A word from the editor

Who's our Typhoid Mary?

For those who've never heard of her, Mary Mallon or Typhoid Mary was an Irish immigrant who was the first known healthy carrier of typhoid fever in the US.

She was first recognised as a carrier of the typhoid bacteria during an epidemic of typhoid fever in 1904 that spread through Oyster Bay, New York where she worked as a cook. Although she always vehemently denied being a carrier of the disease, 51 direct cases of typhoid fever and at least three deaths were directly attributed to her, and she was eventually confined to quarantine for life.

While the rest of the world is mopping up in the wake of some of the most powerful tropical storms in history, South Africa has to deal with its own 'Typhoid Marys', those in our local authorities who cause death and destruction while denying that anything is amiss as they sit in their cushy office chairs.

The reality, however, tells a different story. The small town of Delmas, in Mpumalanga, is still reeling after at least five deaths and more than 600 cases of typhoid and 3 300 cases of diarrhoea were diagnosed due to contaminated groundwater. In the same province, Chrissiesmeer made headlines when *E. coli* was found in one of the town's reservoirs, while trout farms in Dullstroom are losing business over sewage streaming into their dams from the dilapidated municipal system.

The problems are not bound to small towns. In Cape Town, concern has been expressed over the apparent overload of the city's wastewater treatment infrastructure, with one official quoted as saying many of the municipality's sewage treatment plants were "on the verge of collapse."

A water tank stands in front of the Delmas Local Municipality during the recent typhoid outbreak.

And while New Orleans and Texas could blame Mother Nature for their disasters there is no excuse for what is happening in our municipalities. The 'lack of capacity' mantra has become an easy utterance in defence of the appointment of seemingly incompetent, uncaring political allies.

It was back in March when the Department of Water Affairs & Forestry (DWAF) completed an assessment of drinking water quality in several of the country's municipal areas. It was found that a staggering 63% of Water Services Authorities (WSAs) in the country do not comply with set criteria for acceptable drinking water quality management. This includes not delivering water of an ideal or good quality and not regularly monitoring drinking water quality.

Provinces with the worst drinking water quality performance were found to be Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape and North West, who are all performing below the national average. In fact, in the two worst performing provinces, KwaZulu-Natal and North West, only 43% of WSAs have the perception that they comply to drinking water quality, while only 50% and 57% of the WSAs in the respective provinces actually monitoring the quality of their drinking water. This means that the actual figure could be much worse.

Following the destruction of Hurricane Katrina, the US Department of Health and Human Service (HHS) waived the standard eligibility and enrolment requirements that beneficiaries of government benefits must meet. "No one who has been a victim of this disaster should be prevented from getting benefits they need because of government red tape," said HHS Secretary Michael Levitt in announcing the waiver.

Let us not wait for another disaster before we deem it fit to cut the red tape and assist the communities whose lives depend on our actions.

Letter to the editor

Baseflow and groundwater

Congratulations on your latest edition of *the Water Wheel*. I look forward to this publication landing on my desk as it is full of interesting information. The September/October 2005 issue was no exception, particularly because of the focus on groundwater. However, I must take exception to the definition of baseflow presented in the article "*Groundwater - more valuable than gold*" (Water Kidz, page 28). As we try to get a better understanding of the interaction between surface and groundwater, it has emerged that scientists looking at different components of the hydrological system use and understanding terms differently.

This obviously leads to a high degree of misunderstanding and confusion. The term *baseflow* is a non-process related term for sustained low flow in a river during dry or fair weather periods (i.e. low amplitude, high frequency flow events). Baseflow is not a measure of the volume of groundwater discharged into a river or wetland, but it is recognised groundwater contributes to this component of river flow.

When we want to describe the groundwater component of river flow, the term groundwater contribution to flow or groundwater contribution to baseflow is appropriate. While I understand the tone and pitch of your article, it is crucial we don't perpetuate myths and misunderstandings; and we ensure both specialists and non-specialists use terminology correctly. Any of your readers interested in this topic may want to read WRC publication TT 218/03 entitled "*Surface water - groundwater interaction in a South African context: a geohydrological perspective*".

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