Show Transcript
Deconstructing Dinner
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Title: Future of Food in the Kootenays Conference I: Overcoming Denial

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JON STEINMAN: And you're tuned in to another edition of Deconstructing Dinner, produced at Kootenay Co-op Radio CJLY in Nelson, British Columbia. I'm Jon Steinman. And for the next hour I'll be taking you through segments that we recorded in November at what was probably one of the first regional food security conferences ever held in Canada. Titled "The Future of Food in the Kootenays," the two day conference was held right here in Nelson and was conceived with the intention of inspiring the communities in and around the Kootenay region of the province to begin addressing the many concerns facing the region's food supply. And because the food security issues facing most North American communities are quite similar, it's our intention that the many recordings coming out of this conference will help inspire other communities to launch similar forums or conferences that can begin addressing the impacts of energy resources and climate change, environmental degradation, government regulations and concerns around health and well-being.

On today's broadcast we will listen in on some of the keynote speakers at the conference including both the provincial and federal elected officials representing the region.

Lending their voices to the show will be Justin Roller of Canada's National Research Council; Architect Richard Balfour who is also the Director of the Metro Vancouver Planning Coalition, he also will be lending his voice; Member of Parliament Alex Atamanenko who is also the federal NDP Agriculture Critic; and Corky Evans will be featured on the broadcast. Corky is the Provincial MLA for the Nelson-Creston region and also the *provincial* NDP Agriculture Critic.

increase music and fade out

As was mentioned on a previous broadcast of Deconstructing Dinner, most of the raw unedited recordings from the conference have been made available on the Deconstructing Dinner website. Located right on the main page of the site is a link to another page titled "The Future of Food in the Kootenays Conference." And included there is also some background info on the conference itself, and the powerpoint presentations used by some of the keynote speakers. And so one option for anyone near a computer as you listen to today's show is to actually follow along with the visual presentations of Justin Roller and Richard Balfour. And the website is cjly.net/deconstructingdinner.

To give you a quick outline as to how today's broadcast will evolve, today is the first in a number of shows featuring recordings from the conference that will be launched with segments from Justin Roller. Justin was the first speaker at the conference and he laid out the current global picture of energy supply and demand. Following Justin was Richard Balfour who presented some of the outcomes of this current and future energy scenario, and in particular, how

the definition of community and local governance will be forced to change. Richard's presentation emphasized why local or regional food security conferences are so important and will hopefully inspire other communities to do the same. And following these segments from both keynote speakers, we will hear recordings of MP Alex Atamanenko, who shared with the delegates how food security is being discussed within our federal government. And we'll hear from MLA Corky Evans, whose remarks were, to say the least, quite refreshing and to some of you may be surprising, as his remarks were more along the lines of how an elected official *should* represent themselves when among their constituents. And his comments challenged the common definition of political correctness.

soundbite

The first speaker at "The Future of Food in the Kootenays Conference" was Justin Roller. Justin is a Fuel Cell Engineer with the National Research Council of Canada and their Institute for Fuel Cell Innovation based in Vancouver. He is currently a Masters candidate at the University of British Columbia in Mechanical Engineering, and his presentation was titled "Canada and The Coming Energy Transition." In this first segment Justin speaks *of* this transition, the associated risks, current global energy use, and the distinction between energy sources and energy carriers.

JUSTIN ROLLER: Basically I'm going to go through my premise. I'm going to tell you exactly what I'm purporting from the very beginning so you don't have to guess; give you a world overview of our energy situation; what our challenges are; go into a little bit of basics of energy; talk about peak oil; some of the complexities and then I've pulled together some quotes from some very different people in the oil and gas industry.

Okay, probably everybody here knows that there have been some rumblings about uncertainty in supply, very specifically in conventional oil supply. If you look at the projections from the economists there's a projected 2 to 4% growth in demand per annum in the future. Oil drives the entire economy. It drives our transportation sector. Without oil we can't do many of the things that we're accustomed to being able to do easily and cheaply. Because of a risk of a supply interruption or an inability to be able to get what we're used to perceiving, it could have profound economic and social consequences. There's a good report out by the Department of Energy by an author by the name of Robert Hirsh that looked directly into that subject and he predicted that we'd need 10 years to mitigate and have a rough time 20 years to try to go through this transition. And that's what it is - it's a transition that we're looking at. And I would say from a risk management standpoint, there's enough risk involved to all of us that if we don't start looking at this in a proactive fashion – look at it and start addressing it now before it becomes a problem, we'll definitely have consequences to suffer.

So I'm going to put some big numbers up here, don't get scared. But the world basically uses 450 quadrillion BTUs of energy a year. You're like, what the hell is that? Well, let me give you some context here. If you were to take a pile of coal 10 feet high, a mile wide and three miles long and you were to drive around that pile of coal, it would probably take you nine minutes at about 60 miles an hour. That's a quadrillion BTUs and we use about 450 of those a year. That's *a lot* of energy.

Energy used in the world is expected to grow by 64% that has to come from somewhere. Most of the growth is going to come from India and China. They're going to grow roughly 3% annually in energy use and it's going to double between now and 2030. That's huge. As a matter of fact, China's building something like 520 coal-fired plants on the books right now being built, and

that's with old technology. Coal-fired plants have a capital lifetime of 50 to 60 years so that's a lot of commitment.

So there are two types of energy – there's primary energy and energy carriers. Now these are all the resources of primary energy. Your primary energy is where can you extract energy directly. And you have your renewables on the left hand side – the renewable on the short term. Nelson is blessed with an abundance of hydro. I know that you pay some of the cheapest hydro prices in the province and that's quite a blessing that you're going to be thankful for in the future. On the right-hand side you have coal, oil and natural gas. The province has been blessed with an abundance of that as well. The lifetime of renewable for that is millions of years. So everything's renewable it's just how long is it renewable for. Another thing to point out is that all of this comes from the sun with the exception of maybe wave and geothermal, it all comes from the sun. At one point or another the coal and oil is stored all up solar energy.

