rice, even though the company gave up plans to market LL601 in 2001 and it remains untested. The approval would free Bayer from liability.

LL601 is one of several 'LibertyLink' (LL) rice varieties that have been genetically engineered by Bayer to survive application of Bayer's proprietary Liberty© herbicide. Liberty kills normal rice, but can be applied directly to LL varieties to kill surrounding weeds. [After approval of the LL rice, Bayer had to obtain government approval to permit residues of the weedkiller on its rice.]

LL601 was first detected in US rice in January 2006 and LL601 has now been detected in virtually all milled long-grain rice supplies tested. USDA announced the contamination debacle seven months later, in mid-August.

In 2001, Bayer purchased Aventis CropScience, the company responsible for multimillion dollar food recalls due to massive contamination of US corn supplies with GE StarLink corn. StarLink was unapproved for human consumption due to concerns it could cause food allergies.

Since 1996, the USDA has granted at least 48 permits authorizing Bayer or companies it has since acquired (Aventis, AgrEvo) to plant over 4,000 acres of experimental, genetically engineered (GE) rice. The extent to which

pollen or grains from these field trials have contaminated commercial rice or related weedy species such as red rice is unknown.

— *Center for Food Safety, Sept. 11, 2006*

Cabinet resigns over toxic waste

(Abidjan) In early September, the entire cabinet of Cote d'Ivoire resigned as populist anger mounted over the dumping of toxic waste in the main city, Abidjan. Six people died and the UN says thousands of others have suffered possibly long-term ill effects from the waste. The waste, which was discarded in various residential areas by a local company, is residue from a gasoline cargo. The health scandal adds to an already tense atmosphere in Cote d'Ivoire as the country's peace talks have failed.

— *UN Integrated Regional Information Networks, September 2006*

"The European Union is testing all US rice shipments and rejecting those that contain LL601."

Court rules biologists get say on pesticides

A US federal judge has ruled that the Bush administration "plainly violated" the *Endangered Species Act*, and has overturned a regulation that eliminated reviews of pesticide registrations by wildlife officials responsible for protecting rare animals and plants. The judge restored pre-2004 standards requiring the Environmental Protection Agency to consult federal wildlife biologists before licensing pesticides.

— *LA Times, August 2006*

Pesticides in Indian Pop

Seven Indian states have banned the sale of Coke and Pepsi at schools and government offices, while the state of Kerala in Southern India has ordered a halt to the production and sale of the soft drinks. The bans were initiated after India's Centre for Science and Environment found high levels of pesticide residues in most pop samples from all companies. Coke and Pepsi account for 80% of the Indian market. The federal government said the CSE's sampling techniques were flawed, although the state of Karnataka said its tests supported the CSE findings. The impact on local communities of withdrawal of groundwater for the bottling plants, as well as "toxic waste" at the facilities, has been the subject of grassroots campaigns in India for several years.

— *Counterpunch, August 2006, ABC News, Sept. 2006*

Wild Times

rabble rousing in the northern rainforest

by Joe Foy

A Strong Spirit

Usually I like to roll out of bed early before anyone else gets up. It's a habit I picked up when I was a kid. Small house – big family. I like a little morning quiet time to think things over.

This is especially true when we are on a family camping trip. Small tent – big family.

And so it was on a recent August morning that I crawled out of our tent into yet another glorious blue-sky day just after sun-up in the Pyramid Campground at Wells Gray Provincial Park. My wife and son and two of my nephews and I were in the middle of a 20 day road-trip camping in some of BC's awesome provincial parks. On this trip we'd already been to Monk, Green Lake, Bull Canyon, Tweedsmuir, Barkerville, Purden, and Mount Robson. Now it was time to experience Wells Gray — the waterfall park.

I hopped on my mountain bike and went for a short ride up the road to Helmcken Falls. When I got there I had the view all to myself. I stood by the precipice and contemplated the wonder of it all for a bit, then went for a stroll.

When I looked at the new parks on the map I thought of the buckets of blood sweat and tears that had gone into securing protection for these beloved wild places.

THE LAND

While wandering around I spied a large display map of the provincial park system, so I went over to have a look. I couldn't quite put my finger on it, but something wasn't right about the map. Then I figured it out. All of the new parks – many the result of the tree wars of the 1980s and 90s — were on the map. There were a lot of new green bits that weren't there the last time I had looked at a parks map.

It was fun to recall some of the wild times that had gone into gaining these newer protected areas. Back in the early 1980s only about 5% of the province was under park protection. Today, thanks to the hard work, innovation and persistence of thousands of conservationists across the province and to those politicians willing to listen and to act, the level of park protection has more than doubled to just over 13% of BC. And the protected area system is still growing. Many conservation organizations would like to see it grow to at least 40% of the landbase, putting BC on par with Alaska.

When I looked at the new parks on the map I thought of the buckets of blood, sweat, and tears that had gone into securing protection for these beloved wild places. My finger traced the boundaries of Tatshenshini Valley, Stein Valley, Skagit Valley, Carmanah Valley, Pinecone Burke, Megin Valley, Cariboo Mountains, and the Northern Rockies. I thought of all of the newest protected areas in the Great Bear Rainforest, not yet inscribed on the map. And I offered a silent prayer of thanks to all the work of those earlier generations who had secured the old-time parks like Wells Gray, Mount Robson, Strathcona, Tweedsmuir, Garibaldi and Manning.

And finally, I gave a bit of quiet contemplation to past battles lost. Wild places where conservationists had given their all and yet the bulldozers and chainsaws had still come.

These lost lands were not marked on the big map, yet it is on these lands that BC's conservation movement forged its most determined wilderness defenders – in

the firestorm of peaceful resistance.

I thought of past protests in Clayoquot Sound, Walbran Valley, Tsitika Valley and the Elaho where forest defenders had watched with bitter tears as their blockade lines were broken, comrades arrested and ancient forests chainsawed to the ground. And yet, even though some forests were lost, it is largely because these brave folks took a stand and hung in there no matter what that a kind of strong

THE LAND

Another Cliff-Hanger in Clayoquot

In late July, the British Columbia government and First Nations released the results of a ten year science panel planning process for Clayoquot Sound which would allow logging in intact old growth valleys. Environmentalists were dismayed. A 1999 Memorandum of Understanding between environmental groups, First Nations and logging company Isaak Forest Resources had voluntarily put the pristine valleys off limits to logging. Tzeporah Berman of ForestEthics, a leader of the Clayoquot protests of the early nineties, called the move "our worst nightmare" and said, "We urge governments to reconsider this devastating move."

Shortly after, First Nations-owned Isaak Forest Resources announced it had chosen EcoTrust Canada and logging contractor Triumph Timber as management partners for the next 18 months to establish a conservation based economy in the Sound. By mid-August the rhetoric and concern had cooled considerably after a meeting between five environmental organizations (ForestEthics, Friends of Clayoquot Sound, Greenpeace, Western Canada Wilderness Committee, the Sierra Club of Canada, BC Chapter) and five Central Region First Nations (Hesquiaht, Ahousaht, Tla-o-qui-aht, Ucluelet, and Toquaht). The meeting was called to discuss their existing Memorandum of Understanding (MOU) and the controversy in Clayoquot Sound. The parties agreed to pursue the full consultation and accommodation of aboriginal title and rights of the Central Region First Nations and to create a working group to renew the MOU. They also called on the BC and federal governments to identify resources to create economic alternatives for Clayoquot Sound and to enable legal mechanisms to ensure a lasting solution.

Maryjka Mychajlowycz, Forest Watch Co-ordinator for Friends of Clayoquot Sound, said that the controversy and the meeting had managed to shift the direction of developments but that much work remains to be done to convert the promise into reality. Mychajlowycz pointed out that "logging intact ancient rainforest is untenable. It flies in the face of the science, it's not what consumers want and companies are losing money."

She pointed out that it is essential to "maintain pressure on the provincial government to entertain solutions" for Clayoquot including legislated conservancy designations for intact valleys similar to those agreed upon in the Great Bear Rainforest, and resources for First Nations to make the economic transitions they need.

— Delores Broten

spirit was kindled in the greater conservation movement. I believe that spirit is why our protected area system has expanded so much and continues to grow today.

Before heading back to camp my last thoughts were of Eagle Ridge Bluffs in West Vancouver and all the people who this spring gave their all to save the forest there. Today the trees have been cut for the Olympic highway and the forest defenders arrested, charged, and are working their way through the court system. [See page 28, —Ed.]

Their peaceful actions and determination in the face of a losing battle is the latest chapter in the proud history of BC's conservation movement.

The strong spirit they display foretells a hopeful future.



Helmcken Falls, Wells Grey Park

Joy Foy is Campaign Director for the Western Canada Wilderness Committee, Canada's largest citizen-funded membership based wilderness preservation organization. WCWC currently has 28,000 members from coast to coast.



in the Brooks Peninsula on the cutting block

by Richard Boyce, August 2006

I have just returned from a week-long trip into the wilderness on the north-west corner of Vancouver Island, just north of the Brooks Peninsula.

My goal was to return to the ancient rainforest of East Creek to begin shooting a film.

East Creek is one of only six watersheds that still remain pristine out of an original 91 on Vancouver Island; the other 85 have been clearcut logged. East Creek, Carmanah Valley, and three watersheds in Clayoquot Sound are all that remains of the intact ancient rainforest we know so little about.

Geographically the primeval rainforest on the shores of East Creek is isolated by rugged mountains, long fjords, a wind-swept coastline with steep, exposed cliffs and thousands of dangerous reefs. The annual rainfall is more than 3,500 millimetres. The rainforest of the Klaskish is at the base of Brooks Peninsula, which held off the glaciers during the last ice age, and is inaccessible by land. The people of the Kwakwaka'wakw plied these waters for over 10,000 years, moving goods and people between the village sites protected by the many inlets along this rugged coast. The remote and rugged location of this rainforest has protected it from 150 years of industrial logging, until today.

I drove a small Subaru station wagon, loaded with gear and topped with two, six-metre sea kayaks, past the concrete mass of the fume-belching pulp mill at Port Alice which was built in 1910. We then drove 75 kilometres of logging road labyrinth to the ocean's edge.

As soon as we had crossed a bridge over Klaskish Creek the logging road began a series of steep switchbacks where, according to my topographical map, the road into East Creek rises 900 metres over one kilometre. This extreme road winds through clearcuts on Crown land in what is designated as sensitive management by the BC Ministry of Forests. Suddenly the entire road ahead was filled by a fully loaded off-road logging truck roaring towards us with tons of enormous ancient logs, stacked twice as high as the truck. Luckily I was able to pull off where a grader had widened the road. It was truly heartbreaking to see this massive

truck drive past us loaded with 1,000-year-old yellow and red cedar from the highlands of the East Creek valley.

Unable to drive up the steep logging road, we decided to try accessing the ancient rainforest of East Creek by paddling our kayaks to the mouth of Klaskino Inlet and then along the open coast.

Amongst the rocky reefs and associated kelp beds we watched several sea otters swimming, diving, and squealing in their high pitched tones. Through binoculars I gazed at an adult smashing a sea urchin with a stone and a tiny young pup scrambling onto her belly to eat the tasty treat.

We camped on a well protected sand beach at Heater Point.

The next morning we hiked out to the open coastline of the Pacific Ocean to check out the surf. We watched waves pound into the steep granite cliffs of the rugged coast dotted with offshore rocks. For the next three days the coast guard weather report called for gale force winds in Brooks Bay.

We paddled back the way we had come, stopping at an ancient village site standing alone in the midst of massive clear cuts which have devastated most of the shores of Klaskino Inlet.

We marveled at the five foot deep midden along the shore and ventured into the tiny stand of old growth forest where we looked at examples of trees that were culturally modified several hundred years ago for a variety of uses by First Nations. Massive planks split off living cedar trees which continue to grow. Sitka Spruce with massive holes burnt into them so that pitch could be harvested. Totem and canoe trees left behind due to splitting.

On the way back we sighted ten bears, several of them cute and very curious cubs, foraging below the tide line. All the while we paddled closer to the extreme logging road pushing over the ridge into East Creek through piles of debris, blasted rock, and scars created by landslides.

Contact BC Forest Minister Rich Coleman:
FOR.Minister@gov.bc.ca

FORESTS

In BC's Forests This Year

The bullies in the forest are running amok, logging rules are virtually non-existent and the subsidies have been generous

by Jim Cooperman

A Ministry of Forests and Range compliance and enforcement technician confided to me the other day about the sad state of current forest management. "They have legislated us out of the bush," he complained. "Companies are controlling prices and are bullies in the forests." He had heard that his union was going to do a survey to determine the level of job satisfaction under the province's *Forest and Range Practices Act (FRPA)*, but the survey was mysteriously canned. He does not know anyone that is satisfied, "except the managers."

