

# FLOW 99 SUMMARY PACKAGE

## Introduction

The FLOW 99 conference was a huge success: inspiring, stimulating, unifying and educational! Over 300 delegates attended the conference in New Denver, which took place from Friday, August 20 1999 to Sunday, August 22 1999. Conference attendees came from the West Kootenays and around B.C., as well as from other provinces, from the US northwestern states, and from as far away as England and Germany. Conference delegates included: representatives from environmental groups, educators, community development workers, forest workers, wood manufacturing business owners, personnel from the Ministry of Forests and the Environment, and alternative logging contractors.

The number of people who attended showed how widespread the commitment is for networking, communicating and implementing solutions. The many workshops were of excellent quality, the presenters informative and thought-provoking. The current crisis was examined from many different angles, giving participants a sense of the interconnected issues and bigger picture.

FLOW 99 explored three related areas: how to safeguard the health of our water (both domestic and wild); the economic impacts on our communities of poor logging practices compared to sustainable ones; and the opportunities to ensure long-term jobs for forest workers and others who depend upon the forest. The overall goal of the conference was to come up with some key recommendations for sustainable forestry for the new millennium, to identify the tools and strategies needed to protect water, and to build strong and sustainable forest-based economies.

The conference interwove workshops, keynote presentations, networking opportunities and a panel discussion with many elements of inspiration and celebration, such as topic-related entertainment, an arts/craft/trade fair showing the diversity of locally made goods, children's events and pure fun: The location, New Denver, offered an ideal setting to remember the blessings we have here in the Slokan Valley and throughout the province, allowing all involved to renew their energy for action.

So where do we go from there - seven months later? Innumerable projects and initiatives around the globe continue to work toward sustainability on this planet.. Here in the Slokan Valley an initiative is arising from the FLOW 99 conference: The Slokan Valley Eco-Region Initiative (SVERI). As Michael M'Gonigle said during his FLOW 99 keynote presentation, "We need a precedent of a whole jurisdiction that is working on a sustainable model. British Columbia has huge potential to be such a precedent - and the Slokan Valley could be such a leader in this." At present the watersheds of the Slokan Valley are still threatened. This summer 2000 roadbuilding for logging activities is planned to commence into the Hasty watershed, the Elliott-Anderson watershed and the Trozzo watershed. Perry Ridge is still awaiting a court decision. The opportunities for this valley discussed at FLOW 99 could well be eroded if a swift and radical shift toward sustainability does not occur.

The Slokan Valley Eco-Region Initiative envisions the powerful mechanism for change, in which local and regional grassroots efforts, supported by the provincial, North American, and global environmental communities, will together establish a model of bioregional sustainability in the Slokan Valley. As of now there still exists no viable example of *large-scale bioregional* sustainability in North America for people to build upon. Perhaps it is only by joining and synergizing our collective talents that we can take the quantum leap necessary to implement sustainability at the bioregional level

The Slokan Valley Bioregion (3,441km<sup>2</sup> or 341,099 ha) in the Selkirk mountains of British Columbia, Canada is an ideal candidate. This bioregion would then serve as a practical and inspirational model to springboard the implementation of economic, social, and environmental sustainability in other communities and bioregions throughout the world, especially in the high-consumption countries of North America and Europe. Implementing a model of sustainability in the Slokan Valley would benefit other regions, providing a tremendous precedent, proving that it *can* be done. Other regions could study, visit, draw lessons from and be inspired by it. The enthusiasm, momentum and

global support generated from this one initiative could be transferred to other bioregions, facilitating their transition. As more and more bioregions "get on board", a wildfire of positive change could be ignited around the world.

Most of the residents of the Slocan Valley are ready and willing to make this transition! Many creative individuals have spent decades rebuilding a vibrant, resourceful community with a highly diversified economy. Numerous studies and plans are in place, including a state of the art ecosystem-based plan, developed by an expert forest ecologist in consultation with the community, the Sinixt Nation (this plan includes a Sinixt cultural layer) and other specialists. These plans and studies address the ecological limits of the bioregion, as well as an economic transition that includes all members of the community; they also examine the social issues and possible solutions related to the critically needed shift in the valley from corporate control of community resources to an ecologically responsible, balanced and sustainable way of life.

At this time in history more than ever before we need to consciously move quickly towards sustainability. The ecosystem of the Slocan Valley is still relatively intact, with clear air, healthy forests, and pure water. People are supportive of, in fact are demanding this shift. We must begin NOW, because this opportunity may soon disappear due to the adverse impacts of over-consumption and unsustainable corporate activity. This is our Chance! For more information on this initiative, to network and/or participate, please contact: [sveri@netidea.com](mailto:sveri@netidea.com)  
For ongoing information on the Slocan Valley Watershed Alliance: [www.watertalk.org/SVWA](http://www.watertalk.org/SVWA)



We hope this summary package will serve you in your work for sustainability on this planet earth, and help fuel the vision of creating large-scale bioregional models of sustainability around the globe.

Stephan Martineau  
FLOW 99 coordinator

Miriam Mason Martineau  
FLOW 99 steering committee

"Some day the dam will break - there will be a flood of possibilities pouring forth.  
So let's keep chipping away!"  
Michael M'Gonigle

## 1. Welcome!

*Marilyn James, Appointed Spokesperson for the Sinixt Nation*

The Flow 99 Conference was opened with a welcome by the Sinixt Nation to New Denver. Marilyn James, Appointed Spokesperson for the Sinixt welcomed the 300+ crowd to Sinixt traditional territory. She spoke of the land and water crisis within the Sinixt Territory. Due to the dams on the Columbia River there were major losses for fisheries and wetlands. Marilyn spoke of her support for the Slocan Valley Ecosystem based plan, which includes a Sinixt cultural layer. She was accompanied by Bob Campbell and Robert Watt. Bob Campbell referred to all that his people lost since colonization, and how we all need to take care of what is left for all people living here now. Robert Watt is the appointed caretaker for the Burial Grounds in Vallican in the Slocan Valley.

This welcome set the tone for the conference, highlighting the need for long-term thinking and action, for respect and humility towards nature and for learning from the past so that we can move together toward a brighter future.

## **2. Opening Session**

**"A Long Look at the Forests and Water" – a Historical and Philosophical Perspective on Current Problems.** *Stan Rowe, Ph.D. in Forest Ecology.*

Stan Rowe's opening address is rendered in its complete version. It provided a wonderful, insightful entry into the three-day conference.

The oldest epic story so far discovered, five or six thousand years old, was found written on clay tablets in the ruins of the ancient city of Niniveh, in present-day Iraq. It tells of King Gilgamesh, ruler of the city of Uruk in southern Mesopotamia. There on the floodplains of the Tigris and Euphrates Rivers, agricultural civilizations prospered. To build up this city and its walls, Gilgamesh and his trusty companion, the wild man Enkidu, set out to log the Cedar Forest in the mountains that border the eastern and northern sides of the "Fertile Crescent." Assisted by the SUN.GOD, they captured Humbaba the guardian of the forest, chopped off his head, and then proceeded to chop down the cedar forest. According to the story, once they started logging, "for two miles you could hear the sad song of the cedars."

One version of the Gilgamesh epic calls the primeval Cedar Forest "The Land of the Living," presumably because evergreenness has long been a symbol of immortality. You may know that the common name for the noble Western Red Cedar that grows so well hereabouts, is "Arbor Vitae," meaning "Tree of Life." Like the Living-Forest Cedars logged by Gilgamesh, the Tree-of-Life name has not prevented the downfall of the Giant Arbor Vitae, neither in B.C. nor in A.D.

Another version of the epic calls the mountain Cedar Forest the "Home of the Gods, and Throne of Ishtar." Now Ishtar was the revered Babylonian Venus. In the ancient world, Ishtar had various titles, some unspeakable ones were: "The Queen of Heaven", the "Forgiver of Sins" and "Star of the Sea," the latter in Latin, "Stella Maris" – and from "Maris" (and from the related French word for the sea, "La Mer") came "Mary," clothed in the sea colours of blue and white. Putting it all together, this oldest story of mountain logging, pins destruction of the Living Cedar Forest on city men, backed by a male sky-god, with a poke in the eye for the Goddess. Is there something faintly familiar here?

Because the Gilgamesh epic deals with the effects of cities and city people on natural resources, it has attracted the attention of many commentators. For example, Evan Eisenberg (from his book, published last year, *The Ecology of Eden*): The epic killing of Humbaba the forest guardian, then deforesting the mountainous "Land of the Living," he says, marks "a turning point for the western mind. Nature offers its services: flood control, pest control. Climate control, gene banking, renewable resources without end, and of these free boons there is no better symbol or dispenser than the forest. An offer we can't refuse, free of charge, 'on the house' (a reference to the root meaning of 'ecology' as house or home study). Our answer: Off with its head! Decapitate nature."

Another commentary (from *The Living Dance*, a this-year's book on biodiversity) is by Dr. Clark Binkley, until recently the Dean of Forestry at UBC: With the benefit of history, he says, we now know the rest of the Gilgamesh story: "Once the forests were gone, civilizations in the region failed and the people suffered from erratic water flows, the loss of forest-dwelling creatures, silted-up harbours, and a shortage of wood for heating, cooking and construction." "Silted-up harbours" is an understatement because, in the five or six millennia since the epic was written, erosion in the deforested upper reaches of the Tigris and Euphrates Rivers has infilled the head of the Persian Gulf 250km! The sites of ancient port cities are now 150 miles inland.

"It is a sorry fact of history," said the historian Robert Harrison, "that humans have never ceased re-enacting the gesture of Gilgamesh." The same story of deforestation, erosion, and loss of good water, has been repeated again and again: in the Middle East, in the Mediterranean countries, in the mountainous parts of Europe, and in the Cordilleras of North and South America. Hence Chateaubriand's lament that forests precede civilizations and deserts follow.

Historians have identified forty or more past civilizations that arose, flourished for a while, then proved unsustainable and passed away, perhaps leaving a few ruins with grandiose inscriptions, as described in the sonnet, "Ozymandias" by the poet Shelley:

I met a traveller from an antique land  
Who said: Two vast and trunkless legs of stone  
Stand in the desert. Near them on the sand  
Half sunk, a shatter'd visage lies, whose frown  
And wrinkled lip and sneer of cold command  
Tell that its sculptor well those passions read  
Which yet survive, stamped on these lifeless things,  
The hand that mock'd them, and the heart that fed.  
And on the pedestal these words appear:  
"My name is Ozymandias, king of kings;  
Look on my works, ye Mighty, and despair!"  
Nothing beside remains. Round the decay  
Of that colossal wreck, boundless and bare,  
The lone and level sands stretch far away.

So much for human vanity. Ah yes, but when vanity has had its day, there's always TOURISM. As a tribute to tourism, and perhaps a warning to the inhabitants of the Slovan Valley, Ogden Nash rewrote the last lines of Shelley's poem to read *something* like this:

And on the pedestal these words appear:  
"My name is Ozymandias, king of kings",  
Also "Grad '69", "Kilroy was here",  
And "Joe and Betty Schultz from Windermere".

Enough of ancient history, some may say, we know better now, and do things differently. But do we? What is the measure of our advancement? John Ralston Saul in *The Doubter's Companion* suggests that the way people clean water is a good index of their cultural realism and progress. Any civilization that allows the quality of water and its water distribution system to deteriorate, he says, is on its way out. Over the last 2000 years cities have had clean running water three times, when civilizations were at their peaks:

- 1) The Romans two millennia ago
- 2) The Arabs one millennium ago
- 3) The West, i.e. Europeans and North Americans, "until recently"

His comment: "By the standards of the Roman and Islamic empires we are well advanced in our own decline since we have fouled most of our surface sources and are doing the same to our water tables ... The sight of millions of Westerners drinking bottled water is a reminder of our disconnection from reality." Saul might have added, the sight of millions of Westerners drinking chlorinated water is not only a reminder of our disconnection from reality, but also a reminder of how trusting humans are in quick-fix technologies using known poisons.

The slogan "FOR LOVE OF WATER" is a good one, and its companion "WATER IS LIFE" is close to the same mark. Unlike its nearest neighbours Venus and Mars, Earth is a watery, cloud-bathed planet. The dead planets, along with moons, comets and asteroids lack liquid water. Out of water on planet Earth came organisms, first bacteria and then, through long evolution, the confederation of bacteria that we call higher organisms, including people, all dependent on water. Without water, organisms would lose the life-spark. Our clever ancestors, noticing how rain from the sky caused seeds to germinate and plants to grow, postulated a male sky god fertilizing with his semen, or "holy water," the female Earth – a reasonable inference on which various rituals and ceremonies have been based.

Forests are the source of good Fresh Water. With few exceptions, dry grasslands and deserts are found wherever yearly evaporation is greater than precipitation, but where yearly precipitation is greater than evaporation then forests prevail. In forestlands the excess of precipitation over evaporation runs off to feed wells, springs, creeks and rivers. Thus forests on the eastern slopes of the Rocky Mountains produce rivers that water the dry prairie grasslands.

Here in the Kootenays, the Interior Temperate Rain Forests are the source of springs, creeks and rivers that feed water to the drylands bordering the Columbia River to the south of us. When the clouds move in and the rain pounds down (and we long for blue skies and sunshine), remember we are favoured to live in a water-producing area, north of the inland dry-belt that stretches down to California and Mexico, a dry-belt whose people appreciate – perhaps more than we do – the life-giving value of fresh water.

Out of the thirsty south in the early 1960s came NAWAPA – the North American Water and Power Alliance – proposing to divert water from the Yukon, Peace and Columbia Basin Rivers into the Rocky Mountain Trench as a vast reservoir, then channel some of it to the Great Lakes to keep their levels up and feed industrial growth in the East, while shifting the rest south to feed growth in California. An enthusiastic editorial in the prestigious Journal, *Science*, in 1965, ended with these words: "It is hoped that Canadians will join us in this great project."

Soon after the editorial appeared, Dr. Daniel Luten, a geographer-hydrologist at the University of California, responded by pointing out that the NAWAPA scheme "would destroy a great deal of low altitude wildlands of Alaska and Canada." He did not mention the drowning of Valemount, Golden, Invermere, Cranbrook and points between! NAWAPA never dies, its annual pay-off to Canada was estimated at \$2 billion in the 1960s (probably \$10 billion today) and many politicians find that kind of bait irresistible. And it may be, as Maude Barlow (from the Council of Canadians) argues, that the North American Trade Agreement will force water diversions and export.

Nevertheless water-transfer schemes should be strenuously resisted, or so I believe. They are attempts to achieve sustainability of one part of the continent at the expense of other parts, to enrich already wealthy ecosystems by impoverishing others. Such plans are at odds with the aim of harmonizing humans and their lifestyles with the resources of the ecological regions where they live – which to me seems the only reasonable definition of **sustainability**.

A chief focus of this conference is on **creating models of sustainability**: perhaps the most important task for all of humanity, not just in the Slovan Valley and Columbia Basin but in all ecoregions of Earth. Knowing something of the long history of non-sustainable cultures that preceded ours today, can we find the right track toward sustainability?

The pessimistic view is that it's doubtful. "Biology is Destiny," so the argument goes, and human nature (female and male) is pretty well fixed by our genes, which explains why history tells much the same story over and over again – a story of blundering along, repeating earlier mistakes. It is our nature to go for the quick take, the fast profit, without much thought of future consequences. Humanity's stay here on Earth is fated to be a brief but a merry one. Like the moth whirling round the flame (Georgescu-Roegen's appraisal).

The more optimistic view, to which most subscribe, is that human nature is alterable. Human actions are the outcome not only of genetic heritage, the GENES, but also of cultural heritage, the MEMES. **Memes** are the ideas, concepts, faiths that every child soaks up from parents, teachers, siblings, school chums, the media. Mostly these concepts (the big ones, in modern jargon, called "paradigms") lie concealed under the surface of our thoughts, writings, conversations. They constitute the whole network of accepted conventions in language and culture that allow us to converse and communicate with one another. They embody the fundamental values that underlie our systems of education, of law, of economics and of politics. Rarely are they exposed and questioned. We simply accept them as the norm, and judge other cultures against them as "strange" or "uncivilized," as "primitive" or "pagan."

"Flexible human nature" is the hopeful view of humanity, because it implies that the damaging things we do to the world and to each other can be corrected if we attend to changing our memes. In summary: **you're stuck with your genes, but you can change your memes.**

Of course, the truth about human nature, and what determines it, lies in the interaction of both genes and memes. Certainly the genetic inheritance from our parents is important, but the evidence for control of our biological instincts by ideas and faiths is striking. Think for a moment of the astonishing behaviour of people who have surrendered their minds to cults, leading in some instances to such anti-biological behaviour as life-long celibacy, self-castration, mass suicide – or, more popular at the moment, moving to Jerusalem to experience apocalypse first-hand four months from now! Then consider that every culture (cult/ure) is a cult, our own included, riddled with ideas and behavioural patterns that seem ridiculous to other cultures unconscious of their own absurdities.

Fortunately, human behaviour is not set in cement, but can be changed. Therefore the conviction that parental guidance, education, philosophy, religion can make us better people by eradicating *bad memes* and replacing them with *good memes*. Which brings up the important question: what is a good meme, and what is a bad meme? The answer used to be easy: good memes are those that profit the human race, especially those that help people to live materially better lives. Here is an example of a once-good meme that has turned into a bad meme. Such ideas, helpful in the past when we were few in numbers and limited in wants, today spell environmental disaster. Six billion of us (going for 10 billion 25 years from now), all trying to "live materially better and better" are the cause of acid rain, ozone holes, deforestation and polluted water, just to mention a few of the more obvious environmental ills.

The philosopher Santayana said that those who know history are fated to repeat its mistakes. But knowing history will not prevent repeating the same mistakes over and over again if the knowers are motivated by the same value-memes that caused the mistakes in the first place, whether in ancient Mesopotamia or Periclean Greece, in Mayan Belize or the Easter Islands.