And then there're carriers of energy. This is what gets a little more complicated. There're things like what I work on, methanol and hydrogen which can store primary sources of energy. There's electricity. There's ethanol from crops but those all require inputs. Those are not energy themselves. You have to put energy into those and then you can extract the energy out later. And that's a very important distinction to make. So when you hear people saying that there's going to be a hydrogen economy and we're going to run everything on hydrogen, the first thing you need to ask is well where is all the energy going to come from to make that hydrogen – that's a very important thing to ask. So they're basically conduits for energy use.

JON STEINMAN: And you're listening to Justin Roller, speaking at the November 2007 "Future of Food in the Kootenays Conference" held in Nelson, British Columbia. Justin works with the National Research Council of Canada. As his presentation continued, he focused in on one topic that is covered here on Deconstructing Dinner rather often - oil. But given how little the mainstream media is focusing on the supply and demand issues facing this vital resource for our current infrastructure, the repeating of this topic does also provide an important context through which the purpose of the Conference can be best understood. That so long as government and media are failing to cover the concerns facing our energy supply, the bringing together of community to instead take on such issues, does increase in importance.

JUSTIN ROLLER: I'm just to go into a little about oil basics – a barrel of oil is 42 gallons, that's 160 litres. Currently the world is using about 84 ½ million barrels per day. That's every day of every year. It's about a thousand barrels per second. That's *huge*. We need to maintain that supply and it's growing at 2 to 4% depending on which economist you believe. The U.S. is overwhelming in its use – 20 million barrels per day. Five percent of the world's population uses roughly 25% of the world's energy. Canada uses about 2.2 million barrels a day; we're number seven in the world. And it's a dynamically traded commodity. It has to flow. It doesn't matter how much you've got in the ground if you can't pump it out and bring it to the pump and sell it, you have a disruption in supply. It has to be supplied at all times. There is some buffering capacity in strategic reserves.

So where are we at? This is a graph of the production over the last 10 or 15 years or so - we're roughly at about, like I say, 84 ½ - 85 million barrels per year. This is another slide just to put Canada in perspective. We've actually peaked in conventional production. So conventional production of oil has peaked and we're getting less and less of conventional production out per year. Now we're having to go to the tar sands and we're ramping up the tar sands increasingly fast. And we went from 1 million barrels per day to hopefully 5 million barrels per day. We're

trying to get to 5 million barrels per day by 2030. That's a huge amount of growth. There's about $50 billion dollars in investment heading to the tar sands right now. It's about three times more intensive to produce a barrel of oil from the tar sands than it is to produce a conventional barrel of oil. And the energy returned on invested is much lower so you've got to put much more energy in to get that stuff out. To heat water up you have to use a huge amount of water and natural gas to extract that oil so there's a lot more complexities in that.

So peak oil. I don't know how many of you are familiar with this concept but this is basically just an abstract idea. It's an abstract term for a very complex idea. Basically the idea is that you discover a resource, you develop that resource with money inputs, you extract that resource and at some point that resource reaches a maximum in production and comes down. But the good news is we're not running out of oil. We're just running out of cheap oil. We've used about a trillion barrels. There's still about a trillion or so left in the ground depending on who you believe. The question is that the reserves are quite questionable. Many people are questioning what OPEC is stating as their reserves and their accounting is not transparent. So there's no way to confirm how much they have or do not have.

So if you look at the numbers - basically 30 million barrels per year, if you divide that out that means we have 42 years left of oil but it doesn't work and you don't extract all of the oil out of the ground. Most of the oil remains in the ground after production and it's unextractable. It's just completely not economical to get it out. Also, we're not going to peak when we reach at the halfway point, it's not as nice as that really beautiful halcyon peak. In actuality if you look at individual fields which I'll put here at the bottom, they tend to actually peak before their halfway point. So it's not just a geological factor as well, it depends on what producing countries want to do. As the price of oil goes up countries may want to withhold. They may not want to sell it on the open market. They may want to take a longer term look at the situation. Like I said - the reserves, we don't know exactly what they are. Inflation and unstable political environments may also affect what can be sold so there's a huge amount of uncertainty here.

Again it's a dynamic system - it's just-in-time supply. It's suggested that with a 4% decrease, that means we need about 20 million barrels per day just to break even by 2015. Now Saudi Arabia only produces 10 million barrels per day. We need two Saudi Arabia's by 2015 to be able to make up for the decline that we're seeing in the existing fields. This is *huge*. That doesn't even take into account how much we need to grow. So we're looking at a major, major problem here. We need 3.3 million barrels per day just to maintain the existing capacity. It took us 140 years to go through the first trillion barrels of oil and it's going to take us 30 to go through the next – that's unbelievable.

JON STEINMAN: And this is Deconstructing Dinner. In this last segment from Justin Roller's presentation, his remarks further emphasize the magnitude of current global supply and demand for oil. Again, if you *do* have access to a computer, I encourage you to check out Justin presentation, which has been archived on our website at cjly.net/deconstructingdinner. Within it is an interesting graph outlining the rise and fall of the price of oil over the past 150 years or so. And in this next segment, Justin points out that we are currently in the third oil price spike in history. And he asks the question, can we move on, and can the current infrastructure built upon *cheap* oil, be sustained.

