



**Semana temática:** Agua y Sociedad

**Eje temático.** Comunicación

**Título de la ponencia:** Attitude Adjustment: Changing our relationship from water as low-cost commodity to water as sacred, life-giving resource

**Resumen:**

Much of the world treats water as if it were in endless supply or a commodity that can be easily manufactured. Neither attitude reflects water's reality and yet this water fantasy is commonplace in all levels of society in Canada and many other countries. As a result water is wasted, polluted and mismanaged in most places. Changing our relationship with water from a product or commodity to a precious, life-giving resource is crucial to coping with the water challenges we face. Water has been sacred for most of humanity's history save the last two hundred. It is time for an 'attitude adjustment'.

Journalists and communicators have an important role in revealing and explaining the reality of water and exploring how attitudes shape our decisions about water. Most importantly communicators must first pull themselves out the prevailing water fantasy in order to ask the right questions. This work of vital importance because humanity is reshaping the Earth and its climate with little knowledge of what we are doing.

**Author: Stephen Leahy**

Stephen Leahy has been an independent journalist covering environmental issues for the past 14 years. For the last five he has been the environment and science correspondent for Inter Press Service News Agency (IPS), one of the largest global news wire service. IPS is based in Rome, with offices in Johannesburg, Mumbai. and New York City. He is a regular contributor to Tierramerica, a Latin American news service based in Mexico City that received the 2008 Zayed International Prize for the Environment.

Based in Canada, Leahy has published articles in leading magazines and newspapers including New Scientist, The London Sunday Times (UK), The Toronto Star, Earth Island Journal, Wired News, BBC Wildlife among others

Leahy's articles have been reprinted in a number of books including: Introducing Environment, Oxford University Press; Current Controversies: Genetic Engineering,Greenhaven Press; The Contemporary Reader, Pearson Educational Publishing; Nature's Fading Chorus, Island Press; Possible Worlds, CUSO Press.

He has also author of two E-books: Steve's Hurricane Handbook 2007 - Lesson's Learned 2004-06? Oil Stains in the Boreal Forest: The Environmental Cost of Canada's Oil Sands.

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1.

After a ten year career in the corporate sector I became a freelance journalist who specializes in environmental issues. Over the last 14 years I've written more than a thousand articles covering many environmental issues in many parts of the world including water issues, pollution, climate change and writing for many different publications;

Based on my experience of covering enviro issues, it seems to me most, if not all enviro prob are a problem of values and attitudes. That is why I've titled my presentation today as:

Attitude Adjustment:

Changing our relationship from water as low-cost commodity to water as sacred, life-giving resource

Most of us in the developed world take fresh water for granted. We think water is a product, a low-cost commodity that is available in endless supply.

And if water is not plentiful then we think should be. We seem to think water is manufactured in a factory somewhere.

If we truly believed that water is a rare and precious gift of god and nature then we would NOT expect to use hundreds of liters each day or dump our industrial wastes in our rivers and lakes.

Changing our relationship with water from a product or commodity to a sacred, life-giving resource is key component in learning to cope with our current and future water challenges.

For most of humanity's history water has been sacred. It is only in the last two hundred that we have forgotten how important and precious water is. It is past time for an 'attitude adjustment'.

2.

And no where is an attitude adjustment needed more than in my country, Canada.

I want to start by telling you little about Canada's water, our perception about water and how we use and abuse water. Other countries also misuse water, but Canada is the country I know best.

I will then talk about media --

What is the role of communicators?

Journalists and other communicators have an important role in revealing and explaining the reality of water and examining how attitudes shape our decisions about water.

But first communicators must pull themselves out the prevailing water fantasy and understand the real situation we are in. This work of vital importance because humanity is reshaping the Earth and its climate with little knowledge of what we are doing.

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Canada is a big country, second largest in the world and we have a lot of fresh water. Canada's lakes and rivers cover 891 163 square kilometres – those lakes and rivers would cover an area larger than Spain and Germany combined....

The Great Lakes, which lie in the center of Canada, are the largest system of fresh, surface water on Earth, containing roughly 18% of the world's fresh, surface water.

Canada has more water underground than on the surface...

4.

It is not surprisingly then that Canadians at all levels of society believe high-quality water is abundant and freely available. And indeed it is free. Sink a well in the ground or put a pump in a lake and help yourself, free of charge. Bottled water companies do just that and then sell the water in millions of plastic bottles all of the US and even into Europe.

That's the common perception and expectation.

But the reality is Canada suffers from droughts, chronic water shortages, water restrictions, pollution -- each year people die from drinking contaminated water and so on...

How can that be??

5.

Like many places in the world, most of our water is not where most of our people are. 60 per cent of Canada's fresh water drains north to the Arctic while 85 per cent of our population lives thousands of kms away.

The second water reality is that Canada's apparent abundance of water is a gift of the last ice age.

12,000 years ago the entire country was buried under a kilometer or two of ice. Virtually all water in our lakes and streams and in the underground aquifers is melt water from the last ice age.