It seems to me that the fundamental flaw, the common denominator in the histories of *unsustainable* civilizations, has been a lack of ecological knowledge and understanding. People have not realized their absolute dependence on what surrounds them, on the air, the water, the soil, the plants and animals of Earth. Partly this is due to philosophies and religions that have focused human thoughts on *other-than-earthly* issues. Partly it is because we are mobile animals. When conditions become intolerable in one place we move somewhere else (today by ship, with the help of a Korean crew), inevitably causing conflicts. The most recent ruse, now that the world is flooded with dirt-cheap oil and gas, is to stay in place as environment deteriorates, and sustain city, town and village by trucking in from elsewhere such necessities as food, liquids, clothing and building materials, instead of fostering self-sufficiency in region and community.

With limited ecological understanding, (and still today very little taught in our educational system), humanity has focused only on itself, believing that people can successfully and sustainably go it alone, with minimum attention to the health and welfare of whichever part of the Earth they occupy – beseeching heavenly help when the going gets tough. Paraphrasing the American historian Eugen Weber on the C.B.C. program "Ideas" last week, humanity is loth to believe it is not God's special pet. Confused and misled by the premise that only people matter, that our one species is the pinnacle and centre of Creation, people have again and again failed to act toward the Earth in sustainable ways. Ecologically ignorant, we have thought it possible to sustain societies, cultures, economies, without taking as first priority the sustaining of Earth's ecosystems that provide all the necessities of human welfare.

Perhaps today the realization is dawning that unless Earth and its ecological systems are sustained, human societies can never be sustainable. In short, Anthropocentric Memes that for thousands of years have taught us our importance now have to take second place to ecological or Ecocentric Memes that teach the reality of Earth's prior importance.

One helpful thought, known by the Aboriginal People, is that Earth, not organisms like you and me, is the correct word for "life." Language is metaphorical, meaning that the words we use are imaginative expressions – and some are dead wrong. No one understands the mysterious organizing force called "life," but imaginatively – and I believe wrongly – we have associated "life" with ourselves and things like us; i.e. with organisms that move, metabolize and reproduce. So when the question is asked, "When did life begin?", we immediately think of the first appearance of organisms, the first bacteria, imprinted on rocks three billion or more years old. But, thinking ecologically, we know that these early single-celled life-forms – and the more complex organisms that by symbiosis developed from them – were created from Earth substances, nurtured and sustained by the life-giving environment that Earth provides. Mother Earth is the source from which we, and other organisms, derive our lives. Take any organism away from Earth and it is soon dead. All living things come from Earth and go back to Earth. The expression, WATER IS LIFE, is correct as far as it goes. We should add to it, AIR IS LIFE, MOUNTAINS ARE LIFE, and SOIL IS LIFE. Putting everything together, EARTH not ORGANISM is the truer metaphor for LIFE.

Today we know that this Earth planet in whose skin we live is an immense, vital, integrated system, the Ecosphere. Nothing that we can see, feel, hear, smell, or taste is separate. Everything has co-developed in complex interaction with the rest. The sense of wonder and affection we all feel for the beauty and bounty of the Earth is the natural expression of being a co-evolved part of it all, and Rachel Carson opined that it is important to get out in it, to know you are part of it, and especially, *to feel it*.

The Earth, the Ecosphere, is large and diverse. Dividing it down into smaller segments called "ecosystems" helps our small minds to at least get a toe-hold on reality. So we impose fictional "walls" to separate out what seem to be different kinds of regional and local ecosystems, representing these "walls" by boundary lines on maps. For example, the Slocan Valley – a single watershed unit of about 360,000 ha, bounded and mapped by the mountain ridges that surround it – is a useful sub-regional ecosystem. Susie and Herb Hammond and their associates in the Silva Forest Foundation have divided down this large landscape ecosystem into smaller local ecosystems and shown them on the map: "Ecosystem-based Planning for the Slocan Valley." When looking at such maps add the third dimension, visualize each map division as an integrated ecosystem "box": air layer over soil/water layer with organisms the bacon-bits sandwiched between the two. Ecosystems take on the reality of three-dimensional volumes, complex units of nature, ourselves living within them and by our activities modifying them in various ways.

Do we understand this miraculous Earth that we briefly occupy? No. Do we understand its marvellous parts, the terrestrial and aquatic ecosystems, visible to us on Earth's surface? No. We have made some progress in understanding the intelligence of individual organisms, so that for example we know how to plant trees and help them grow. But we have no comprehension of the

intelligence of ecosystems, of the forest ecosystems that humans have blithely destroyed since the time of Gilgamesh, and still today.

A long-time ecosystem-thinker and college friend, Dr. Arnold Schultz in the Forestry Faculty of the University of California at Berkeley, proposed that if we want to get along with this Earth-home and adapt our behaviour to it, a good start would be trying to "THINK LIKE AN ECOSYSTEM." What can we learn from the natural ecosystems surrounding us; that is, in addition to silence, beauty, wholeness (the root of holiness), courtesy, and wildness? He noted that ecosystems teach connectedness; they maintain an internal balance between their parts. The health of the whole requires that no one component grows immoderately at the expense of the others. An equality of the parts exists. Ecosystems teach us the wisdom of *balance*.

But the main point in "Thinking Like an Ecosystem" is to learn *sustainability*, for that apparently is a goal of the Ecosphere and of all its continental and oceanic ecosystems. When left to themselves, ecosystems just keep on rolling along, self-repairing, diversifying, as they have for millions of years. They only need "management" after we have set other-than-sustainability goals (such as maximum timber yield or maximum water yield) for them, after we have "improved" their productivity to serve only human purposes, after we have changed them from complex systems to one-purpose simpler systems. Ecosystems naturally diversify, and so the fostering of diversity rather than simplicity seems a worthy goal for forestry, for agri/culture, and indeed all kinds of human culture.

The word "forestry" is a source of confusion because it is applied to two kinds of land treatment – one simplifying and one diversifying – that ought to be clearly separated. To understand this, consider the two ways of "managing" the prairie grasslands. One way – called "till-agriculture" – means ploughing down the complex native grassland and replacing it with simple monoculture plantations of cereals, pulse, or oilseed crops. The second contrasting way is "range management," which means preserving the native grasslands, with their hundreds of species of herbs and grasses, while carefully cropping them for hay or pasture.

In till-agriculture, after destruction of the grassland ecosystem, crop yield is maintained by subsidies of fossil fuels, fertilizers, biocides and irrigation. It is unsustainable without massive inputs of non-renewable energy. Range management is a sun-run sustainable system that, with care, will go on forever, without subsidies, because grassland ecosystem is treated as "natural capital," and only a safe percentage of its yearly production, the "natural interest," is cropped. Those of you who know Merv Wilkinson's woodlot on Vancouver Island and his management of it will recognize that he practices the equivalent management of "range management," and this technique, requiring care and intelligence, surely merits the name FORESTRY in capital letters.

The equivalent of "till-agriculture," and the contrast with FORESTRY, is "Plantation Management." Its goal, more and more, is to copy the agronomist: clearcut, scarify, plant genetically selected fast-growing monocultures, destroy the herb/shrub/tree competition with herbicides, pour on some nitrogen fertilizer, kill insect pests with biocides, grow space-and-pruned trees like corn in a corn-field, and when they are hydro-pole-sized cut them down and repeat. In the same way that the prairie farmer's goal is to drain the marshes, cut down aspen groves, and get every last acre into wheat production, the plantation manager's goal is getting the forestland into wood production. Water, landscape integrity, biodiversity, wildlife, aesthetic and recreational uses are marginalized, not because of anyone's evil intent, but because they contribute little to the bottom line.

Plantation Management invites mechanization and the replacement of workers in the woods with big machines. Clear-cutting prepares the stage for plantations, and old-growth forests are the first target. To the plantation forester, the very existence of old-growth forests is a waste. The names "overmature" and "decadent" indicate the attitude. The first priority of the plantation manager is to log off the slow-growing old forests and replace them with fast-growing plantations.

When I was with the Canadian Forest Service, the professional entomologists and pathologists told me happily that they would never be out of work as long as a main goal of silviculture was planting trees, rather than helping forests to reproduce from seed in their own natural way. Plantations are simplified banquet tables for bugs and fungi, they are recipes for future trouble and hence need plenty of management. From this perspective, every tree planted on forestland is an admission of ignorance and failure. The more we redesign and simplify natural ecosystems, the more management they need, which of course fits right in with the human proclivity for tinkering. But to foster sustainability, limits to human tinkering must be set for every part of Earth. It's the *Precautionary principle*: Don't mess around with what you don't understand.

To protect B.C. from too much tinkering, zoning that rules out human uses for large areas is necessary. Wilderness preservation is a must. Here in the Slocan Valley the zoning for complete protection of the subalpine forests, i.e. the snowy, slow growing, hard-to-regenerate belt of alpine fir-Engelmann spruce above the cedar-hemlock-fir zone – up where the air smells so fine – would be a good start. Then protect what fragments of old-growth and ancient forest remain in the lower zones, for these – usually on or close to water-producing sites – are irreplaceable. There will still be plenty of forested terrain left for proper management. Foresters in

the Pacific Northwest understand that ancient forests are non-renewable resources – once they are gone they can never be reconstituted. The idea that "old-growth recruitment areas" will ever substitute for logged-off old-growth stands is naïve in the extreme.

Listening to the C.B.C. in the morning two years ago I was astounded to hear a professor, from a prestigious University on the B.C. coast, telling the world that the old-growth forests up on New Denver Flats needed to be managed by logging, as a sort of sanitation job before fire or insects moved in and devastated them. I wondered how on earth such forests had got along without management between the time the Cordilleran ice-cap receded 10,000 years ago, and a century ago when miners came into the Valley. How did the B.C. forests survive without forestry's geriatric doctors to anticipate their fatal illnesses, and prescribe radical surgery as a better way to die.

I was reminded of a saying by H.L. Mencken, editor and critic, a warning for those who take university education too seriously: "There is no idea", he said, "no matter how stupid, but you can find a professor to support it!"

Before you think too deeply about that one, and how it might relate to ideas expressed in the last 45 minutes, it's a good time for this ex-professor to step down. But not pessimistically, despite a certain sadness at what we know of human behaviour in the past, and apprehension at what we see developing around us in the present. Hope for better ways of living motivates everyone at this conference, everyone in the Slokan Valley, everyone in the world. And so, in the words of the poet Pablo Neruda, a lover of the ancient forests of Chile:

I greet you, Hope,  
You who come from afar,  
You who flood with your song the sad hearts.  
You give new wings to old dreams...

Now is the time to give "new wings to old dreams."

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Stan Rowe, Email: [stanrowe@netidea.com](mailto:stanrowe@netidea.com)  
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### **3. Accounting for the Forests: Sustainability Accounting vs. the Price Waterhouse Approach to Reporting on the B.C. Forest Industry.** *Tom Green, MA in Ecological Economics, and Lisa Matthaus, Forest Policy Analyst for the Sierra Club of B.C. (SSC)*

Sustainability accounting attempts to describe all of the benefits and costs (social, environmental and financial) borne by society as a consequence of a productive activity. It probes "the relationship between an industry's financial and management performance and the overall well-being of the environment and community that supports the industry's activities."

Tom Green and his associates at Ecological Economics Inc. of Victoria, B.C., used sustainability accounting principles to critique the conventional financial cost accounting methodology used by the Price Waterhouse accounting firm in its annual report on the B.C. forest industry. The critique was prepared for the Sierra Club of B.C. and published in May 1999. It found that Price Waterhouse "neither accounts for the full social and environmental costs of industrial forest use nor factors in the economic opportunities forgone from this type of industrial activity."

The major unidentified social cost was direct and indirect subsidies from government, including artificially low log prices and stumpage rates, foregone taxes, and direct financial support. In addition, governments have financed economic diversification programs for single-industry, forest-dependent communities, and they have faced expenses maintaining public order when unacceptable industrial practices create public conflict. The report also claims that Price Waterhouse overestimates the size of the forest industry workforce by more than 60%, and it ignores costs to First Nations for forest resources extracted without their consent and for damages to their traditional territories.

On the environmental ledger, Green and company argue that a large proportion of the budget and work of the ministries of forests and environment supports an industrial approach to forest management. Much of this, they say, does not contribute to the maintenance of fully functioning ecosystems or the protection of vital environmental services and can be considered a subsidy to the forest industry.

Unaccounted for “environmental externalities” occur when a firm damages the environment and imposes the costs on others. These include costs due to sedimentation and impairment of water quality, landslides, damaged habitat, and reduced wildlife populations. These costs are often borne by water users, fishers, and tourism operators. As well, governments spend large amounts on questionable environmental restoration work such as the replanting of not satisfactorily restocked forest land (989,000 ha in 1997) and the stream and watershed restoration work under Forest Renewal B.C.

Forgone economic opportunities result from the depreciation of natural capital, the neglect of alternative economic uses of the forest, and a reduction of the “second-paycheque” for residents – the spectacular mountain settings, fish-bearing rivers, clean water and backcountry recreation opportunities.

To properly account for natural capital depletion, Green and company recommend an interest/depletion approach, which sets a logging “ceiling” using ecosystem-based planning. This ceiling is the maximum annual logging volume that may be allowed without depleting natural capital for future generations. Their calculations conclude that of \$4.6 billion in 1997 government revenue from the forest industry, only \$1.4 billion can be considered interest with the remaining \$3.2 billion coming from capital depletion.

Using sustainability accounting principles, and acknowledging the uncertainties and disagreements that exist over these calculations, the report concludes that the net annual contribution of the forest industry to the province ranges between a benefit of \$322 million and a loss of \$1.68 billion.

Not surprisingly, the Price Waterhouse methodology discriminates against ecosystem-based forestry. It does not capture the decline in subsidies and investment funds nor the decrease in costs associated with social dislocation, public order, liabilities to First Nations, environmental externalities, ecological restoration and natural capital depletion. It does, however, highlight any declines in employment, government revenues, and corporate profits.

Finally, the report concludes that while Price Waterhouse’s methodology paints a rosy picture for companies, unions and government, it ignores interests of other stakeholders including First Nations, forest-dependent communities, non-timber forest product producers, tourism operators, and watershed users.

Ecological Economics Inc. suggests that unless Price Waterhouse changes its methodology to one based upon sustainability accounting principles, it will “perpetuate public misperceptions about the net contribution, and thus the economic importance, of the forest industry in B.C.”

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#### **4. Purpose, Principles and Operations of the Forest Stewardship Council (FSC).**

*Marty Horswill, FSC Coordinator for B.C. (SSC)*

The Forest Stewardship Council (FSC), the most widely accepted, third-party forest certification system in operation today, promotes good forest management by giving consumers the ability to choose forest products that have been certified as the end product of principled forest management. The FSC certifies that areas of forest are being well managed according to 10 guiding principles: Compliance with laws and FSC principles, tenure and use rights and responsibilities, indigenous peoples’ rights, community relations and workers’ rights, benefits from the forest, environmental impact, management plan, monitoring and assessment, maintenance of high conservation value forests, plantations.

From the FSC guiding principles, specific standards are set for certain regions. The B.C. regional initiative is developing the B.C. standards for FSC certified wood by equally representing 4 areas of forest interest: economic, environmental, social and aboriginal. An accredited certifier (an individual, a company or a non-profit organization) will use these standards to decide whether a forestry company’s management of a given area of forest in B.C. is in compliance with the FSC’s principles, and thereby decide whether to certify the wood coming out of that particular forest. When a company is a certifier it is important to note that it is the product that becomes certified, not the company, which may still be selling mixed products. The Silva Forest Foundation will be the first Canadian certifier to be certified by the international body of FSC. (Update: Silva is now the first and so far only FSC-accredited certifier based in Canada. Just recently the Cariboo woodlot of Rod Blake and the Vancouver Island woodlot of Allen Hopwood received FSC certification from the Silva Forest Foundation, thus becoming the first two FSC-certified logging operations in B.C.

The FSC certification from the Silva Forest Foundation was also received by four manufacturers using FSC certified wood: Zirnelt Brothers Sawmilling, Spokin Mountain Timbers, Fiesta Barbeques and Ornamentum Furniture).

For a product to bear the FSC certification stamp, the wood used to make the product must be traced from the trees, through a chain of custody, right to the specific product which bears the FSC stamp. The principles of the FSC, however, are not currently concerned with the production details of the product (i.e., the use of bleach in the production of paper); only forest management is taken into account when certification is decided.

The FSC is currently a small, new organization that is facing certain difficulties, such as avoiding the exploitation of their label by companies seeking an eco-friendly reputation through the PR on what may be only one certified product out of many that the company sells. There is also insufficient supply of certified wood available on the market. The challenge is to get a greater supply without lowering the set standards of certification.

FSC certification is a powerful tool for attaining widespread sustainable forest management because it addresses the control that market trends have over industry behaviour. If certified wood becomes desirable to the consumer (as is becoming the case in Europe), a large demand for this wood will encourage companies to become FSC certified and forest management will be vastly improved. FSC has existed since 1995. To date 17 million hectares of wood world-wide are FSC certified (15 million of these in Sweden).

As individuals who wish to promote sustainable forest management, we can use the FSC's aims by:

- a) buying certified wood,
- b) lobbying companies to certify their logging,
- c) becoming educated and educating others about what FSC certified wood does and doesn't guarantee,
- d) demanding a reduction in the AAC to allow for sustainable forest management,
- e) helping to create a network between the FSC and other stewardship initiatives to create a certification process that ensures an ecological production process as well.

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## **5. Community-Based Creek Monitoring – Flow, Water Quality and Biological Indicators.**

*Jennifer Yeow, Water Monitoring Coordinator & Microbiologist, Martin Carver, Geoscientist, Darcie Quamme, Biologist, Al Isaacson, Hydrologist and Gerry Nellestijn, President of the Salmo Streamkeepers Society. (SSC)*

The Slocan Valley Water Monitoring Program has been collecting extensive data on the water (currently 11 creeks) of the Slocan Valley watersheds for the last 3 years, making it the largest grassroots water monitoring program in Canada that uses technical standards for water measuring. Together with a team of biologists, geoscientists, hydrologists and local people, Jennifer now has data at hand that provides extremely valuable information about how a healthy intact water system works. This information will enable assessment of the effects of logging and road building on yearly flow patterns, sediment load, water quality and temperature.

