

*Private Members' Business*

He said: Mr. Speaker, what I have to say may be a little anti-climactic after such a session, voting on the goods and services legislation, but I think it is an important matter in its own right.

A fundamental global threat is the acceleration of the pressure of human activities on the natural resources and the ecosystems on which life itself depends.

The recent report of the Brundtland Commission stated very bluntly that our fragile planet simply cannot sustain the current destructive industrial practices when its population is expected to double within the next 35 years. That threat is best exposed when we look at the impact of man's activities on the quality of our inland waters and oceans.

Water is the lifeblood of the biosphere and, as a fundamental component of a complex ecosystem, the preservation of its quality is essential to ensure our continued survival.

Although Canada holds 20 per cent of the world's fresh water, it possesses only 9 per cent of the world's fresh, renewable water. The rest, according to the Science Council of Canada, is "fossil water" which is a legacy of the melting ice sheets.

Our over-all supply of water is truly formidable, but the picture disguises wide variations. Over 60 per cent of Canada's river flow is carried northward where only 10 per cent of Canada's population lives. Major sections of Canada's population, including the prairies and the interior dry belt of British Columbia live in regions of chronic water shortage.

Canadians have failed to recognize that, despite our exponentially increasing demand for water, there is in fact a limit to the fresh water run-off from the land each year and thus there is also a limit to its availability for consumption.

The 1973 report of the Science Council of Canada stated that "Canadians must begin the transition from a consumer society preoccupied with resource exploitation, to a conserver society engaged in more constructive endeavours" and, I might add, a more judicious husbandry of our resources.

Evidence of the over-exploitation of our water resources and the consequences of environmental stress are becoming all too clear to all of us. Pollution from human activities has destroyed aquatic life, inhibited the reproductive capacity of mammals and birds and now

threatens our very existence. The misuse of our water resources has caused widespread degradation of our soils, has disrupted our supplies of clean potable water and has generated massive economic dislocation. We can no longer afford to use our waterways as convenient dump sites for domestic and industrial wastes. To continue on our present path jeopardizes the integrity of our total environmental system. With it, it jeopardizes the economic well-being and in fact our very survival.

In recent years, pollution from human activities has seriously disturbed the composition of species and has greatly increased the rate of species extinction. It is estimated that aquatic ecosystems in some parts of North America have lost up to 20 per cent of their indigenous species because of the acidification of our lakes by airborne pollutants.

Twenty-four species of birds are endangered in the east as a result of the impact of acid rain.

Estimates of the number of lakes at risk in Canada from acid rain range up to 600,000. Already as many as 100,000 lakes have been seriously damaged. Approximately 14,000 of those lakes are biologically dead. Unless acid rain depositions are reduced, another 10,000 to 40,000 will also die.

More than 360 chemical compounds have been found in the Great Lakes systems alone. Among them are a number of persistent toxins. They include alkylated lead, benzopyrene, DDT, hexachlorobenzene, mercury and other heavy metal contaminants, polychlorinated biphenyls and a slew of other chemical cocktails.

It is no wonder that of the 10 most highly valued species of fish in Lake Ontario, seven have almost completely disappeared. It is no wonder that in the species still remaining, tumours and lesions have been found and their ability to reproduce effectively has been questioned. Evidence also links a sharp increase in deaths among beluga whales to contaminants in the fish that they eat. Canadians should not be surprised to hear of closures in the west coast shellfish industry because of the dangerously high contamination from pulp mill effluents.

Throughout the aquatic food chain the phenomenon of biological magnification is occurring, causing those species at the end of the food chain to ingest and to accumulate lethal concentrations of toxins and pollutants. Fish-eating birds, for instance, such as herring