Essentially, he said, some companies are "running amok." His views coincide with a consulting forester who was once a major licensee woods manager, but now does not like to look anymore when he is out in the field. No wonder, as he now sees a management style similar to the 1970s, with openings that are too large, cut block boundaries that are too close in proximity to other blocks, improper riparian management, too much waste, and a lack of attention to visual quality.

Although profits are finally falling for the industry because of the current low price of lumber, most companies have done very well this decade. Thanks to the provincial Liberals, logging rules are virtually non-existent and the subsidies have been generous. The provincial government has spent hundreds of millions of dollars buying back timber to establish its new market-based tenure system, timber that the companies never paid for in the first place. Another \$125-million has been allocated for worker and community adjustment programs. This is public money being used to prop up an industry that always claims it pays for our schools and hospitals!

BC Timber Profits Flowing South

Despite the billions of dollars that were spent on softwood duties, most BC forest companies were able to make sizable profits thanks to low stumpage rates and mechanization in the mills and in the bush. Now these profits are getting invested in the US as BC forest companies purchase sawmills there. What a sweet deal: companies can get paid for the 20 percent of the timber that the government takes back and then they use this money to invest outside of the country, providing jobs to US workers. Then they are able to purchase at auctions the timber removed from their tenures to use in their mills.



Environmentalists Silent

There is quite a contrast between this decade and the last, when every move by the government faced harsh criticism from the environmental community and the forest industry fought hard to pursue its goals with its Forest Alliance public relations campaign and Share movement. Now the industry has achieved its entire wish list from the government it helped to elect with generous election funding. The Forest Alliance and Share movement is gone and with it the industry's and government's commitment to communities. And sadly, the environmental community is nearly silent with its censure, even though government policies are abysmal. Perhaps there is a lack of critical analysis because there are few groups working on forestry policy anymore and the media avoids reporting on any criticism of forestry.

Softwood Treaty

The softwood lumber agreement is a dog's breakfast that quickly puts the public to sleep. Clearly, the Harper government has agreed to terms that continue to benefit the US, despite many court victories in Canada's favour including two recent ones. Perhaps they agreed to the terms because they know, but will never admit, that Canadian lumber is indeed subsidized and that the final court decision may support the US, which does need controls on Canadian exports to protect its industry. While Canadian companies are eager to see most of their duty payments returned, many remained opposed to the deal. The Harper government has basically bullied the companies to accept the agreement

Continued on Page 10 →

⇐ *BC Forests continued*

and we will likely never know how many companies actually support it. Under the treaty, the Canadian public could benefit more from lumber exports as the proposed treaty calls for a sliding scale of export charges that will flow into provincial treasuries combined with quotas when the price of lumber falls below \$355 per thousand board feet. However, under B.C.'s "market-based system," stumpage rates will likely fail to account for the export duties, resulting in no change in resource rents. Currently, the price is well below \$300/thousand.

Coastal Shell Game

There is a real disparity between the interior of the province, where there is a glut of beetle killed timber that is more than the mills can handle and the coast, where mills are shutting down and the industry is suffering. While the companies claim they need new investment dollars to build high tech mills that can process smaller dimension timber, the real problem is that decades of overcutting have depleted the supply and the costs are too high to access what timber is left. It has been an empty shell game on the coast, with MacBlo cashing out first, settling up with all their shareholders. Weyerhaeuser cashed in next — buying up the shards and making off with millions in government compensation. Then the companies benefited from their private land being removed from the TFLs, so the final logging of the second and third growth could take place without any provincial oversight and with the logs exported whole. Now that these former railway grant parcels of land (one third of Vancouver Island) are stripped of trees, the former forests are ready for malls and condos! Meanwhile the cut is down in the public forests because the remaining difficult-to-access timber is of inferior quality and Japan no longer wants to buy hemlock that twists when it dries.

Climate Change Impacts

The forestry scene is further complicated by the impacts of climate change. BC's forests are rapidly succumbing to voracious, climate-change induced western pine beetle populations that show no signs of slowing down now that they have made it past the Rocky Mountains. The latest projection for the beetle epidemic shows 80 percent of the province's lodgepole pine forests to be dead or dying within ten years. And other insect pests are also gobbling other species, including spruce and ponderosa pine. Then there are the fires and the impacts from drought. Chief Forester Jim Snetsinger, in conjunction with a team of government experts, has developed an adaptation plan that focuses on maintaining ecological resilience through the Future Forest Ecosystems (FFE) Initiative. Learn more about this initia-

tive that focuses on more studies, better monitoring and a re-evaluation of silviculture policies from www.for.gov.bc.ca/hts/Future%5FForests.

Comprehensive Analysis Needed

Forest companies do not deserve the lack of critical analysis that they are currently enjoying. What is needed is a thorough study of all the subsidies they have and continue to receive, as well as the policies that now provide them with nearly carte blanche freedom to operate in the forests. The study should also consider the impacts that forestry continues to have on the environment, including loss of species and damage to watersheds. And the government employees' union should carry on with its proposed survey to gauge how current policies are working. The Forest Practices Board has been very critical of the inadequate Forest Stewardship Plans, which are devoid of any detail. But the public needs to hear more about the kind of problems that foresters like those mentioned above are experiencing.



Jim Cooperman was editor of the BC Environmental Report and the BCEN Forest Caucus coordinator from 1990 to 2000. He lives above Shuswap Lake, is president of the Shuswap Environmental Action Society, www.seas.ca and continues to write and study about B.C. forestry issues. Contact him at [jkcooperman@yahoo.ca](mailto:jccooperman@yahoo.ca).

Ozone Hole in Recovery

American scientists say the Antarctic ozone hole now appears to be stable. Two of the scientists who first warned the world about the growing ozone destruction announced at a news conference in August that the Antarctic hole seemed to have stopped growing. The scientists said they were optimistic that, in time — about 60 years worth of time — the ozone hole might recover. The Arctic ozone "hole," which was never as wide or thin as the one at the southern pole, is expected to recover within about 30 years.

The National Oceanic and Atmospheric Administration said the improvement in the ozone layer was caused largely by the phasing out of CFCs (chlorofluorocarbons) from aerosol sprays and refrigerators under the unprecedented international Montreal Protocol which banned their use in 1987. However, the chemicals which have been used to replace CFCs are potent greenhouse gases which contribute to global warming.

Ozone filters out harmful ultra-violet radiation from the Sun. The gas is constantly being made and destroyed in the stratosphere, about 30 km (19 miles) above the Earth.

— *BBC News, August 2006*



Compiled
by Delores Broten

X-Rays and Breast Cancer

An Australian study of 1,600 women has found that a chest x-ray increased the risk of breast cancer, by 54% for women who are genetically pre-disposed to the disease, and by 2 and a half times for women under 40 with those genes. Mammograms were excluded from the study which depended on the women's recall of having had an x-ray. The research was published in the *Journal of Clinical Oncology*, —*Weekend Australian*, July 06

Breast Cancer, Cadmium

A study of over 500 women, controlled for other factors, found a much higher risk of breast cancer directly correlated with higher levels of cadmium in urine. The researchers pointed out that it was unknown whether the cadmium was a cause of breast cancer, or if the high levels were due to cancer treatment, or a result of the disease.

—*Journal of the National Cancer Institute*, June 2006

Don't Worry

A new laboratory study suggests that exposure to Prozac can disrupt the reproductive cycle of freshwater mollusks, potentially increasing their risk

of extinction. The study, one of the first to examine the ecotoxicological effects of Prozac (fluoxetine) on native freshwater mussels, found that the drug caused females to prematurely release their larvae, essentially dooming them. About 70 percent of the nearly 300 species of freshwater mussels native to North America are extinct, endangered or declining.

—*American Chemical Society*,
September 2006

Forget the dust mites

Neither eliminating dust mites around the house nor changes to diet showed any impact on childhood asthma, according to an Australian study which tracked 600 children from birth to age five. Scientists also tested the commonly held belief that boosting levels of omega-3 fatty acids in a child's diet could ward off allergic conditions but again found no impact. The study, published in the *Journal of Allergy and Clinical Immunology*, involved children in western and south-western Sydney with a family history of asthma. The researchers concluded that, of all the popular remedies examined, only avoidance of exposure to tobacco smoke has a preventative impact.

—*The Australian*, June 2006

Metal Particulate

Inhaling metal particles from air pollution may lead to the development of lung cancer, researchers at the University of Texas Southwestern Medical Center have found. The ecological study, published in September in the *Journal of Thoracic Oncology*, compared lung cancer rates for all Texas counties from 1995 to 2000 with industrial air releases of metals reported to the US Environmental Protection Agency in the previous period of 1988 to 2000.

Lung cancer rates were highest in counties with higher industrial emissions of zinc, chromium and copper. The study's findings point to potential

root causes for lung cancer in the estimated 10 percent to 15 percent of lung cancer patients who never smoked, said Dr. Yvonne Coyle, associate professor of internal medicine and the study's senior author.

Explaining the cancer-causing effect of airborne metals, Dr. Coyle said, "There is some evidence that metals can interfere with a biochemical process called methylation that inactivates genes that normally suppress tumor growth."

Future studies should examine whether individuals with lung cancer have actually had previous high exposures to airborne metals.

—*University of Texas Southwestern Medical Center*,
September 2006

POPs and Diabetes

Results of the South Korean National Health and Examination Survey, 1999-2002, which studied over 2000 people, have found a strong dose-response relationship between serum concentrations of persistent organic pollutants and diabetes. People who had detectable levels of six pollutants, including two of the dioxins, in their bodies were more likely to have diabetes than people who didn't have detectable levels of the pollutants in their bodies. The results were adjusted to compensate for other known diabetes factors: age, sex, race and ethnicity, poverty income ratio, BMI, and waist circumference.

The design of the study requires that the results are interpreted with caution. The dataset from the survey did not distinguish between type 1 and type 2 diabetes. Misclassification bias was also possible in this study. Diabetes was extremely rare in those who didn't have detectable levels of POPs, so the reference group may not have been reliable.

—*Diabetes Care* 29:1638-1644,
2006, *The Lancet*, June 2006,
www.diabetes.org

More From Our Readers

Toxics/Health Studies

Something really disturbs me about our government's approach to research into health problems in First Nations communities when they discover that those people have been eating contaminated fish for decades. Here's how it often goes:

- 1) If the community raises a big fuss, launch a study,
- 2) Never test the people for the toxins found in what they eat (only test their food and give out questionnaires),
- 3) Never investigate historical contamination in any depth,
- 4) Never investigate what local polluters are releasing and what they have been releasing for decades,
- 5) Never do research which could result in a First Nation suing either a company or a government for damages due to assault by pollution.

By sending out all the information I am sending, I hope to change the nature of toxics research in Canada and create a situation where the victims of pollution might get a bit of justice for their suffering.

The 'mantra' in Canada's scientific community for some time has been: 'it is better for native people to eat

contaminated fish than to eat store-bought food because they will get diabetes if they stop eating food from the land and if they stop eating healthy food from the land then, they will lose their culture, have social breakdown and the many health problems that go along with that situation.' There is much truth in this but, here's what bothers me: This approach lets polluting companies and the governments which allow that pollution, totally 'off the hook'! so they can continue forever to poison and pollute people!

These are my thoughts.

John H.W. Hummel, Nelson, BC

P.S. I know that all Canadian Government studies are not as I have described but, enough are to warrant my concern.

Friendly Support


I really enjoy and value the information and articles you include in each of your issues. Thanks to all of you for all of the excellent work you are all doing. Have a very successful year,

*Your friendly supporter,
Mel McDonald, Victoria BC*

BANYEN BOOKS

*Offering the Perennial Beauty of the
World's Healing & Spiritual Traditions*

3608 West 4th
Vancouver,



Ave. (at Dunbar)
B.C. V6R 1P1

books 604-732-7912 sound 604-737-8858
or out-of-town 1-800-663-8442
open Mon-Fri 10-9 Sat 10-8 Sun 11-7
www.banyen.com



PAPER CHOICE

Environmental Papers

- stationery sets • journals • blank card sets • sketchbooks
- multi-coloured pad sets with matching envelopes
- copy paper • spiral bound note pads • letterhead • and more

All PAPER CHOICE products are 100% recycled post-consumer fibre. Most are Processed Chlorine Free.

Shop on-line at: paperchoice.ca

Danish-Inspired Community Under Development

Creekside Commons cohousing community in Courtenay is now being developed by the families who will live there.

Based on a successful sustainable housing model from Denmark, this unique multi-generational neighbourhood will soon be home to 36 families. Our 9 acre strata-titled community will include private 2-5 bedroom duplex homes as well as a 3500 sq. ft central common house, workshop, children's play areas, garden, an orchard, and ponds.

If you are interested in joining please check our website at www.creeksidecommons.ca for more detailed project information. Schedules of public meetings held monthly in Courtenay and contact information are also available on the site.



information are also available on the site.

