



A Tower of North American Babel: Making Climate Science Intelligible To Leaders, Policy Makers and the Public

A
Presentation
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We are pleased to be invited to be a part of the IP3 climate science research process. It is our hope that we can not only participate in the IP3 user's network but play vital role in making the science that emerges from this important project intelligible to leaders, policy makers and the public.

The Western Watersheds Climate Research Collaborative is a not-for-profit consortium that provides science-based analysis of climate change impacts and consequences to industry and government.

Though created under the auspices of the University of Lethbridge, it operates independently in association with other universities, institutions, governments and business to find the best ways to translate what we know about climate change into appropriate action.

Located in Canmore, Alberta the collaborative promotes understanding of climate impacts on river systems originating in the Rocky Mountains.

Our mission is to find out what climate change impacts might occur, determine the direct consequences of these impacts on communities and each of our economic sectors and then propose the best practices and public policy options to deal with those impacts.

The Western Watersheds Climate Research Collaborative works with universities, industry and government to provide three essential services:

1. We undertake useful research and translate our own research results and results from all over the world into language the average Canadians can understand and decision-makers can act upon

2. By drawing on world examples we identify appropriate adaptation practices & encourage the development of new adaptive technologies
3. We help identify incentives and put into relief new policy options that will make adaptation possible, economically feasible and even desirable

What are we working on now?

We are, in partnership with EPCOR, the Bow River Basin Council, Alberta Environment and others, presently utilizing the work of the Prairie Adaptation Research Collaborative, Dr. Shawn Marshall and others to complete the first-ever comprehensive climate vulnerability assessment for the Rocky Mountains and Eastern Slopes in Alberta.

We are also organizing to begin research on potential climate change impacts on flow volumes of the North Saskatchewan River in Alberta.

We are working toward the development of a joint-research agenda with other similar climate change research collaboratives in Canada, the United States and Europe.

This agenda will be established at an international climate change forum we are hosting in Canmore between November 21st and 23rd of 2007.

Our work is founded upon an important premise; that climate change can be easily and immediately understood by the public and by politicians by following its impact on our water resources.

It is our belief that ignoring the connection between landscape, climate, water and our energy demands could cost us our prosperity and could cost our children more than they can afford to pay. This surprisingly, is likely to be more true in Alberta than in the rest of the Western provinces.

Some of you may have observed our special circumstances in Alberta. We are wealthy there so it doesn't matter that we have left the furnace on at its highest possible setting and all the taps running while we head off for a weekend-long party in the mountains.

Despite much talk about climate impacts on already scarce water resources in the West, we are not addressing these problems in an integrated way.

Because we have not until recently had much leadership – or in many instances have we wanted much leadership – in the integrated management of water, many interests have gone their own way with respect to water policy.

Many of the solutions being put forward are symbolic only in that they promise action but do not establish a timetable or provide adequate funding for truly effective action.

We are well on our way to defining a West through happenstance and unplanned incrementalism. We are on our way to a future we did not intend to create and that may not be what we want.

Solutions do exist, but they are seldom ones that satisfy everyone. Despite appearances there is little will to change the way we presently do things, because if we change the way we manage water in response to climate-related threats, we may have to change the way we manage land use. And that is a huge project.

It occurs to me that public policy processes in much of this country are paralyzed. Not necessarily dysfunctional – but paralyzed. Everyone is waiting for someone else to move. The result: gridlock.

There is no real nationally orchestrated leadership on water issues. On a national basis this is also clearly true also of climate issues.

What we have created in Canada could be described as the Al Capone School of Public Policy. This is a school of public policy defined by the gangster maxim that if “Nobody moves, nobody gets hurt”. You can talk all you want but don’t you dare move.

We spend far too much time being connected and not nearly enough time being effective. And while we remain motionless, we are creating problems for ourselves faster than we can afford to solve them.

We are good in North America at engineering solutions to water availability and quality problems within confined jurisdictions. If there is one thing that stands in the way of truly integrated watershed management in Canada, it may reside in the fact that jurisdictions often isolate themselves and affected interests do not always share information or collaborate effectively on better solutions that serve the long-term common good.

IP3 can play a role here.

I attended a workshop recently on emerging challenges to the development of a sustainable national water policy in Canada.

A spokesperson at that workshop told the national audience that the city of a million people for which she worked had gone its own way in terms of the management of water resources for the future.