Current methodology and goals of the work:

*Jennifer Yeow (Microbiologist):*

- The 11 creeks are surveyed 3x/week with Canadian Water Survey Methods.
- Requirements: willingness, training and partnerships (financial).
- Goals: to develop a baseline, documenting the quality and quantity of the water over time, thus providing scientific basis for any management and promoting a community understanding of the interrelated watershed processes (flow, sediment, temperature, coliform, benthos – invertebrates, low level metals).
- The Slocan Valley Water Monitoring program has been and is currently funded by Forest Renewal B.C. and the Winlaw Watershed Committee.

*Martin Carver (Geoscientist):*

- Watershed behaviour is complex and intricate.
- Good tests are available.

- Assessing 1 stream in isolation is difficult. We need an integrated analysis of all creeks in a watershed.
- Study Design: realistic questions, appropriate parameters, sampling frequency, ongoing feedback.
- Community contribution: training.

Monitoring Variables:

Physical – sediment (amount), turbidity (cloudiness), temperature

Biological – fecal coliform, total coliform, benthic macroinvertebrates and periphyton (algae)

Chemical – low level metals, phosphorus and other nutrients

Channel condition

Watershed – geology, topology, climate, vegetation

Management – roads, agriculture, urban development, vegetation changes, human access

Events – antecedent conditions, sediment/flow, thresholds, interactions

The analysis currently takes place at the "observation level," not beyond (explanation, prediction).

Small creeks in the Slocan Valley are Cadden, Harris, Bartlett, Hasty, Elliott, Jerome and McFayden. Bonanza, Lemon, Winlaw and Airy are examples of large creeks.

Hydrographs: show changes in stream flows over time.

Sediment rating curve: rates the total suspended settlement per stream flow

Each creek has a different "personality":

\*Elliott creek is a small creek with little change in sediment in relation to flow. Turbidity, however, does increase.

\*Harris creek has a steep rise in sediment with flow.

Future activities of the water monitoring program:

- Identify the differences and similarities between the creeks
- Explain the observations
- Examine snow on rain events
- Link the physical, chemical and biological variables/data to watershed and channel

*Darcie Quamme (Aquatic Resources Ltd., MSc. RP Biol.):*

Part of the Slocan Valley Project involves the biological analysis, the monitoring of freshwater macroinvertebrates.

Macroinvertebrates have no backbone, see with eye and include freshwater insects, molluscs, snails and worms. The macroinvertebrates make up an essential part of the food web and are an indicator of a healthy stream.

Field sampling:

- Goal and funding determines the sampling techniques.
- Necessary to standardize sites by replicating several similar sites to assess disturbance.
- Collect and preserve, counting the number and kinds of macroinvertebrates using a key dissecting microscope.

*Gerry Nellestijn (President of Salmo Streamkeeper's Society):*

Gerry spoke about the Salmo Streamkeeper's Society's work carrying out research and habitat restoration in the Salmo Area.

His message was that all "stakeholders" need to be invited to help develop monitoring programs and stream work.

Gerry's work currently focuses on the health of the fish in the local rivers. Because fish are indicators of creek health, water quality and quantity are critical.

*Al Isaacson (Hydrologist):*

Al spoke on the water monitoring in the U.S. The U.S. has legislation called the "Clean Water Act" that protects water sources. Implementation is through their "Best Management Practices" where monitoring has become an effective tool for determining impacts of forestry. The laws also encourage community based monitoring efforts and, in fact, the U.S. EPA has extensive information on how to set up programs, use the data and relate findings to management practices. As a result they are ahead of Canada in community watershed stewardship initiatives. The U.S. also has the Endangered Species Act, which allows for habitat

(including water) protection. Al also stressed the usefulness of photos as indicators of conditions over time and the need to have at least 5 years worth of data before trends can be observed. Also, monitoring requires a long-term commitment: 20-30 years.

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**6. A Geologic History of the Kootenays.**

*Lesley Anderton, M.A. in Geology and Geography. (SSC)*

The two-hour slide show covered the past 750 million years, providing an incredible overview of the earth changes and processes that resulted in the present land forms and its many beautiful lakes, mountains, rivers and creeks. The movements of the earth's tectonic plates which form the great mountain ranges where these plates collided (taking millions of years to do so), show how the geologic history of an area is made up of one long chain of events that is constantly unfolding.

It is a mere 10 to 15 thousand years since the glaciers which covered the Kootenay region to a depth of 6,000 feet melted almost completely away, leaving only small remnants of glacial ice on a few mountain tops. What they left in the lower valleys of the Slocan watershed is of most importance to the people living in the area, as it is their homes and properties that can be affected by the inherent instability of glacial deposited soils and the hidden structures beneath the soil. Added to this is the steepness of slopes and large amount of precipitation falling on the slopes that may heighten the potential for structural failures, which could be catastrophic for those people living downhill. These residents depend on maintaining a regular quantity, quality and timing of flow of their water to drink, wash and grow their gardens and small farms.

Landslides and debris torrents have happened in the Kootenays naturally from time to time because of the inherent instabilities built into the present land forms by past geologic activity. The erosion and landslides that are triggered by human activity and happen more frequently, however, could be prevented by living and working within the geological limits.

Ms. Anderton showed a series of landslides crossing highways or finally falling into lakes and rivers after road building through unstable terrain had taken place. Some of these slides were generated by clearcut sites where the natural forest cover and binding roots that stabilized the area have been removed. Such concerns are often ignored when planning activities in unstable areas.

The information of the unstable nature of much of the Kootenays should play a crucial role in the decisions made as to which activities pose a high risk to the people who live and work in the region. To try to downplay the risks or acknowledge them, but try to work around them with quick fixes has not proven successful in the past. The precautionary principle should guide us in land use decisions. When we refuse to use this principle as the guiding rule, erosion degrades the land, the water and ultimately degrades civilizations to the point of collapse.

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**7. The Silva Wood Certification Program.**

*Cam Brewer, Co-Manager of the Silva Forest Foundation Certification Program. (SSC)*

The Silva Forest Foundation is developing a 3<sup>rd</sup> party certification process to determine whether the operational standards and practices of wood producers meet the standards set by the Forest Stewardship Council (FSC). The Silva Forest Foundation is in the last stages of becoming a Forest Stewardship Council accredited certifier, thereby being the first in Canada. World-wide there are 6\* FSC accredited certifiers so far. (\*Update: The Silva Forest Foundation is now the first and so far only FSC-accredited certifier based in Canada, bringing the number of FSC accredited certifiers around the world to 7)

The formation of guidelines that can be applied to logging operations anywhere on the planet has been driven by consumer pressure demanding ecologically sustainable wood and wood products, as well as the environmental movement that has been working to establish ecologically responsible forest use.

The guidelines focus on:

- What to leave rather than what to take, always applying the precautionary principle in order to protect the forest's ecological limits (e.g. buffers around riparian zones, excluding steep slopes, complex terrain, extremely wet or dry terrain, climate limited forests and naturally rare ecosystems from what is taken).
- Protecting, maintaining and where necessary restoring natural composition, structures and functions at both landscape and stand levels.
- Protecting the forest ecosystem connectivity at all scales of time and space during planning activities on the ground.
- Respect for First Nation cultures, both traditional and current, accepting their rights and engaging in meaningful consultation with them to develop mutually acceptable protocols and responsibilities before activities in their territory commence.
- Forest health rather than timber health.
- Recognizing 1<sup>st</sup> and 2<sup>nd</sup> order riparian ecosystems as needing protection (in the Forest Practices Code they are not granted protection).
- Preserving and protecting old growth trees, both alive, snags or dead standing and fallen trees, thereby recognizing that the function of a tree continues for hundreds of years after it dies.
- Adjusting the annual allowable cut so that it is ecosystem-based and calls for longer rotations.
- Establishing a chain of custody to track the wood through the system all the way to the final product.
- Getting more wood to secondary manufacture and further value added.

As for the market for eco-certified wood, the demand is presently far greater than the supply and has increased from 1% to 7% over the last two years. The demand is for visible, high value items.

What are the steps involved in the certification process?

- 1) Application
- 2) 'Scoping' – the first close look
- 3) Evaluation agreement
- 4) Stakeholder consultation
- 5) Document evaluation
- 6) Field evaluation
- 7) Draft Certification Report
- 8) Peer reviews
- 9) Certification decision and final certification agreement
- 10) Public summary

The final agreement includes the intention to get better and better so that conditions must improve. It is important to know that there also exist some certification schemes that seek to lower the standards, such as the Pas Neuropean Certification scheme, and our own CSA, both industry-driven.

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## **8. Private Rights vs. Public Responsibility: Tenure Reform and Community Forest Management in B.C.**

*Cheri Burda, Forest Policy Strategist for the David Suzuki Foundation. (SSC)*

This presentation examined the current system of timber-based management and corporate control in B.C., with regard to current initiatives towards privatization or enhancement of tenure rights. The flip side to this is a vision for tenure redistribution, greater community control and more ecosystem-based forestry. How do we achieve this?

Corporations (20 companies) currently control 86% of the AAC in B.C., communities control less than 5%. The Forest Act is a timber-based legislation that puts corporate rights before community responsibility.

Community forestry is a vehicle with which to transform high production, industrial-based forestry to community and ecosystem-based forestry. Community forestry should be about community decisions (i.e. community sets the AAC according to the ecosystem). Even industry calculations determine that the AAC is 20-30% too high to be sustainable, while other studies which look at ecological sustainability rather than just economic sustainability maintain that the present AAC is 80% too high.

Tenure reform has been requested by the environmental movement for many years. Government and corporations are now also calling for tenure reform. The difference between these requests for tenure reform is that the latter is calling for a vertical tenure reform (i.e. more rights to corporations and tenure enhancement or privatization), while organizations and individuals working to protect the forests are calling for lateral tenure reform (i.e. tenure redistribution and community-based management).

With tenure reform back on the negotiating table, there is an opportunity to demand for tenure redistribution and more community-based management of forests. The "Vision Process" is a provincial forest policy review process, taking place Oct./Nov. 1999, which will address issues such as: changes to timber tenures, land stewardship policies, stumpage reform, and regulations for local processing. Participation in this process could help communities gain control over their forests through changes in forest policy. (Update: Garry Wouter, the province's Jobs and Timber Accord advocate, has now delivered his final report on the forest policy review process to the new government of Premier Ujjal Dosanjh. It can be downloaded in PDF format off the MOF website. According to the David Suzuki Foundation, while the report outlines some opportunities for innovative solutions, the recommendations are futile without fundamental forest policy reform.)

As Dave Zirnhelt, former B.C. Minister of Forests said, "We know the issues, we need policy solutions." Well... we already have the solutions: ecosystem-based planning and ecoforestry. What we need to do is put the solutions into action. For this to happen, we must:

- a) push for community proactive responsibility/community management
- b) challenge the current tenure
- c) demand a redistribution of tenure rather than a reform
- d) participate in the upcoming Vision process as a community, demand stakeholder status
- e) challenge the fact that we live in a democracy, and unify the many cries for change. If all to no avail... revolt
- f) Have a clear long-term vision: look 50 years ahead, what would you like to see in place – then work backwards from there

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## 9. Obtaining Tenure? A Community's Journey.

*Rami Rothkop & Ramona Faust from the Harrop-Procter Watershed Protection Society.*

This workshop focussed on a community's grassroots efforts to obtain tenure on the surrounding landbase. Harrop-Procter has a long history of activism in land use planning. The latest effort is applying for a Community Forest Pilot Project to the B.C. government, using the ecosystem-based approach developed by the Silva Forest Foundation. Rather than summarize the workshop, we chose to use the executive summary of the Harrop-Procter Community Forest Pilot Agreement Proposal (appendices not included), as it provides an excellent overview of this community's journey.

### *EXECUTIVE SUMMARY of the Harrop-Procter Community Forest Pilot Agreement Proposal*

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**Submitted to Ministry of Forests January 15<sup>th</sup>, 1999**

**Selected as the #1 ranking proposal by the Community Forest Pilot Project Working Group, May 1999.**

**Chosen as one of 7 proposals accepted by the Ministry of Forests July 18<sup>th</sup>, 1999**

The Honourable David Zirnhelt's personal invitation (CBC Radio, November 1997) to submit this proposal triggered excitement in the Harrop-Procter community. Finally, after 22 years of public involvement, there appeared to be the potential for a win-win situation. The Harrop-Procter Watershed Protection Society (HPWPS) sees this as a great opportunity to implement our ecosystem-based land use plan. Submitting this proposal is the culmination of months of hard work by the community. The majority of local residents support this plan. It protects a broad range of values important to us, and pro-actively addresses sustainable forestry practices and long-range economic development. Due to a change in licensees and a long-standing history of public involvement, there have been no forest-related activities in the area for 20 years. If the HPWPS is successful in obtaining tenure over this land base, we are confident that there will be an expansion of a variety of economic activities in the community of Harrop-Procter which will expand into the surrounding Kootenay Lake area. While it has been difficult for prospective business interests to make firm commitments for the future until a community forest agreement is signed, the HPWPS has been encouraged by the range of local and regional companies interested in the economic opportunities which would flow from the creation of a community forest (see Appendices D5, E2 and E3).

The HPWPS chose an ecosystem-based planning approach to help us evaluate our land base, and to determine present and future uses available to us (see Appendix G). Our approach was based on many considerations.

- ☑ It answers community sentiment expressed repeatedly in three separate surveys (1976,<sup>1</sup> 1992<sup>2</sup> 1995) (See Appendix D1).
- ☑ It follows the principles of the B.C. Land Use Charter.
- ☑ It embraces the principles guiding the Forest Practices Code (FPC), as stated in the preamble to the FPC Act.
- ☑ It recognizes and builds on the work of the Kootenay-Boundary Commission on Resources and the Environment (CORE) Table and the resulting Kootenay Boundary Land Use Plan (KBLUP) (Oct. 1994) recommendations.
- ☑ It is fully substantiated by the planning approach recommended by the Clayoquot Sound Scientific Panel which “differs from current planning methods.” A similar scientific panel was recommended for the Harrop area (see KBLUP recommendation #62 – Appendix C5).

This proposal lays out how the HPWPS will move forward into the 21st century with an innovative and visionary approach to forest management.

The Community Forest land base encompasses approximately 10,600 ha of Provincial Forest Crown land on the South Shore of the West Arm of Kootenay Lake. The area is almost surrounded by Kootenay Lake and the newly established West Arm (Wilderness) Park. The majority of the forestland was burned in 1901 (leaving a few scattered pockets of old growth), and its main use has been as water supply sheds for irrigating a thriving orchard industry in the 1930s. There has been reduced farm use and increased domestic use since then. Mill Lake (in the westerly portion) and an old logging road (toward the east) have been popular areas for hiking, fishing, berry picking and other recreational activities.

The HPWPS met with the District Manager of the Kootenay Lake Forest District to secure the portion of the Allowable Annual Cut (AAC) needed for the operation of our community forest. A letter from the District Manager states that there is 5000 m<sup>3</sup> of AAC available from the forest service reserve to allocate towards our community forest proposal (see Appendix C3). The land base in question is under the Small Business Program, and it does not have a five-year plan or any active operation. This fact is in our favour as granting our community forest licence will not displace any licensee or small business operator.

The community forest will operate as a cooperative. The Harrop-Procter Community Cooperative (HPCC) has applied to be registered under the Cooperative Association Act of British Columbia (see Appendix B2). This is the best corporate structure for conducting community business as it allows for meaningful public participation while maintaining accountability and creating an appropriate vehicle to undertake business operations.

Since 1976, residents of the Harrop-Procter area have voiced their concern about logging in domestic watersheds; they have also repeatedly stated what changes they would like to see in logging practices.

*"Small operators, with good performance histories, selective logging or small clearcuts, good field supervision, careful road location, reduced logging waste, low soil disturbance, yarding systems and good liaison with the public were among the many suggestions that were put forward." (MOF Survey, 1976)<sup>1</sup>*

While the above suggestions came from small "kitchen meetings" organized by local residents who took an active interest in forest management, a second Ministry of Forests (MOF) survey in 1992<sup>2</sup> intentionally focussed on randomly selected residents with hopes of reaching the normally silent majority. The executive summary based on the results of this survey states:

*"The resident's message to the MOF is: 'reduce the cut', 'don't clear-cut', 'manage for water and viewscape' and 'stay well back from creeks and wet areas, unless using single-tree selection systems with very light equipment or horses'. Above all, listen to the people, they hold the ultimate veto."*

Community support for this project has grown over the past few years in a powerful, inclusive way. The HPWPS has 276 members in the community, and membership has grown steadily since the Society was founded. The HPWPS members have taken great care to reach, and include, all segments of the local population. Recommendations obtained from water users, local business and professional people, community groups, and First Nations have been included in this plan. The HPWPS has the strong foundation of support required to make this community forest a model for local decision-making and resident participation.

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<sup>1</sup> D. Ailman, J. Baron, B. Fraser, *Forest Planning for the West Arm of Kootenay Lake - Planning Unit 3 - South Shore, Selkirk College - 1976*

<sup>2</sup> Appropriate Forestry Services & Associates, *Survey of Community Forest Values in the Vicinity of the West Arm Demonstration Forest (Kootenay Lake Forest District) - March 1992*

The following list identifies the various ways in which the Harrop-Procter Community Forest could be used by the citizens of B.C.:

- an example of partnership management with the MOF;
- an example of ecosystem-based forest management which can be used to obtain Forest Stewardship Council certification (many European buyers insist on this certification and B.C. will want to capture this business opportunity); and
- an example of job creation through more labour-intensive logging systems, agroforestry projects, and value-added manufacturing.