The third water reality is that large parts of Canada are arid like Spain. The interior of province of British Columbia, the vast wheat region of southern Prairies, and the high Arctic receive less than 35 centimeters of annual precipitation.

From 1999- to 2004, the western half of Canada experienced the worst droughts on record.--crops failed and hundreds of thousands of sq km of forests burned. 2007 was another drought year.

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The Great Lakes are located in the middle of Canada on the border with the US. It is the largest system of fresh, surface water on earth.

These huge deep freshwater seas are also gifts of the ice age -- 99 per cent of the water in the lakes is from ancient ice melt water. As is much of the groundwater in the region. Only 1 per cent is renewed each year by snow melt and rain.

40 million people in Canada and the US live around these lakes and they face growing demand from industry, power plants, farms and urban sprawl. Given renewal rates of just 1 per cent and the enormous current water usage there is little extra capacity for more growth.

Drought has also hit this region in recent years. Throughout much of the last 10 years there have been water restrictions every summer and urban expansion has meant water levels in aquifers are dropping. Finally the lakes themselves are shrinking -- water levels are at historic lows in some Great Lakes. Water withdrawals are a factor in this decline but many scientists now believe that because climate change has warmed the region significantly in winter, reducing winter ice, evaporation rates have increased.

7.

Ironically western Canada has become one of the world's biggest oil producers because of the Alberta oil sands.

Oil sands are a mixture of tar and earth that is dug out from under the forests and wetlands and then boiled in water to extract the raw bitumen that is refined into oil.

Alberta's oil sands region is 141,000 sq km in size nearly twice the area of Austria. -- imagine an area that large as an industrial mining site? So far only 2 per cent is in production and represents the world's largest industrial project. And it is rapidly expanding as oil companies investing tens of billions of dollars to expand.

Canada has quietly become the biggest supplier of oil to the US, shipping 1.1 million barrels of oil a day. Getting oil out of the oil sands is not only devastating huge areas of landscape it is extremely polluting and uses enormous amounts of energy and water.

A cubic metre of oil, (1000 litres) mined from the tar sands, needs two to 4.5 cubic metres of water.

The main source of water is the Athabasca River, one of North America's longest undammed rivers, and one of its most beautiful. Approved oil sands mining operations will take 359-million cubic metres a year from the river and that is expected to increase to 529 cu m. That's enough water to supply a Canadian city of 2-3 million people. Elsewhere in the world it might be enough water for five to 10

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million people.

8.

Once all that water is removed from the Athabasca it is too polluted to return. In fact there is no way to clean it so it is dumped into huge tailings ponds like these. The oil sands produce 1.8 billion litres of toxic tailings waste every day.

There are now tailings ponds -- lakes really -- covering 50 square kilometres behind some of the largest dams on the planet. This is projected to grow to 220 square kilometers.

Last spring hundreds of migrating ducks and other waterbirds died when they landed in one of these lakes.

9.

Not only is Canadian industrial use of water high, our household usage makes us house the planet's second-biggest per-capita water consumers, behind Americans. The average Canadian uses 335 litres per day -- more than double Europeans' usage. And Canadian water use is growing by 25 per cent over the past two decades, while other developed countries, including the U.S., have seen consumption drop.

One of the reasons for this is that our water pricing bears little relationship to the importance and value of water at C\$0.92-- roughly 65euro cents per 1000 litres -- and that is a +50 per cent increases in recent years. Agriculture and Industry pay much less if they pay at all.

Another reason Canadians are such water hogs is the belief that we have an endless supply. My neighbours who are quite green and concerned about the environment think nothing of washing their two or three cars every day or every other day. They don't fully understand that we are living at a time of limits - we are reaching limits of the natural resources and services that nature can provide.

And equally important we are living in a time of climate change.

10.

We humans have altered the climate. Research shows that with Climate Change dry areas will become drier; and wet regions get wetter.

Sea levels are also rising -- projections now are for at least one-metre and as much as 5 meters before 2100. One of the implications of sea level rise is salt water intrusion into coastal groundwater sources. Some coastal cities such as Miami depend on on groundwater. Miami has already over used its aquifers and spends millions to inject treated water to keep salt water out.

We are living in an extraordinary era. Humanity has never faced anything like this on a global scale.

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Can we learn to reduce our impact on the planet's limited resources and adapt to climate change?

One of the first things we need to do is change our attitudes and perceptions about nature's adjustment, that's where communicators come in

11.

This graphic is the work of an American artist Cindy Snodgrass who has a strong interest and connection to water. [[www.windsphere.org](http://www.windsphere.org)] Artists are important communicators and will play a crucial role in helping us understand why and how to re-orient our attitudes and values about water and other environmental concerns.

We have to remember that media, educators and other communicators help form and reinforce the values people hold right now. This is not usually overt, it is often subconscious in the way we present something or fail to present something.