Tofino on the Edge

Just before the last long weekend of summer, Tofino BC resorts and cafes were advised there was not enough water for them to serve their customers

Tofino's water supply has been drained to minimum requirements needed for fire and emergency maintenance. This resort community has been heavily hit by burgeoning populations of summertime visitors ever since the Pacific Rim National Park established itself along the Long Beach and coastal areas.

A two month drought has affected everything and it is an example of what all humans need to be considering. The rivers in the area are low with trickles maintaining just enough water to hold pockets of salmonids in ever warming conditions. Meanwhile, salmon waiting to lay near-ready eggs are circling around the river mouths.

Many people want to place the blame on all sorts of ridiculous sources from taxes to environmentalists but in fact, Tofino is just another town unprepared for the extreme conditions being found around the planet as climate changes continue to wake humans up to the possibility of a world without all the benefits that have been taken for granted for far too long.

Water comes from a tap, electricity comes from a plug in the wall, waste goes down a toilet. People live in cocoons of ignorance of where it all comes from and where it goes. Until it runs out.

The weather temperatures across the country and into the US have been some of the hottest on record. Drought is causing forest fires. Glaciers and ice packs are disappearing at unprecedented rates. Permafrost is melting and animals and humans are sinking in the slush.

If Tofino hadn't fought so hard for its forest cover on Meares Island due to the water supplies coming from there, it would have been out of water long before now. There is still a trickle maintained from these great forests in spite of low levels stressing the forest cover. This won't be the case in many areas where reservoirs are the only source of water. Tofino has been unprepared for the onslaught of visitors and resorts ever since the National Park was established. Pressures haven't let up. Everyone and everything is feeling it but the overall reality is that it hasn't rained and may not.

Conservation is something that all people need to do and if their water came off their roof and their electricity came out of solar panels or wind generators, they would be aware of how much they could use. We also need to be thinking about our waste and stop using our precious sweet water to dump it into. Composting toilets, grey water recycling and many

other factors should be in use by all. Live simply so that others may simply live.

Tofino is the tip of the edge. Everyone should be paying attention.

For All Our Relations,

*Steve Lawson, Susanne Hare for
FNEN in Clayoquot Sound*

it's more than great coffee...

SALT SPRING
Certified
ORGANIC
COFFEE

Roasting for
SOCIAL CHANGE
B.C.'s Original Ethically Responsible Coffee Company

ROAST-TO-ORDER - 100% CERTIFIED ORGANIC - FAIR TRADE CERTIFIED
saltspringcoffee.com - 800.332.8858

- TROJAN AND HALLET UV SYSTEMS FOR DISINFECTION
- BIOSAND SYSTEMS FOR IRON-MN-H2S-TOC-TANNINS
- REVERSE OSMOSIS FOR SALT AND HEAVY METALS
- CUSTOM DESIGNED WATER TREATMENT PACKAGES

RESIDENTIAL - LODGES - COMMERCIAL
FIRST NATIONS



WATERTIGER

320 Mary St., Victoria BC V9A 3V9
www.watertiger.net
250-383-4558 info@watertiger.net

Your One Stop Shop
in Courtenay!

EDIBLE ISLAND
WHOLE FOODS MARKET

Good Food ♦ Great Choices
334-3116 477 6th St. Courtenay Mon-Sat 9-6pm Fri. til 7pm Sun 10-5pm

Fill 'Er Up!



Americans are addicted to oil. George W Bush said it himself.

by Arthur Caldicott

Actually, the entire industrialized world is addicted to oil. And those countries that aren't yet fully wired on the fossil fuel junk, like China and India, are getting hooked fast.

Addicts of oil will apparently do just about anything for a fix. Few commodities — perhaps even including tobacco, alcohol and heroin — have such inelastic demand. "Gotta have it."

Canada and Iraq, in quite different ways, are in the throes of historical change which derive from a common situation — the global and particularly the US need for oil.

Both countries sit on a phenomenal amount of oil — we're number two and four respectively after Saudi Arabia. One country is under an unwelcome military assault and occupation. The other is willfully engaging on a capital assault, and a corporate occupation.

Both will contribute significantly to enriching US oil corporations and to ensuring that the US gets its fix.

The Global Context

In 2005, the US used 20.7 million barrels of oil per day (MMb/d). By 2015, it is expected that the US will burn 23.5 MMb/d and by 2025, 26.1 MMb/d. That's a 26 percent increase in consumption over the twenty years.

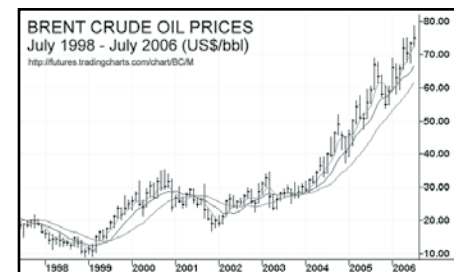
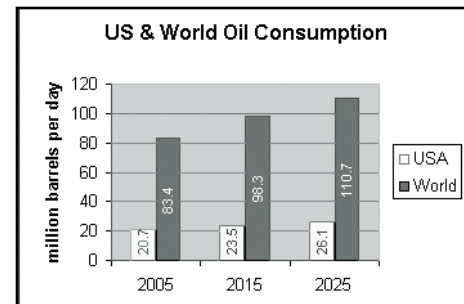
In 2005, the entire world consumed 83.4 MMb/d. The US Energy Information Administration (EIA) estimates that the world may use 98.3 MMb/d by 2015, and 110.7 MMb/d by 2025 — a 33 percent increase over twenty years.

Supply constraints, however, are a challenge to those growth projections. The world may actually be running out of oil. It is, at least, running out of easily produced oil.

Getting what's left out of the ground, and moving it to end-users, will not be "business-as-usual." The costs and impacts — economic, environmental and social — will be profound.

The manifestations of supply constraints are everywhere we choose to look for them, but the most telling indicator is the price of crude oil. Constrain the supply of a commodity in a tight market and the price will rise. The historical price for oil remained under US\$30 a barrel since the last energy crisis twenty-five years ago.

In early 2004, however, oil broke through the US\$30 level and hasn't looked back. Oil has been above \$70 for most of the first half of 2006.



ENERGY

To build on the addiction metaphor, our world has a serious fossil fuel dependency, and oil is a part of that. Modern civilization runs on a constant fix of hydrocarbons, burning 83 million barrels of oil, 275 billion cubic feet of natural gas, and 15.2 million tonnes of coal, every day. These are awesome quantities, beyond comprehension for most of us. Is this "civilization" even tenable without fossil fuels?

The US is the biggest junkie on the global street — with fewer than 5% of the world's people, it uses 25% of the world's oil.

And it has to import most of it. Sixty percent of the oil consumed in the US comes from somewhere else.

America's next hit

Control of the world's remaining oil resources is already shifting dramatically from the countries which produce the oil, to those nations best equipped with dollars and guns. Enter the number one oil junkie, the United States, and its giant petroleum corporations — increasingly on a permanent hunt to find the next hit.

Iraq's boundaries encompass the fourth largest known oil reserves in the world. It is no small target, with an estimated 115 billion barrels. (Number one is Saudi Arabia with 264 billion barrels.)

Acts of military aggression and occupation in Iraq, as well as Kuwait and Afghanistan, are viewed by many as steps by the United States and Britain to secure these oil rich territories. At least 64% of Iraq's oilfields, fully nationalized prior to 2003, are being re-allocated since the US occupation for development by multinational oil companies.

Canada contains the second largest reserve of oil in the world, at 178 billion barrels. Most of that is in Alberta's oil sands.

Canada's role as a fundamental and willing participant in America's energy strategy is easy to understand for the obvious geographic, political and economic reasons. Canada's oil industry is completely integrated with that of the US. Even those companies which are nominally Canadian — Enbridge, for example, or EnCana or Suncor — trade their shares on the New York Stock Exchange as well as the Toronto Stock Exchange, and there's not much about them that makes them "Canadian," other than a head office in Canada. They are all members of the corporate global energy plutocracy.

So it's no surprise that American capital is marching into Alberta at an unprecedented rate. Close to one million barrels a day of oil was produced from the oil sands in 2005 (compared to Canada's total oil production of 2.5 million barrels per day). Expectations are that oil sands production will be three or four times the current output by 2015 — somewhere between three and four million barrels per day.

\$100 billion is estimated to be invested in new production projects in the oil sands by 2020. Estimates are highly elastic, and this one is based on an oil price of \$32 per bbl. With oil at twice that price, the attraction for investment capital increases accordingly.

There are, however, a couple of show-stoppers to increased oil sands production. While capital floods in, in a seemingly unconstrained rush, there are other factors which will serve to throttle down otherwise unfettered growth — workers and, ironically, energy.

It takes people to make energy

One estimate claims that the oil sands will create 240,000 jobs across Canada by 2008.⁵

Think about that for a moment. Within two years, Canada needs to find or train 240,000 new workers, just for oil sands work. Can Canada "produce" so many people in such a short period of time? Where will they come from?

They'll have to be imported. As many as 20,000 foreigners are expected to be working in Alberta this year, nearly double the figure from 2005, driven higher by demand for labour in the booming oil sands.

Entire workforces from China could be arriving in Alberta within the next few years. These people, along with all the Canadian workers and families, will need to be housed and fed and provided with the amenities of a modern civilization. In the capital assault that is ramping up production from the oil sands, little thought is being given to these human and social needs.

And as the oil sands compete with other labour markets, inflationary pressures become generalized across the country. Headlines about labour shortages, and wage pressures, have become routine in Alberta, and are beginning to ripple across Canada.

It takes energy to make energy

The fossil fuel component in oil sands is bitumen. Bitumen content of the sands is about 10-12%, sand and clay is perhaps 80-85%, and the balance is water.

All the processes so far developed to separate bitumen from non-commercial components involve heat. Natural gas is overwhelmingly the energy source used for this purpose. Natural gas is also used in upgrading bitumen to synthetic crude oil.

Approximately a billion cubic feet (bcf) of gas is required every day to produce (extract and upgrade) a million barrels of oil, which is the current daily production from the oil sands and a third of what is projected by 2015. Canada produces about 17 billion cubic feet per day of natural gas, delivering all that gas into a continental market that is

Continued on Page 18 →

GATEWAY PETROLEUM EXPORT PIPELINE
 600,000 b/d; \$2.5 billion
 Edmonton to Kitimat
 Owner: Enbridge
 Markets: China, other Asia, US west coast
 Open Season: high interest, added capacity
 NEB: in pre-app phase

GATEWAY CONDENSATE PIPELINE
 \$1.7 billion; 150,000 b/d, up to 230,000 b/d
 Parallel to Gateway oil pipeline
 Source: Russia, Asia, Middle East
 Issues: First Nations, uncertain Chinese partners, offshore moratorium, rugged vulnerable terrain.
 Unlikely to proceed.

ALTEX BULLET PIPELINE
 250,000 b/d; \$3.6 billion
 Edmonton - Houston TX
 One-project Altex is unlikely to beat competing Enbridge, even with mysterious new technology that requires less diluent.

ENBRIDGE "BULLET"
 400,000 b/d; US\$3.6 billion
 Hardisty - Houston TX
 This latecomer doesn't even have a name yet, but if a bullet goes ahead, Enbridge is more likely to build it than Altex.

