



STATE OF THE BASIN ADDRESS

2004

Presented by

**Patrick Reid, Chair
Fraser Basin Council**

at the

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Welcome to the 2004 State of the Fraser Basin Conference.

Welcome elected officials. Welcome concerned citizens. And a special welcome to the younger British Columbians here today. I thank you all for coming.

I also want to thank our sponsors. Without the financial support and commitment to sustainability from major sponsors like Alcan, and the Governments of Canada and British Columbia, VanCity and Land and Water BC, and a host of other sponsors that you can see listed on the screen, this conference could not be taking place and the *2004 State of the Fraser Basin Report* could not have been produced.

I would also like to welcome The Vancouver Sun as our gold media sponsor.

We need you, and all the other media throughout the Basin, to get sustainability issues in front of the public so that individuals, families, businesses and government can take the action that is needed to make sustainability in the Fraser River Basin and British Columbia a reality.

Sustainability is an evolving concept – and reality. In the last, 1996, edition of the Oxford Reference Dictionary, the word “sustainability” did not even exist. As recently as five years ago, sustainability was still relatively unknown. That led to misunderstanding about what sustainability is – and what we can expect of it. The redoubtable Michael O’Brien will challenge us on this at lunchtime.

Today the word has become a part of our everyday vocabulary. More people have a far better grasp of what it means and why it’s so important.

Around the Basin, we’re seeing increasing evidence of this acceptance.

Individuals and institutions alike are seeing that sustainability is not an option; it is essential. So they are becoming more willing to cooperate and collaborate in making sustainability a reality.

Making sustainability real at any level requires a fundamental shift in mindset. It’s not enough to be a diligent recycler when you’re still driving an SUV.

Sustainability requires a willingness to let go of individual selfishness on many levels, which is no small task in a society that rewards us for putting ourselves first.

But I’m here to attest that, within the Fraser Basin, and indeed within this room, there is a growing, dedicated army of citizens who are putting the sustainability of their communities first.

I have, for the last year or so, been engaged in what has been for me a voyage of exploration, and indeed of love, in what really is the best place on earth.

I have lived, worked in or visited some 75 countries and I chose to make the banks of the Fraser River my home. But it was not until I stood in for Dr. Jack Blaney while he left the chair of the Council to perform another urgent public service that I got to meet some of the best people in the best place on earth.

And all are engaged, in some form or another, in finding new ways to make sustainability work in their lives and their regions.

These are the people who deal, as Kipling wrote, with triumph and disaster and treat those two impostors just the same.

They are found, mostly, in the farthest reaches of the mighty Fraser and its tributaries and may well face a more uncertain future than those of us who live in the Delta.

It was Jack Blaney who told me where to find them and I am delighted to see him here today, and to congratulate him on the impending conclusion of his stewardship of prospective electoral reform in the province, and to assure him of a warm welcome back to Council next year.

On this voyage of exploration, I discovered much about the Basin I didn't know, all of which reinforced my sense of awe about its magnificence.

First of all, it's a very big place. Great Britain could easily fit in to the third of the Province that the Basin occupies. Yet the Basin is home to just 2.6 million people, compared to nearly 60 million in Britain. So, we have, on the face of it, ample room.

The Fraser Basin is a very productive place. It produces 80 per cent of BC's economic output and 10 per cent of Canada's.

Its farms, ranches and orchards comprise half of BC's agricultural lands and it accounts for almost 80% of BC's total farm income.

The diverse forests that cover 75 per cent of the Basin support our largest resource industry. We have eight major producing mines, as well as some of the world's most spectacular scenery and outdoor recreation opportunities.

The Fraser remains one of the world's greatest – if not THE greatest – salmon-producing river systems. It supports five different salmon species, as well as 65 other species of fish, including steelhead and sturgeon.

The Fraser Basin is also recognized internationally for the diversity and abundance of its waterfowl; some 21 species nest here. The Fraser estuary is a crucial staging area on the Pacific Flyway for massive flights of migratory birds.

The Basin hosts the largest wintering population of Trumpeter Swans in Canada – a species once threatened but now thriving.

The Fraser Basin also has enduring appeal. The Aboriginal peoples of the Basin were the first to recognize the special nature of the place when they settled here many thousands of years ago.

Today, people come from all over the world to live, work and play here. In Vancouver alone, 70 different languages are spoken.

These are just the elements of what makes the Fraser Basin a special place. But they convey neither its power nor its beauty, nor, more to the point, the passion that it inspires.

Come with me on a quick tour through the Basin and you will get a sense of its grandeur.