JUSTIN ROLLER: Since that's the amount of oil we use that runs our economy and runs everything that we move around, what are we going to do? Most of the oil used goes into the transportation sector, almost 70%. Now this is the U.S., I'm originally from the States but Canada's very

similar. So 70% of the oil goes to transportation. About 25% goes into refining to make petrochemicals. In the transportation sector greater than 90% uses oil so transportation needs - 90% of the supply is oil. Without that you can't move around. That's the way that our current infrastructure is set up, if anybody's been paying attention to the NYMEX I think oil hit $98 a barrel last week. We're looking at the third spike in oil prices in history. The first one was back in the late 1800s; the second one was during the oil embargo and the third one we're hitting right now.

Can't we move on? Let's talk briefly about the alternatives – hydrogen and bio-fuels and tidal energy and run of the river. Well the simple fact of the matter is that none of these are as good. A lot of these are not available in forms that we can use to run our transportation system the way that the infrastructure's set up. The other thing to think about too especially with fossil fuels is there're a lot of challenges. You know back in the 70s international oil companies controlled something like 90% of the oil out there. Now they control less than 20%. The rest is all owned by national oil companies. National oil companies may do what they want to do with oil.

This slide just shows that we've extracted all the easiest stuff – the large lakes of underground oil and we're moving up the chain here. If you look at the upper right-hand corner there that's oil shale, that's rock. So you can imagine producing and extracting liquid pressurized oil and now we're going to eventually have to go to rocks and crush them up to get the same amount of oil.

What's the government's response been? They're suggesting that with a focused effort we might be able to replace about 4% of our oil use with key technologies by 2015 - that's with a focused effort. We're not even talking about this. This isn't even a big issue in the news and that's only 4%. That doesn't even take into account the amount of decline. There's no coordinated strategy. An imminent peak in decline would cause a major disruption in the economy.

This is a report by the U.S. government accountability office. This is a mainstream government office that issued this report. But my point is that this is not some fringe issue. This is real and it's here and it's now.

This is Samuel Bodman. You'll have to excuse me for all of the U.S. uses, I'm originally American before I converted to the Canadian side. I'm just saying it's a finite resource, it's going to eventually run out. What's OPEC's response been? Well it's basically been mute. But you have rumblings here and there. This came out of an OPEC bulletin back in October 2006 basically admitting that we're going to reach a peak and a decline in oil production. And this just came out last week. This is the former head of exploration of Saudi Aramco, the national oil company for Saudi Arabia, basically admitting that the reserves that they've stated are overinflated. So that means it's sooner rather than later.

And my last slide here – this is the economists response – this is from International Energy Agency basically saying that we're reaching a huge energy transition coinciding with the fact that China's ramping up in its expansion of its economy and that the world is going to have a very, very difficult time dealing with that.

JON STEINMAN: And that was Justin Roller speaking at the November "Future of Food in the Kootenays Conference" held in Nelson, British Columbia. Justin is a Fuel Cell Engineer with the National Research Council of Canada.

soundbite

And this is the first part of what will likely be a three-part series here on Deconstructing Dinner featuring recordings from the "Future of Food in the Kootenays Conference" held in Nelson, British Columbia. The two day conference was launched with a number of keynote speakers who outlined some of the major issues facing the food supply of Canadian communities, and the second speaker to do this was Richard Balfour. Richard is a Vancouver-based architect who also acts as a director with both the Metro Vancouver Planning Coalition and the New City Institute. He recently published the book "Strategic Sustainable Planning: A Civil Defense Manual for Cultural Survival." Richard recognizes the many threats facing our current way of life, and as part of his research accessed a report that the provincial government had withheld from releasing to the public. Through a Freedom of Information request, Richard Balfour was responsible for the release of the report titled, "BC's Food Self Reliance: Can BC farmers feed our growing population." The report was funded by the B.C. Ministry of Agriculture and Lands. And the final conclusion of the report was that B.C. currently produces only 48% of the food consumed within the province. Now while this report has now been released to the public thanks to Richard's request to have it released, the reasons as to *why* the report was *not* released can only be speculated, but perhaps one reason, is denial.

Richard's presentation touched on the widespread inability of Canadians to accept the crisis we are heading into.

RICHARD BALFOUR: You might find some of this talk depressing. I let Justin go first because if I told you those kinds of statistics you'd say "what does he know about it?" And I'm going to have trouble doing hand-eye coordination here between changing slides and doing these things. But I'm going to take you into the future. Strategist sustainable planning to differentiate it from the baby step linear progression plan that we do now is something we have to take a look at. It's usually something the police and the military do but the civilian authorities have to do it thus hence the title of the manual. We had two war game sessions in the Planning Commission in Vancouver. We had pressure not to do them. And we put reports up and people had heard about it and filmed it and said "Can you write a manual so other cities can do it too." So we've unofficially titled this session "SSP_3." One of the things we do is we take people into the future and deal with these factors that are coming into play that scare you – global warming, peak oil and mass migration.

Seeing as nobody's going to believe this I'm going to take you to the future. If everybody would close their eyes right now for just a minute and count backwards – three, two, one - you're now hypnotized. You're now in the year 2014. So we're going to talk about the year 2007 in the past tense so you can have a better understanding. You're now going to get a feel for what's really happening to you in the future. One of the things we're probably going to have to look at is a change of governance. You now constitute the 2014 citizens assembly for regional government because local governance is gong to become important to manage the ecological basin. We're now talking about having control of the local forests, managing your water resources and agriculture because the relocalization becomes the important thing for survival.

We've had 100 years of cheap energy. We've blown it. We're suppose to be the smartest species in the planet but we've managed to consume most of the planet. There's a fellow by the name of Richard Duncan - has the old Olduvai theory. He said there was enough resources on the planet for civilization of a 100 years of any substance and he looks like it's proven true. The trouble is it started in 1930 so we're near the end. It's like the people in the night of the French Revolution,

they didn't know that it was the end of the empire and I hate to say it but we're in that situation now.