Take golf for example. Golf courses use enormous amounts of water, but TV golf commentators don't talk about this right now.

Now let's imagine that the TV sports reporters who cover golf truly understand that water is precious and scarce. Instead of going on about lush green fairways, they would praise groundskeepers who creatively utilize xeriscaping - dry landscaping -- to create a challenging course that respects and values water.

That is the future of golf

It is important to be aware that the values we communicators depict usually reflect our own personal values.

12.

So Communicators must first pull themselves out of the prevailing 'water fantasy' and into REALITY that:

Water is Irreplaceable

Water is Precious

Water is Scarce

Water is Sacred

Without understanding this we communicators cannot ask the realistic questions or convey realistic information

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For example when a business reporter is researching a story about a proposal to build a new factory they will ask questions about how many new jobs and how much money it might bring.

But if this reporter understands the water reality, they would ask about the factory's water usage, pollution and so on. And because the reporter knows water is a precious, scarce resource that is held in common by all, they'd try and find out if the factory's usage of water is truly worth the potential jobs and income.

This business reporter, and all of us should also understand that our current economic system does not properly value clean water, or air or other services that nature provides, nor does it account for the full costs of pollution or degradation.

Some economists now admit that our focus on economic measures such as gross domestic product (GDP) ignore the reality and value of nature's services. And that has cost human society dearly in terms of unsustainable growth, degraded ecosystems, lost biodiversity and even reduced per-capita human welfare.

We all know that disasters like Hurricane Katrina are terrible things but such events increase a region's GDP. Disasters and cutting the rainforest and hundreds of other ways of trashing the planet are in fact 'good for the economy. We should not rely on such measures which are another kind of fantasy.

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And that's why I think it is vital for communicators to report the Reality

More than one billion people on earth already lack access to fresh drinking water. Growing global demand for water exceeds capacity to supply.

According to fellow cdn Maude Barlow in her book "Blue Gold" By the year 2025, as much as two-thirds of the world's population will be living in conditions of serious water shortage and one-third will be living in conditions of absolute water scarcity.

14.

It is up to communicators to make connections, to investigate, question, examine activities and decisions that might have an impact on water now or in the future.

We should remember that the future may not resemble the present, especially with climate change.

In province of Ontario where I live, the government is considering building some new nuclear power plants on Lake Ontario, one of the Great Lakes. There are already 10 and each one of these uses millions of litres of water every minute from the lake to cool the reactor and power the turbines. The hot water is returned to the lake but in summer the lake water is too warm to use some of the time.

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The proposed reactors would be expected to operate until 2060 and with falling water levels and warming of Lake Ontario, who knows how long the reactors could run. And it may be that with climate change the lake's ecology cannot withstand tens of millions litres of hot water being pumped into it.

Will these new reactors be engineered on the assumption that enormous amounts of high quality fresh water could be used free of charge for the next 50 years? I don't know. But I believe these would be dangerous and unrealistic assumptions.

The media needs to dig out and reveal these kinds of assumptions.

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And our starting point is always that since water is a precious and scarce resource we need to cultivate an attitude of gratitude towards water.

Our ancestors were deeply aware of the importance of water and many rivers and springs around the world have been considered holy and sacred.

what are the potential impacts of new development. And we should also ask tough questions  
Communicators

Communicators need to develop this attitude of gratitude so that we will ask the right questions and provide the right information.

Where water will come from when we allow urban expansion or other new development?

Could we/ should we improve our current water use?

What are the ways in which society can properly reflect our water reality?

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I'm going to wrap up now with a brief summary:

Much of the world treats water as if it were in endless supply or a commodity that can be easily manufactured. Neither attitude reflects water's reality and yet this water fantasy is commonplace in all levels of society in Canada and many other countries.

As a result water is wasted, polluted and mismanaged.

Changing our perception of water as a product or commodity to water as a precious, life-giving resource is crucial to coping with the water challenges we face. Water has been sacred for most of humanity's history save the last two hundred.

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It is time for an 'attitude adjustment' for all of us.

Journalists and communicators have an important role in revealing and explaining the reality of water and exploring how attitudes shape our decisions about water. But first communicators must pull themselves out the prevailing water fantasy in order to ask the right questions. This work of vital importance because humanity is reshaping the Earth and its climate with little knowledge of what we are doing.

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Humanity is like a giant water buffalo in a very small shop filled with fine crystal. We are clumsy, have poor vision and are not fully aware of where we are.

On Planet human we are not aware that water is a shared resource -- that we can't take all the water for ourselves or we lose ecosystem services. If we steal too much water from the world's remaining wetlands and CC will be worse...far worse

Adjusting our attitudes towards the reality of water is a slow business. It's like climbing a mountain as I did a couple days ago at beautiful Monistrol de Montserrat. If I looked up at the distant peak it seemed too difficult but when I put my head down and trudged slowly upwards, step by step ... it took time and it was hard but then suddenly I was there on the summit.

How do change our attitudes towards water? Step by Step

Thank you