

Minutes of the Final Seminar (BELSPO, Dec 10th, 2010)

The final seminar was a great opportunity to communicate with end-users and managers, with 50 people attending the meeting held at BELSPO on December 2010. After the scientific session held in the morning, a lively debate followed the afternoon presentations made by the persons in charge of the implementation of the 2006 Bathing Waters Directive in the three regions.

The first point for debate focused on the definition of the threshold concentrations for toxicity, as given by international norms and listed in European guidelines. For the representatives of the various managing authorities present, these guidelines remain vague, heterogeneous, and lack clarity, not to mention that they are sometimes considered as only provisional. The European Water Framework Directive does not necessarily help clarify the situation, as governments are largely left to their own devices when asked to define their own sets of thresholds. In some cases, like in Belgium, threshold values are set at the regional level. In neighbouring France these thresholds are nationally defined and enforced whereas in the Netherlands, despite a nationallydefined set of values, enforcement is conducted on a voluntary basis. The terminological vagueness of the EU WFD, and the reliance on member states to work out the best possible scenarios independently, leaves managing authorities somewhat disoriented. Professor Codd's intervention at one stage aimed at easing some of these concerns, by reminding the audience that the seemingly diverging sets of threshold values defined throughout EU member states remain well within the confidence interval of WHO guidelines, and as such they should be considered adequate at present, despite their disparity.

A second point focused on the apparent multiplication of events associated with the proliferation of cyanobacteria, and to a growing perception of their danger, as such events almost inevitably will happen more frequently and be more widespread in the foreseeable future if current trends are confirmed. With this in mind, corollary questions

naturally arise from these observations. Will economic interests become more and more threatened by the increasing incidence and frequency of such proliferation events? Is the burden of having to decide on restricting access to the public manageable for local authorities, given the economic consequences and the need for public understanding and compliance? How should authorities best communicate to the public about the motives underlying their decisions? What roles should scientists and the media fulfil in informing the public about these issues?

Two interventions are worth mentioning in connection with these questions. Professor Codd warned against excessive alarmism, by reminding participants that the problems caused by cyanotoxins are very different in nature from those caused by "classical" pathogens such as bacteria and viruses, in that no contagion is involved and that epidemics do not arise from exposure to cyanobacyeria. Bearing this in mind, even if bloom proliferation events become more frequent, some of them leading to increased risks of waterborne toxicity, the potential health hazards should remain largely manageable, given good awareness among decision-makers and water-users with contingency plans in place.

As to the implication of scientists and journalists in informing the public, there is a general agreement among scientists themselves that they are ill-equipped to communicate with the general public, as they are trained to deal efficiently with specialized audiences. Scientific journalists, on the contrary, can do a much better job of framing the debates in general terms, but suffer from a lack of visibility in the printed press. They are also a species in decline. Potentially important news with a scientific twist is often confined to the back pages of newspapers. Consequently, to get their message across journalists could be inclined to throw in a pinch of alarmism, use punch lines that grab the interest of the general readership. Between running the risk of quickly becoming yesterday's news, and unwillingly instilling fear, there is a delicate balance to strike.

The role of scientists is best confined to two fields: educating future generations, as everyone will agree, and adequately briefing authorities and managers by maintaining a level of quality in their applied research, in other words: telling it like it is...

A third important topic dealt with the difficulties of long-term management. In many cases, managers are faced with heavy legacies from past eutrophication, and where solutions exist to efficiently limit additional inputs of nutrients into water bodies, managing contaminated sediments is a totally different proposition. Technical, workable solutions exist but the dwindling availability of credit is often a constraint. As far as

perception is concerned, the long-term economic benefits of rehabilitation efforts are sometimes difficult to get across, too. An additional difficulty in raising the necessary funds is that, in the EU WFD, only lakes and impoundments are considered: ponds are not, that make the bulk of water bodies affected by cyanobacteria.

At the end of the debate, the possibility of testing "green technology" (for a blue-green problem) was briefly evoked, in direct relationship with this topic.

The session was concluded by a proposal to hold annual workshops at national or regional level on the subject of cyanobacterial blooms, their consequences and management, with the aim of sharing experience and strengthening co-operation between scientists and managers. The idea was welcomed.