The other thing is that it isn't just peak oil, it's global warming. How can we use all this energy and not expect the planet to heat up. There's a book, "Six Degrees" that explains right now we pretty well cannot avoid a two degree increase in climate and if we don't slow it down we get to three and four, the trouble is that when we get into this range we start talking about more death across the planet, the middle part of the planet dying completely. At five degrees there's a fringe left at the Arctic and at six degrees the planet's a cinder - no life. So, we're responsible for this or at least partially.

What we're talking about here – the red line is your heartbeat of your community. Right now we're on a path to a flatline so we have to step down. You know that, that's why you're here. The problem is that a whole bunch of people out there who aren't here are in denial. The denial of these things is probably the biggest thing we have to get over because as long as there's somebody saying "I don't believe it; I deny it; prove it to me," we're all held back and can't make progress. So, this is like an evangelical meeting tonight. I want you to get out of here and do something about it and convince the rest of them that something has to be done.

This is an indication of the old Olduvai theory. If we priced oil because its such a precious resource and it does things that no other source of energy or product can do, we would be charging something like $10,000 a litre and it would last a long time and we wouldn't be heating up the planet. So, the trouble is we haven't.

JON STEINMAN: And again, for anyone near a computer, Richard Balfour's visual presentation is available on our website at cjly.net/deconstructingdinner, and it's linked to from the main page and titled "The Future of Food in the Kootenays Conference."

As Richard continued his presentation he began speaking of the dysfunctionality of cities - cities that have all been built upon cheap energy that is quickly disappearing.

RICHARD BALFOUR: What I'm going to deal with here is the order of magnitude change on communities because out of the planning sessions we had, as an architect and a planner, the biggest mistake we've made in the last 100 years is in the pattern of community. We've let the cheap energy and oil allow us to disperse things, put things in the wrong place and now we're paying the price. The trouble is we've done it with all that cheap energy, we've built cities and when the energy's gone the cities don't work.

How would you like to hire an architect when you ask for four bedrooms and you get one or no windows. That's what our cities are. They don't function or they shortly will not be functioning. Cities like Nelson are ahead though. It's more of a traditional city and it's the ones like Justin comes from Atlanta or L.A., they're in worse trouble. Europe's ahead of us – they don't have as far a fall. The third world is in the best position because they didn't manage to get on the band wagon - they're already down there. What happened is about the time we reached the peak of consumption of oil in the world the Club of Rome report came out. I don't know if anybody remembers it but in 1972 it came out and said that not only oil but a whole bunch of resources – nickel, anything of any significance to civilization, we were going to go through this same consumption and decline. The human population on the planet is actually based on the consumption of this energy too. We're all here because this energy's cheap and we've managed to multiply and kill the planet. It's like the bacteria in the milk bottle. The trouble is when we go

over here, when the supply goes down, Economics 101, that's one of those true facts that plays out, says that the price curve which we found stable or slightly increasing shoots up and where they cross over we get potential chaos.

The reason for having these sessions is to tell you things are going to go wrong, you know what the 1930s were like - well we're going to go through something much worse. When we had the sessions and we gave people pieces of the city, in our second session, our Wargame session, everybody went through a Mad Max scenario. And we had to said, "Whoa, hold off. Don't run for the guns. Don't start fighting each other as resources go. Let's see if we can work together." That's why we're having these sessions because we know things are going to go sideways, how can we learn to work together? So we're together to talk about co-operatives and reorganizing government, managing resources, finding better ways of doing things. And all these projections you hear right now – but we're going to grow 2% and they're going to grow 4%; we're going to get more oil – none of those things can happen. Cumulatively it's impossible. Even a handful of those things can't happen because they're drawing upon resources that aren't there. Or the cumulative effect of using those resources is going to cause another problem. As much as China wants to reach a North American standard of living, they can't get there and the trouble is we can't stay where we are either. So the current trends can't persist. Everything you take for granted essentially is up for grabs in the next seven years. It's the year 2014 don't forget.

And by the way don't anybody leave the room before I take you out of your trance (audience laughs).

This is a diagram from Scientific America trying to explain in scientific terms to the lay public what's going on with the production of food. This system in the middle that's coloured red is the part that's consuming fossil fuels to transport that $.10 head of lettuce to B.C. so that it becomes a $1 or the other expression we've is used is the $200 papaya soon to come from Mexico because the cost of getting here is going to be so high. You're just not going to be able to pay the price of paying for food to be shipped from Australia and Chile and Mexico. You might have to go back to a cabbage diet but something has to change. We just can't keep this up. So we're going to get into talking about the land reserve and niche farming and all that sort of thing because all of us are going to have to learn to farm more. It's not going to be the 2% farming anymore; all of us are going to have a piece of this. We have to, we have no choice. A lot of the things you're going to hear me say, you're going to say, well he's being idealistic and he's trying to rebuild the past. No, I'm talking about things that are going to happen because we don't have any choice.

And of course, relating the energy consumption to global warming, we can't take the two apart because one's impacting the other. And we're getting heat trapping and we're burning fossil fuels and the heat's building up in the atmosphere and the map on the right indicates the degrees of change over the next couple of decades. Just to give you a sense of impact because one of the things that's coming in this presentation is mass migration. You thought global warming was bad and peak oil was a problem but wait until what happens when these two come together and people start moving.