Much thought and a tremendous amount of research has gone into preparing our proposal. The HPWPS has a viable proposal utilizing a variety of harvesting systems, which respects other less profitable values such as biodiversity and viewscapes, as well as wildlife habitat and movement corridors. Our business plan considers expansion of a small, local sawmill providing customized material to value-added operations, with plans to establish our own value-added manufacturing facility. As an added bonus, the HPWPS is planning to produce 'eco-certified' wood, which is generally not available in B.C. at this time. Botanical forest products and craft tree licences will also increase revenue from the land base. As well, the business plan looks at tourism potential with trails to some of the numerous scenic mountain lakes. By such diversification, the HPWPS will be less dependent on a high volume of timber, as each tree cut will create higher-than-average revenue for the community and the province of B.C. For the purposes of this application, the HPWPS has conservatively estimated the number of jobs which will be created as a result of obtaining a Community Pilot agreement. It is believed that as the community and region become confident in the long-range security of the tenure, this will attract a diverse range of business interests and thereby provide more jobs.

The management of our community forest focuses on the future. Our long-term goals include the continued health of our local environment, the growth and harvest of high quality wood, and the assurance of local employment. The HPWPS is using a conservative, precautionary approach, treading lightly on a fragile land base that is steep and not easily accessible. Our planning process has been taken to the stand level, and indications are that these are productive sites with a healthy diverse mix of merchantable timber.

Neither community forests nor ecosystem-based plans are new concepts. A combination of both can be found in the 1945 Royal Commission Report, where the Hon. G. McG. Sloan discusses them:

*"These community forests, apart from the timber production therefrom, have proven to be of considerable value in the United States as a means of acquainting the public with the benefits to be secured from the practice of sustained yield forestry, the necessity of fire protection, and related subjects. I refer, for instance, to watershed protection and other multiple forest uses. A tree is a plant and to secure an economic return from the soil producing its growth, the tree must be harvested. **At the same time it must be kept in mind that a tree may be of more real value in place in the forest than when converted into lumber. The difficulty lies in striking a balance between these two values.**"*<sup>3</sup> (emphasis added)

The members believe that our ecosystem plan strikes this balance.

In closing, the HPWPS thinks that our sentiments are best expressed with a quote from our MLA, Corky Evans, in response to the throne speech (March 25, 1992).

*"Lastly, we don't want any Coquihalla. We don't want any presents in a box, any northeast coal or any steel mill. We don't want this government, or any government, or Murray Pezim, or a bank.... We do not want any bag of money, pot of power, or ideologically-driven decision-making process to solve our problems. We want to let the communities decide what is good for the communities. We want to let the patient heal itself. Thank you so much."*<sup>4</sup>

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<sup>3</sup> Hon. Gordon McG. Sloan, Chief Justice of British Columbia, *The Forest Resources of British Columbia* - Report of the Commissioner - 1945 (p. Q. 147)

<sup>4</sup> Corky Evans, M.L.A. (Nelson-Creston), Province of British Columbia, 1<sup>st</sup> session, 35<sup>th</sup> Parliament, Official Report of *Response to the Throne Speech* (Excerpt) - March 25, 1992

## 10. Abandoning the Exhaustion Economy for the Economy of Abundance.

*Tom Green, M.A. in Ecological Economics. (SSC)*

Economist Tom Green opened his workshop with a question: How can economic change and reform influence a better future? His answer lies in his assertion that we are coming to the end of an era of exhaustion economics, and the time has come to adopt the economics of abundance.

In the exhaustion economy, resources are exploited at an unsustainable rate. This involves consuming/living off natural capital rather than interest, an unhealthy economic situation which leads to exhaustion of the natural ecosystems that are the foundation of the economy. We die of consumption.

Unhealthy economies and ecosystems are the result.

The economics of abundance is about restoring nature's abundance and then living within natural limits. Income is what you can use if you keep your capital intact. To succeed, a diverse economy is needed, focused on satisfying modest human needs and finding meaning outside of consumption. As soon as the environment gets depleted we are eating into our natural capital, thus not gaining a true income. Presently we are losing capital. Ecosystem-based forest plans say that, to meet ecological requirements, logging should be reduced to 10-35% of current industrial volumes. True sustainability accounting shows that some activities are an expense to society, not a benefit.

We must create and support the conditions that foster an economy of abundance:

- a respect for ecological limits
- an emphasis on needs rather than wants
- a local orientation
- diversity and resilience
- creativity and initiative: do more with less
- better conception of well-being: sustainability does not imply poverty
- full cost accounting: apply what we apply to goods/factories to our resources (Asking "Are we keeping our natural capital intact?" the way we ask: "Are we keeping our factory intact?")

We need government policies that:

- ensure that producers are responsible for costs
- shun subsidies
- challenge economic myths
- set maximums and minimums

Some tools for this transition:

- clear understanding of economy
- ecological tax reform (tax what we don't want e.g. pollution, rather than taxing people)
- social tax reform (present tax system is largely arbitrary)
- local control, less global economy
- proactive approach
- community investment
- come up with rules, guidelines for our natural capital

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## 11. The Lumby Log Sort Yard.

*Tom Milne, Manager of the Lumby Log Sort Yard. (SSC)*

In 1991 the Forest Resource Commission took a close look at the forest industry to see what could be improved. This investigation concluded that there was a need to get more value from wood than the province of British Columbia was getting from selling off the stump. Thus in 1993, with the help of Jim Smith, the Lumby Log Sort Yard was established under the Ministry of Forests Small Business Program. The yard is now in Coldstream, B.C. Its mandate is to:

- oversee experiments in small-scale jobs
- be involved in logging and blowdown salvage

- run a log-haul and dump operation that allows competitive bidding to determine the value of the wood sold through the yard.

The log sort yard is presently the only source of certified wood in the province (for an update on present situation see "Purpose, Principles and Operations of the Forest Stewardship Council" on page 9). While the percentage of certified wood sold is still fairly small, it is significant and growing. The market is presently working best for small operators.

People visit the yard from all over the province. The interest in establishing more sort yards like this in other parts of the province is growing. Because there are so many different demands for special woods, the sort yard has over 60 piles or sorts that customers can choose from. There is a market for all sorts of wood, not just different species and sizes, but also for forked tops and dead trees. The sort yard has sold individual tree sections to guitar makers, saddle makers, log-home builders, shingle and shake makers, and even for firewood.

Alternative harvesting techniques are more expensive and labour intensive. At a log sort yard such wood receives a better price. All wood is hand scaled rather than weight scaled, usually resulting in 20% higher volume for the logger.

The Log Sort Yard has provided steady employment since its beginning and shown significant profit, exemplifying that ecologically sound, partial cutting and an open log yard can work together to be profitable, practical, and provide significantly more jobs per volume of wood cut.

The Silva Forest Foundation has worked closely with Tom Milne and Jim Smith to successfully implement ecoforestry.

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Tom Milne; Fax: (250) 542 3194  
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## 12. Your Money or Your Life.

*Alan Seid, B.A. in Whole-Systems Sustainability. (SP)*

Ecology, Money and Freedom – powerful personal choices for freeing up the Earth from destructive consumption patterns, and freeing up our time from a society based on indentured servitude to jobs and a culture of domination.

This workshop focused primarily on the "FI program," which is detailed in the best-seller Your Money or Your Life by Joe Dominguez and Vicki Robin (Viking/Penguin, 1992). FI stands for Financial Intelligence, Financial Integrity, and Financial Independence. This is a nine-step integrated program for financial health, which utilizes feedback mechanisms based both on self-interest and higher values. It is a whole-systems approach to money, work, and consumption making it a "personal finances" facet of sustainability work focused on root-cause. This program provides a framework for being impeccable with money, in a way that benefits ourselves, others and the planet.

### AWARENESS OF WHAT IS

First, we must recognize that money is one of the most loaded topics in our culture. Neither is there consistent early-childhood education regarding money, nor are there straightforward, life-connected rules from the culture for how to handle this energy. Some of us love money, some of us hate it. For many of us it is a source of confusion or anxiety, or simply something we expend a lot of energy trying to ignore. I have met very few people for whom the *idea* of putting awareness into our relationship with money does not bring up personal discomfort. This is simply to point out that it is very likely that we all have "issues" around money, and that honesty and truthfulness about that is the healthiest place to begin.

### WHAT IS MONEY?

Some of us treat money as freedom, or security; some of us treat it as power. Some of us regard it as evil or dirty; others as essential. In the approach presented in this workshop, we simply treat money as something for which we have traded some of the hours of our life.

The practical advantage of this definition is that money is no longer "out there." It is no longer an abstract number on a piece of paper or a coin. Money is no longer a "necessary evil" nor a "tool of political repression." When I define money as the life energy (time) I traded for it, I am regaining some of my power, because now what money IS, is intrinsic and not extrinsic. It's a very personal and intimate definition for this energy in my life. How I expend my life energy says a lot about the meaning and purpose I ascribe to my life.

Another advantage of this definition is that it is true 100% of the time. It is no longer an abstract theory, nor a projection of my cultural conditioning. I am dealing with the most precious energy to me: the finite hours of my visit to planet Earth. This definition seems absurdly simple, yet therein lies its power.

#### MAXIMUM FULFILMENT AND MAXIMUM INTEGRITY

Based on this very simple definition for money, we can analyze our spending patterns through two filters:

(1) Did this expenditure bring me FULFILMENT (happiness, wholeness, satisfaction) that is equivalent to the hours of life energy I spent? The aim here is maximizing our fulfilment in relation to the life energy spent; and,

(2) Was this expenditure of life energy in ALIGNMENT with my values and life purpose? The aim here is ensuring that our actions are in alignment with our values (what we say is important to us) and with our purpose in life. If we don't know what are our values and life purpose, asking the question provides an opportunity to explore and learn. The object here is maximizing our integrity: walking our talk. I personally don't care if you change your walk or if you change your talk; when they line up, you experience integrity, wholeness.

What happens when we examine our monetary actions through these two questions is that we begin to discover “how much is enough,” based on maximizing fulfilment and integrity (quality of life) – never based on worry, fear, cutting back, or depriving ourselves of things we want and need. Another thing that happens is that one easily and naturally separates “quality of life” from “standard of living” – the latter being how much stuff we consume, the former being how happy or fulfilled we are.

Another natural result of this applied awareness and consciousness in our relationship with money, experienced by tens of thousands of people following this process, is eliminating debt, generating savings, and creating the option of financial self-sufficiency, in order to free up our time to be of service to humanity and the planet. I've met dozens of people who have reached this stage – who have the time and space to follow their hearts and be of service without *needing* to charge – and who have been living this way for years, some of them for decades, simply from following the steps in the FI program.

#### EARTH

The carrying capacity of planet Earth comes down to a certain number of people at a particular *lifestyle*. A person living in the U.S., Canada or Europe has **many times** the impact on Earth's life-support systems as someone living in one of the “less developed” nations. Consumption patterns in the rich countries – *a clear extension of our unconsciousness with money* – are a primary cause of, among others, habitat loss, species extinction, global warming, climate change, deforestation, ozone depletion, war, famine, poverty, and acid rain. Our home planet is suffering beneath the weight of human beings using very powerful technology to consume the Earth in order to fulfill nonmaterial needs and desires such as acceptance, respect, security, freedom, prestige, and love, through more and more stuff. Becoming clear and empowered within ourselves regarding this very powerful energy can be a very important strategy for serving life on the planet.

#### OTHER CULTURAL ISSUES

Economics has become the religion of the nation state. Whenever a political leader speaks about the economy people perk up their ears. Whenever people in the culture speak about money, it is usually about “more” or about “less” – rarely about how much is “enough.” A famous American singer once joked about how the culture encourages us to spend money we don't have, on things we don't need, in order to impress people we don't even like. In addition, we live in a culture where many people work 8 to 10 hours a day, 5 days a week, 50 weeks out of the year, for 30 or 40 years of our lives.

It may be apt to mention how the culture of careerism emerged from a particular place and time in history – the industrial revolution beginning between 300 and 500 years ago in Europe and the Americas – and that this culture can only thrive in an environment of consuming more than we need. If we didn't think we needed so much stuff to be happy, we wouldn't need to work so much to earn the money for all the stuff.

Increased financial clarity positively affects our emotional health, our families and communities, and empowers us to more clearly navigate outdated economic paradigms driving the destruction of life on the planet.

#### VISUALIZE FINANCIAL SELF-SUFFICIENCY

Though full financial self-sufficiency does not need to be one's motivation for doing this program, it is a natural outcome of following the steps over time. One's motivation may be simply to get out of debt, or create savings for specific goals. However, when one sincerely follows all the steps (there are 9 – they are VERY simple – and the program consists of ALL of them) the result is creating a relationship with money that is at peace, whole, empowered —where all the pieces of your life fit together and you see how money supports the kind of life you want to live.

Some, as I was, are attracted to the program because of the potential of freeing up your time from the need for paid employment. Financial clarity and peace of mind came as a by-product. However, even when you reach the point of a steady and secure income for the rest of your life – coming from a source other than what you do day-to-day, which is enough, and then some, for a consciously chosen lifestyle – you need not quit your job. The difference is that you *can* quit if you like (but nobody says you must).

So – if the company downsizes, or you get the itch to travel, or you’d like to take up a service or learning opportunity that won’t pay – financially you are ok. You are simply at a place of greater choice.

I quit my job in February 1998. I am basically financially self-sufficient, meaning I haven’t charged for my time in two years, and have not had to touch my capital. I can return to work any time I choose – part-time, full-time, piecemeal here and there – but so far I haven’t had to. Every day is like Saturday. I can, and often do, volunteer my time with groups whose work I consider worthwhile, without draining them of precious financial resources. And I make my services available to people who would otherwise not be able to pay.

Most importantly, in the last two years I have increased my skills so that: (a) if civilization suddenly collapses, I have many times the ability to be self-sustaining and thrive in community than two years ago, or (b) assuming the continuation of things as they seem to be, and I need to create income, I can make several times more than when I quit in early ’98.

A few day-dream thoughts about how this could affect the issues concerning the FLOW 99 Conference are the following:

- If people who work as loggers found a sense of 'enoughness,' they would be less dependent on their jobs to fulfill an ever increasing standard of living. Perhaps many would become financially self-sufficient, quit, and devote themselves to their families, communities and other fulfilling avocations.
- If the people consuming so much wood and tree-derived paper developed the simple-yet-elegant means of living a life where more is not necessarily better, then there would be less demand for logging. But with loggers having buffered and immunized themselves against a downturn in the logging industry, involuntary unemployment would be less of a threat.
- The decreased demand for profit from the forests would also mean less pressure on the region’s clean water, and more habitat preserved.
- If the people who work, paid or not, as activists, working to protect watersheds and forests, employ this tool for being truly efficient with finite financial means, more of their life energy would be freed up for what they love to do in the world. Some of this might happen because of less anxiety and stress around money – or less energy invested in avoiding the issue altogether. Or some of them might actually get themselves financially liberated, thus being empowered to freely give their labour of love to the world.

It’s win-win-win.

**CONCLUSION**

The purpose of the workshop has been to present a tool that can powerfully help humanity and the planet, show how it works, and explain how I see it may apply to the issues and concerns behind the FLOW 99 Conference.

For more information see: [www.newroadmap.org](http://www.newroadmap.org).

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**13. The Politics of Trying to Protect the Watersheds of the Slocan Valley – A Case Study.**

*Colleen McCrory, Chairperson of the Valhalla Wilderness Society, Marilyn Burgoon, Co-Chair of the Perry Ridge Water Users Association, Austin Greengrass, Craig Pettitt, Kootenay Regional Coordinator, Forest Watch and Jasmin Caton. (SP)*

The workshop focused on the crisis of the Slocan Valley and gave an update on the logging and road building that has occurred in the New Denver, Bonanza and Perry Ridge watersheds. It also gave an update on several legal cases that are still (as of now April 2000) before the courts.

Colleen McCrory, Chairperson of the Valhalla Wilderness Society, explained how the government is willing to sacrifice people's water, land and lives in the valley. In the last four years many people have been arrested for protecting clean drinking water in New Denver, Bonanza Creek and Perry Ridge. Jack Ross was in prison for two months, Eloise Charet was in prison for 3 months for trying to prevent loggers from entering Slokan Valley watersheds to destroy drinking water and threaten lives and homes. There is widespread community support for protecting drinking water. Blockades have never been a first option and they have always followed numerous planning processes. In these planning processes, the recommendations of residents have been ignored by the Ministry of Forests and by Slokan Forest Products. Industry has gutted the side valleys that feed into the Slokan Valley, and logging is now moving to the core of the valley-above homes and into the drinking water supplies of thousands of rural people.

Jasmin Caton, student, Bonanza Creek water user and arrestee, spoke about the fragile fish-bearing Bonanza Creek and the last natural wetlands on the Columbia River system. She addressed how she feared the loss of this important habitat, the loss of safety for the travel routes of backcountry tourists, and the loss of her domestic watershed. A petition signed by 93% of the residents asking for meaningful discussion about logging Bonanza was sent to the Ministry of Forests, Arrow Forest District. Of great concern is that the road building and logging is taking place on steep slopes (50%) right above Slokan Lake.

Marilyn Burgoon explained that in the case of Perry Ridge it is not only about drinking water for over 500 people, but also about safety to "life, limb and property" as Perry Ridge has many extremely high hazard areas and some properties have already suffered damage from the underground water. Perry Ridge is a very unstable landform and the government's own reports identify many high hazard areas throughout the ridge. Logging will increase the risk that already exists due to groundwater and glacial soils along with steep rock faces behind and surrounding the residents on Perry Ridge. A temporary injunction against those who sought to prevent road building in preparation for logging on Perry Ridge was set aside when the judge found that the Attorney General's office had misrepresented and mischaracterized information in gave to the Supreme Court. The judge also found that the government mislead the Court when it claimed Perry Ridge arrests took place on Crown land. In fact, at that very time, the government had an accurate survey showing that the beginning of the proposed road was actually on private land. During the protest against logging and road building, the government was involved in negotiations with the landowner to transfer a portion of the property to the Crown to be used for the logging road. There has been no decision in the court case where the Attorney General is suing five residents who protested, in order to obtain a permanent injunction against the protestors actions. The Perry Ridge Water Users Association continues to have scientific research done on the ridge and supports the defendants in the Perry Ridge court case.