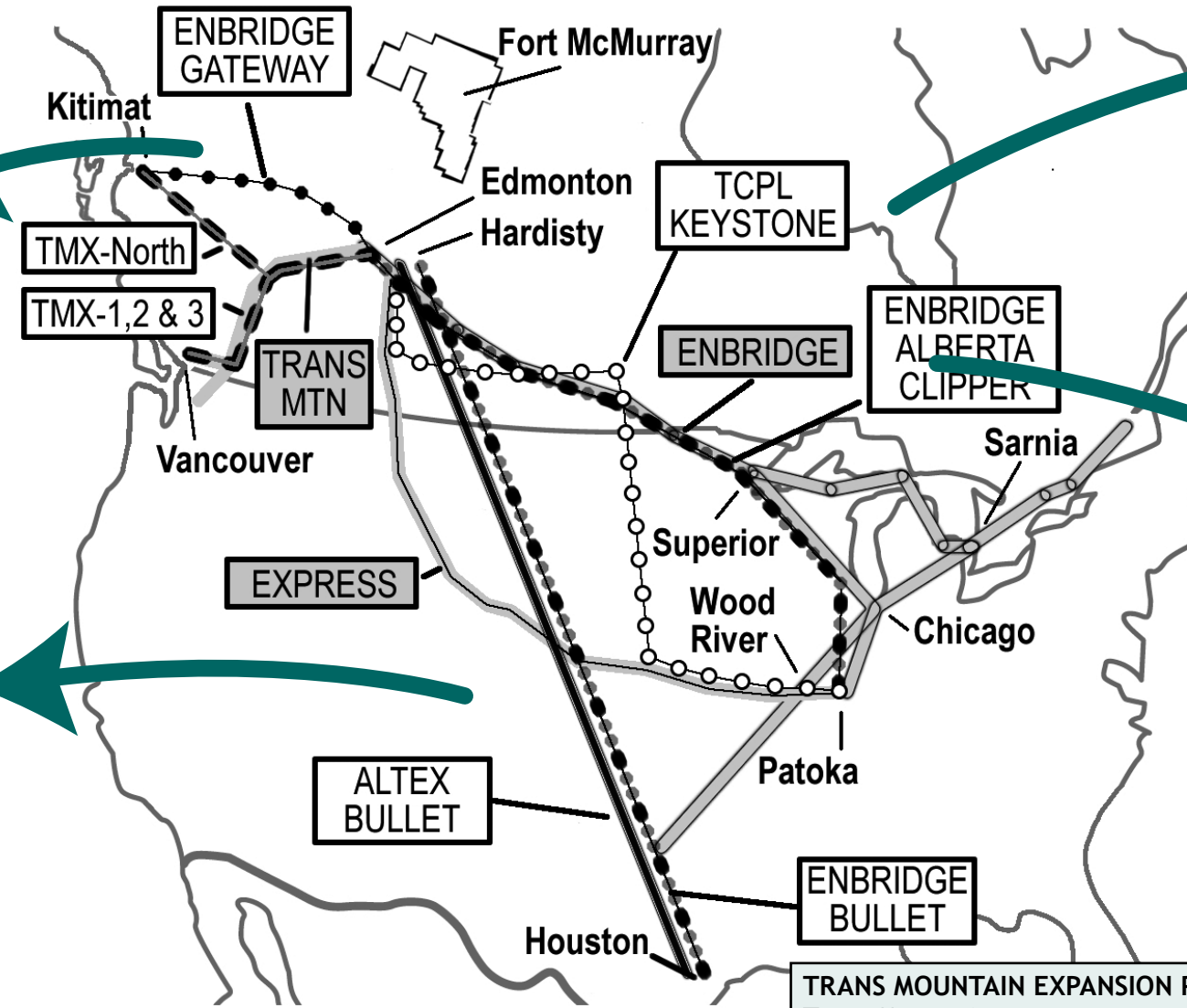
Three steps in the development of a pipeline

Pipelines are billion dollar undertakings, and a great deal of planning, preparation, and money is invested in a project by the time construction starts. Three preliminary phases or steps are common to all.

1. Introduce the idea. When a new pipeline is conceived, the company announces it by way of press releases, conferences, etc. This generates awareness of the proposal, and gives the company an early sense of viability of the idea. Ideas floated in this stage often don't make it much further.

2. Open Season. A pipeline is only viable if shippers commit to use it. Open Season is a formal process to identify the capacity on the pipeline shippers will commit to.

3. Regulatory approval. Every interprovincial and international pipeline requires a Certificate of Public Convenience and Necessity (CPCN) from the National Energy Board (NEB) in Canada.



KEYSTONE PIPELINE
 435,000 b/d, expandable to 590,000 b/d
 US\$2.1 billion
 Hardisty, AB to Patoka, IL
 Owner: Trans Canada Pipeline (TCPL)
 Open Season: 80% of capacity secured
 Communications Energy and Paperworkers Union says exporting unrefined bitumen is exporting 18,000 jobs
 Almost certain to proceed. Strong industry support will overcome challenges.

ALBERTA CLIPPER
 400,000 b/d
 US\$1.8 billion
 Edmonton - Superior WI
 Owner: Enbridge
 Phase 2 adds 400,000 b/d for \$380 million
 Clipper by itself is incomplete without Enbridge's expansion projects within the US
 CEO says won't proceed if Keystone goes ahead; only the Open Season knows for sure

View reading list, sources and resources at www.watershedsentinel.ca or www.sqwalk.org

The Pipelines

Pipeline (New Capacity)	Capacity (b/d)	Cost (Can \$million)
Kinder Morgan TMX-1, 2 & 3	475,000	2,400
Kinder Morgan TMX-North	400,000	2,000
Enbridge Gateway	600,000	2,500
Enbridge Alberta Clipper (Phase 1&2)	800,000	2,600
Enbridge Bullet	400,000	4,300
TCPL Keystone	590,000	2,500
Altex Bullet	250,000	3,600
Total	3,515,000	19,900

TRANS MOUNTAIN EXPANSION PROJECTS
 Trans Mountain system serves BC & WA
 Edmonton to Burnaby & NW Washington
 Owner: Kinder Morgan
 Current capacity: 225,000 b/d

TMX-1
 Adds 75,000 b/d ; \$595 million
 Open Season received "strong support"
 NEB approval expected late 2006
 TMX-1,2,3 high likelihood of completion

TMX-2
 Adds 100,000 b/d; \$900 million

TMX-3
 Add 300,000 b/d; \$900 million

TMX-North
 New 400,000 b/d; \$2 billion
 Valemont-Kitimat. Same issues as Gateway

NAFTA - Out of Proportion

Article 605(a) of the North American Free Trade Agreement (NAFTA) states that a government of a party to the agreement (Canada, US, Mexico) cannot change the proportion of the energy it exports to another party. Consequently, Article 605 is often referred to as the "proportionality" provision in NAFTA.

In agreeing to 605, Canada signed away the country's energy autonomy, and tied the hands of any future government that might want to try to regain a measure of national control of Canada's energy industry. Mexico was smarter than that, and did not agree to Article 605.

In the last five years, Canada has exported about 65% of the oil it produces to the US. Virtually all of the expected increase in production — a near doubling of output, and all of it from the oil sands — is likely to be exported to the US. As a result, that 65% export figure will rise significantly. And it won't be reversible by government policy.

This increase in US export proportion over the next ten years could be mitigated by reducing the amount of oil Canada imports for the Atlantic provinces, Quebec and Ontario or by exporting to other countries. Enbridge's Gateway, one of the proposed pipelines, intends to do just that, selling to China and other Asian markets.

⇐ *Fill Er Up continued*

overheated, in which prices are at historical highs, and for which no relief is forecast.

Most of the gas that would be shipped in the Mackenzie Gas Pipeline, if it is built, will end up in the oil sands. Another source of gas for the oil sands could be liquefied natural gas (LNG) imports from overseas. Kitimat LNG, Canada's first west coast LNG import facility, was recently approved by the British Columbia Environmental Assessment Office.

The only alternative to natural gas appears to be nuclear energy. It's not too far fetched. Energy Alberta Corp. already has a deal with Atomic Energy of Canada Ltd., and is proposing a project using the Candu reactor to sell steam to several oil sands producers.

Takeaway transportation pipelines

There are four groups of pipelines which are being expanded, modified or proposed related to the oil sands.

1. An ever-expanding network of pipelines that connect the growing multitude of oil sands extraction projects in northern Alberta to the main upgraders and hubs at Edmonton and Hardisty, Alberta.

2. Long distance transportation pipelines that will "takeaway" or move the oil from Canada to the west coast or to the US.

3. Within the United States itself is a network of pipelines that move oil to hubs and refineries, and which distribute oil to end-users.

4. "Diluent" pipelines. This fourth group of pipelines serves an essential function for the bituminous crude produced in the oil sands. This stuff is so viscous — imagine cold molasses — that it needs to be diluted to move through a pipeline efficiently. The diluent, typically a "condensate" byproduct of natural gas processing, is added to the oil, retrieved at the delivery end of the pipeline, and either used or recycled — piped back to Alberta.

The takeaway transportation pipelines, the second group, are the multi-billion dollar energy arteries driven by the enormous economic forces at play — forces unleashed by US demand for oil.

Canada at present has oil pipeline capacity, from just three pipelines, sufficient to transport just under 2.5 million barrels per day (MMb/d) of oil from producing areas to distribution hubs and end-user markets.

In April 2006, with oil prices soaring above \$70 and no indication of any resolution to so many unsettling and violent political events around the globe, particularly in the Persian Gulf, the Canadian Association of Petroleum Producers (CAPP) stated that "pipeline capacity must be expanded to move the growth in oil production to markets

— enough to accommodate an additional 2.5 million barrels of crude oil a day by 2020."

Canada produces oil from three sources.

- Offshore production from the Atlantic coast, for which no appreciable change in production is anticipated;
- Conventional production from the Western Canadian Sedimentary Basin (WCSB), from which production

has been declining steadily since about 1999. The WCSB is the massive petroleum producing area that underlies much of Alberta, northeast BC, and parts of Saskatchewan and the Northwest Territory;

- Oil sands production. The chart shows clearly the growth in Canadian oil production from the oil sands, even as conventional production declines.

The consensus of agencies that analyze these things — particularly the National Energy Board, CAPP, and the US Energy Information Agency is that all available surplus takeaway capacity will be used up around 2007-2008. There are already frequent allocation constraints leading to apportionment. Within ten to fifteen years, pipeline capacity will need to double.

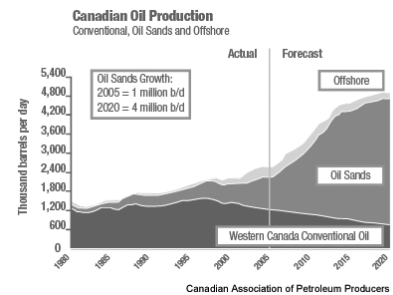
That's a lot of oil to move.

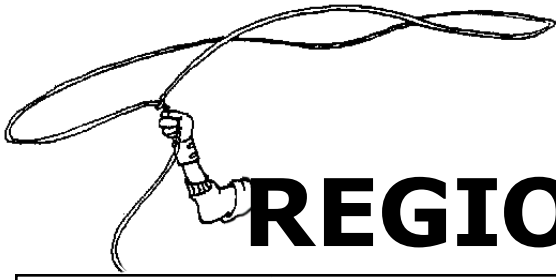
For producers, this is an emerging crisis. Their game is selling oil. Without the infrastructure necessary to move that oil to markets, they have no game.

Pipeline companies also see this crunch coming, understand the business opportunity, feel the pressure from producers, and have been introducing expansion projects and new pipelines for a couple of years.

Twenty billion in new projects have emerged, with the capacity to transport an additional 3.5 million barrels per day of oil to markets, most of them in the United States. With forecasts that 2.5 million b/d of additional capacity will be required, and a regulator inclined to grant CPCNs like it's handing out gift coupons, it could be that many of these pipelines actually will get built. Caught up in the interplay of the US addiction to oil, NAFTA, and plain old greed, northern Alberta will be torn apart and Canada will lock itself into pushing its oil as quickly as possible out of the country.

As all that oil is produced, and ultimately used, greenhouse gas production in North America will accelerate unabated.





REGIONAL ROUNDUP

Coal, oil, hydro, the world seems to be obsessed with energy these days, and a lot of that energy carries very bad vibes indeed. In BC much like the rest of the West and the rest of the country, the energy debate rages.

BC's Offshore Moratorium

They Want You to Unbelieve It!

The government and corporations like Enbridge are working a strategy to erode the public understanding and consensus that a moratorium exists. That's a change from a couple of years ago when the Royal Society and the Priddle Commission were tasked with terms of reference from a government that agreed a moratorium did, in fact, exist.

We are witnessing a deliberate campaign to change our minds, and to convince us of something other than what we have believed, up to now, is true. If the strategy is effective, the public will begin to unbelieve the moratorium; it will become as insubstantial as melting frost on a winter window, and a critical precedent could be established.

The game is at its most intense at the National Energy Board Gateway pipeline proceeding. In April, Pembina Institute and a number of environmental organizations wrote to the NEB, advising that the pipeline review cannot proceed without resolution of the moratorium issue. Gateway responded that "there is in fact no restriction on the movement of tankers into and out of Canadian ports."⁷

If intervenors abandon this matter, or Gateway wins the argument before the NEB or in court, we're at square one in terms of protecting the coast of BC from tankers, seismic exploration and drilling.

Arthur Caldicott

Coal Power for BC Not Cheap at Any Price

In August, BC Hydro awarded power contracts to two coal-fired power plants, one near Princeton, at the head of the Similkameen Valley, and one in the south Peace region, north of Tumbler Ridge. By all accounts, BC Hydro had its arm twisted behind its back, and was forced to accept the coal by Richard Neufeld's desire to please the coal barons, and the government's misguided belief that "cheap power" is all that matters, regardless of the environmental cost.

We should celebrate the fact that BC Hydro also awarded three contracts for wind power, with BC's first turbines to be installed in the Peace and near Prince Rupert, but that is overshadowed by the decision to burn coal to generate electricity for the first time in BC's history.