JON STEINMAN: And you're listening to Richard Balfour a Vancouver-based architect who spoke at the November "Future of Food in the Kootenays Conference" in Nelson B.C. As the current infrastructure of cities throughout North America is built upon the easy access to cheap energy, Richard's presentation took conference delegates into some scenarios of how he believes communities will need to change. The direction in which his presentation headed, coincided

nicely with the purpose of the conference, and that was to inspire the communities in and around Nelson to begin responding to such threats and rebuild a more stable local food supply.

RICHARD BALFOUR: I'm going to take a look at orders of magnitude and communities and how they're impacted by these things. I can speculate on these things as a generalist in the way that Justin can't as a scientist. And as a social scientist too I can make projections and do graphs that scientists would get in trouble for doing. They're not right but it's a shorthand way of communicating interrelationships of things that otherwise takes a long time to say with words. So we're going to take a look quickly at L.A. at 13,000,000; Vancouver – 2.5, Nelson and region at 10,000, it's actually 10 – 50,000 in the county area. I say county, which is an American term, but there is a move afoot to look at county governments in B.C. - has come and gone but I think it has to come again because it's a reasonable way to deal with relocalization and management of the ecological basin and also to get people to have better control over their local area through this system of government. Right now we've got partitioning and balkanization of the regions through our small municipalities. Not to say it's an amalgamation but when you look at the governance you feel better control. And below Nelson just for fun, we've thrown in Spuzzum at 25 people because those kind of places have a role to play too.

Impacts causing decimation - so we're always talking about communities growing. We're now talking about things like Jim Kuntsler, in his book talks about death of suburbia when the price of energy goes up and you can't afford to heat your house, you can't afford to commute to work. Your job's probably in jeopardy because it's not a value-added job. It's something that all of a sudden becomes something nobody wants to pay for. All these things kick in and communities start changing. We talk about urban triage when pieces of the city start to die how do we save them. How do we work together to rescue them. How do the suburbs get reorganized to become villages and farms – more of a medieval pattern. I only offer that because I don't know what other pattern it would be except to wipe the area out altogether, which is another possibility. This is really down isn't it? (audience laughs)

Anyhow, you also have a loss of economy and a loss of tax base but basically a loss of access to cheap food and the abundance of food. We have a loss of personal mobility. We'll also have a loss of portability of capital. If you have an area, say L.A. becomes decimated and people can't sell their house because nobody wants it, how do they move north with no cash from the house because the house can't be sold – I'll come back to that one in a minute. We also risk loss from environmental protection because masses of people are moving and overwhelming the environment. And this is a case where you want to welcome people but we've got to make sure that we welcome people in a way that doesn't overwhelm the environment. The big thing is loss of future for your children. I've got two daughters. This is really important to me. That's why we're doing this too. That's probably why you're all here. And basically it's the loss of community stability. Like I said, everybody in our sessions went to the Mad Max scenario; we somehow got to learn to bypass that. As Andrea says "the Mad Max scenario is a basic response because the reptilian part of your brain is kicking in" – it's your survival instinct kicking in. What we need to do through these sessions is to deal with the upper levels of your brain – the rational thought process and the co-operative mammalian part of our brain.

If you look through history and we use 1870 as a baseline energy consumption, towns before cars and sprawl had a certain pattern. And in fact, Nelson is really close to being in that pattern in the downtown core. As we went up and built new towns based upon automobile engineering standards and shopping centres and single family subdivisions and the growth of the nuclear family and the fairy tale of the single family house, all based upon consumption of oil, we have a

pattern of community up here which is not sustainable when the oil disappears. The question is which flight path we have. In our book we use a lot of analogies and one of them is the fear of flying and you as passengers in the plane have to learn to fly quickly. You've got some drunken pilots in control who don't realize that they're running out of fuel even though the navigators are yelling at them and telling them there's no more gas! We've got to reconfigure communities and so it's a question of whether we reconfigure and come down on the glide slope, that we have a soft landing or we ignore all this and continue and we crash. That's a real possibility.

JON STEINMAN: And this is Deconstructing Dinner. In just a moment we will hear from two of the elected officials who attended this regional food security conference, Member of Parliament, Alex Atamanenko and Member of the Legislative Assembly, Corky Evans. Both shared *their* thoughts on food security in the region. But before we hear from them, here is the last segment from Richard Balfour's keynote presentation. This segment included a number of different ideas on how future societies will appear in light of energy availability and climate change. And he predicts that mass migration will be likely, and that traditional societies and their settlement patterns may act as an ideal guide to manage such migration.

RICHARD BALFOUR: What I'm throwing at you is the possibility with mass migration where you're going to be a not a community of 50,000 in 15 years but 250,000. James Lovelock talks about the revenge of Gaia and people having to move so there's only a fringe of a few people living around the Artic, the rest of us don't make it. Compared to Vancouver – this is sort of order of magnitude, scale of comparison - they've got a tendency to shrink but they still have pressure from Mexico to grow and there's a problem with the borders. Vancouver is going to have a problem because of our climate and our current political status that we're going to get hot weather refugees and post oil refugees from the United States meeting the cold climate refugees from the Prairies as the natural gas runs out. And Asia will continue to come in but we're going to have out migration to the hinterlands – that's you guys.

Unsustainable Vancouver – Vancouver's always patting itself on the back about what a good job it's doing but it's not a sustainable city. All those pretty green glass towers on the False Creek edge are not sustainable buildings. Vancouver's best hope – well, save every bit of farmland. In fact, we're now talking about clawback which scares the hell out of people. Clawback? I thought it was a one-way process but we think it's essential to take back the pieces that we've lost that shouldn't have been taken out.

