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EDITORIAL

To be a hydrologist in the eyes of the world is an awesome responsibility. People die in large numbers in floods and droughts, and untold misery is suffered by those who survive; it is the job of the hydrologist to provide engineers and planners with data and advice that contribute to reducing the scale of death and misery. At the less extreme part of the resource behaviour scale, it is the hydrologist's job to provide data and advice on the exploitation or development of a resource, so that it will be used in a wise manner.

These are urgent matters. People die and suffer today, or next week; resources suffer over-exploitation and pollution now. Rapidly increasing population in some countries, and rapidly increasing expectations of living standard in others, are placing tremendous stress on land and water resources, and this stress is often reflected in the degradation of the resource and the environment. There is real work to be done now.

Of course, we are all aware of this. In this country we have a Ministry for the Environment, several hard-core 'green' pressure groups, a wide-ranging reform of the laws governing natural resources, and a relatively pristine environment. We are daily reminded of ecological catastrophies in other parts of the world, and of those impending. Times have changed — in the late 1960's and early 1970's there was unlimited oil and land, western civilisation was booming and starvation in other countries had been going on since the plagues of Egypt. The world today is a grimmer, more real place. We know we cannot continue to live as we have before — this Earth ain't big enough for all of us.

Knowing this, isn't it strange that hydrology has changed so little in the past twenty years? Looking at back numbers of this Journal, and its neighbours, the main changes seem to have been an increasing degree of complexity in data-handling and statistical procedures, and a decreasing emphasis on simple, directly-applicable methods for predicting future events to a realistic degree of precision. Hydrology has become more sophisticated. It does not seem to have become more conscious of its present responsibilities to the people who currently live on this planet.

There are several reasons for this. One is the increasing degree of competition in the game of Academic Hydrology played by most University hydrologists, the aim of which is to have most papers published. Survival in this game is infinitely harder today than it was twenty years ago, and the player, especially the new player, is in much the same position as the politician whose primary aim is to get re-elected so that he or she can *then* be of benefit to the country. As competition increases, less and less time and energy is available for the useful business. Another reason is that it is relatively easy to work on computer-based modelling exercises or data analyses, and quite hard to interface these exercises

or analyses with the real world where people are dying; hence the increasing prevalence of this type of work. Further, funding for all types of hydrology has been severely restricted in recent years, and only the most 'respectable' people and proposals have much chance of being supported. Since the hydrology that is directly useful to engineers or planners tends to be simplistic, common-sense and, indeed, rather obvious when pointed out, as well as implying some criticism of 'established' techniques and people, it is often quite unattractive to a funding committee.

I find this all very sad. Never before has the need for useful hydrology been so desperately urgent, never before have the tools available to hydrologists been so powerful — yet I see little sign that these tools will be diverted from the seductive pursuit of enhanced reputations to the earthy business of saving lives. Or even saving the Earth from environmental catastrophe. Maybe this work is going on but not being published in the hydrology Journals; if so this is a grave mistake because it is vital that as many people as possible learn about the real, useful work that is being done.

It is clear to me that hydrologists need to take a step back from their keyboards, look at the urgent needs of the world and its people, and consider how to meet those needs. Personal needs such as keeping your job or reputation must be put into the same perspective by each individual, and a personal decision made. My purpose in this article is to try to present the uncomfortable, real-world factor in such a way that it will be properly considered; I believe it has been neglected hitherto.

I do not apologise in any way for using an editor's privilege to publish these words. I am not a pessimist, neither am I unrealistic — only in a cruelly honest acceptance of reality can I be truly optimistic. In the end, we must all do what we know to be right. Hydrologists, consider these thoughts, reject them if you must (but only if your heart tells you you must), and do your hydrology in a way that is right for you. Good luck.

Tim Davies