Marilyn discussed the unfair, divisive process the government had put in place with poor terms of reference that did not allow for the option of not logging Perry Ridge; rather, the process is a logging plan and assumes that Perry Ridge can be logged. The public process has moved behind closed doors because a local citizen wanted to video the proceedings. The process is undemocratic and the table is stacked with timber-biased sectors. Perry Ridge Water Users Association is therefore not participating. After years of participating in government processes only to find that industry and government ignore our concerns, the Perry Ridge Water Users Association is not willing to be used as a public relations tool for the government to create a paper trail that makes it look as though the community supported the government's planning.

Austin Greengrass, who is one of the defendants being sued by the government, spoke of a landslide that left his home hanging 30 feet in the air. He said the land dropped one inch per hour from under the house for 7 days, resulting in an 11- foot drop over a one-half mile distance on a bench 80 feet above the river. Logging increases water runoff and any increase on Perry Ridge will come down to the valley bottom where people live. If government gets away without going through correct environmental impact assessment procedures, no watershed in B.C. is safe. Austin's property value went from \$104,000 to \$6,000 overnight because of the landslide. His neighbour's property value decreased by half and her house insurance has been cancelled after suffering from the same slide.

Craig Pettitt, a Forest Watch Regional Coordinator, has documented 17 landslides [in August 1999, 34 slides in April 2000] in the West Kootenay region. Two of the 17 were natural slides and the rest were related to industrial activity, primarily logging. Of these 34 slides, 28 occurred just below logging roads and/or clearcuts. The failure to install culverts accounted for 7 of these landslides. In 11 cases, the logging/roads were done under the Forest Practices Code. This shows that the Forest Practices Code is weak and doesn't provide adequate protection on moderate slopes.

The workshop finished up with hope for change if the ecosystem-based plan that has been prepared for the valley were implemented. The ecological and economic feasibility of logging consumptive use watersheds was questioned given the steep, wet, glacial valley where both surface and groundwater need protection.

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Jasmin Caton, Email: [jccaton@excite.com](mailto:jccaton@excite.com)

Peter Ronald, Friends of the Slocan Valley, offered his contact of HYPERLINK, e-mail to: [peter@island.net](mailto:peter@island.net).

Austin invited people to view [www.tinmen.org](http://www.tinmen.org) for more information.

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## 14. Keynote presentation

### **The Inevitability of an Ecologically Based Economy: What are some of the tools for getting there? How can the experiences in the Slocan Valley build on these tools?**

*Michael M'Gonigle, Ph.D. in Political Economics. (ET)*

From an academic perspective: We have a “system” problem. We all know it – but those in power don't talk about it.

Putting an optimistic spin on it – change is inevitable!

What is the system that we are working with? There exist hierarchical systems and territorial ones. These are two different ways of organizing society that co-exist in various ways. In the hierarchical system central power subsists on resources from elsewhere. The territorial system subsists on local resources. The very nature of “modernity” was to move more and more from a predominantly territorial system to social structures dominated by hierarchies of central power. These hierarchies are driven by certain imperatives: to secure territory, to maintain flows of energy and resources from territories to centres of power, and to control local communities that resist. The Slocan Valley is an example of a territorial system that has been taken over by a centralized, non-local power. A critical alternative to this process is to establish communal land bases.

The problem with large systems of centralized power is that they violate the laws of nature. At certain scales, they can't work. The evidence is clear. Just look at the rise and fall of civilizations where huge structures of power went over the edge. We need to look at the laws of nature and organize ourselves mapped onto the way nature works. Ecology helps us do this.

It is important to have this context – we are not taught this, we are not taught to ask these questions and to understand these dynamics.

All is coming to a head: For the first time in human history a global constitution is being planned (this is not just another set of laws, but actually a constitution in relation to which a state loses its power). The World Trade Organization poses a terrible threat, but also an opportunity: 'cause it can't work!

What are the alternatives?

Community-based territorial structures/systems. It is totally logical that there is a need for power on the other side to bring things back into balance. As WTO does not work, these alternatives will become evident. For this we need movements, huge ones to make these alternatives happen. This movement is already happening, it is already incredibly deep and broad. The amount of innovation all over the planet is phenomenal. A huge range of experience is accumulating – what is still missing is the ability to work together. We must network and become more cohesive.

How can the role of the state change? It needs to become protector, facilitator of communities. We must begin using the precautionary principle, which we have been totally avoiding so far. The whole world needs to be turned upside down. It is an exiting time to be alive. I don't think there is any place on the planet that is more important than this valley, the Slocan Valley. It has already set many precedents. In 1973 the Slocan Valley Community Forest Management Plan was established – so many of us have looked to this model. The struggle continues.

### **Some of the specifics – strategies and tools:**

On the level of the individual: First principle:

We are here now, we are not going anywhere – we are in the struggle and will not resolve this this weekend, or in the next decade, but in the future (if the planet continues...) people will look back and say: "God, What an exiting time these people lived in!" Leon Trotsky says: "Anyone who wanted a quiet life has the misfortune to be born in the twentieth century."

Second principle:

The importance of a global and/or local precedent. There exists incredible resistance to precedents. The Slocan Valley with the Silva Ecosystem-Based Plan, Clayoquot Sound, Harrop-Procter, The Vernon Log Sort Yard – they all pose huge threats to status quo.

The Community Forest Trust Act suggests that communities organize and say: "We want the land-base moved into trust, run by community under principles of ecosystem-based management." We need radical change now!

Third principle:

The importance of territory, of a larger jurisdiction that could bring it all together. We need a precedent of a whole jurisdiction that is working on a sustainable model. British Columbia has huge potential to be such a precedent – and the Slocan Valley could be such a leader in this.

So if this were possible, what would it look like?

What specific types of mechanism would need to be in place for this to work? What type of passage would we put together synergistically for this to come about?

Fourth principle:

Critical importance of networks – non-territorial, bringing diversity together. We recently set up an organization called "Forest Futures" – with the goal of bringing together communities, First Nations, small businesses, environmentalists around the theme of tenure reform. The Forest Stewardship Council (FSC) is also a network with huge potential. Also the Inland temperate Rainforest Network.

Some tools:

- 1) Community Forest Trust Act
- 2) Community-based revolving loan funds (a fund of ~\$2 million – to keep investments in the community)
- 3) Business strategies (support development of green businesses)
- 4) Land reform – community forests
- 5) New models for self-regulation – people manage themselves (community self management for areas that are ready)

The role of the state in this?

Protector, facilitator. We can't live with the state, but can't live without it either. Need to change tax system, access to wood, tenure and many more regulations.

Some day the dam will break – there will be a flood of possibilities pouring forth. So let's keep chipping away!

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## 15. Panel Discussion

**Expansion on the theme introduced by Michael M'Gonigle: What strategies and tools will be most useful for the Slocan Valley and other communities to take the next steps toward sustainability?**

*With Cheri Burda, Ernie Niemi, Herb Hammond, Dr. Lee Hutton, Lisa Matthaus, Michael M'Gonigle and Grant Copeland.*

The panel discussion is rendered as a complete transcribed text, with just a few edits to allow for easier reading. Each speaker had the opportunity to answer the question posed and introduced by Michael M'Gonigle.

### Herb Hammond:

Thirty years of experience in forestry in B.C. has led to several important conclusions:

1. **Avoid the trap of thinking that we don't already know what we need to know to change.** We need to change policies and practices toward truly responsible, sustainable forestry practices. We need to widen our model of understanding and action beyond the nitty-gritty issues to include structural solutions to the ecological, economic and social challenges, towards which we have been working for so long.

We must remember to work on those structures that prevent us from doing those nitty-gritty things, and on how we can divide our time between the ground models, community-based models and removing the impediments to those models, setting precedence to implementing those models.

*Laws don't change values. Values change laws.* A nitty-gritty solution definitely works towards a different legislative framework, and I agree with that, but all that is a catalyst for changing actual values.

2. **Avoid the trap of complexity.** Any good anthropologist will tell you that this society will eventually collapse. Maybe you're hearing that now. All societies like this through time have collapsed because they build up complexity to avoid solving the problems that they know how to solve, and eventually they collapse: As that complexity grows societies reach a point where ecologically and economically they can't afford themselves anymore. When they can't afford themselves, they collapse, and when they collapse they go back to more tribal-based and land-based kinds of cultures. I think that's what we're going to get with these solutions, but we'd like to be able to do that without collapsing.

Val Napoleon, a Cree woman who's on our board, puts it this way:

"Non-indigenous cultures have a simple social structure and complex rules. Indigenous cultures have a complex social structure and simple rules." So think about that when we're talking and tie it back when we talk about laws versus values.

The dictionary meaning of the relatively new and often loosely used buzz-word **sustainable** is: enduring or forever. This is a human concept, not an ecological concept. In the practice of mainstream forestry and agriculture, and despite all the rhetoric of foresters, we're not even close to being sustainable.

"Sustained yield" as the term is now used, means sustaining tree-cutting at a certain level until that level can absolutely not be maintained anymore, and then sustaining tree cutting at a lower level until there aren't enough trees left to sustain cutting at a lower level. If you don't believe that, just get in your car and drive from this coastline to the east coast of Canada. When you get into Manitoba and east of there, you see pulp mills, not saw mills. You go to museums, you see big trees and saw mills. You walk out the door and you see pulp mills. Talk about poor economics and people. Millions of dollars to sustain one job. Few people work there, and it's all based on degraded ecosystems.

The other buzz-word **sustainable development** came out of some good ideas, but it's flawed in the vision that we can have it all, including 4% growth – which is what it's based on.

So, if we're going to talk about ecosystems and sustainability, we've got to recognize that ecosystems focus on maintaining the whole in a form of systemic equilibrium, not on producing one part. As soon as you start a system that is attempting to focus on producing water or producing timber or producing wheat you're suddenly out of the concept of sustainability. Ecosystems don't focus that way. They focus on maintaining themselves.

So eco-sustainability means fitting into natural systems. We have to get out of that idea of forcing ecosystems to produce. We've got to focus on sustaining needs, not on wants. Ecological Limit must be the guiding principle. Not "Can we?" but "Should we?" Respecting ecological limits being ecological. If you stay within ecological limits, you have ecologically responsible solutions.

Also, the Precautionary Principle: "In the absence of information – don't do it." If we don't have information on how a system works and what our impacts will be on the system, then we don't do it. In the past, we've done exactly the opposite in forestry, agriculture, in land development – we use the absence of understanding to justify very invasive action. Communities have to place diversity, responsibility and accountability within a framework of ecological responsibility.

Keep control close to the forest. Ecological responsibility indicates community control. "Control with, not control over."

Education is the most important principle we need to talk about: before we talk about an apprenticeship with machines, we need to talk about an apprenticeship with nature. As long as we continue to ignore that this principle is being violated every day, you can design any solutions you want, but won't get them implemented anywhere.

Let me just conclude with a little bit of humility: "The forest sustains us, we don't sustain the forest."

### **Ernie Niemi:**

As an economist, looking at the economy, how economics works and how people make economic decisions, several major points need to be made.

#### **1) We have to get the incentives right.**

I learned this about 20 years ago, when a mill owner made it very clear that he was making about one million dollars a year off of subsidies from cutting our federal forests and that he was willing to spend \$999,000 of that in order to win. As long as he has economic incentives – all the local organizing, all the local marching, all local agonizing and wrenching your heart out, still doesn't have the power of that \$999,000.

If you don't get the incentives right, you will have people getting incentives to do the wrong thing. So fundamentally, we need to be backing up and looking at the incentive that we have.

There are tremendous subsidies – that is, direct payments to people, who do what I consider to be the wrong thing. We need to make certain that "every firm, every household, every community has a much stronger incentive to do the right thing. "

#### **2) See this as a tax reduction movement.**

Point out that there are tremendous spill-over costs, subsidies, direct payments – that logging interests are allowed to impose elsewhere. When dirt goes into a stream when companies log upstream from a community and it is the people downstream who have to deal with the dirt, then the company is not being held fully responsible for their actions and will continue off-loading these responsibilities. This isn't rocket science and very little of the economics here is rocket science. When governments allow your timber companies to come in, put the dirt in the stream and make you pay to clean it up – that's a back-door tax and people don't like that.

It's possible then to make the case that you are a tax-reduction movement. This really is a tax-reduction movement.

#### **3) How do you get other groups involved?**

We have to have the scientists involved. In the early '90s, scientists came to realize that unless they involved themselves in forest management discussions, their voices would be dismissed as irrelevant. Some scientists have taken that step. They have spoken out and made known the consequences of the decisions being made. To a great extent, they now dominate the debate in the Pacific Northwest and increasingly across the U.S. So the shift in the sensitivities of these professional organizations was that it was OK to have an opinion.

Also there was an attack on the schools. Public pressure is being brought to bear on the forestry schools through letters to the editors, to the presidents of universities and the deans, saying: "What kind of trash are you teaching your students?" "Are these forestry or timber schools?"

#### **4) Trace the money and find out how the banks actually change where their allegiances lie.**

It was noticed, in the '70s and '80s, that legislative decisions were being influenced by pressure from the bankers who had investments in the timber production sector. Then in the early '90s the banks started to realize that protecting the clean water, protecting the forest, started to have more impact on their bottom line than protecting the mill did. That if the mill went down, the bank wasn't going to go down because the community is actually doing quite well.

Even the timber industry discovered in polls that with the shift to information-based economies, increased personal mobility and over-riding quality of life concerns – communities that can attract very skilled qualified people will be more prosperous than communities that can't – and that 75-80% of people polled will choose to protect the environment over protecting resource-based jobs. This is the new economy. Get bankers on your side. And also all those individuals interested in the quality of life.

The banks have noticed and are now starting to look through the windshield rather than the rear-view mirror in order to see what the economy is going to be like and what role forests play in it.

#### **5) We need to deal with transitions and develop transition visions.**

People are tremendously afraid of change. If you ignore that, then you have that fear operating against you, and it is a very powerful motivator. Allow people to see that there is a world beyond, that there is prosperity beyond where we are right now. Otherwise you're never going to get to the long-run, you'll always be stuck in a series of short-run steps to hell.

**Lisa Matthaus:**

We need transitions that allow us to get on with making the necessary changes now, while we still have options. Twenty-six years ago this was first recognized in the Slocan Valley. People need to know that in some places transitions have already happened. In Nelson and other communities there has been (often very quietly) a shift away from resource-dependent economies.

This won't be as frightening as people think this is going to be. We're looking at what happens in places where it wasn't as bad as everybody thought, places where transition has already happened.

We need to show people actual examples by creating outreach materials to make this information widely accessible. Doing so will help lessen people's real anxiety about future economic possibilities.

Simon Fraser University – in its Economic Development Research Program, is seeking out examples of communities who have gone through this transition, in an effort to find indicators of success which can help other communities realize their transition goals by identifying factors and patterns common to successful communities. Their on-going research may be accessed on their web-site and can provide indicators for other communities that might be facing this, so it's possible to say: "Look, this doesn't have to be as frightening for you because you have some of these good indicators or you can work on some of these and make this transition."

People can't understand what they don't know about.

There is also a need to establish mechanisms that let precedents happen and that allow some leeway to take some chances. A good example is the recent legislation of Bill 82, which allows pilot projects to happen by approval from Cabinet and exempts these projects from the Forest Practices Code.

Depending in whose hands the projects lie, this leeway can be used well or misused, and that can be a little frightening. It just means that we have to take advantage of the leeway as much as the forest companies will.

While this does open the door to potential abuses, there have been some commitments that none of these pilots will go forward without community involvement – not necessarily approval – but the more inclusive projects will then be approved.

The prospect of exempting a forest company from the Forest Practices Code because they want to try something new and different could be a little frightening. But it does also open up the doors for things like community forests; say the Harrop-Procter Watershed should be given this community forest status because they want to do something different, but they are still constrained by the exact same rules, you still have to meet your cut control requirement under the Forest Act. It really does constrain your ability to do something experimental. This is one way of getting around, in a way, the rules that give us comfort on the one hand, and constrain us on the other.

So we need to look at that tool very creatively and be aware of the pitfalls of its use. In the wrong hands it could be problematic. But as even some of the forest companies start looking at that – look at what they're doing, get involved if you can and see if we can get some good experiments happening on the ground.

Another experiment is what's happening in Clayoquot with the eventual tenure transfer from MacBlo to the First Nations under the terms of their joint venture. This actually is a very momentous occasion – we're talking about a major form of tenure reform and it's happening fairly quietly. In the memorandum of understanding between Iisaak (a forest services company owned 51% by the Nuu'chah'nulth, the Central Region First Nation, and 49% by Weyerhaeuser (former MacBlo) and 5 environmental organizations) the Sierra Club, Greenpeace, Natural Resources Defense Council and Western Canada Wilderness Committee, Iisaak has agreed to operate according to principles of eco-forestry that will be laid down in consultation with Herb Hammond and others. They have said that they will stay out of the pristine valleys and parks – recognizing that there are greater values from not logging these areas – and will concentrate their operations in non-pristine areas. We think that this is a major coup.

The Sierra Club will work very closely together to help them gain the premium market access they need to support this model of production and to ensure that this joint venture will be a prime working example of an eco-forestry vision in action.

Which brings me to the caveat around experimentation – we need experimentation, we need to try different things and new approaches... diversity produces far more in the long run. It also means that we're going to have a lot of failures. That's the nature of experimentation. That's really how we learn. These experiments, most of them, will not go smoothly, so we've got to be quite tolerant of failure to a certain extent. We don't want to plan for it, we don't want to build in mechanisms that will cause it to fail, but we need to – as communities, as a local area, as an environmental group, as a movement – discuss goals with each other.

We need to build trust in our communities, in our movement and in British Columbia as a whole, that our intentions are good – that we have shared goals, that we're all working toward the same thing.

We need to recognize that we have different ways of getting there in the environmental movement, in the Slocan Valley, but it's the diversity of approach that's going to get us where we want to go in the future towards a durable, diverse economic system that benefits from all the values of our environment, our forests and our water and all the good things that we have here.