One thing that's overlooked is the coastal settlements and I think it's important when we're looking at traditional societies and learning from the Third World to take a look at what the First Nations settlement pattern was in B.C. And this is the sparse settlement pattern of the First Nations in Vancouver area which would have been higher if they'd been an Agrarian society but they weren't, they were basically hunters/gatherers, they didn't till soil, In the interior mountainous area like Nelson – newsflash, 2012 – the highway is wiped out; the connection to the lower mainland is gone. There's no money left to replace it. You're now an isolated area. You've got a railroad, you're connected to the States. We're not sure what our relationships are with them at this time. So what we've got in Nelson's case is you've got migration from a whole bunch of different places and then the impact by the changes that are coming is going to be greater in terms of scale than in Vancouver for instance.

And then there's the notion of – I just mentioned it, we can discuss it tomorrow – the idea of reorientation of government with county governments and control of the ecological basin. It's actually a parallel, it's like the First Nation's actually manage their ecological area. They settled

(in) valleys. All around the world tribal societies basically took control of an area where the mountains were a boundary and they managed that area. I think we have to take another look at that and see what we can learn from it.

Just quickly, one of the things we looked at – if the community expands we have to take a look at using the hillsides including around Spuzzum and one of my things is this is the archipelago up the coast - it has great capability of maintaining populations. We have to look at the Maritime capability of the coast as migration floods in here. We don't try and put people all in one area fighting over resources. There's no technical rescue we can see that's going to work so this is the whole thing about rediscovering rural land uses, raising horses. It's not all a black picture. There is the historical things we need to rediscover like steam engine and that sort of thing. I'm only saying this because the futuristic Buck Rogers stuff isn't going to work, we know that. If Nelson has to urbanize we look at the hillsides and I say this if there's 250,000 people moving in the area you're going to have to look at Mediterranean type hillsides. The hillsides have this potential. It has a different pattern of development; it can't be done like flatland engineers to approach it and there's the potential of these kinds of hamlets and villages up the lake oriented with water transportation. And David Spearing – he's an architect that wrote "Living on Mountain Slopes" and one of the things he said was the steeper the slope, the higher the density and that's one of the things I try to apply in these kinds of studies too.

And this is a niche form approach. So one of the things we're going to look at is not only saving the flatlands and the bottom lands for farming but discovering niche sites in the forest lands where there's fertile benches to become places for extended families and hamlets to grow crops and mixed farming.

JON STEINMAN: And that was Richard Balfour, a Vancouver-based architect and author of the title "Strategic Sustainable Planning: A Civil Defense Manual for Cultural Survival." Richard is a Director on both the Metro Vancouver Planning Commission and the New City Institute.

soundbite

And this is Deconstructing Dinner, a syndicated weekly radio program and podcast produced at Kootenay Co-op Radio CJLY in Nelson, British Columbia. I'm Jon Steinman. Today's broadcast is titled "The Future of Food in the Kootenays Conference: Overcoming Denial." In the coming weeks we will be featuring more of our recordings from this regional food security conference that was held in November right here in Nelson. We have devoted an entire page of our website to this conference where all raw recordings and visual presentations have been archived. And we hope that this page will act as a resource for other large or small cities wishing to learn how members of a community can be gathered together to begin discussing how greater control can be assumed over the local food supply. And again, that website is cjly.net/deconstructingdinner.

One of the most interesting quirks of this region here in the middle of the province is that our elected officials, both provincial and federal, are also the Agriculture Critics for both the provincial *and* federal NDP parties. Alex Atamanenko who has lent his voice on our program on a number of occasions is the Member of Parliament for the B.C. Southern Interior riding and as the party's Agriculture Critic, also sits on the House of Commons Standing Committee on Agriculture and Agri-Food. The NDP is one of the most vocal parties challenging the *current* government's interest to harmonize regulations and trade with the United States and other countries. In doing so sovereignty over the Canadian food supply is being threatened. And so it seems that Alex is the most appropriate person to share with conference delegates how food

security issues are making their way into the House of Commons, if at all. And so here's Alex Atamanenko.

ALEX ATAMANENKO: I would just like to thank Andre and others for doing this. This is really a very stimulating event and it's a real pleasure to be here. It's also a pleasure because if I weren't here I'd probably as we speak, be getting ready to head over to the House of Commons to listen to more debate on Brian Mulroney and the scandal that's happening. So it's nice not to have to be there and to be here where we're doing something I think a little more productive (audience laughs and applauses).

I won't take much time because there isn't a lot of time but I think it's important – I'd like you to know what's happening there; how this ties in with what's happening here. My responsibility as Agriculture Critic is to be on the Standing House Committee for agriculture which means we meet twice a week and we listen to witnesses on different issues where currently my colleague Pat Martin today is meeting with the Committee to set the agenda. And one of the priorities now is I guess – we look at priorities before Christmas **–** that is hammering farmers across Canada is the goal of the dollar and the effect and specifically the pork producers and the cattle ranchers. And as a party and a critic for the New Democratic Party, my focus is and will be on food security. Food safety is a huge issue. The other thing as you may know I've tabled a couple of Private Members Bills – one on labeling genetically modified food and also one on terminator seeds (audience applauses). And the other issue that we want to push forward is this whole idea of genetically modified foods in general and just to get a real handle on this and eventually stop it. And it's going to take a lot of work.

On the Standing Committee we made a tour last spring. We hit every province and listened to farmers and listened to a lot of people and the main thing that kept coming up was food security. And what I thought I would do and of course we wrote a report and in the report there were a number of recommendations. And in reply to the report there was another report written by the Department of Agrifood and Agriculture that commented on the report. So it's my hope that some of these recommendations will actually come to being and it's just not going to be one of these things that's shelved and the department goes on and does whatever it has been doing for the last while.