This, at a time when the alarm signals about global climate change could not be more serious. Together, the coal plants will release as much CO₂ as 300,000 cars, over 30 to 40 years.

They will also release filthy air pollutants, at a time when the BC government, in its Five Golden Goals, has pledged to "Lead the world in sustainable environmental management, with the best air quality ... bar none."

Compared to the Sumas 2 power plant in Washington State which the government rightly opposed, these plants could emit up to 7 times more particulate matter, 72 times more NO_x, and 200 times more SO_x, as well as mercury, a known neurotoxin.

What are they thinking? Are the Ministers and staff responsible for this in complete denial about global climate change? There is no shortage of green, sustainable energy to meet our needs, combined with the greater efficiency.

And why is the NDP so silent?

BC may seem to be a long way from the Amazon, but we live on a perishably small planet, where these things are very closely connected.

Please, let your MLAs know that coal-fired power is completely unacceptable in BC. We may not be able to do much about the Amazon, but we can at least stop this.

Guy Dauncey, EcoNews, September 2006

In Memorium

"It is unfortunate that some feel that it's an "either/or" concerning Site C. Nobody is arguing that deforestation, coal, or petroleum extraction is a "good". But to suggest that somehow construction of Site C would be somewhat of an improvement does not stand scrutiny. Further, it seems naive to suggest that (for example) coal extraction will cease once Site C has been constructed. This raises the issue of our being conditioned to accept "development" as a right and a given; it seems to me it is our responsibility as 'environmentalists' to remind the public of the real issues and to offer what may seem to be hard choices!"

*David White, artist, educator and activist,
who died suddenly in July*

from our islands .com



island marketplace

fine art
gourmet foods
island music
local crafts

island homes & lands

build local resources
developer chronicles
free home listings

shop . sell . read . contribute

a new community website for our b.c. islands

IRIDOPHORE

a design resource for the biological sciences

Rachel Ogis B.Sc.

rachel@iridophore.com

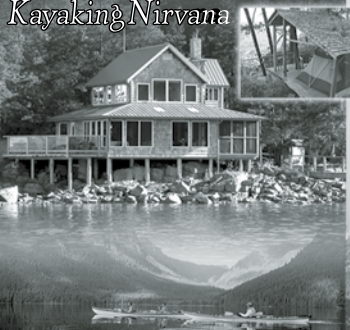
250.537.8852

web design

salt spring island, bc

www.iridophore.com

Desolation Sound Kayaking Nirvana



New!

Waterfront Tent & Breakfast Accommodations

Kayak/Yoga Retreats
Wildlife & Bird Watching
Holidays • Meetings • Clubs

TAI-LI-LODGE

Cortes Island, British Columbia

www.taililodge.com

1-800-939-6644 or 1-250-935-6711

QUADRA CREDIT UNION

The Discovery Island's Full Service
Financial Cooperative

Serving our members since 1941

Quadra Island Office – 250 285 3327

Cortes Island Office – 250 935 6617



www.quadracu.com



MISTY ISLES ADVENTURES

CORTES ISLAND, DESOLATION SOUND

- Sail Charters on 43 ft. Schooner
- Guided Kayaking Day Trips
instruction & rentals
- Kayak Mothership trips
- Nature Hikes

(250) 935-6756

mistyis@island.net

www.mistyislesadventures.com

Cortes Connection



Take the **Bus** to
Cortes Island

935-6911

CONNECTING YOUR MONEY WITH YOUR VALUES

Caring Where Your Money Is Invested
Can Go Hand In Hand With Good Returns

THE PINCH GROUP



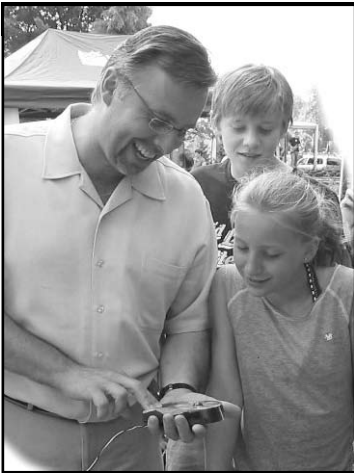
250-405-2468 or 1-877-405-2400

For more information on Socially Responsible
Investing, call for a free package or visit:

www.pinchgroup.ca

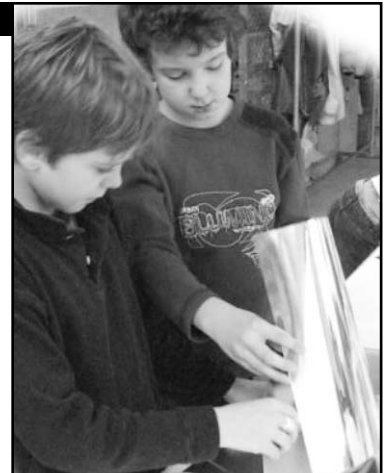
RAYMOND JAMES

Member CIPF



Kids Power Up Solar

by Robert Matthies



Kids' discoveries at Vancouver Museum and Telus Science World workshops parallel or exceed real-world sustainability science.

Picture this: Wacky-looking scraps of bright metallic cardboard held together by sticky tape that brings a stone to nearly 200°F in two minutes, using only the sun. It doesn't look like a conventional solar oven, more like a science-fiction movie prop. Created, not by a film-studio artist, but by an 11-year old attending the Vancouver Museum's workshops on solar power. Solar ovens have commercial potential, and might even reduce forest fires, if we can convince campers to use them.

The next scene is not from a Silicon Valley board room, where the Tesla electric sports car is nearing final engineering work: Six gifted young men and one young woman discuss the merits of various energy sources for a vehicle of the future. And, just like Popular Mechanics editors, they decide that the hydrogen fuel-cell vehicle isn't as practical as a solar-powered battery vehicle. This group's average age is probably 12 years, and this scene was actually at Pinewood Elementary School in Delta. The Tesla electric car is the first production car created by software and computer engineers, spurred on by the hit feature documentary, "Who Killed The Electric Car?"

Here's another example: Wired magazine featured a light-concentrator based on supercomputer calculations programmed by math wizards. These math geniuses' parabolic dishes will allow a solar panel to exceed its usual performance. Only math post-grad students equipped with supercomputers can do this and save the planet, right? Well, here's what happened at the 30 Days of Sustainability event at Telus Science World: A young boy created a parabolic panel that allowed his model electric car to run without direct sunlight – it worked in the shade, and, at a good speed relative to other solar cars running under a full sun! We named this parabola, "Marek's Curve", in his honour. You can probably find Marek's Curve with Google.



Why are we, adults, throwing alkaline batteries away? Mountain Equipment Coop alleges that small household batteries cause 50%-70% of heavy metal contamination in landfills. As any American familiar with the billions of dollars in the Superfund cleanup will tell you, all landfills will eventually leak. And that toxic sludge will bubble up in our children's children's drinking water, and litigation lawyers will issue class action writs, decades from now. Adults don't know this, but scores of pre-teens in Vancouver attending Solar Power Roadshow's workshops have experimented with everything from gravity to freezing temperatures to revive single-use batteries. Students who succeeded in bringing used batteries back to 1.5 volts have shared their methods with others. Vancouver now has dozens of potential recycling entrepreneurs, since a new brand-name alkaline retails for \$2 each. More than one pre-teen vowed to become the 'Bill Gates' of battery-revival, as there are 12 billion alkalines disposed of annually.

Given what has been shown by these kids, I respectfully suggest to other educators, to consider allowing elementary school students to investigate sustainable energy technology without showing already-existing 'adult world' models because there are useful discoveries being made by pre-teens, as we've seen in Solar Power Roadshow's free-form workshops.

Edu-fun at the Nature Matters festival: <http://solarfun-surrey.blogspot.com/>

Sustainability magic at Canada Day: <http://sustainabilitymagic.blogspot.com/>

Robert Matthies is a Vancouver innovator with an interest in renewable energy and sustainable living.



BC Coastal Environment: 2006 Snapshot on Sustainability Status

A report on BC's coastal environment, produced by the BC ministry in collaboration with Fisheries and Oceans Canada, the University of British Columbia Fisheries Centre, and the University of Victoria Geography Department, with key contributions from Environment Canada, reveals several trends worth thoughtful consideration.

Many of BC's ecosystems are relatively intact, particularly in the northern and central coast. Ecosystem loss is greatest on the South Coast where the human population is most concentrated. This area formerly contained some of the highest levels of biodiversity in the province, but it has been severely altered ecologically. It is likely that climate change will create additional pressure on ecosystems that are already stressed.

All results, including the full text of the papers and the data sets underlying the graphs, are available to the public on the project website (www.env.gov.bc.ca/soe/bcce/). The website provides summaries of key information and links for further reference.

Results

- Over the next 20 years, the coastal population is projected to increase by a million people.
- Sewage discharged into the Georgia Basin increased by more than 60% between 1983 and 1999. In 2004, more than half of the shellfish harvesting areas in the Georgia Basin were closed due to sewage contamination.
- Sea surface temperature has risen along the entire coast, with the North Coast and the central Strait of Georgia showing the largest increases. Deep-water temperatures have also increased in inlets on the South Coast. With the exception of areas of the coast being pushed up due to geological processes, relative sea level has risen along the coast.
- In BC, the largest source of greenhouse gas emissions comes from transportation, including commercial and

private vehicles. From 1990 to 2002, greenhouse gas emissions in BC rose an average of 2.1% per year, which is less than the Canadian average of 2.8% annually. [At this rate of increase, by 2025, these emissions will have doubled from 1990 levels – Ed].

- A wide range of contaminants are detectable in BC's coastal environment. Overall, environmental concentrations of PCBs, dioxins and furans, mercury, DDE and other organochlorine pesticides have fallen as a direct result of regulatory controls instituted in the 1970s–1990s. Except at contaminated sites, concentrations of these substances in air, water, and the general environment are low.
- Dioxin and furan levels in pulp and paper mill effluents have dropped to non-detectable levels since 1990. Environmental monitoring shows a corresponding 95% decrease in dioxins and furans in the tissue of crabs and an 85% decrease in sediment contamination near most mill outfalls. Not quite half of the area of shellfish beds closed to harvesting due to dioxin and furan contamination has been reopened.
- Persistent contaminants, such as PCBs, dioxins and furans, already in the environment continue to circulate and accumulate in animals near the top of the food chain. Southern resident killer whales are among the most contaminated marine mammals in the world.
- New industrial contaminants continue to emerge as issues, as exemplified by a new class of persistent contaminants, brominated flame retardants. Levels have been rising rapidly in the general environment and in the tissues of animals and people.
- Despite controls, there are still continuous, low-level inputs of contaminants to the provincial environment.
- As of January 2006, BC and Alberta had the largest proportion of protected areas in Canada — including

recent announcements, the protected area for BC is 13.8%.

- Results of a risk assessment survey showed that experts considered that more than one-quarter of coastal protected areas were subject to high impacts from forestry, mining, and agricultural activities outside of the protected area.
- As of January 2006, 46% of the land on the northern and central coast was ecologically intact (at least 2000 ha in size and 5 km away from roads), compared to the south coast, which had only 2.8% of the area ecologically intact. A preliminary analysis found that less than 25% of the continental shelf ecoregions remains undisturbed by human activity.
- The rugged BC coast, with its complex geography of deep fiords and countless islands, is home to animals that live nowhere else. It is one of the most biologically diverse areas in Canada. Of all the species in BC, two-thirds of the mammals and three-quarters of the freshwater fish live only in the coast region. One-quarter of all remaining coastal temperate rainforests in the world are found in BC.
- In 2005, 86 coastal BC species were listed as locally extinct, endangered, or threatened by the Committee on the Status of Endangered Wildlife in Canada.
- Indicators show that the status of coastal vertebrates as a group has declined over the past 14 years; 4 new species were added to the red list, and there has been no improvement in status for most coastal vertebrates that were on the red list in 1992. Killer whales have been added to the provincial and federal lists of species at risk.

- Rare and sensitive ecosystems mapped on eastern Vancouver Island lost nearly 1400 hectares (or 5%) over the past 10 years.
- At least 629 species of alien plants occur on the BC coast and about 65% of these have become widely established. Forty-one species of vertebrates have been intentionally or accidentally introduced to coastal BC.
- Overall, although there are conservation concerns for some populations or stocks of fished species in BC, many appear to be doing well with an estimated 81% of the salmonid populations in BC (outside of Strait of Georgia) and the Yukon, at no or low risk of extinction.
- Many inshore rockfish species are at low abundance levels or are experiencing poor recruitment, and 89 areas, especially on the south coast, were closed to fishing at the time of writing.
- Stock assessment outlooks for 2004 classed 49% of managed salmon stocks in BC as stable, increasing, or well above target abundance, but about 13% of managed salmon stocks are in the category of greatest concern.