“We can’t keep waiting for the Province, which is waiting for the Feds” she said. Her point was clear, if you have to keep waiting for permission or direction, nothing gets done.

Another reason that Al Capone remains on the loose long after his purported death is our failure to build a reliable and durable bridge between science and public understanding that results in effective public policy.

Science and politics sometimes have trouble relating to one another. One of the reasons that this is so is that the language used in each of these two domains is completely different. While the currency is the same – we may all speak English or French – the way in which the language of science is constructed is very different than the way the language of politics works.

The language of science is data-based while the language of politics is nuance-based. The language of politics is based on opinion, the language of science on demonstrable fact.

The language of politics is meant to be manipulated by individual interests. The whole purpose of the language of science – which is to say the scientific method – is to prevent such manipulation.

The difference between these two languages – and the mindsets that power them has allowed the creation a Tower of Babel in North America on the question of climate change impacts and how to deal with them.

Even though the facts appear obvious to scientists, politicians just don't seem to understand either the nature of the threat or the crucial importance of acting in a timely manner to reduce that threat. We are not communicating. This, simply, will not do.

In the past this may not have been a serious issue. Scientists have been at odds with politicians in one way or another for 500 years. Unfortunately, the threat we face now is such that we can no longer afford to have the future defined by short-sighted political self-interest.

In other words we can no longer have our response to what is happening in and to the world defined by spin.

The Denial Machine

I know from personal experience that it can be hazardous to work in situations that rely too heavily on spin. After a while – that is to say after much repeated telling – you can become a victim of your own intent.

The intent of spin – as everyone here knows – is to shape the perceptions and actions of others around a vision of reality you and your colleagues have created to defend or advance singular interests.

The risk is that over time – and by way of much repetition – you start believing your own spin. Where once you were merely confined by it; suddenly you are defined by it. And that, ladies and gentlemen, is when the unseen whale that is the larger truth invades.

Contrary to popular belief, Margaret Atwood is right. It is entirely possible to entice a whale with a bent pin. Not enough successful people in our culture today have experienced this. But they will.

Spin, professional public relations and lobbying are part of how business is done in our market economy. But there is a risk at being too good at it without keeping an eye on larger truths and realities.

We have, for example, all seen how effective lobbying ensured that North American automobile manufacturers remained exempt from legislation demanding more fuel efficient vehicles.

They have been so successful with their lobby that they have been permitted to keep producing inefficient cars and trucks even though it has hurt their business and our economy to do so.

Because of persistent self-interest, North American auto manufacturers lost world domination of their main markets. We simply cannot afford to let climate related issues lead to similar consequences in any of our other economic sectors.

If we don't want this to happen, then we have to build a better bridge between science and politics. That is not a job everyone wants. It is, however, one to which our collaborative is seriously committed.

As a potential user of IP3 scientific research outputs, we hope also to get advice on how to best link science and politics. It ain't going to be easy.

Perhaps like you, I find I have to think and act very differently around scientists that I do around people with political motives. One lives in a fact-based world; the other in a world in which facts matter far less than consensus.

Say "good morning" to a scientist and she is likely to check her watch. Say "good morning" to a politician and he is likely to look around to see if everyone agrees.

Their motivations and methods of discourse are so very different, no wonder they have trouble talking.

Let's start with scientists. Scientists gain academic and professional status by advancing shared knowledge. They usually pursue knowledge purely for knowledge's sake.

They also gain status by being cautious in interpreting new knowledge claims and for their fairness in evaluating the validity of competing claims.

While there are real disagreements and often bitter rivalries in scientific debates, advancing knowledge is seen to benefit science as a whole. Even research that leads to a dead end is valued for it advances what we know – and knowing is what science is all about.

A scientist's reputation won't amount to much if he or she makes unsupportable claims based on limited experience, fails to acknowledge how he or she might be wrong, ignores or misrepresents contrary evidence, makes emotional statements or makes personal attacks on those holding opposite views.

Compare this with politics. In vigorous political argument it is quite common to hear exaggerated and biased claims. Emotional appeals and personal attacks are the stock and trade of political debate. It ain't pretty but that's how politics work.

Even when the appropriate scientific course is right before our eyes, truth may not win out if you find yourself up against a rhetorically skilled opponent who operates – not by the rules of science – but by the much different and far less constraining rules of political debate.