### **Cheri Burda:**

Fundamental structural changes in this province in the form of tenure reform and reduction of the AAC are critical. Implementing policies and pilot projects will not create sustainability unless the AAC is reduced significantly. We need structural change.

Tenure reform can be a way to bring about that needed change. Industry and government are now adopting the language of environmentalists and social changers, creating both opportunity and apprehension. The type of tenure reform that industry wants is a type of vertical reform, with more enhanced rights for industry – a type of privatization. What is really needed is tenure redistribution, a shift in ownership from the central powers to the territorial powers and we need structures that enable that to happen.

The **Community Forest Trust Act** is most relevant for a number of reasons. First I would like to clarify a few points about this Act. The Community Forest Act may serve as a mechanism for places like the Slocan Valley and a number of other B.C. communities that have developed alternatives for change based on ecosystem values. All the work has been done – the mapping, finding community consensus, the development of business plans in many situations – but the rigid tenure system prevents implementation. After years of effort, communities may not be offered small volume-based timber status because the wood has already been allocated.

There's a huge momentum for change and the *Community Forest Trust Act may possibly provide the legislative mechanism* for these communities that are ready to work on ecological principles to have a shift of management over to the community. Even when there are opportunities to move beyond the status quo/timber-based way – such as in the Community Pilot Project in Harrop-Procter, where the community wants a much lower cut volume – it is the Chief Forester who has the final say in ultimately determining how that AAC should be set. Transitions are necessary in order to actualize all these fine possibilities for legislative change. We need a type of movement to get from where we are with tenure to where we need to be.

**Forest Futures** is a new organization that has been in the works a long time and is a social justice movement made of labour groups, environmentalists, First Nations, community groups and businesses. The objective of Forest Futures is to bring those isolated voices together for change. You have a cry in the woods – where people are working so hard in their communities for change but there are dozens of communities who are trying to do that. There are a lot of other groups – the Woodlot program is trying to push for changes, the value-added sector is trying to push for changes. It all involves tenure and policy reform. Forest Futures is going to be that mechanism that brings these voices together and pushes for a fundamental change where we can see sustainability and the types of tenure systems and policies that we need.

The B.C. government has recently announced the Vision Process, saying that they have listened to communities, environmentalists and industry, and have chosen to initiate a process for tenure review called the Vision Process. The four main areas that they're going to be looking at look great: changes to Timber Tenure, Land Stewardship Policies, Stumpage Reform and Regulations for Local Control.

This huge opportunity means: we need to be in there to show **how** this reform must occur, otherwise it's going to be stamped by the industry and it's going to reflect their values, which continue to be timber-based.

Reforms without change to the AAC will be a meaningless repackaging of the same timber-based regime. Should we be involved in yet another process? It's really up to us. First we need to be informed. We need to know what the terms of reference are and how we can push them further. For an update on the forest policy review process see "Private Rights vs. Public Responsibility: Tenure Reform and Community Forest Management in B.C. on page 14.

(Now former) Forest Minister David Zirnhelt has acknowledged: "We know the issues. We need policy solutions." We, however, know we already have the solutions and don't need to do a lot of further research and the Slocan Valley is one of the best opportunities I know of to implement these solutions. So this Vision Process could be an opportunity to finally say 'We have the solutions here. We can show you how to make change.'

Dave Zirnvelt believes he knows if he asked the average person on the street of any local community – "If you had your choice – would you prefer to have government subsidies to keep your mill going to keep your job or would you prefer to have the opportunity to manage that forest yourselves? What would you choose?" – that in all cases communities would prefer the status quo, for things to continue as they are.

I don't believe that's true. I believe there's a huge opportunity to prove otherwise and this process is one of the ways that we can do it.

In addition, recent public concern when MacBlo was calling for land as a type of compensation prompted David Perry to be commissioned to investigate this. He concluded that a comprehensive **compensation policy** was needed. We're talking about land reform, tenure redistribution, opportunities for communities, redistribution. We are talking about those hard issues.

We need to be involved in any process on tenure reform. The possible World Trade Organization Free Logging Agreement could impose a box from which there is no escape: If a compensation policy is set that does the same thing, we're not going to be able to move beyond that. So we need to be aware of when this process (Vision Process) occurs and how to set what we need for compensation.

So I want to end with some positive things about Forest Futures. Forest Futures is really there to break the jobs versus environment gridlock, which the industry is effective in using to divide and conquer. It is time to unite and come together for change and develop policies looking forwards rather than backwards. We must take the time to look and ask ourselves: "What do we want in the future? Where do we want to be ten years from now? What do we want our forests to look like? What kind of communities do we want?" And then set our policies. This is something that the government has not done in the past and something we really need to convince them to do in the future. I think that there are a lot of opportunities for that.

#### **Grant Copeland:**

Having worked toward gradual, but radical change for a long time, it's clear that we're running out of time. It's hard to believe how fast the globalization of the economy is happening around the world. A recent U.N. study comparing the disparity of wealth within rather than between countries has found that: the 200 richest people in the world now have more wealth than the bottom 41% of the world's population and that their wealth has doubled in the last four years. Projecting those statistics into the future we can see we need to quickly "change the way we do things."

Two ideas for change that may have the broadest effect are:

**1. Reducing the AAC.** Science and even the Ministry of Forests' own numbers call for a 28% reduction to achieve a long-run sustained yield. Former Forest Commissioner, Sandy Peel, also concluded during his years of investigation that the AAC needed to be reduced by 50% across the province. The Clayoquot Sound Scientific Panel determined the need for a 62% AAC reduction. Silva's ecosystem-based plan calls for at least a 72% reduction over the long run.

I'm calling for an immediate 50% reduction in the Annual Allowable Cut across the province.

Scientific and legal opinions not only support substantial AAC reductions, but also confirm that along with these – **there is no compensation required.** The case of the 47% cut reduction in the National Forest of the Pacific Northwest in 1991 to protect the spotted owl confirms that, despite predictions of gloom and doom: What happened, in reality, is that the economy responded positively because of the reduction in logging. Why? The quality of life is so important to so many of us, yet it's hardly ever factored into the decision about whether or not to log.

**2. Elimination of further subsidies is also essential.** According to a recent study by Norm Myers of Oxford University, tremendous increases in subsidies to corporations of all kinds all over the world have now reached \$3.35 trillion/year – twice the total amount of military spending around the globe.

The largest but not the only subsidy in B.C. is to the forest industry. The figures are startling. Based on the last eight years of work by economist Michael Mascall (present here today) – we see that the Canadian government through Forestry Canada, Foreign Affairs, International Trade, National Research Council, Human Resources, Environment Canada, Western Economic Diversification has spent \$215 million/year each year over those eight years to support the B.C. forest industry.

While subsidies are very complex and very difficult to estimate, and we don't know what it's really worth to preserve quality of life and the costs to clean up the messes left by logging, we do know that 90% of the total B.C. Ministry of Forests budget (\$558 million per year) is for logging-related administration. Less than 1% of the total budget goes for recreation or anything else. Other logging-related costs per year (estimated):

Ministry of Environment – \$60 million (30% of total budget)

Ministry of Employment and Investment – \$41 million

Ministry of Advanced Education and Training – \$5 million

Forest Renewal – \$472 million ('95-'97).

The total amount the B.C. government spends to support the forest industry is \$1.18 billion per year. The total direct agency expenditures from the federal and provincial government then amount to \$1.4 billion.

In addition tax credits, preferential rates, tax write-offs come to \$400 million per year for the forest industry of B.C. and then there are the bailouts. Figures are incomplete for these, but we do have examples like Skeena Cellulose, where the government has given \$820 million over the last three years. That's \$340,000 per worker per year subsidies for each of the 2,400 jobs there.

The biggest subsidy of all is in the form of indirect public trust – stumpage fees forgone – which means we're not collecting what the wood is worth on the international marketplace. Comparing the value of wood on the log markets of Vancouver and Seattle we find a \$2.8 billion pricing difference for the same wood. The price differences between the Vernon log market in the Interior and what the large companies pay for the same wood is estimated to be \$3 billion for a total \$6 billion for stumpage fees forgone per year. In addition there are damage-related costs, which are difficult to estimate. Studies done in Washington State estimate costs to be \$250/acre over 25 years. Extrapolating to B.C. means \$3 billion. Herb Hammond suggests it could be up to three or four times that.

So when you add all these numbers up you get to 11 billion dollars per year, that's eleven thousand million dollars: \$1,000,000 x \$11,000. Divide that number by the amount of forest industry employees in B.C. (approximately 75,000 employees) and you get an average of \$136,000 per forest worker in B.C. According to Statistics Canada in 1997 there were 2,658 million tax filers in B.C. During that year the annual public cost of the forest industry averaged nearly \$4,000 a year for every taxpayer.

I would suggest that, if most taxpayers were aware that they were paying this much, I don't think very many of them would want to continue doing so. I am therefore advocating getting rid of the subsidies, reducing the Annual Allowable Cut and doing it right away.

For more details, see Grant's newly released book "Acts of Balance", chapter 15 (New Society Publishers).

#### **Dr. Lee Hutton:**

My interest is in water quality. I agree with Dr. Tom Powers, Chairman of Economics, University of Montana, who pointed out "that really sustainable, growing vibrant communities are found in places where people want to live. They want to live there because they've found the quality of life to be good." Nelson is a good example of a growing community where people didn't move there just for a job but because they wanted to live there. Though mining, agriculture, forestry all have waned or are waning – Nelson continues to grow because people want to live there.

As in Oregon, people get a subsidy to their wages in a place they want to live. For instance most of us – if we had to live in Detroit we would have to be paid a whole lot more than if we lived here. Quality of life is very important.

Data from studies in the States show that counties which had legally protected wilderness areas were growing 50% faster than the rest of the counties in the U.S. Again – quality of life – people want to live next to wilderness or in places with beautiful views and good water. Because it's a better quality of life – that's why people move places. Who will live in the lead-filled environment of Trail if Cominco ever closes? Out of the fifty doctors in Trail, only one lives in town and the rest in Rossland or Fruitvale for a better quality of life. When people worry about jobs if logging is decreased they need to remember that Nelson is not growing because of an increase in logging jobs, it's growing because people want to live there.

Water is a 'quality of life' issue. People like to have good water. There are many places in the States – San Diego for instance – where you can't really drink the water. Well, you can drink it but it's not very palatable water. Our water tends to be excellent. Of course there are a lot of issues around it including logging and chlorination of the water.

Water quality means different things to different people – appearance, taste, health issues etc. and I, being a physician, focus in on health facts. It's easy to divide it into three things: raw water quality, the treatment of water and the distribution of water. In my opinion, and in the opinion of others, raw water quality is of the utmost importance. It's affected by many things, primarily and most importantly, by what people do to the water. In other words the number of people, cows or other animals in the watershed, whether there's logging or road-building that affects sedimentation.

In terms of the number of people in watersheds, it's interesting that it's illegal to go into the watershed of Vancouver, Portland, Victoria and Seattle without permission. The reason they do that is so people don't introduce human pathogenic diseases passing organisms into the water, which can range from cryptosporidium, giardia, hepatitis A. Fortunately we don't have any of the really

bad diseases such as typhus, cholera, hepatitis A in our water here due to the fact that people don't have much of these diseases, whereas in other countries that can be problematic.

It used to be a big deal here before chlorination, there were lots of people dying in New York and everywhere. In fact I looked around 1900 in Nelson and about half the deaths in town were from typhoid fever. That was because the miners were right above Nelson on top of the creek and that's where Nelson was getting its drinking water from – they were contaminating it. The only carrier of some of the really bad diseases – is humans. So it's best to keep human activity to a minimum in watersheds without having to use super treatment afterwards. The Kamloops cryptosporidium outbreak was a result of cattle grazing activity in the watershed, as well as the one in Milwaukee that killed sixty people and made 60,000 sick. That was from the cattle industry.

The other thing about raw water quality is sedimentation. A lot of times in Vancouver they talk about the sedimentation being caused by logging and road-building as if they were just slides but that's probably not where most of the water comes from after logging. It's from the peak flows being increased and destabilizing the bed of the creek and then the whole thing starts moving and it takes a hundred years to get back to where it was. As most of you know. The reason sedimentation is such a problem in terms of health, it makes it really difficult if your water does get disease-causing organisms in it to clean it up. If you chlorinated water with a lot of particulates in it you get a lot of organochlorines which are known carcinogens. There's ample evidence that people who drink chlorinated water for a lifetime have an increased incidence of bladder cancer. That's statistically conclusive.

So when the Ministry of Health asks you to chlorinate your water, remember first of all why you're not supposed to be chlorinating. Secondly neither of the two major organisms which occur in water in B. C. – giardia and cryptosporidium – can be effectively treated by chlorination. Cryptosporidium can live in a bottle of bleach. You can get rid of some of these things by filtration, but not just by simple rapid sand filtration. You have to use something called slow sand filtration. When you talk about money, I think the price, fifteen years ago for 100 Mile House, a fairly small community, was 10 million dollars so they get very expensive, and that's for a very small community.

I think we can safely say that logging affects water quality and quality of life issues and therefore economics. Keep asking the question "Why are people moving to this area?" Are they moving here for more logging jobs or are they moving here because they like the place? I think the answer is obvious.

### **Michael M'Gonigle**

The objective here is to begin a process and carry it through to tomorrow (Sunday, the last day of the conference), where we really begin to have a concrete action plan for what people are going to do and how they're going to do it. So let's talk to that for the next forty-five minutes back and forth between the floor and the panel.

Let me just do a quick attempt at integrating and summarizing what the panel said. I've got it down under three main headings and I'm not trying to lay down a roadmap we have to follow, but just a first attempt to put some integration together here.

#### **1. Economic Initiatives:**

We need to:

- Get the incentives right, moving to reverse subsidies,
- See this as a tax reduction movement,
- Trace the money and find out how the banks actually change where their allegiances lie,
- Press for the creation of clear compensation policy approaches,
- Highlight the successes i.e. Nelson, SFU Economic Development Project,
- Pursue more pilot projects, Bill 82 as setting a precedent,
- Help develop whole strategies for new green business development – co-operatives and de- regulation.

#### **2. Political**

We need:

- To get involved in the Vision Process,
- Particular legal reforms that could happen,
- Transition strategies,
- To network more strongly with groups whose own self-interest was in working with us,
- Scientists to take a political position.

#### **3. Land reform**

We need to:

- Defend the ecosystem from our sense of ecological responsibility,

Press to reduce the AAC immediately,  
Shift from a resource-based economy & remind people of quality of life issues,  
Press for tenure reform, redistribution of tenure, not just tweaking the existing system,  
Make the most of the Forest Trust Act by creating more pilot projects.

ALWAYS keep water and the centrality of water quality as our thrust and focus.

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SPECIAL NOTE: Grant Copeland died at midnight Saturday, January 8, 2000, in New Denver after a courageous and lengthy battle with cancer. Grant leaves behind him a legacy of deep caring for the land, and because of this, the Sierra Club of B.C. Foundation has established the Grant Copeland Fund in his honour. The Foundation has also inaugurated an award to honour his work. The fund will go towards an annual award called the Grant Copeland Award for Outstanding Achievement in recognition of Grant's substantial contributions. It will be used to support those working on linking the economy and environmental sustainability. Grant's book, *Acts of Balance: Profits, People and Place* published by New Society Publishers last fall, deals with the crisis of globalization by examining a number of case studies in the Pacific Northwest and arriving at some surprising conclusions in favour of community-based development. Donations to the Grant Copeland Fund c/o Sierra Club of B.C.

Foundation will be tax receipted upon request.

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## 16. A Lifetime of Creativity Displayed.

*Will Malloff, Creator of the Alaska Chainsaw Mill.*

With his research and ingenuity Malloff has made a unique contribution to the field of value-added production. Will is the designer of what many consider the most effective chainsaw lumbermaking system available. In this presentation he shared his work, research, inspiration and hands-on approach, offering new avenues for diversifying the wood-based economy of B.C. His workshop was very lively and interactive, giving participants the opportunity to ask many questions and learn from his extensive picture display. For more information see Will Malloff's book "Chainsaw Lumbermaking" (The Taunton Press).

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Will Malloff, Ph: (250) 973 6633

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## 17. The Sky Did NOT Fall. Ernie Niemi, Economist with ECONorthwest of Eugene, Oregon, and Lisa Matthaus, Forest Policy Analyst with the Sierra Club of B.C. (SSC)

The workshop looked at the findings of the 1999 study prepared for Earthlife Canada Foundation and the Sierra Club of B.C. entitled *The Sky did NOT Fall: The Pacific Northwest's Response to Logging Reductions* on the premise that B.C. is presently facing similar reductions.

In 1988, the U.S. Fish and Wildlife Service applied the Endangered Species Act and listed the northern spotted owl as a species threatened with extinction, setting in motion a chain of events that culminated in the curtailment of logging on 24 million acres of federal land in Washington, Oregon, and northern California. The prospect of these logging reductions triggered widespread fear that workers, families, and communities throughout the region would endure prolonged, widespread economic calamity and social

disruption. In truth, the disaster never happened. Instead the region's economy has been among the nation's leaders throughout the 1990s, with growth in population, employment, and per capita incomes outpacing the national average.

This growth in the face of such a large contraction in the timber industry calls into question the validity of commonly-used economic models that conclude resource extraction has a determinative influence on the overall economy and reveals much about the current role of natural resources in the region's economy.

The report (*The Sky Did NOT Fall*) found that most of the fears never materialized because of three related facts:

- 1) Logging's economic positives were small and decreasing in the region. In the period from 1979-1989, although the timber harvest had increased by over 4%, jobs in the industry had declined by 10.6% and income per employee had declined by 11.8%.
- 2) Logging's economic negatives were large and increasing. Taxpayers were losing out through subsidized labour and other costs, tax breaks, and below-cost timber sales. Downstream flood risks and clean-up costs were increasing. Clearcut logging resulted in forgone opportunities for other uses of forest resources.
- 3) Logging was not a basic industry supporting the rest of the economy. Those who feared logging reductions worried that logging supports other economic sectors, and as logging goes, so goes the economy. The reality was that as logging went down, the economy grew. As economic activity diversified, prosperity grew as the range of services and skills in the community grew.