From its headwaters in the Rocky Mountains to its mouth at the Strait of Georgia, the Fraser runs some 14 hundred kilometres. Thirteen major and countless minor tributaries feed the Fraser as it passes through a veritable atlas of geography and five major climatic zones.

From alpine tundra and lodge pole pine forests.... to grasslands and desert canyonsthrough old growth rain forest... and a lush lowland valley.

How could you not be enamoured of such a blessed place? And since you do love it, as your presence here indicates, it is only natural that you be concerned for its future.

There seems to be a universal urge to prognosticate these days. Hereabouts, it may be connected to the preparations for the 2010 Olympic and Paralympic Winter Games, the urgencies of deadlines and the widespread hopes that the benefits and lustre of the Games will somehow rub off on the rest of the province.

But the forecasts that really give me pause are international, and they come at us almost daily now in various forms.

On the “think globally, act locally” thesis, there are two main themes.

The first, and the one that has dominated forecasting for decades, deals with the planet’s carrying capacity.

The bible on this, to me, was the report of the Club of Rome over thirty years ago called *The Limits to Growth*. The concern then, as it is now, is that there will eventually be too many people on earth; and, that we already exceed the capacity of the natural resources of the planet

The evolving certainty is that, before long, there will be many more millions of people in Asia, principally in China and India, which will have the largest population of all.

With burgeoning economies, they will be seeking a standard of living as good as that of their contemporaries in North America, Europe and Japan.

The ecological footprint on the earth’s resources that will inevitably result will be massive.

But the real issue is that, during the course of this century, the carrying capacity of earth will not cope, unless human ingenuity can find a way. I, for one, have enormous faith in human ingenuity.

Let me quote you something I recently came across at the “Massive Change” exhibit at the Vancouver Art Galley. The exhibit explores how humans are designing ways to cope with some of the issues that this huge population increase is helping to create.

It said, “One thing is sure. The earth is cultivated more than ever before. There is more farming with pure force, swamps are drying up and cities are springing up at an unprecedented scale. We have become a burden to our planet. Resources are becoming scarce and soon nature will no longer be able to satisfy our needs.”

It sounds like it was written yesterday, but those words were actually written more than 2,200 years ago by one Quintus Septimus Tertullian.

Clearly, we, as a race, have been here before. Perhaps we have always been here, facing an uncertain future.

The other major global uncertainty, short of wars and terrorism, is an apparently more recent phenomenon . . . climate change.

While there is still some lingering resistance to the validity of the science that suggests a human cause to global warming, that resistance is rooted more in economic self interest than in reality.

The fact is that the thaw in the Arctic, with warming temperatures and ice that is receding more quickly than anywhere else, will disrupt the lives of humans and other species far from the Arctic. When one tugs at a simple thing in nature, one finds it’s attached to the rest of the world.

Who would have thought, a decade ago, that drought would join flooding as a hazard of the life and times of the Fraser Basin, or that invasive plants would spread like the noxious weeds they are? Or that the

disappearance of a salmon run would be blamed, at least in part, on high water temperatures in the Fraser River?

These indicators of change are both alarm bells and signposts. They tell us what to watch for – and more importantly – they spur us to apply that human ingenuity to respond to the uncertainty we face.

Nearly two years ago in the State of the Basin address, the Council introduced a set of sustainability indicators, markers that will enable us, over time, to report more accurately on the State of Sustainability in the Fraser Basin. We called that first indicator report *A Snapshot on Sustainability*.

Today, I introduce *Sustainability Snapshot 2* by outlining some trends in reporting on the State of the Basin.

Many of you will have already picked up your copy when you registered this morning. If you haven't, please do so. It is an extraordinary, and informative, document.

Over the rest of today and tomorrow morning, we'll get a thorough look at the indicators in the report, both directly and through the views of a stellar array of commentators.

Let's start with our greatest asset, health.

The life expectancy of a child born in Greater Vancouver in 2004 is 80.7 years. If BC were a country, it would rank second in the world after Japan in lifespan, the best single indicator of human health.

On a per capita basis, British Columbians are consuming less energy, using less water and accumulating less waste.

We've seen a 4.5 percent decline in per capita energy use compared to 1990 levels.

We've reduced per capita domestic water use by 4 per cent in the last decade. And we've reduced the amount of waste we have to dispose of by 28 per cent.

The quality of our air is generally improving, with lower levels of ozone, even though levels of particulate matter have risen, mostly in the northern Interior.

Did you know we produce 50 per cent of the food we eat right here in BC, much of it on prime agricultural land in the Fraser Valley and on ranches and farms throughout the Basin?