We need good science. And we need effective politicians. Science is not likely to change, nor is politics. We need to build a better bridge between them if we are not going to get where we want to be.

This bridge is important. In every single Canadian community I have visited there are people who are trying to make things better. But where there are problems exist there are always the same. I want to make clear, at this point, that, in my opinion at least, the enemy is not growth.

The enemy is our habit of continuously delaying action on crucial water and water-related climate issues until further growth has satisfied what are perceived to be more urgent demands.

Many believe that because Canada is a wealthy country with seemingly endless resources and millions of well educated people that it is impossible for us to make the mistakes previous civilizations have made in the management of their resources. But our record is not exactly perfect.

I invite you to consider the Atlantic cod fiasco. Some of the causes of the Canadian cod fishery collapse have been identified and they are very relevant to the debate we are having in the West over water.

They include the fact that almost everyone thought the resource inexhaustible; private interests demanded to be served before the real issue was addressed; federal and provincial governments warred over jurisdiction so no organization could claim charge; government departments suppressed information; scientists who offered dissenting views were discredited and short term political gains were put ahead of the sustainability of the fishery.

An environmental catastrophe became an economic and then a social disaster. The worst thing is that we didn't learn anything from it. Five years after a moratorium on fishing was imposed, the stocks still show no sign of recovering. And yet we still allow people to fish. We literally can't afford this to happen with our water resources. And we certainly can't afford to have this happen with the climate change issue.

Through our initiative we have talked to hundreds of politicians. What they want is for us to simplify this issue. They would, in fact, like the issue simplified to the level of a sound byte. Here is what politicians are looking for:

Because we are really busy with more immediate issues we would rather you prove this isn't a problem. If you can't do that then prove it is a problem that don't we need to address at this moment in our term of our office.

Even at this point, most will allow you to give them the facts. Their response:

OK, OK, OK. We are really sick but we can't say that. We need to think about how we can sell this and still stay in power.

You think about what they tell you next. In essence it is daunting:

Our society is in need of a triple by-pass: but we can't tell the public that; we can't even tell them they are sick. What we need to do is quietly perform this operation on them - preferably without them knowing about it - while at the same time ensuring that their income does not drop but in fact rises and that the future will be even brighter than the present.

The survivors of this operation must be able to do more and make more after the operation and - better yet - the cost of the surgery will be not reflected in increased health care costs.

Preferably no one will have to make any unpleasant changes in their lifestyle habits – at least not during the next four years of my office.

Oh, there are a couple of more little conditions. Don't even think about mentioning population controls of any kind. That is certain to offend influential elements of my constituency. Don't even think of proposing any kind of economic slow down. Economies are supposed to red-line. That's what economies do.

So fly at it, boys, go for the triple by-pass but make sure it doesn't slow us down but instead makes us healthier and richer without having to change our habits. And remember, do it on the cheap.

And - Oh – did I tell you, I also want to take credit for this if it works. But if it doesn't I won't even acknowledge that I know you even if I see you on the street.

There has been no change in federal water policy in 25 years. The current federal government policy on climate change is defined not by a vision but the opposite of vision. It goes something like this:

The Liberals – whoever they were – didn't do anything about climate change when they were in power back in the 1900s. Because the Liberals didn't do anything, it follows that the Conservatives can't possibly do anything either.

The current government intends to reach dubious emission targets through reducing emissions intensity. This means that the only way you are allowed to increase industrial greenhouse emissions is if you make more money by doing so.

Gone are the days of simple wastefulness. You can pollute more as long as you increase production and productivity by doing so. Unfortunately an already full atmosphere and its attendant climate remain indifferent and un-amused.

This, I would submit to you, is a very difficult place to start in the further construction of a bridge between science and public policy. But if that is where we have to start, then let's get going.

Our climate research collaborative has been founded on three principles:

The first is that we have excellent science in this country that we can rely upon to begin to act seriously in response to the climate threat.

Second, there are practices and technologies that are being developed here and elsewhere that we can build upon in this basin.

Our third founding principle is that thoughtful, articulate and carefully focused communication of the outcomes of good science and effective mitigation and adaptation strategies employed elsewhere can be made to shape effective public policy in Canada.

We need IP3 to guide us scientifically; to inspire us in terms of appropriate action and to help us become an enzyme that positively changes public policy at the municipal, provincial and federal level in Canada.

Thank you.