Some recommendations that we touched upon - and I must emphasize that this Committee is made up of all party members - and all of these recommendations except one were agreed to by everybody from each political party. So it's not just people from our party or the Green party who are concerned about these issues. A lot of these people on the Committee are farmers and they understand what's happening.

The first recommendation was that the emphasis when we talk about agriculture should be on the primary producer. If we look at statistics we see that over the last five years, our farmers have been losing money. They've been hit hard. Farmers across the border have been experiencing the five best years. So there's a disconnect. There's something happening here and we have to when we consider policy, we have to ensure it's the primary producer that gets the priority so that person can at least make some kind of a living. The government's answer is not very clear. It kind of states, well we have to look at everybody and the business – it's very vague.

The next recommendation was to buy local. The government should financially assist market promotion. A point coming through on the government's answer was that the consumer should dictate that. So once again, we don't see a clear commitment.

Another recommendation, #9 was that we should have a Made in Canada labeling which means that at least 51% of the content of that package is in Canada. Right now when you see a package of juice or something that says Made in Canada, that means that 51% of the cost of production is Canadian. The apples could be here from Washington State, from China, they could be turned into juice in Canada if 51% of the cost is Canadian then it's labeled a Product of Canada. So, we feel that's wrong. The response of government is that the regulations should not create unnecessary obstacles to trade. And as we go through this and a quick summary that I'll see is underlying and kind of overshadowing all of this is our trade obligations – how we've locked into NAFTA, locked into the WTO, World Trade Organization.

Recommendation #10 from the report was that Canadian food products – we should be a priority at institutional procurement in our prisons and other Canadian institutions. The response was that most of them are but the World Trade Organization agreement on government procurement may be an obstacle and NAFTA, Chapter 10 may be an obstacle to this. And they quote that "federal departments and agencies covering the agreement shall not discriminate against agri-food products from our trading partners." So you see what's happening, as we go through and we want to build a local production, we want to ensure we have local food and Canadian food in our institutions, we're getting the pushback that we're going to discriminate against those trading partners that we're locked into agreement. So, something clearly has to be done here.

Recommendation #11 was that – and these are just the recommendations touching food security, I'm obviously not reading the whole report – to allow greater shelf space for local Canadian agri-food products; to take the minimum from 5% to 15%. And here we get into that whole area of that we've touched upon - the idea that we don't have enough space in our local supermarket shelves for local produce and the reason for that is that the agreement says or the law says that only 5% has to be. You know they don't have to have any more if they don't want to because it's all done through a central distributing agency. And the government says well you know, market forces should be dictating and then they go and they say well this is a provincial jurisdiction.

The other thing is, recommendation #20 Supply Management should be enshrined in the three pillars of supply management and that is accepted. We made a recommendation #21 that there should be legislative support for farm-run orderly marketing agencies to continue to work on farmers' behalf. This was not in agreement. The Conservative members of our Committee did not agree to this and this means this eludes to the Canadian Wheat Board. There's a movement now by this government to dismantle what we call the single marketing agency which works on farmers behalf to sell their wheat around the world. And this current government wants to make this idea a marketing choice and allow this on the open market. And many of us feel, certainly all three opposition parties feel that this would eventually destroy the farmers ability to get a fair price for his/her grain.

Recommendation #36 states that the National Food policy to be put in place to guarantee a safe, viable and plentiful food supply to ensure a long-term food security. So that was the last recommendation of the report which clearly states that those members of the Committee from each party believe that food security is an important issue. However when we look at the response from government we get quite a response that says it recognizes critical role of primary agriculture and then it goes on to talk that the system we have has served us well and that we have to look at the whole situation in the world. And my analysis is that most Members of Parliament at least federally agree with that. Somehow we've allowed the system to slip into this, the situation that we're in now.

So how do I analyze all of this stuff? Well, food security is a national concern. The Agriculture committee almost unanimously supports the idea of Canadian food security. The government response is often not clear and the government refuses to put the primary producer as number one. So we see this idea of government pullout which Don eluded to – the fact that the government is not on the ground taking an active role in supporting the farmers. We see industry self-regulation. We see the pressure, for example from our world trading partners. We see that before NAFTA in British Columbia we had in-season tariffs that would protect our vegetable producers where at one point in time we had 2,000 onion producers and now we have something like six. You know we see apple dumping happening where we're getting Washington State apples putting our people out of business and we're not knowing how to react because we're worried about how to deal with NAFTA and all these regulations.

JON STEINMAN: And that was Alex Atamanenko speaking in November at the "Future of Food in the Kootenays Conference" held in Nelson, B.C. Alex is the MP for the region and is also the NDP Agriculture Critic in Ottawa.

soundbite

In wrapping up today's broadcast with one more of our recordings from the conference, we listen in on another NDP Agriculture Critic, but in this case, for the province of British Columbia. Representing the Nelson-Creston riding in Victoria is Corky Evans. Corky spoke to conference delegates following the second day of workshops, and his comments may come as a mild shock, because of how openly he criticizes the functioning of B.C.'s provincial government. Having now been at the forefront of some of the more well-known food and agriculture debates being waged here in the province, Corky has a strong understanding of the barriers that face communities wishing to assume greater control over its resources and its food. He suggests that as the role of government is increasingly passed on to corporate board rooms in far away places, that it's the recognition of such loss of democratic power that has historically been the driver for communities to rise up and take control over local resources and infrastructure. Corky uses one example that will become a feature for an upcoming broadcast of Deconstructing Dinner, and that is an example taking place just outside of Nelson in the Slocan Valley where dozens of farmers have been affected by the poorly implemented meat inspection regulations, and in response, have begun the process of creating a slaughterhouse to help ensure the food security of the region.