Since the other half of our food comes from markets that are often running out of water and land, maintaining our local food supply is crucial.

Between 1974 and 2003, the amount of land in the Basin protected under the Agricultural Land Reserve increased by 3.3 per cent overall.

But now, urban and industrial development is putting increasing pressure on this land, particularly in the Fraser Valley and Greater Vancouver.

Since 1980, more of us are working in the Basin and we're making more money. Unemployment levels are down by 1.5 percent and income levels adjusted for inflation are up 9 per cent.

More people in the Basin are attaining higher levels of education and training. 46 per cent had achieved either a university degree or college diploma by 2001.

More Basin businesses are embracing sustainability principles in their planning and decision-making. They recognize that enhancing their social and environmental performance can deliver significant and quantifiable bottom line benefits.

In 2002, three of the Canada's top 10 firms for sustainability reporting came from the Basin.

These are but a few highlights of advances the Fraser Basin has made towards sustainability in recent years. But success in sustainability, like success in life, rarely comes unalloyed, and our performance has been decidedly mixed.

While British Columbians have achieved the second longest lifespan on the planet, we have also seen a 100 per cent increase in those considered overweight since 1985. And the incidence of diabetes in BC is projected to increase by 87 per cent by 2010.

Even though per capita energy consumption is down, overall energy use has risen by 21 per cent from 1990 to 2002, and greenhouse gas emissions have risen by 28 per cent.

Efficiency gains are not keeping pace with population growth, which has brought expanded economic production and increased use of fossil fuels – and consumer choices like bigger homes and SUVs.

In fact, if BC were a separate country, we would have the fourth highest greenhouse gas emissions per capita in the industrialized world, after Australia, the US and Canada.

BC produces about 16.9 tonnes of greenhouse gas emissions per person. By comparison, Norway, another northern country with extensive resource-based industry, has per capita emissions of just 8.6 tonnes per person.

We may have reduced domestic water use per capita, but overall, water consumption is up. By world standards, we are water gluttons. We have also faltered in reaching water quality objectives everywhere in the Basin except in the Fraser Valley.

Speaking of water, we face formidable tasks in protecting the Basin from inevitable Fraser River flooding, as well as from drought, while still ensuring adequate quantities and quality of water for hydroelectric power, food production and a raft of commercial and industrial uses – not the least of which is fisheries, to which I will return in a moment.

More people are working and making more money, but there are still about 500,000 people – out of 2.6 million in the Basin – in the low-income bracket, which is defined as \$20,000 a year or less.

While all regions have had increased employment rates since 1986, each of the Basin's northern regions had small decreases in employment from 1996 to 2001.

A survey last year on Aboriginal and non-Aboriginal relations conducted by the Fraser Basin Council showed that 55 per cent of respondents felt that relations between Aboriginals and non-Aboriginals were getting better, with only 13 per cent saying relations were getting worse. This is good, but not good enough.

The Council simply has to accelerate a project started last year, which has as its focus the enhancement of Aboriginal / non-Aboriginal relations in the Basin.

Our second *Sustainability Snapshot* report focuses on 17 topics that the Fraser Basin Council has identified as leading sustainability indicators. Each is critical to informing us about how we are progressing – or not – toward sustainability.

Once again, I encourage you to read the report.

What I want to focus on now is how these indicators are interconnected, how they affect each other and what their cumulative impact is on sustainability.

One indicator that I mentioned at the outset, Energy and Climate Change, provides a window on these interrelationships, and how the events or trends can affect various parts of the Basin differently.

Changing patterns of energy consumption, particularly of fossil fuels, have contributed to increased global greenhouse gas emissions, which in turn, according to most scientists, have raised average temperatures in the Basin by one degree Celsius over the past century.

Warmer winter weather has contributed to the devastating infestation of the Mountain Pine Beetle in the Basin forests. It has fed the increased number and severity of forest fires, which increase particulate matter that degrade air quality.

It may also be increasing water temperatures.

This has an impact on fish and wildlife, and could affect water flows, including flood and drought, which increase the risk of more forest fires and affect agriculture and ranching. In economic terms, the next great Fraser River flood in the lower Fraser could cost anywhere from \$2 billion to \$10 billion.

All these impacts, in turn, affect the economic and social health of Basin communities. They affect our health, our industries – including forestry, agriculture, tourism and outdoor recreation – and the jobs they provide that support families in communities, both rural and urban. In short, they all affect sustainability.

Most of the attention to date has been focused on the potential negative effects of climate change.