The report concludes, in relation to fish stocks: “Marine ecosystems are complex, and determining definitive causes for observed changes, whether positive or negative, is rarely straightforward. Whether the decline or low abundance of many of the species discussed in the indicators is related to overfishing, or to unfavourable ocean conditions perhaps related to global climate change is not known.”

In the area of ecosystems and biodiversity, the report notes that many of BC's ecosystems are relatively intact, particularly in the northern and central coast. However, ecosystem loss is greatest in the South Coast where the human population is most concentrated. This area formerly contained some of the highest levels of biodiversity in the province, but it has been severely altered ecologically.

A warning note is struck that climate change will likely create additional pressure on ecosystems that are already stressed.



An Energy Descent Action Plan for BC?

When the production of oil fails to meet demand, a scenario known as Peak Oil, what then? World Peak Oil is predicted to occur sometime between 2008 and 2010, though some say it has already happened, and “the event” will be followed by a steady decrease of available energy. This could be a collective opportunity for society to transition to true sustainability.



by Norberto Rodriguez dela Vega

Rob Hopkins describes this process of peak oil and decrease on the Transition Culture website as “the continual decline in net energy supporting humanity, a decline that mirrors the ascent in net energy that has taken place since the Industrial Revolution.”

The period of decline, coined by ecologists Howard and Elisabeth Odum as energy descent, is a transitional stage that could be considered the fodder of futuristic horror movies or could be a collective opportunity for society to transition to true sustainability.

In their book, *A Prosperous Way Down*, the Odums take a positive perspective: “That the way down can be prosperous is the exciting viewpoint whose time has come. Descent is a new frontier to approach with zeal...if everyone understands the necessity of the whole society adapting to less, then society can pull together with a common mission to select what is essential.”

Enter the EDAP

One of the most useful visioning and policy guiding tools to deal with the transitional period of decreasing energy is the Energy Descent Action Plan (EDAP). An EDAP is a local plan that goes well beyond issues of energy supply, to look at across-the-board creative adaptations in the realms of health, education, economy and much more. An EDAP is basically a proactive community planning process, done in an integrated, multidisciplinary way. It provides direction

to local government, decision makers, groups and individuals with an interest in making the place they live a vibrant and viable community in a post-carbon era.

The Permaculture Connection

One framework that can be used in the planning process is inherent in permaculture. According to *Wikipedia*, permaculture “seeks the creation of productive and sustainable ways of living by integrating ecology, landscape, organic gardening, architecture and agroforestry. The focus is not on these elements themselves, but rather on the relationships created among them by the way they are placed together; the whole becoming greater than the sum of its parts.”

Most recently, in a 2004 interview, David Holmgren explained the relationship between permaculture and Peak Oil like this: “In a world of decreasing energy, permaculture provides, I believe, the best available framework for redesigning the whole way we think, the way we act, and the way we design new strategies. It doesn’t mean to say that everyone’s going to have a chook tractor, a vegetable garden or some other permaculture technique. But the thinking behind permaculture is really based on this idea of reduced energy availability, and how you work with that in a creative way. That requires a complete overturning of a lot of our inherited culture.”

Mark Your Calendars!

FOCI’s 5th annual Sustainability Home Show will take place on Saturday, October 21st.

The theme is Food Sustainability, highlighting local food and food security.

There will be speakers and interactive booths, ranging from seed saving, to food preservation and apple cider pressing.

We will have local organic food for sale for lunch and door prizes.

This event is always an October highlight on Cortes Island.

For more information, please call the FOCI Resource Centre, (250) 935-0087

The first EDAP was written in 2005 by permaculture students in the small Irish town of Kinsale. The focus was on “how Kinsale could navigate this uncertain time by setting out a clear vision of how a lower energy future could be, and then identifying a clear timetable for achieving it.”

The resulting plan components cover most aspects of life in Kinsale: food; youth and community; education; housing; economy and livelihoods; health; tourism; waste and energy. Each of these components details The Present, The Vision, followed by Practical Steps in chronological order, and lastly, References.

The EDAP process includes;

- 1. Community education,** consultation, and networking. On Cortes Island, we can begin with our annual Sustainability Home Show where we look at many of these issues, and we have the FOCI Resource Centre.
- 2. Research.** Local food mapping and security, researching wind flows, solar radiation, local skills, current energy mix and vulnerability, etc.
- 3. Producing the plan.** Creating a visionary but grounded document condensing all the best of the community feedback and ideas. A planning charrette is a perfect tool to use for this step.
- 4. Gaining political support.** For BC, this could be from regional district/municipal up to the provincial level, depending on the size of the city, town or community.
- 5. Implementation.** Sometimes the most difficult step, but some facilitation ideas include awards and prizes, continuing consultations, newsletters, community participation activities, celebrations and recognition.

We know that BC is a major oil user, unsustainable in many aspects. We cannot ignore the fact that our resources are limited and that our current focus on economic growth takes priority over everything else. It is time to develop our own Energy Descent Action Plan!

A sampling of references (available at the FOCI Resource Centre)
 Transition Culture - <http://transitionculture.org/>
 Kinsale EDAP - <http://www.fuellingthefuture.org>
 Heinberg, R. (April 2003) *The Party’s Over: Oil, War and the Fate of Industrial Societies*.
 Holmgren David (2002) *Permaculture: Principles and Pathways Beyond Sustainability*.
 Kunstler, J.H. (April 2005) *The Long Emergency: Surviving the Converging Catastrophes of the 21st Century*.
 Odum H.T & Odum E.C (2001) *A Prosperous Way Down: Principles and Policies*
 Ruppert, M (October 2004) *Crossing the Rubicon: The Decline of the American Empire at the End of the Age of Oil*.

Permaculture Design Principles

Each principle is a positive action statement and a traditional proverb that emphasises the negative or cautionary aspect of the principle.

Principle 1: Observe and Interact

Beauty is in the eye of the beholder

Principle 2: Catch and Store Energy

Make hay while the sun shines

Principle 3: Obtain a Yield

You can’t work on an empty stomach

Principle 4: Apply Self-regulation and Accept Feedback

The sins of the fathers are visited on the children unto the seventh generation

Principle 5: Use and Value Renewable Resources and Services

Let nature take its course

Principle 6: Produce No Waste

A stitch in time saves nine. Waste not, want not

Principle 7: Design From Patterns To Details

Can’t see the wood for the trees

Principle 8: Integrate Rather Than Segregate

Many hands make light work.

Principle 9: Use Small And Slow Solutions

The bigger they are, the harder they fall. Slow and steady wins the race

Principle 10: Use and Value Diversity

Don’t put all your eggs in one basket

Principle 11: Use Edges, Value the Marginal

Don’t think you are on the right track just because it is a well-beaten path

Principle 12: Creatively Use and Respond To Change

Vision is not seeing things as they are but as they will be
 —Permaculture: Principles and Pathways Beyond Sustainability, David Holmgren, 2002





MADE HERE. READ EVERYWHERE. BC MAGAZINES.

From Tofino to Tokyo, more than one million people read BC's award-winning magazines. Do you? For a limited time only, win monthly prizes and save a bundle on special trial subscriptions at www.bcmags.com.

 BRITISH COLUMBIA ASSOCIATION OF
MAGAZINE PUBLISHERS

The
WICKANNISH INN
A FINEST RESTAURANT

 THE SALMON HOUSE

Canada  We acknowledge the support of the Government of Canada through the
Canada Magazine Fund of the Department of Canadian Heritage for this project.

Sustainers of the Watershed Sentinel

Your generous help allows us to provide you with a strong independent voice for environmental issues, activism, and social justice. The following supporters have brought this issue to all our readers. You keep us publishing every issue and we depend on you.

Sentinels

Dr. Philip Chambers, Lantzville BC • Mel McDonald, Victoria BC • Chris & Beth Napper, Whaletown BC • Michael Redican, Quathiaski Cove BC

Friends

Across Borders Media, Victoria BC • Kathy Dunster, Bowen Isld. BC • Brian Grant, Victoria BC • Mike Thomsen, Victoria BC • Peter Johnston & Sue Wheeler, Lasqueti Isld. BC • RE Wolf, Calgary AB

Patrons

Louis & Vera Broten, Edmonton AB • Jilly & Lew Carlino, Whaletown BC • Roger Colwill, Victoria BC • Anicca de Trey, Manson's Ldg. BC • Frank English, Lake Cowichan BC • E. Golds, Port Moody BC • Good Libations, Cortes Island BC • David & Ann Hiatt, Whaletown BC • James Hickling, Vancouver BC • Labour Environment Alliance Society, Vancouver BC • Paul MacGillivray, Vancouver BC • Hannah Main, Victoria BC • Dorothy and Des McIntosh, Santa Barbara CA • Stefan Ochman, Bamfield BC • Glen Osborne, Gabriola Isld. BC • Smokey's Bike Shop, Quadra Isld • Catherine Soudoplatoff & Joe Prochaska, Nashville TN • Nina Raginsky, Saltspring Isld. BC • Sylvia Rehse, Honeymoon Bay BC • Norberto Rodriguez dela Vega, Whaletown BC • Harriet Rueggeberg, Lantzville BC • Paul Sanborn, Prince George BC • Penny Sanger, Ottawa ON • Lucretia Schanfarber, Whaletown BC • Basil & Jill Seaton, Jasper AB • Ronni Solbert, Randolph VT • Lesley Taylor, Richmond BC • Ray Woollam, Duncan BC

Sustaining Subscribers

Steve Ablitt, Whaletown BC • Alberni Environmental Coali-

tion, Port Alberni BC • Arne & Flora Baartz, Lasqueti Isld • J. Barber-Starkey, Sidney BC • Douglas S. Brown, Vancouver BC • John & Sharon Cashore, Coquitlam BC • Vivian Chenard, Saltspring Isld. BC • Citizen's Stewardship Coalition, Port Alberni BC • Alan Dolan, Victoria BC • Henry Dumouchel, Alexandria ON • Ralph Garrison, Manson's Ldg. BC • Elaine Golds, Port Moody BC • Alison Graves, Nanaimo BC • Barbara Graves, Lantzville BC • Joyce Baker & Ray Grigg, Quathiaski Cove BC • Karen Hansen, Prince Rupert BC • Just Havelaar, Courtenay BC • Wendy & Hubert Havelaar, Whaletown BC • A & E Haythorne, Victoria BC • Shirley & Harry Holmes-Holman, Denman Isld. BC • Barb Hourston, Nanaimo BC • John C & Cathie Howard, Hornby Isld BC • Marian Halle & Jared Irwin • Joy Jeffries, Hornby Isld. BC • Paul Brewer & Darsi Kamay, Manson's Ldg. BC • Jim Kearney, Manson's Ldg. BC • Robin Keller, Hornby Island BC • Elaine Kerr, Courtenay BC • Jeff King, Abbotsford BC • Judith Lawrence, Hornby Isld BC • Ingmar Lee, Victoria BC • Ruth Masters, Courtenay BC • Hugh McNab, Surge Narrows BC • Delphin, Samantha and Mike Moore, Manson's Ldg. BC • Cathy & Don Morrison, Victoria BC • Pam & Don Munroe, Courtenay BC • M. Murphy-Falkner, Powell River BC • Sakiko Neuffer, Whaletown BC • Oonagh O'Connor, Sointula BC • Tom Pater, Kyuquot BC • Jo Phillips, Sooke BC • Brian Pinch, Victoria BC • Norman Riggs, Powell River BC • Martin Rossander, Powell River BC • Paul Senez, Victoria BC • Joy & David Shipway, Manson's Ldg. BC • Joel & Dana Solomon, Manson's Ldg. BC • Dr. Roy Sutherland, Victoria BC • Laura Trent, Victoria BC • Milo & Virginia Wilcox, Whaletown BC • Susan Marie Yoshihara, Denman Isld. BC • Ruth & Fred Zwickel, Manson's Ldg. BC

And All Those Who Wish To Remain Anonymous

Sustaining Subscribers

(\$ 50 - 99 annual donation):

Sustaining Subscribers assist with the copies of the *Watershed Sentinel* in colleges, universities and libraries.

Friends of Cortes Island sponsors public education features about sustainable living for Georgia Strait and the islands - features that focus on renewable energy sources, environmentally friendly building materials, alternative sewage treatment, practical tips on "Living Green." To receive a tax receipt, **please make your donation to FOCI.**

Watershed Stars

(\$ 1,500 - 4,000 annual donation):

Watershed Stars help us find, follow and write the stories, print the magazine, distribute it, and sell subscriptions and advertising.

Watershed Sentinels

(\$ 500 - 1,499 annual donation):

In days of yore, sentinels were stationed to herald the approach of threats. Our *Sentinel Supporters* allow us to keep watch on the issues and to inform concerned citizens and activists.