Lessons learned from the U.S. experience were: that there are always competing demands for forests; that any forest-management decision has economic impacts; that a decision to maintain the status quo does not mean that jobs will be maintained; that the economy adjusts quickly to change; that logging doesn't warrant special treatment; that logging's negatives should be reined in; that resources should be directed to industries with prospects for growth; and that we must manage the transition to ensure that the burdens of change are shared.

The presenters argued that B.C. has essentially the same forest-economy relationship as the U.S. northwest, and therefore, the lessons learned should apply to B.C. The timber industry might be the economic base for how Canadians got here, but not necessarily for where they are going.

The transition is inevitable, so manage it, they urged: accelerate change to overcome inertia (call for large logging reductions); mitigate the short-run adverse impacts of change (improve community infrastructure such as fibre-optic networks, educational opportunities); compensate families, firms and communities financially to accomplish efficiency and equity goals.

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Ernie Niemi; Email: [niemi@eugene.econw.com](mailto:niemi@eugene.econw.com)

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## **18. Do You Play the Next Inning When the Ballpark is on Fire?**

*Dr. Fred Bass, British Columbia Medical Association. (SSC)*

This participatory workshop guided by Fred Bass addressed how we're helping the marbled murrelet (ecosystem) beat the Marlboro Man (corporate greed), focussing on strategy: Dr. Bass used his knowledge of epidemiology to demonstrate how a positive epidemic, such as support for ecologically sustainable forest practices, can be spread effectively.

Understanding the epidemic:

1. Look at the whole population, what are the trends of the epidemic over time.
2. Learn the natural history of the epidemic, where did it start?
3. Determine the agent, host, environment.
4. Understand the process for making a change: pre-contemplation, contemplation, preparation and action, maintenance, relapse.

Understand the various components of a change:

1. Innovators. 2. Early adopters. 3. Late adopters. 4. Resistance.

Know how to spread the epidemic effectively:  
Through media...

- a) Have 3 prepared points. No matter what you're asked, those are the answers.
- b) Be sure of your facts.
- c) Be human. Use your own words. Be yourself.
- d) Listen to what you say. Speak slowly.
- e) On TV, speak in 10 second clips.
- f) Use your body, gestures.
- g) Don't say the same thing twice. "Through sustaining optimism and encouraging others..."
- h) Use hard, scientific facts.
- i) Understand that no-one knows where we will be in 10 years.
- j) Realize it only takes 2-3% of the population to change an entire society.
- k) Keep demonstrating, having conferences. Continue with songs, poetry, nature, laughter, music.
- l) Realize it's naïve to think we'll win the first time around.

\*\*\*\*\*  
Fred Bass; Email: [fredbass@home.com](mailto:fredbass@home.com)  
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### **19. Ecosystem-based Mapping: A Powerful Tool for Communities.**

*Susan Hammond, Executive Director of the Silva Forest Foundation. (SP)*

Ecosystem-based mapping looks at whole landscapes. The mapping designs ways to protect (or restore) biodiversity, identifies current human uses, shows the impacts of past and proposed logging and proposes potential areas for human uses, including ecologically responsible timber management. The extensive information empowers people to plan for healthy ecosystems, communities, and economies.

What is Ecosystem-based Planning?

Ecosystem-based planning looks at 2 questions:

- 1) What are the ecological limits to human uses of a specified land area?
- 2) Given these limits, how can we maintain fully functioning ecosystems; maintain or improve social conditions, including employment levels; and provide community stability?

At the broad landscape level, large core areas are protected to provide the framework for maintaining biological diversity. These large protected areas are necessary to maintain species and genetic diversity for both animals and plants. In the Slocan Valley, large protected areas include the Valhalla Park, Kokanee Glacier Park, and the new White Grizzly area.

In addition to large protected areas, the protected landscape network includes old growth forests and riparian ecosystems (the area next to streams, rivers, and lakes), as well as sensitive areas such as steep slopes, wetlands, sensitive soils, and cultural sites. Corridors connect the various parts of a protected landscape network and are necessary to protect water and soil, to provide for the movement patterns of large animals, and maintain plant and animal diversity. Provided ecosystem functioning is fully protected, some human uses can occur within the protected landscape network.

Once the protected landscape network has been defined, the area outside the network is potentially available for ecologically responsible human uses, including timber extraction, tourism, recreation, and wildcrafting. An ecosystem-based plan proposes zoning for human uses and establishes standards for those uses that will maintain and protect fully functioning ecosystems.

What About the Economy?

If we pay attention to what the ecosystem tells us about the limits to human activities, then we will modify our activities. We will cut less timber on a smaller portion of the total land base. Not every area will be available for recreation and tourism. This, however, does not have to mean fewer jobs or reduced economic activity. If we cut timber using partial cutting systems with smaller machines, and if we make more higher value products from the wood we cut, the number of timber-related jobs can actually increase. If we maintain the beauty of a bioregion, tourism will increase and more jobs will be created in this sector. Protecting the ecosystem allows us to maintain economic options and to create a more diversified, stable society.

A transition strategy for implementing an ecosystem-based plan provides a way of phasing in plan recommendations so that individuals and communities are protected as much as possible. A transition strategy includes:

- \* training and retraining for workers
- \* forest restoration
- \* logging equipment remodelling fund
- \* expansion of value-added wood products industries
- \* expansion of home-based and small businesses, tourism, and wildcrafting
- \* financial assistance for new businesses
- \* local control of resources and economic planning

**The Use of Computers to Aid in Ecosystem-based Planning:**

Ecosystem-based planning can be done without computers, but the use of Geographic Information Systems (GIS) permits more extensive analysis of computerized mapping information and also generates numerical data regarding planning decisions. For example, the computer can readily identify how many hectares are included in protected areas, in timber zones, or in other designations. Additional programming that interacts with the GIS permits additional sophisticated analysis that would be extremely time-consuming to do by hand.

The Silva Forest Foundation works with communities around British Columbia to develop ecosystem-based maps and plans that reflect the ecological realities of the forest and the social concerns of the people who live there. Maps and plans have been completed for the Slocan Valley, Harrop-Procter (near Nelson), Cortes Island, two portions of the Robson Valley (east of Prince George), and the Yalakom Valley (near Lillooet).

Each community uses its maps and plans in ways appropriate to that community. Some communities are participating in government planning processes and use the maps as information at the table. Others use the mapping to educate the community, Ministry of Forests and industry personnel. Harrop-Procter was recently granted one of seven pilot Community Forest Agreements and has taken their planning to the operational level with ecosystem-based logging prescriptions and an ecologically responsible allowable annual cut—the first ecosystem-based plan to become operational! The Cortes Island community is working with the Klahoose First Nation to establish community control of all Crown forest on the island, using their ecosystem-based mapping as a starting point.

"The forest sustains us, we do not sustain the forest"

\*\*\*\*\*  
 Susan Hammond  
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**20. Ecoforestry in Action.**

*Peter Jungwirth, Ecoforestry Practitioner. (SSC)*

Peter Jungwirth, an eco-forestry consultant and neighbour of Merv Wilkinson, kindly jumped in at the last minute to present Merv's workshop on ecoforestry. A video was shown, telling the story of Merv's life, his commitment to sustainable forestry and how he does it on his piece of land. For 60 years Merv has been cutting the same volume of wood on his property (137 acres); he now has 10% more wood than when he began, with 35 – 40% of the large old trees still standing, sustaining an ecological balance for the many creatures in the ecosystem. Over the last 60 years Merv has made 10 cuts and provided a substantial part of his annual income from his land. 20 years ago he began to leave dead trees in the forest – and has noticed how the general tree health and rate of growth improved.

Harvesting methods: The main rule is to avoid damage to the trees that remain, to avoid damage to the soil. In Merv's experience horse logging proves to cause less damage than machines. Even slight damage to a tree, such as the bark being removed by skidding another tree past it, invites fungus infections that decrease the future value of the remaining tree. During his stewardship of Wildwood Farmmm, Merv has witnessed the overall health of the forest improve: decrease in root rot, less insect damage. Woodpeckers and carnivorous insects eat the main pests.

Merv has inspired countless others to look into a better, more satisfying way of practising forestry. Present at the workshop were several other loggers who work with alternative harvesting methods and contributed to the discussion with examples of why they made a commitment to better forestry practices and their support for the spreading of ecoforestry.

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Peter Jungwirth; Email: [jungwirth@bc.sympatico.ca](mailto:jungwirth@bc.sympatico.ca)  
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**21. Reworking Success.**

*Robert Theobald, Futurist. (SSC)*

We must challenge the current dogma of maximum economic growth, globalization and international competitiveness. In order to survive we must overhaul our whole concept of 'success.' The required criteria of success for the next phase of human social evolution are ecological integrity and a respect for all of nature, effective participatory decision-making, and social cohesion based on profoundly changed concepts of justice.

We live in an odd time and place: within a silent majority that doesn't seem to effect the basic need for change. In the sixties the need for change was in the head – those spearheading for change were the "clowns of the society." Now the urgency is felt by many in the gut: "I have to change." We are often, however, trained to think that we are not capable of discerning truth and then of living it. Culturally we believe in experts and professionals. Plus we are lousy at co-operation – all want to do it our own way, fight with our allies, rather than make some headway with the real "enemy."

We must come to an agreement on:

- 1) Quality of life is more important than quantity of goods
- 2) Spirituality is part of life (movement away from objective reality)
- 3) Social cohesion – need minimum gap between the rich and the poor
- 4) Effective decision-making: our adversarial system does not enable long-term, complex decision-making

We need all the different pieces for real change to come about – an individual, however, does not need to cover them all; the system does.

People in general are not apathetic, rather frustrated, angry, baffled: we must create spaces for people to act differently. Spaces to listen deeper, where people can talk and listen and not get jumped on for their ideas. How can we listen at a deeper level than we have till now – so that a place like the Slocan Valley can come to a united understanding?

Corporations and governments need good ideas for things to shift. Suggests enthusiasm rather than optimism (which can blind you). We cannot just work on changing the system at the margin – the system itself must become completely different.

Some suggestions:

- Support another person weekly – share an appreciation with another individual 1x/week
- Talk once a month with an "opponent"
- Imagine: How would we behave differently if we thought we were the wave of the future rather than the minority?

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SPECIAL NOTE: Robert died at his home in Spokane, Washington on Saturday afternoon, November 27<sup>th</sup>, 1999. He was surrounded by a circle of dear friends who had supported him in his healing and in his work during the final two years of his life. In Spokane, since November of 1997 when Robert had his cancerous esophagus removed, Robert found the community he has been inviting others to find all his life. His body has died. And his spirit continues. Robert first became aware of the need for fundamental social change in the late fifties. He has written, spoken and consulted on these issues for the last forty years. The Encyclopedia of the Future has recognized him as one of the top ten living futurists.

His core work has been done through Resilient Communities. This action/learning inquiry, being co-organized with Northwest Regional Facilitators, enables people to work together to promote "resiliency" at personal, family, community and ecological levels. For more information visit the Resilient Communities Home Page: <http://www.resilientcommunities.org/>

You can write to Robert Stilger with comments, thoughts and ideas about continuation of this work.

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Northwest Regional Facilitator  
E. 525 Mission Avenue

Spokane, WA 99209  
Attn: Robert Stilger, Executive Director  
Email: [rstilger@nrf.org](mailto:rstilger@nrf.org)

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## 22. Forest Watch – Looking Behind the Veil.

*Craig Pettitt, West Kootenay Regional Coordinator of B.C.'s Forest Watch Program. (SSC)*

The Forest Watch Program is an "industry and government watchdog" that monitors forestry activities without government funding. Forest Watch documents the environmental impacts of forestry, and ensures that forestry is being done in accordance with the Forest Practices Code.

It also trains citizens to be able to monitor forestry operations, to recognize and know particular areas of concern. If you are in the forest, and notice something to do with forest management that doesn't look right, the Forest Watch Coordinator is available to assess the situation and counsel you about how to proceed with investigating the situation more closely, providing professional support and investigation through wildlife biologists, foresters and lawyers.

It's important for citizens to be aware of the forestry done around their communities, and to contact the Ministry of Forests and ask pointed, specific questions about their concerns. Another thing for citizens to do to prevent damage around their communities, is to review the development plan for their area so that they can be informed and plan ahead for monitoring the development.

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Craig Pettitt; Email: [craigp@vws.org](mailto:craigp@vws.org)

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## 23. Urban Water.

*Will Koop, B.C. Tapwater Alliance.*

This workshop related the history, politics, and public concern about logging in five community watersheds: the Greater Vancouver watersheds, Seattle, Portland, Victoria, and the Sunshine Coast. Koop also presented an historical overview of the provincial government's evolving policies on the issue of resource use activities in consumptive use watersheds.

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Will Koop; Email: [wkoop@alternatives.com](mailto:wkoop@alternatives.com)

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## 24. Keynote presentation

**Building Resilience in Communities, People and Ecosystems.**

*Robert Theobald, Futurist. (ET)*

Do we live in the same world? Why do we so often see issues differently?

We each use different stories (story as in myth) to explain the world. We choose facts and data to fit what we believe in – and the rest we screen. There are basically three stories that run the world:

- 1) The "Hunting and Gathering" Story: living with nature, controlled by nature, a cyclical process, no expectation of significantly altering world one lives in.
- 2) The "Agricultural" Story: creating crops, herding animals, creating surplus. The question arises what to do with the surplus? Creating of priests and kings who take control – and guards to maintain the situation.
- 3) The "Industrial" Story: Knowledge is important; when the church denied this stand it went down. We are living in the end days of this era – will it take us down?

There are three reactions to this question:

- All is in great shape and O.K.
- The system works, but we need to work on the edges a bit, can be fixed (political game).
- Opposition – the corporations must be stopped.

- None of these responses is sufficient. We need to invent a new language, new myths, new ways of looking at the world. We cannot change the problems at the margin, rather we must imagine completely different systems.

Ecologically, economic growth can not continue.

The Years 2009 – Imagine! What will have happened if we are halfway intelligent? I invite you to join me in a journey to the year 2009, looking back on the changes that have occurred since 1999.

*"I remember being in the Slocan Valley in 1999 – we were standing at a point of choice in relation to the logging issue. The FLOW conference happened in August – and out of this came the decision that people had to learn to talk to each other – and to hear each other's real concerns. Everyone was willing to ask the question: Am I trapped in my own rhetorics? We realized that if we worked together, it would be so much harder for outsiders to make decisions over our forests and communities. A lot of discussion had to happen between "allies." This was a hard lesson – to accept that people see things differently. We had to go to their places, learn their language and stop expecting them to come to our meetings. There was a willingness to go where the listening would lead us. Encouraging this core skill we learned that deep down people care about the same things. All wanted a shift to more sustainability.*

*Some people in the valley decided to make the Slocan Valley issue a major issue in B.C. – in a time for fundamental change. They began to use the Web in a very effective way, getting support from the province and around the world for the valley to become a model. And they looked for allies in all sectors – also in forestry. A new form of coalition was formed, with a strategy and process that worked because we were ready for change. A large number of people knew that the industrial story did not work anymore. While at the end of the 20<sup>th</sup> century the systems looked solid and stable, many individuals (from business people to environmentalists) felt that this was not so. And several fundamental changes came about.*

- 1) *Distribution of income change – the limited amount of work was shared amongst all. People simplified their lives. Realizing we didn't need so much, we began to produce less and to work less, and have more time to live, to be with family and friends.*
- 2) *We also realized that different people enjoy different kinds of work, and that everyone could find a meaningful occupation.*
- 3) *We changed the educational system, integrating the realization that learning to learn is important (while regurgitation of information is not) and can take place in groups, rather than as competitive individuals. Our educational system began to teach cooperation.*
- 4) *We changed our medical model. Allopathic medicine that had not been working very well was balanced with preventative medicine. While this is still in transition, the responsibility of each for their own health has become much more integrated. The Slocan Valley took on health tourism – helping people find out what true health is, offering places to rest and rejuvenate and helping people find out who they are.*
- 5) *We became a community, knowing that we need relationships to live and that we must care for each other. We decided to tell at least one person 1x/week that they were wonderful. This had much more impact than negative feedback. We also started talking to politicians, telling them that we are out here and care about them.*
- 6) *We began a social movement – not politics. The Slocan Valley simply said what it wanted and began to implement it. This was not adversarial, rather it was a proactive, positive, cooperative approach.*

*Now in 2009 we are not finished – there is still lots to be done. What is different is that we can now see clearly that we are on the right track – that there is a 4<sup>th</sup> story. Tensions are still present, problems still exist, but we recognize what direction we need to move in. There is a sense of excitement in the air, not certainty, but we have decided that living in the rapids of change is fun. In 1999 we were not sure whether we were on the right track. It seemed like it could tip any way. There was great inertia.*

*One more thing: environmentalists decided to move out of 'poverty consciousness.' People in this movement were often broke. We decided we could find money for this work – and we got funding for dealing with the real issues without being able to guarantee results. And we realized we had to take care of ourselves and our souls. That just because we were doing good work didn't mean we were capable of being balanced and centred. So we set up healing groups, meditation groups, times in nature – and explored many different ways to relieve us from the 'weight of the world'."*

The 4<sup>th</sup> story: No one will save the world alone. It will be together. We are all limited heroes/heroines. Each has her/his own piece to play.

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See "Special Note" on page...

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## 25. Keynote presentation

### **Creating Models of Sustainability: An Ecosystem-based Approach to Protecting Ecosystems, Communities and Economy.**

*Herb Hammond, Ecological Researcher.*

Herb Hammond presently works with First Nations people 80 % of his time. He says that they helped him realize that it is OK to connect your head with your heart. To put intuition ahead of science, especially when the two seem to oppose each other.

The most sophisticated management systems, says Hammond, were practised by the natives before we arrived on the continent: "passive management." It is important to integrate these kinds of management systems and it is thanks to the natives that we still have something to conserve in the forests.

Following is Herb Hammond's introduction and the commentary that accompanied his slide show: It is an edited transcript of his presentation.