The fact is, we don't exactly know what the long-term effects of climate change will be, or whether there may be positive impacts as well. There are even those who suggest that, with the warmer weather, perhaps tours of the Vanderhoof wine country may be popular in 50 years or so.

And while we all know we can't stop global warming through our actions alone in the Basin, we can reduce our greenhouse gas emissions, thereby helping minimize climate change.

What is equally important is how we understand and respond to the sustainability issues that such changes help create. In other words, how do we make sustainability work in our corner of the world?

The Fraser Basin Council knows from experience that sustainability *does* work.

We also know how and why it works.

It begins with identifying and defining our challenges – bringing together all the people needed to solve the challenges, finding common ground, and then working collaboratively...as well as very, very patiently.

We have seen this process work time and again since the Council came into existence seven years ago.

Let me give you a few examples.

In 1996, the Council initiated a process to resolve 50 years of often bitter controversy over how to manage the Nechako River's water resources.

The Fraser Basin Council helped create the Nechako Watershed Council, which has made great progress in recent years developing a more natural flow regime that will support a variety of both human and ecological needs over the long term.

The Watershed Council has urged its partners -- the provincial government and Alcan -- to support the construction of a cold water release facility at Kenny Dam.

This release facility would help manage the volumes, temperatures and timing of flows to meet a range of environmental, social and economic interests.

Every year, invasive plants – a fancy name for noxious weeds – harm people, animals and plants in the Basin.

This costs us tens of millions of dollars annually.

Over the past three years, the Council has brought together all the people and groups needed to address this issue effectively, and working together they've developed a strategy and an action plan to combat this silent invasion.

Up the Sea-to-Sky highway, the Britannia Mine has been North America's worst point source pollution for nearly three decades.

In 1998, at a meeting on the site, the Council brought together all the parties needed to effect a solution.

That led to an announcement just three weeks ago to award a contract for the installation of a waste water treatment plant to extract copper and zinc from the effluent that had been killing all living matter in the foreshore.

Further up the road in Squamish, five years ago the town's waterfront was an economically depressed area mired in acrimony.

That turnaround began when the Fraser Basin Council brought together strongly polarized economic interests and facilitated their cooperation.

Today, a revitalized Squamish is looking forward to a prosperous future, in time to capitalize on opportunities flowing from the 2010 Olympic Winter Games.

Closer to here, a number of groups have been in conflict for more than 10 years over the removal of gravel from the lower reaches of the Fraser River

Three years ago, the Fraser Basin Council brought them all together to reduce conflict. This led to the signing, earlier this year, of a five-year federal-provincial agreement that regulates the removal of gravel. This will reduce the impact on fish and fish habitat while safeguarding flood hazard protection and navigation.

This gravel removal applies to only one stretch of the Fraser and there are compelling reasons to focus as well on other sedimentary hazards in the Basin – in particular the long-standing lack of public funding for annual channel maintenance in the estuary.

As you can see, achieving sustainable solutions with multiple stakeholders doesn't happen overnight.

It begins with responding to or identifying an issue, bringing together all people involved, ensuring the best information is available to guide deliberations, and then patiently working together to create a solution.

It takes time...sometimes a lot of time, but it is possible and it *is* happening. In fact, the methods and management style of the Fraser Basin Council have been successfully exported as far away as the Philippines, China and Brazil.

At home, I'm happy to say that more and more people in the Basin, besides the Council, are taking the time to make sustainability work.

Today there are hundreds of groups with thousands of people coming up with solutions to sustainability issues for their corner of the Basin, and even for the Basin as a whole.

Here are just a few examples.

The City of Prince George's Partners for a Healthy Downtown Project is uniting community partners to work on issues of safety and security, social policy, transportation, investment and development, parking and homelessness.

BC Hydro's Water Use Planning Program now takes a triple bottom line approach to operating hydroelectric facilities with significant social and environmental benefits.

The Land Conservancy of BC's Horsefly River Riparian Conservation Area has become a catalyst for removing invasive plant species, restoring habitat, building fences to protect land and livestock and educating citizens on conservation.

The City of Port Moody, once known as a "dirty little mill town" – their quote not mine – is now one of the most liveable cities in the world – a healthy, vibrant, culturally diverse and economically viable community that has been recognized internationally for its sustainability leadership.

Gibraltar Mines and the Cariboo Regional District have found a way to create a landfill site on one of the mine's waste rock dumps that would be environmentally, socially and economically sustainable.

The question of landfill sites is another sustainability fundamental that weaves its way in and out of the current Snapshot Report, but will merit its own place in the next one. The Council will shortly commence a review of waste management policies, practices and possibilities throughout the Basin. We want to see how the disposal of waste can be improved.