Friends of the Watershed Sentinel

(\$ 200 - 499 annual donation):

Friends of the Watershed Sentinel help us offer constructive solutions to problems, and praise successes that lead toward an environmentally sustainable future.

Patrons

(\$ 100 - 199 annual donation):

Patrons support the public education program that is an integral and essential part of our publication.

Watershed Sentinel,
P.O. Box 39,
Whaletown, BC
Canada V0P 1Z0.



Thank you to all those listed above and to the many others without whom this magazine could not publish!

The First Time is Scary

Betty Krawczyk, the elder arrested for blocking construction of the Olympic highway to Whistler, has some words about Contempt and the Law

It's true. Doing something important the first time is scary, whether it's sex, inviting the boss for dinner, getting behind the wheel of a car, or committing your very first act of civil disobedience.

But hold on, you may say. The first three instances are legal, right? As long as it's non coercive and between consenting adults? Civil disobedience is another matter. Besides having a bad reputation, civil disobedience is against the law, right?

Not exactly. There is no law against civil disobedience as such. However, many different actions of civil disobedience are described in law books as obstructions of one kind or another that citizens might indulge in when they get fed up with business as usual. Which is exactly what happened at Eagleridge Bluffs. Gordon Campbell's promise of "The Greenest Olympics Ever" while he was in the very act of blasting Eagle Ridge Bluffs to bits was just too galling.

Nobody wants to find themselves afoul of the law. Nobody wants to stand before the icy stare of a judge who is displeased with them. It's not comfortable. But let's look at the big picture. When citizens are willing to take the responsibility of civil disobedience, civil disobedience evolves into the body of law. Instead of civil disobedience threatening the structure of law, it actually strengthens it.

How's that? Civil disobedience strengthens the law? Yes. The history of the evolution of law that governs human rights is primarily the history of civil disobedience. It is citizens, by their actions, who turn unjust laws into just ones, not the courts or the legislatures. In Louisiana (raised there) I witnessed how civil disobedience of the black people morphed into laws of equality for all races. And I've studied the history of the WOBBLYS (our first unionists) who were jailed and even killed for trying to legalize unions. And along with these pioneers were all the women who resorted to civil disobedience in order to gain the vote, or even be considered persons under the law. First Nations? Look at their history of trying to regain some of their ancestral lands in BC. Civil disobedience is huge for them. In some areas it is the only way First Nations have made any gains.

In fact, every law and ruling in the criminal code and the charter dealing with the humane treatment of citizens is either the direct result of, or has been heavily influenced by, some group of citizens' previous civil disobedience. And because of this sensitivity to the evolution of law (never se-

riously taught in history books, or even in law schools for that matter) I actually love the law. And because I love and respect the law, I want its language to reflect an accurate description of what I did at Eagleridge Bluffs.

I blockaded a roadway. I want to be charged for blockading a roadway, which is covered under the criminal code and the *Highways Act*. I did not blockade the court. I did not feel contempt for the court. I did feel contempt for Gordon Campbell's lying promises (still do) and his utter lack of respect for Canadian (BC) sovereignty, and contempt for Kiewit and Sons, a US firm which doesn't even mention the environment in their braggadocio and who wants BC citizens to pay for their court costs. I also feel a healthy contempt for the way Sgt. Almas arrested me and others, waiting for a foreign company to order our arrest rather than arresting immediately, if he thought we were breaking the law. And Attorney General Wally Oppal? He is the one who instructs police on how they should arrest, and why is he under the control of a foreign company?

In spite of this stacked deck (alliance between courts, police, Kiewit and Sons and Gordon Campbell) we accused have a right in court to declare that we are not guilty of the charge of contempt of court. We all have the right to say that section fifteen of the Charter of Rights and Freedoms guarantees everybody equality under the law and that when the contempt of court charge (which stands outside the Charter and the criminal code) is used to place us into a special category where there is no defense, then that's wrong.

We also have the right to use section 2b of the charter, which protects the rights of citizens who attempt to give meaning to others when involved in protests. Certainly, all of the Eagleridge protectors were trying to convey meaning, that is, trying to make sense out of a mercenary provincial premier using the Olympic banner to hide eventual multi-billion dollar deals with private foreign contractors.

We, as citizens, have a right to fight for our rights under the charter, and for our complaints to be taken seriously. All of us arrested at Eagleridge Bluffs, have an absolute right to plead *Not Guilty* in the courtroom. We have a right to argue that we shouldn't even be accused of contempt of court, that the charge itself is wrong. And in this process we may be influencing the law, even nudging it forward. Anything is possible.

Betty Krawczyk



Questioning 9-11

Scepticism Needs to Become Mainstream

by Jim Cooperman

There are not too many examples in history when a one-day event has shaped the course of an entire decade and perhaps even an entire century. What occurred on September 11, 2001 was that event and its repercussions impact the entire world and the environment. Some very disturbing questions about that day deserve more attention from the general public, the alternative media and all concerned about justice, human rights, peace and the environment.

Of all of human activities, it is perhaps war that has the greatest environmental impact. Besides the damage by bombs, armament and missiles, there are the impacts from the depleted uranium now used in armour and ammunition. And there is the immense amount of carbon and other pollutants released by military ships, planes and vehicles. Then there are the oil spills and fires that plague the Mid-east war scene.

The events of that day have been used by the powerful military-industrial complex as justification for the never-ending war on terror, as if the fictional forecasts by Aldous Huxley and George Orwell became reality. While

too many people still believe that Afghanistan cave-bound Osama Bin Laden and his 19 box cutter-wielding terrorists were responsible, one needs only to follow the money to understand the likely real reasons behind the infamous day's events.

Billions upon billions of dollars have gone into the supposed war on terror, including the five billion dollars spent in Afghanistan by Canada and over 300 billion dollars by the US in Iraq alone. Then there is the death toll: 32 Canadians in Afghanistan, 2601 US soldiers in Iraq and approximately 250,000 Iraq civilians. Wasted lives and wasted dollars that could have gone to solve more pressing problems or been used to pay off public debts. Much of this money has gone to the wealthy corporations that supply the military, such as Halliburton, Bechtel Group, Carlyle Group, General Dynamics, and the oil companies.

There is a growing movement that seeks the truth behind the events of 9/11 and there are dozens of websites, books, videos, and a magazine called Global Outlook that probe into the many disturbing questions surrounding the official version. Yet the mainstream media avoids the questions and marginalizes the movement as just more conspiracy theorists. The media seems to assist government's perpetuation of the war on terror by focusing attention on more questionable potential terrorism plots in Canada, the US and the UK.

The list of 9/11 circumstances that are questioned by various sources is extensive, but here are a few highlights.

1. It was impossible for the fires from airplanes hitting the towers to cause the explosions that brought the towers down in just 10 seconds, as airplane fuel does not burn at the temperatures required to melt steel and molten steel was found under the debris many days later.
2. Video evidence shows explosions in the towers as they fell in what appeared to be a controlled demolition, and earthquake detection equipment recorded the two explosions.
3. The steel was quickly cut into truck-size lengths, removed from the site and shipped overseas without proper examination.
4. No military jets were scrambled to deal with the threat after the first plane hit, even though there was plenty of time and this would have been the standard operating procedure.
5. World Trade Center building seven also came down in seconds from an explosion many hours after the first two towers fell, even though there were small fires in the building, which housed offices of the CIA, the US

Continued on Page 30 ⇨

← Questioning 9-11 continued

Secret Service, Securities Exchange Commission and the city's emergency management command centre.

6. The building's owner, Larry Silverstein (who incidentally received 7.2 billion dollars in insurance) was quoted that the fire department decided to "pull" building seven and fire fighters were told to leave before it collapsed. "Pull" is the term used to describe a controlled demolition.

7. It seems impossible for a large airplane to create the small hole that penetrated deep into the Pentagon, especially since there was little debris on the lawn outside. US vice-president Dick Cheney was even once quoted as saying that a missile hit the Pentagon.

8. The plans for taking military control of Central Asia, including regime change in Iraq, were developed by the Project for the New American Century, a neo-conservative think tank formed in 1997. The primary architects of these plans included Paul Wolfowitz, Richard Pearle, Richard Cheney and Donald Rumsfeld, all part of the first Bush Administration and now in power with George W. Bush. The Project's blueprint, published in September 2000, described the need for a "new Pearl Harbor" to create the public sentiment for such a war.

9. President Bush continued to read to schoolchildren for 25 minutes after he was told about the attacks, as seen in Michael Moore's documentary, *Fahrenheit 9/11*.

10. Revelations of profits made by insider trading related to the 9/11 attacks point to the top levels of US business and the CIA.

11. There were plans to invade Afghanistan in July of 2001, as troops were called up and were ready to invade by October 7, 2001.

12. Motives for the Afghan war include building oil and gas pipelines from Central Asia to the Arabian Sea.

13. FBI agents were prevented from pursuing investigations into the airline hijacking plot by senior staff in Washington DC.

14. The Bush administration repeatedly obstructed the efforts of the 9/11 Commission to learn how the attacks could have succeeded.

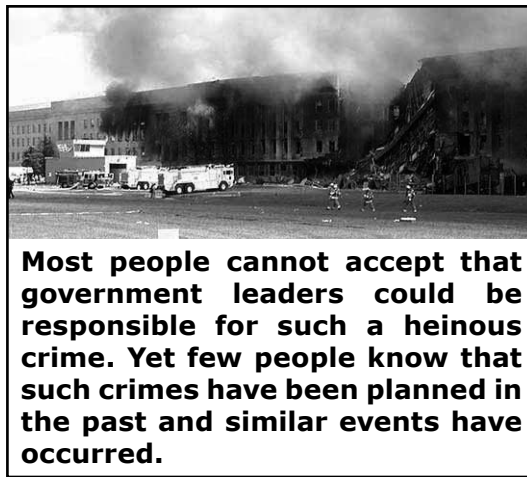
Most people cannot accept that government leaders could be responsible for such a heinous crime. Yet few

people know that such crimes have been planned in the past and similar events have occurred. The use of the phrase, "the new Pearl Harbor," refers to historical evidence that suggests the US government was aware of the potential for attack and allowed it to happen to get the country into World War II. The Kennedy assassination was convenient for those who profited from the Vietnam War. The Gulf of Tonkin incident was invented to get the public to support that war's escalation. Then there was the Operation Northwoods proposal to fake an attack by Cuba so that country could be invaded, although Kennedy nixed the plan.

The 9/11 Truth movement is now making 9/11 an issue for this fall's US elections. Numerous groups are working to initiate a new investigation into 9/11, including Scholars for 9/11 Truth and a group of family members who lost relatives in the towers and on the airplanes. Polls in the US show increased doubts about the official version. Despite all these efforts, questioning 9/11 has yet to become mainstream.

The events of that day, if properly investigated, could help to change the current course of history dominated by the never-ending war on terror. The repercussions of such a shake-up would trickle down to every level of society and could result in a new direction for the world, based on real human rights and justice that includes true environmental stewardship. Anyone who has any doubts about 9/11 should learn more about the issues and help spread the word.

Note: Most of the information in this article comes from *The New Pearl Harbor* by David Ray Griffin (Olive Branch Press, 2004) which provides all the sources in footnotes. Other information comes from the various 9/11 websites including www.whatreallyhappened.com, www.911truth.org, www.informationclearinghouse.info, www.wanttoknow.info, and one of the top google videos, Loose Change II, at www.loosechange911.com/ Look also for *Towers of Deception: The Media Coverup on 9-11* from New Society Publishers this September.



Most people cannot accept that government leaders could be responsible for such a heinous crime. Yet few people know that such crimes have been planned in the past and similar events have occurred.

Here Comes the Sun

Two companies, one in South Africa and one in California, have announced the ability to produce thin efficient solar cells from a copper-indium-gallium-selenide alloy (CIGS), at a quarter or less of current production costs. Nanosolar, the California company, backed by the founders of Google and insurance company Swiss Re, plans to have a plant “printing” the cells in San Francisco within a year. Thin solar films can be used in multiple applications, including roofing materials and glass.

Writing in the *Seattle Post-Intelligencer*, power executives Dave Freeman and Jim Harding suggest that, much like cell phones, these thin solar cells will transform the way we produce and distribute electrical energy. “Can — or should — any utility, or investor, count on the long-term viability of a coal, nuclear or gas investment? The answer is no. In about a year, we’ll see how well those technolo-

gies work. The question is whether federal energy policy can change fast enough to join what appears to be a revolution.”

— *Seattle Post-Intelligencer*, August 2006

Light Lite

A new study from Europe shows that artificial light now uses almost one-fifth of global electricity, but efficient technologies currently available could lower that consumption. Under current practices, the demand for energy for lighting would grow a startling 80% by 2030. If end-users install only efficient lamps, ballasts and controls that will save money over their life cycle, global lighting electricity demand would drop substantially and be almost unchanged from 2005 levels by 2030. These measures would save more than 16,000 million tonnes of carbon dioxide emissions over the same time frame.