CORKY EVANS: Yeah dismantling the NAFTA, that would be a cool start. Years ago I went to a NAFTA meeting in Mexico with Ministers of Agriculture from Canada which I was honoured to be at the time and Mexico and the United States. And before I went to the NAFTA meeting I wanted to try and understand so I met some Campesino groups and they took me for to sort of to meet people who were affected by the NAFTA. I went into this cathedral with them on a Sunday and it probably held 700 or 800 people and there were 60 people sitting at the front. And the priest stops speaking in Spanish and he said, I want you two to understand, those of you from Canada, this church use to be full and now there's only 60 people and they're women and children. My village is broke and the men are all gone. They're working as criminals or in Texas and California because the NAFTA killed our economy because nothing that we grow has any value anymore. And for us here in this room, pretty comfortable, pretty well-fed, it's an intellectual artifice, this NAFTA idea. For those people it actually meant the end of agriculture. They're not having rooms full of people talking about growing stuff. They're struggling over whether they exist at all.

It's kind of held at the end or 20 years where we abdicated governance from elected people to an international level of people that we've never met in rooms we've never been in and writing books and laws we've never read with the NAFTA, with the Free Trade Agreement, with the GATT and they now control what use to be controlled by government. Governments they just determine what taxes you're pay and what the rules will be. They decided just a little while ago that it's against the law for me to sell you a cow. Now they're deciding it's against the law in Smithers for the Farmers Market to sell food that they determine is no longer acceptable and you will find that across the province. And it all, of course, comes from this abdication of politics as a way to control our lives to international trade as the church of the new millennium. And that's the bad news.

The good news is that the really wonderful times in history to where people come together never came out of the good times. The CCF, the party I belonged to and the co-op movement were born not out of the good times of the '20s but out of the dust bowl of the 1930s on the Prairies and came together when people realized that the big solutions weren't going to come unless they made them happen between themselves.

The Farmers Institute in Slocan which was alive and well when I moved there 35 years ago has been dead for 30 years. The co-op that is being born now of people to produce and kill and cut meat between themselves, that's the first wonderful initiative that I've seen in farming in the Slocan in those 35 years and it didn't happen until the international people decided to make it against the law for me to sell you a cow! They changed the law and said what you do for a living, what you've always done is now a criminal act so the people are coming together. That's what feels to me what this room's about - losing control at the political level so creating control at the community level. I think that the plague of our times is alienation. I think the people that, I think our culture suffers from losing a sense of who we are and where we came from, where we're going, where we live and most essentially, the dirt. The essence of making it work is hanging together and not looking to senior levels of government for assistance or organizational where-with-all. Look to Gord and me and Alex if possible, simply to create a benign state that is not in your way. Because our side isn't flying the plane which means you've got to duck below the radar.

At present, the food system is in control of people for whom your values are actually a problem. And that means we make it work if they ain't watching. The people at your table are more likely to make your dreams come true than the people who run your country and I think this is the place to do it. British Columbia grows more products than all the other provinces in the country. Why is that? It's because the ecosystem here is so benevolent, so kind, so beautiful, so diverse. We've got deserts to high mountains to a rain forest. What we can do here, the people of the world would love to have the opportunity. And here we gather wondering how to make it happen when we already are blessed to be in this place. I think it's just digging the dirt and depending on your neighbours. Make coalition with your neighbours. Kill the gossip. Kill the cultural divisions. Kill the parochialism. We do gossip as an indoor sport because like … (audience laughs) Stop the stuff that divides us and the land will blossom and so will you. Thanks for doing what you do (audience claps).

JON STEINMAN: And that was Corky Evans, the MLA for the Nelson-Creston riding of British Columbia. Corky is also the NDP Agriculture Critic. And again, most of our recordings from the "Future of Food in the Kootenays Conference" are available on the Deconstructing Dinner website and can be linked to from the main page. And you can stay posted for future broadcasts

featuring more recordings from the conference. And again, that website is cjly.net/deconstructingdinner.

And in closing out the broadcast, I'll leave you with a rather appropriate song, and one fitting comment made by a Nelson resident during the question and answer period of the conference.

[Bob Marley – Revolution]

AUDIENCE MEMBER: How do we activate people to move beyond the lethargia that has sort of gripped us with all the evidence that has been presented tonight? As an example, why couldn't we get 50 people to go down and take over the City Hall here for just 24 hours and make a proclamation. I mean Zapatistas did it after NAFTA the night they signed NAFTA. So you know, my question is why aren't we like the Zapatistas? We still have a civil society. We are capable of doing something.

CORKY EVANS: For some reason they gave me the mike for this one (audience laughs). I think your question is the answer. And first of all you're here; you've asked a question like that. What we're actually talking about is sort of revolutionary and radical. I can feel there's something happening in the room. Go out and do what you just said.

AUDIENCE MEMBER: I'd get arrested.

CORKY EVANS: I might get arrested for saying this.

AUDIENCE MEMBER: Yeah but I have been arrested and I think about a thousand people need to get arrested. Then things will change.

CORKY EVANS: Yes we do. We're too bloody polite!

ending theme

JON STEINMAN: And that was this week's edition of Deconstructing Dinner, produced and recorded at Nelson, British Columbia's Kootenay Co-op Radio. I've been your host, Jon Steinman. I thank my technical assistant John Ryan. And I also thank CJLY volunteers Chris Born, Neil Sorochan and David Strongman for helping with the onsite recording of the conference featured on today's broadcast.

The theme music for Deconstructing Dinner is courtesy of Nelson-area resident, Adham Shaikh.

And this radio program is provided free of charge to campus/community radio stations across the country, and relies on the financial support from you the listener.

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