There is, far beyond the Basin, an ultimate worldwide goal – one that would considerably ease the carrying capacity of the Earth. It is the achievement of a seamless progression that is, even now, technically feasible – that absolutely everything that we and our consumer society discards, from food to fork-lifts, is recycled. This not only means less demand for the earth's resources, but an end to garbage dumps in someone else's back yard.

Recently, the Fraser Basin Council has been requested to assist or is actually involved with three more exciting sustainability initiatives.

Natural Resources Canada has invited the Council to deliver its National Fleet Challenge Program in BC with the objective of reducing overall greenhouse gas emissions from fleet vehicles by 20 percent by 2010.

The Vancouver International Airport Authority -- YVR -- is about to embark on the development of a 40 year master plan that will explore options for future airport operations through the sustainability lens, and the Council expects to be a major participant in this process.

And, as many of you are aware, the Vancouver Whistler 2010 Olympic and Paralympic Games Organizing Committee has adopted sustainability as a significant component of their overall agenda. The Council is looking forward to providing its expertise to this very important task.

Despite all these successes and projects in the offing, we still face some significant challenges.

One problem in particular has frustrated most British Columbians -- for years.

It's the failure to resolve "the salmon issue". The lamentable state of the salmon shows that whatever we have been doing up to now is simply not working – despite all our best intentions, millions of dollars and dedicated efforts to find long-term solutions.

If there is a symbol of the Fraser Basin that truly encapsulates the sustainability of the Basin in social, economic and environmental terms, it is the salmon.

I know that there are other fine fish in the river, but the salmon is the only one that traverses the length of the river and its tributaries down and back, from fresh to salt water and back again, on predictable cycles like clockwork, with the resilience and determination to make the journey against any and all odds. Above all else, and from the earliest moments of history, one primordial influence has dominated the life of every man, woman and child on the Fraser. And that is the salmon. I have the conviction, symbolically, that if the salmon survive and prosper, the whole of the Fraser Basin survives and prospers.

There are a great many institutions, interests and experts, within and outside government, that have made the exploitation and survival of salmon their business.

Sadly, we have yet to have a summit where all concerned agree to combine their wisdom and resources to ensure sustainability of the salmon and agree irrevocably on a fair distribution of the annual catch both at sea and on the rivers.

Without this agreement, and the means to police it rigorously, the proud boast that the Fraser is the greatest salmon producing river on earth may become as empty as that which once described the teeming cod on the Grand Banks.

This is where the Fraser Basin Council, with a solid proven record as a catalyst and consensus builder, comes in. We are in the initial stages of a major effort, Fraser Fish and Fisheries Together, with support from government and other interests, to bring a full and final resolution to sustaining all the species of fish that live in the Basin, insofar as human ingenuity and cooperation can do so.

I feel very strongly that if we get the future of salmon right, we will have made a quantum leap. It will mean that we will have learned how to bridge even the deepest divides.

It will mean that we have collectively committed to protecting the Basin's long-term sustainability rather than our individual interests in it.

Such a success will make a symbolic statement about the health of the soul of the Basin. It's not listed as one of our indicators and we have no data on the state of the Basin's soul, but if we did, it would surely be linked to the health of the salmon.

It is the one symbol that communicates connectedness to a place like no other. The salmon depend on this place, and so do we.

It is when we work inclusively and collaboratively to protect this place – and this symbol of our connection to it – that we forge a greater personal identification with, and commitment to, the future of the Basin.

As I said, the Fraser Basin the best place I know. There is no place quite like it in the country. On the continent. Or indeed, on the planet. And don't forget that good planets are hard to find!

I didn't have the good fortune to be born or grow up here as so many of you have. But I did have the wit to move here. I can see from the fresh faces in the audience that some of you were not even born when I did so more than 40 years ago.

But let's go back just 30 years, to the Club of Rome. When its report came out, one of the cautions was that the achievement of their sustainability objectives could not simply be passed on to the next generation. They called for substantial progress within a decade. They didn't get it!

30 years on, we are making progress, but there is obviously a great deal yet to be done.

So, I'd like to ask all of you here who are under the age of thirty to please stand up.

When I see so many young people who are aware of the challenge we face – and who have committed to meeting it -- I am very optimistic.

Ladies and gentleman, I give you the future of the Basin.

Please join me in applauding their enthusiasm for sustainability.

What we know, we pass on to them.

What we sustain, we sustain for them and their children. And now, it's their turn.

We know sustainability works. So let's get on with the job!