## Health and the Environment

what I want to hear from her. That is what the Canadian people want to hear. Water development decisions are made as though rivers are simply pipes carrying water to the sea, pipes into which taps and elbows and extensions could be added as long as enough water kept flowing through them and as long as some sort of salesmanship and financial manoeuvring made it possible to sell the idea of all those fixtures to the public. Fortunately, rivers and streams are not like that at all, and manipulating them as though they were can be disastrous. Alberta biologist Dennis McDonald put it this way:

Rivers are extremely complex. They have evolved over millions of years and it is this complex web of life, this interrelationship between vegetation along the river and the organisms within the river which is often severely damaged by man's activity.

This is the kind of protection we are looking for. We seem to take the attitude in Canada that we have an overabundant supply of water; that it does not matter what we do to our water supply, it will just keep flowing and cleansing itself and we will never have to worry about it again. But the matter of supply and demand in Canada is often overestimated; it is often taken for granted, and it is this taking for granted that leads to the fear that I have for the water system of Canada.

It is the same type of thinking that told us we had barrels and barrels of oil, enough to last us for ever, ten years ago. Whoever heard of an oil shortage five years ago? But now it is upon us we recognize we should have acted sooner, that we are late. The whole issue of water as it relates to the environment is the issue that is now being missed. It is not being talked about; it is not being worked on. The minister has a department full of fine experts. I have talked to some of them. They are competent and they know what they are talking about. I say to the minister, "please listen to them."

## An hon. Member: It is their bill. Let it go through.

Mr. Wenman: Please hear the word from the department and expand and strengthen it so that in some way we can get a firm policy developed. Anyone with any kind of environmental expertise will relate man and water and air and tell you—

## An hon. Member: It's their bill.

Mr. Wenman: It's their bill. It's the start of their bill, but I would suggest there has been some tampering with it and I hope it hasn't been by yourself or through your influences, be they political or whatever. The ideas behind the bill were good, there were some good concepts, and I am looking forward to your standing up and speaking in the same way. And I believe the members over there from British Columbia who are so critical know I am right; they know the bill is inadequate, that the penalties in it are inadequate.

Relating to supply, I am concerned about the overexaggeration of the supply of water and the general apathy regarding the fresh water of Canada. Newspaper accounts often credit this country with 25 per cent, even up to 40 per cent of the world's fresh water resources. Such estimates are not merely misleading, they are inaccurate. Most of the world's water that is not found in the oceans or locked up in polar ice or glaciers, is stored underground.

Canada's over-all ground water situation is not known with any degree of reliability, but what we do know is not especially promising; too much of our northern land is bared of soil cover, impregnated with permafrost and underlain with impermeable crystalline rock or saline formations for ground water potential to create great expectations other than on a local scale.

Where Canada does excel is in its lake area, perhaps greater than that of any other country in the world. Lakes are invaluable for regulating the flow of rivers to the sea, but ours are for the most part the legacy of an ice age which ended several thousand years ago. Lakes are not renewable except at a cost to the rivers which fill and drain them. The only real measure of a country's water supply therefore, is its renewable stream flow. On an average annual basis, Canada's rivers discharge, not 40 per cent, not 25 per cent, but slightly less than 9 per cent of the world's renewable water supply. Set against the Canadian population which is less than 1 per cent of the world's population, this is a generous endowment. Set against a territorial area which is about 7 per cent of the world's land mass, however, it is not so disproportionate.

Also, these national data must be tempered with the knowledge that they disguise wide variations of water availability in time and place. Much of the Canadian west is not well watered. Indeed, almost two-thirds of our run-off is carried northward into the Arctic Ocean. On the demand side, there are similar misconceptions. A conventional determination of future water demand in Canada might add up to projections of present uses for domestic, industrial, irrigational, electrical and recreational purposes in terms of discrete quantities. But these are not the sum of our uses of water in Canada. The full impact of such uses on the complex equilibrium of flows, sediments, plant and animal community, the lifestyles of human settlements which have adapted to this setting, the impact on the quality of our magnificent recreational opportunity, their impact of our national sense of what these waterways mean to us as Canadians, have not and cannot be so neatly calculated.

In the wider scheme of things, Canada's water must emerge as more than a commodity to be harvested, processed and transported like a bushel of wheat or a barrel of oil. It is an integral element of our environment. It is, therefore, basic to our national identity and to our understanding of what this country is all about.

May I call it ten o'clock, Mr. Speaker?

## PROCEEDINGS ON ADJOURNMENT MOTION

[English]

A motion to adjourn the House under Standing Order 40 is deemed to have been moved.