A clever person solves problems – a wise person avoids them. This is the theme of today. I will also talk about us as a species, as a community working for change. In such a movement, no one is more important than anyone else. We each have special gifts – and are called to recognize them – in ourselves and in others. Everyone is equal. We need to re-learn and integrate a cooperative approach, so as not to create another problem. This is challenging as we have been dealing with an adversarial system that puts individuals on pedestals.

For close to 30 years I have been working on this: Ecosystem-based forest use. The concept applies to any ecosystem. Most important is that it is inclusive – it does not exclude anyone or anything. The people working in forestry belong in this system too – the workers. (Exclusive solutions are only marginally successful – they operate with a new system, but the same old model.)

In the Slocan Valley an Angus Reid poll showed that 75% – 90% support an Ecosystem-based plan with a transition plan.

#### **The slide show today has two main themes:**

- 1) Apprenticeship with nature
- 2) Concepts for an ecosystem-based approach

There exists a huge range of forest ecosystems. The principles of ecosystem-based planning apply to all forest ecosystems. A forest ecosystem is a lot more than the trees.

- It includes large mammals, grizzly bears that carry salmon carcasses up from the river zones into the forest to enrich the system with nutrients.
- Mushrooms are also an integral part of a forest ecosystem. They are connected to a mass of very fine roots that extend for as much as 10 acres or more (100 acres), encompassed by one fungi. These roots make the forest into one organism, taking water and nutrients from the soil, passing these on to the trees, which in their turn provide sugar and carbohydrates for the fungi. Different trees are associated with different fungi. And yet, daily, we are throwing away plants that we do not even know exist – plants that make up this interconnected web.
- Here we see the Elliot-Anderson watershed in the Slocan Valley, with a steep slope gradient and complexity of slope. It is the Elliott-Anderson watershed. There is so much water here. A road is planned to cut through all these creeks, even though this area is ecologically sensitive. We need to respect systems and say "no" when confronted with ecological limits.
- Soil is probably the least understood aspect of the forest ecosystem. A forest ecosystem requires water, nutrients, sunlight and atmosphere. The soil takes care of water and nutrients – thus contributing 50% of a forest's needs.
- Forest ecosystems also include abiotic (non-living) parts of the system – the rocks and minerals. The natives say that these too are alive. Biotic and abiotic parts are interdependent.
- WATER is the connector – dew drops – ephemeral streams – creeks and waterfalls ... Water is life. Human beings, animals and trees all need pure, clean water. Water also forms the wetlands – one of the most biologically rich parts of a forest ecosystem. It is critical to protect small and large wetlands.
- Water is everywhere in a system. Even on a hot summers day you will find condensation on trees – the trees take the moisture from the forest and put it into the soil. Eventually water moves to the oceans, taking with it nutrients and fallen trees that enrich other ecosystems. We are not just protecting the water in our backyards, but water on this earth.
- Salmon are one of the most amazing species in a forest ecosystem, and they are entirely dependent on a whole watershed (a strip of water is insufficient for their survival). Whilst cutting streams up a slope we must remember that the cumulative effect of each stream influences the chemistry, temperature of each larger creek below. Our present forest legislation has this entirely backwards. The small streams are the most important to protect, yet they have the least protection under the law. The salmon continue to feel the impact of threatened and destroyed streams.

- People are also part of a forest ecosystem. The natives taught us this.

In summary: This earth consists not of objects to be dominated, but of identities to be respected. If we respected trees as much as our neighbours, we would act differently. We would give thanks before taking them for sustenance. We would only take what we need and take this with love and respect.

Important Underpinnings of an Ecosystem-based Approach:

- We need to start from large landscapes – interconnected ecosystems. In Europe they meant well, but started out from small patches and stands and lost the large mammals. The alpine for example is dependent on the marsh and vice versa. It is therefore crucial to begin with as large a landscape as possible. The Slocan Valley is a medium- to small-sized landscape.
- Forest ecosystems change: fires, common in interior forests, are a disturbance, not a disruption. Unlike a clearcut, a fire does not cut all the trees down and haul them away. Logging does not mimic natural fires. Forests are built on the dead tree bodies. Following a fire is the shrub/herb phase, which builds up nutrients. This is an important phase to protect. The alder puts back a lot of nitrogen in the soil. Humans are the largest pest – we set up situations that create pests and epidemics build up. The natural succession is the way to maintain a healthy ecosystem.

The closed canopy phase forest (in forestry one is taught that this is the ideal forest to grow, if one is out to get logs) is the least biologically diverse phase. It is the least effective in purifying and accumulating water. This is a short phase. The majority of landscapes used to be old-growth forests, which is the most biologically diverse and rich phase, with the highest number of species, where the highest quality of water is produced. Now the closed canopy phase is the most widespread. We should have as many old-growth forests as possible. In the main Slocan Valley most of the trees are 80-100 years old. They are not even halfway through their lives.

- Forests are landscapes of stands connected in **time and space**. We must remember this.
- In a dead standing tree, a snag, the role of a tree has just begun. It becomes a home for birds, lichen, woodpeckers. A snag will be around for another 100-200 years. When a tree falls it takes on yet another role and will be visible for another 200-400 years. So when cutting a tree, it is important to think about its actual potential age. This may give us a sense of humility! The fallen trees make up the foundation for future forest soil. Whole hosts of organisms live and thrive there, holding large amounts of water. When a tree falls into a creek it also regulates water flow, thereby providing spawning areas. A forest ecosystem needs a steady supply of dead trees. Decayed wood contains 20x more water than the same volume of mineral soil. It charges the system with water and filters it. New trees often grow in this enriched area.
- In an old-growth forest, 30% of the water that falls in the form of snow is caught and held, and then released back into the atmosphere. This regulates water movement in a landscape. And stops an overload of water in one area. In a clearcut this function is lost. The trees need to grow for 80-100 years before this function can even begin. As there is 30% more water in a clearcut and there are no trees to slow melting, the snow will melt 30% sooner in the spring, creating more spring floods. Vancouver Island is a classical example of this. The forests in the Slocan Valley are just beginning to get into this phase – while there is talk of logging.
- Spiritual values of a forest cannot be easily defined, as it means something different for each person. This meaning of the forest is however essential to all of us, to make us whole. This meaning of the forest is just as important as the water. Without it we will lose ourselves, also as a species.

**Looking at what is actually happening with state of the art forest practices across the province:**

- Soil loss. Whenever we go beyond ecological limits, mass movement of soil results, not just from the roads, but also from the clearcuts.
- The ephemeral streams often receive no protection at all. These are responsible for water quality, quantity and timing of flow and need riparian buffers. We must wake up to this scientific fact about small-scale streams. We must follow science above politics!
- Conventional forestry tends to fragment ecosystems in *time and space*, breaking up connections all over the province and country. In time the fragmentation takes place as the natural continuum of a growing forest. Managed plantations have a short rotation, with continuous cutting of trees planned every 60 to 120 years. In this way, all natural phases of the forest are reduced or eliminated. The shrub/herb phase is shortened by 2/3. The old growth phase is eliminated by short rotations, thereby eliminating nutrients. The highest quality of water comes from old forests, yet this phase is totally missing in a plantation. We need large quantities of old-growth forest in every forest landscape for the ecology to be healthy. The cycles have become shortened – from 350 yrs. to 80-100 yrs., and now to sometimes as low as 40-yr. cycles. The trees are younger and younger when they are cut, leaving the forest with little structure. This is how we prop up an unsustainable cut – across the country we cut the trees at a younger and younger age, getting less volume out of them, thereby having to cut more and more. It is a dead end for all of us: "Once there was a forest..." In this way successive generations of people inherit

progressively degraded ecosystems, seeing these as natural. We need to realize that we don't remember what we have lost. It is a thinking problem!

- Integrated forest management, as it is enshrined in Canadian law, sees ecosystems as resources for the national or provincial economy and for corporate profits. The local economy and jobs are missing from the equation! As we are now in a transition from old-growth forests to managed forests, mills are shutting down across the province, or getting propped up with large subsidies. Functioning ecosystems are disappearing. This one-way relationship takes as much as possible. When an ecosystem doesn't work – the economy won't work either!

**A NEW APPROACH: ECOSYSTEM-BASED PLANNING**

The ecosystem – the land and water – forms the foundation and sustains us all. Within this foundation is culture and within culture is economy. By protecting ecosystems, we protect cultures, thereby protecting economies. How can economy not be part of the environment?! It always intersects with the environment: "There is no 'away' to throw it to."

An ecologically responsible approach protects and carefully uses some parts of the land. We need to work with science that begins with ecosystems.

Important components of Ecosystem Ethic:

- 1) Ecologically responsible activities (don't remove any parts without knowing what they are there for – you wouldn't do this with a car or a computer either!)
- 2) Balanced human and non-human use
- 3) Responsible community control of ecosystems.

Sustainable actions include:

- 1) Long timeframes
- 2) More species than humans
- 3) Diverse interests based on principles – on truths (truths are what we need: clean air, pure water, meaningful work)

Focussing on what to leave rather than on what to take changes our approach to the forest. We must leave fully functioning ecosystems at all scales through time. This kind of planning is fun! It is more fun than laying out clearcuts – it challenges the heart and the mind, and creates community.

We need to develop forest plans, rather than logging plans – for timeframes that we will not live to see the end of. A forest timeframe: 250-500 years. These plans need to be able to accommodate new knowledge, acknowledging our humility, that we don't know it all. They need to be accountable and responsible. They need to be full-cycle plans for all species. An indigenous elder once said: The ecosystems work just fine – it is not them that need the plans; people do.

In balanced use we maintain a fully functioning ecosystem that includes spiritual, recreational, industrial, communitarian aspects, as well as the needs of all life. Presently one interest (TIMBER) dominates at the expense and exclusion of many other interests (such as water users, trappers etc.). It is an insult to have to live in this kind of a model. It is undemocratic and makes no economic sense.

Warning: It is easier to change the image (creating illusion of change) than to fix the problem.

Multiple Use	big clearcuts (the rate of cut liquidates old growth)
Integrated Forest Management	smaller clearcuts, but more of them (no sign of change)
Ecosystem Management	making clearcuts look like natural openings

In the Slokan Valley:

	reduced cut rate	Protects water supply	Alternatives to clearcuts	protection of diversity of forest uses
The Silva Ecosystem-based Plan	Yes	Yes	Yes	Yes
The Industrial Ecosystem Design Plan	No	No	Partly/No	No

Two challenges for ecosystem-based philosophy:

- 1) It must take place at all scales (in small and large landscape areas)
- 2) When faced with ecological limits we must have the courage to say no.

What must be left at a landscape level:

- Protected watersheds over landscapes, well distributed over drainage basins
- Corridors – to connect ridges, valleys and watersheds
- Riparian ecosystems with buffers around them
- Old-growth nodes
- Ecologically sensitive areas

The above forms the basis of what we need to leave at a landscape level. When we bring the people into this picture, we also take into account:

- wholistic timber zones (cutting trees, while maintaining forest structure)
- wildlife zones
- tourist zones
- cultural zones (indigenous sites)

When we leave out the connections – we end up with "wildlife preserves" (cartoon of wildlife squished into canning jars)

Maintaining full ecosystems functioning in the matrix is the most important management decision!

We must create diverse community-based economies:

- 1) Profits are meaningful work
- 2) Based on the interest generated by natural ecosystems – not on liquidation of natural capital
- 3) Local decision-making (within ecologically responsible framework)
- 4) Diverse value-added activities – responsibility to make as much with the wood as we can. At present we are very poor at adding value to wood products.
- 5) Ecotourism: apprenticeship with nature

What to leave:

- large living trees to grow old and die (30% target)
- large fallen trees
- maintain soil composition and structure

The large trees are the hardest to replace. When doing partial cutting in timber zones, it is important to designate full-cycle trees (the ones that stay!) before taking anything.

Ecosystem-based timber economy has two important aspects:

- 1) Log sort yards: \* exact scale of timber volume  
\* to increase value
- 2) Eco-based wood certification (not-for-profit certification)

Another huge topic is RESTORATION

Every clearcut around the world needs to be restored – the soil, the water and habitat. It takes 1,000 years to make an inch of soil. There is no quick fix. How can we purify water in a polluted watershed? Can we import soil? These are major challenges! And yet – we must try, and we have to do it way better than Forest Renewal B.C. We need to restore through joint management between:

- indigenous people and non-indigenous people
- amateurs ("for the love of...") and professionals
- technically oriented people and natural processes

Restoration is...careful observation, patience, caring, love.

Restoration must deal with yesterday's impacts, today's activities and tomorrow's plans.

We need community forest boards:

- 1) to monitor, evaluate, create inventory plans
- 2) with rights to forest uses and forest use fees
- 3) with wholistic forest use zones and forest use standards
- 4) legislation policy

5) that are involved and responsible on all the 4 points

We need to shift the focus from managing ecosystems to managing people's activities in ecosystems. Economic transition depends on control ("with, not over").

The remaining forests are socially sensitive, ecologically sensitive, young and increasingly in trouble!

We must connect our hearts to our brains in order to solve problems. Saying that something is an emotional argument, and therefore does not apply – is a mistake: hearts do not lie. We are the only creature that wants to disregard our intuition/instinct. We must reassume responsibilities.

AND WE NEED TO THINK LIKE A FOREST! – for a happy ending.

\*\*\*\*\*

Herb Hammond

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## 26. Plenary session

The plenary session provided opportunities for the participants to be actively involved in questions, discussions and resolutions. Many resolutions that came out of the conference and culminated in this plenary session with unanimous support, addressed and called for action and commitment on many different levels.

On the political, provincial level:

- A call for an immediate 50% reduction in the Annual Allowable Cut
- Forest tenure redistribution to communities.
- Establishment of Community Resource/Forest Boards.
- A full disclosure of the subsidies to the logging industry and the real costs to the tax payers.
- Changes to the provincial Health Act to remove chlorination as a method of water treatment.
- A strong endangered species legislation from the federal and provincial governments.
- Legislative changes to support small-scale business
- A call for the B.C. Government to implement the Silva Forest Foundation's Ecosystem-based for the Slocan Valley and other communities around the province.
- Inclusion of First Nations people with a recognition that no work or decision excluding them is complete
- Changes to the Forest Act and other legislation to move away from a timber bias and toward increased consideration of ecosystem-based values like water.
- World-class government policy to protect consumptive-use watersheds, recognizing the global importance of clean drinking water.

On the regional level:

- Raising the public profile of the Slocan Valley, recognizing its importance for all other regions as a place of vision and commitment to a transition to sustainability.
- A strong push for communication and outreach no matter what the differing opinions may be.
- Support for strategies that are inclusive of all parties.
- Education of the public and the politicians in order to get ecosystem-based planning on the political agenda in the upcoming election.
- Challenging the decisions of regional and district forest managers given the widely accepted findings of modern forest ecology.

On the personal level:

- Commitment as consumers to request and purchase eco-certified wood and non-chlorinated paper.
- Voluntarily simplifying our consumption - clarifying the distinction between needs and wants.
- Spreading the inspiration, hope and goodwill that came out of the FLOW 99 conference.

People left the FLOW 99 conference inspired and united under a common vision. The FLOW steering committee urges government to listen to yet another unanimous call for transition that will benefit both the environment and the economy of communities around the province."

## 27. FLOW 99 Quotes

“A chief focus of this conference is on creating models of sustainability: perhaps the most important task for all of humanity... Harmonizing humans, and their lifestyles, with the resources of the ecological regions where they live...seems the only reasonable definition of sustainability.” – Stan Rowe

“The precautionary principle should guide us in land use decisions. When we refuse to use this principle as the guiding rule, erosion degrades the land, water and ultimately degrades civilizations to the point of collapse.” – Lesley Anderton

“Putting an optimistic spin on it - change is inevitable! .” – Michael M'Gonigle

“People have not realized their absolute dependence on what surrounds them, on the air, the water, the soil, the plants and animals of Earth... Ecologically ignorant, we have thought it possible to sustain cultures, economies, without taking as first priority the sustaining of Earth's ecosystems that provide all the necessities of human welfare.” – Stan Rowe

“Today we know that this Earth planet in whose skin we live is an immense, vital, integrated system, the Ecosphere. Nothing that we can see, feel, hear, smell or taste is separate. Everything has co-developed in complex interaction with the rest. The sense of wonder and affection we all feel for the beauty and bounty of the Earth is the natural expression of being a co-evolved part of it all... Rachel Carson opined that it is important to get out in it, to know you are part of it, and especially, to feel it.” – Stan Rowe

“We must learn to listen; show we care for one another; tell people we appreciate them; learn to work with people who don't see the world the same as we do.” – Robert Theobald

“We must connect our hearts to our brains in order to solve problems.” – Herb Hammond

“Get healthy; know who you are and how to live with yourself.” – Robert Theobald

“We know we already have the solutions and don't need to do a lot more research, and the Slokan Valley is one of the best opportunities I know of to implement these solutions.” – Cheri Burda

“Live with nature, or you don't survive.” – Robert Theobald

“The problem with large systems of centralized power is that they violate the laws of nature.” – Michael M'Gonigle

“We must get our economic incentives right. Every company, community and household must have the incentive to do the right thing.” – Ernie Niemi

“Laws don't change values. Values change laws.” – Herb Hammond

“Ecosystems focus on maintaining themselves. Eco-sustainability means fitting into natural systems.” – Herb Hammond

“Thinking like an ecosystem is to learn sustainability.” – Stan Rowe

“We must learn humility: forests sustain us; we don't sustain forests.” – Herb Hammond

“Transition is tough. People need to see examples and benefits from new directions.” – Lisa Matthaus

“We need a precedent of a whole jurisdiction that is working on a sustainable model. British Columbia has huge potential to be such a precedent - and the Slokan Valley could be such a leader in this.” – Michael M'Gonigle

“We must envision what we want 50 years from now and then figure out how do we get there?” – Cheri Burda

“Imagine: How would we behave differently if we thought we were the wave of the future rather than the minority?” – Robert Theobald

“We're running out of time.” – Grant Copeland