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We Need to Keep It Clean...Or Else

An Interview with Professor Phillippe Van Cappellen
Ecohydrology Researcher, University of Waterloo

Why do we have to worry about access to clean water?

Traditionally what eco-hydrologists do is to look at interactions between the water cycle and natural ecosystems. But more and more, we're actually dealing with human-dominated ecosystems: for instance, agricultural or urban areas. The way we look at the world is as a collection of socio-ecological systems where humans are an integral part of the ecosystem.

What are some recent developments in your field?

What is becoming clearer and clearer is that degradation of water quality is probably the most pervasive global threat to human health and human prosperity. And just to give you some numbers: I mean, if you look in China, it's estimated that 90% of the cities are dealing with groundwater contamination issues, but that's a country where 70% of the drinking water is supplied by groundwater. So it is a very important problem. It's a problem in developing countries, in arid regions, but also in areas like Southern Ontario or Saskatchewan or Southern Alberta. What I've noticed when I moved to Canada is really this perception that there is so much water we really shouldn't really worry about it. And I think that's probably a wrong perspective, again because water availability is really a local availability. So we have a lot of water in regions where there's not many people, and vice versa.

What is your biggest goal?

In terms of water, I look really at it as a common good. It's a global common good that we all share with all the people in the world. But also from an eco-hydrologist's viewpoint, we also share it with the natural ecosystems. So in fact a core challenge in my field is really how do we balance the needs for clean water of humans with the needs for enough water of good quality for natural ecosystems? And it's really that challenge that keeps me going day in and day out and do the research I'm doing.