— *International Energy Association*, June 2006,
<http://www.iea.org/>

HELP WANTED!

Volunteers needed to research, create and produce the Watershed Sentinel.

Contact editor@watershedsentinel.ca

Calling for: Production and volunteer managers, fact checkers, copy writers for news briefs, researcher/writers, cartoonists, subscription manager, circulation and donor development, proof readers, web master. Must be able to work via email on short notice with quick turnaround.

Also Ad representative(s) for BC, Vancouver, Vancouver Island and Toronto, generous commission.

PS: if you have already volunteered, your contact info may have been lost in an electronic disaster. Please forgive us and get in touch again.

LASQUETI ISLAND LAND

Selling 16.5 acres in a partnership of 160 acre property with 2 other owners. Very private, south facing, ocean views, forested (some old growth), one-acre A.L.R. bottom land. Road, irrigation pond, well, included. Five minute walk to marine park and protected boat moorage. One house and one guest cabin permitted. Grow your own food in your own watershed. Build and heat home with own wood. Offgrid living with renewable energy system. Great wind and solar potential, good winter mini hydro. Looking for partner with small ego, gentle nature, who wants to leave a little something for future generations. Not suitable for hunting retreat. Loggers, developers, real estate agents, flippers need not apply.

**Write: Wayne Bright, Lasqueti Island B.C.
V0R 2J0. Phone/fax: 250-333-8789**

Rent Paradise by the Week!

We offer marketing, booking, and care of select vacation homes on Cortes Island.

Whether you are looking for a vacation rental or want to rent your home out on a short term basis call today for more information.

Cortes Island
VACATION RENTALS

B.C. Travel Agent #35165
www.corteslandvacationrentals.com

1-800-939-6644
or 250-935-6711

COAST MOUNTAIN EXPEDITIONS

(250) 285-2823

Wilderness Kayak Adventures since 1987

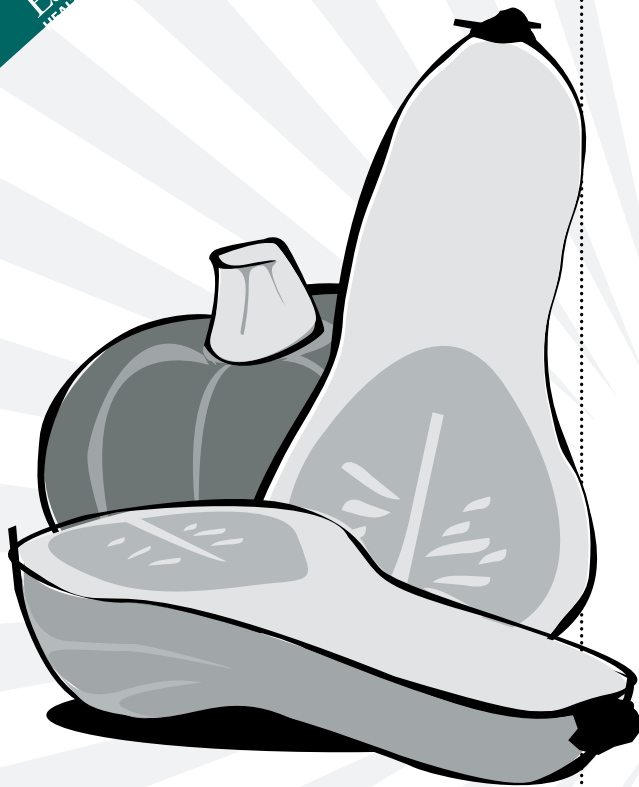
Discovery Islands BC

www.CoastMountainExpeditions.com

Vancouver's largest vegetarian food festival

TASTE of HEALTH

The Healthy Food Festival presented by Earthsave Canada



*Come and taste a whole
 new world of food choices!*

- Speakers • Cooking Demos
- Workshops • Children's Area
- Restaurants • Try-It & Buy-It Market
- Book Fair • Community Tables
- Fun & Laughter • Wellness Displays

Future of Food

Movie Screening: 5:30pm Sat & Sun
 Q&A session to follow

Other presentations include:

Simply Enough founder Rae Sikora
 "I used to be a vegetarian"

Raw Food chef and educator Paul Nison
 "The truth about raw diets"

More speakers and workshops on the web

FREE

The First 100 people on each day
 will receive a Healthy Shopper™
GOODIE BAG!

SEPTEMBER 30 & OCTOBER 1

Saturday and Sunday, 10am—6pm

Croatian Cultural Centre

3250 Commercial Drive (at 16th Ave)
 (near Trout Lake Community Centre)

Walk 7 blocks south from the Commercial Drive/Broadway
 skytrain stations or take bus #20 Victoria southbound

Admission: \$7.00 per day

Children 12 and under with adult: Free

Earthsave members: Free (Don't forget your membership card)

Cyclists: show us your helmet and get in for free

Info: **604-731-5885 • office@earthsave.bc.ca**

www.earthsave.bc.ca/tasteofhealth

So This is Why Toothpaste is Banned on Airplanes!

The “terrorists” arrested in the UK in August were allegedly planning to blow up several airplanes bound for the USA with a liquid explosive, TATP. The global security agencies reacted decisively, for example turning off the public water fountains at Vancouver airport, according to the *Vancouver Sun*. All liquids have been banned from airplane cabins. Here’s what the accused would have had to do to succeed, as reported by Thomas C. Greene in the British IT journal, *The Register*.

...Making a quantity of TATP (triacetone triperoxide) sufficient to bring down an airplane is not quite as simple as ducking into the toilet and mixing two harmless liquids together.

First, you’ve got to get adequately concentrated hydrogen peroxide. This is hard to come by, so a large quantity of the three per cent solution sold in pharmacies might have to be concentrated by boiling off the water. Only this is risky, and can lead to mission failure by means of burning down your makeshift lab before a single infidel has been harmed...

The remaining ingredients, acetone and sulfuric acid, are far easier to obtain, and we can assume that you’ve got them on hand.

Now for the fun part. Take your hydrogen peroxide, acetone, and sulfuric acid, measure them very carefully, and put them into drinks bottles for convenient smuggling onto a plane. It’s all right to mix the peroxide and acetone in one container, so long as it remains cool. Don’t forget to bring several frozen gel-packs (preferably in a Styrofoam chiller deceptively marked “perishable foods”), a thermometer, a large beaker, a stirring rod, and a medicine dropper. You’re going to need them.

It’s best to fly first class and order Champagne. The bucket full of ice water, which the airline ought to supply, might possibly be adequate — especially if you have those cold gel-packs handy to supplement the ice, and the Styrofoam chiller handy for insulation — to get you through the cookery without starting a fire in the lavvie.

Easy does it

Once the plane is over the ocean, very discreetly bring all of your gear into the toilet. You might need to make several trips to avoid drawing attention. Once your kit is in place, put a beaker containing the peroxide/acetone mixture into the ice water bath (Champagne bucket), and start adding the acid, drop by drop, while stirring constantly. Watch the reaction temperature carefully. The mixture will heat, and if it gets too hot, you’ll end up with a weak explosive. In fact, if it gets really hot, you’ll get a premature explosion possibly sufficient to kill you, but probably no one else.

After a few hours — assuming, by some miracle, that the fumes haven’t overcome you or alerted passengers or the flight crew to your activities — you’ll have a quantity of TATP with which to carry out your mission. Now all you need to do is dry it for an hour or two...

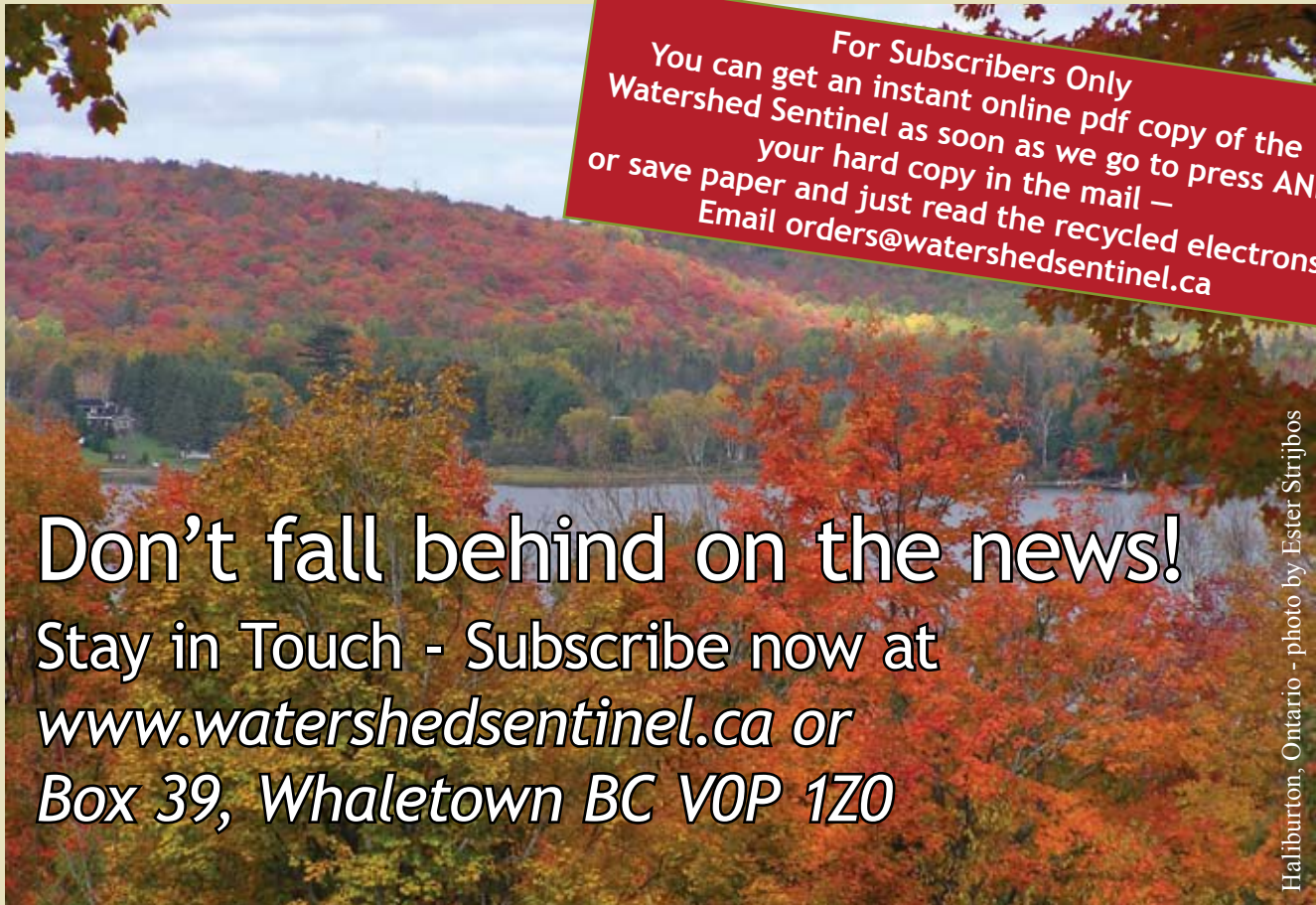
—*The Register*, August 17 2006

http://www.theregister.co.uk/2006/08/17/flying_toilet_terror_labs/



Lies, from Faces of American Empire series; Garcilazo, August 2006

For Subscribers Only
You can get an instant online pdf copy of the
Watershed Sentinel as soon as we go to press AND
your hard copy in the mail –
or save paper and just read the recycled electrons!
Email orders@watershedsentinel.ca



Haliburton, Ontario - photo by Ester Strijbos

Don't fall behind on the news!
Stay in Touch - Subscribe now at
www.watershedsentinel.ca or
Box 39, Whaletown BC V0P 1Z0

Environmental News from BC and the World since 1991.

___ 1 year (5 issues) Canada \$20 Student/Low Income \$10 (US \$26)
___ 2 years Canada \$30 (USA \$40) ___ This is a Gift: Send an Announcement
___ Watershed Sentinel Donation \$50 \$100 \$200 Other \$___
 VISA Mastercard Card Number _____ Expiry: ___/___

Total Enclosed _____ Payable to *Watershed Sentinel* Thank you very much!

For a tax-deductible receipt, make your cheque for the donation ONLY out to FOCI

NAME: _____

ADDRESS: _____


POSTAL CODE: _____ PHONE: _____ EMAIL: _____

Use this space to tell us what to say on your gift announcement.

If undeliverable, return postage will be paid by:

Publications Mail Agreement No. 40012720

Postage Paid
at Whaletown BC
Canada V0P 1Z0


**Watershed
Sentinel**
Box 39,
Whaletown BC
Canada V0P 1Z0