

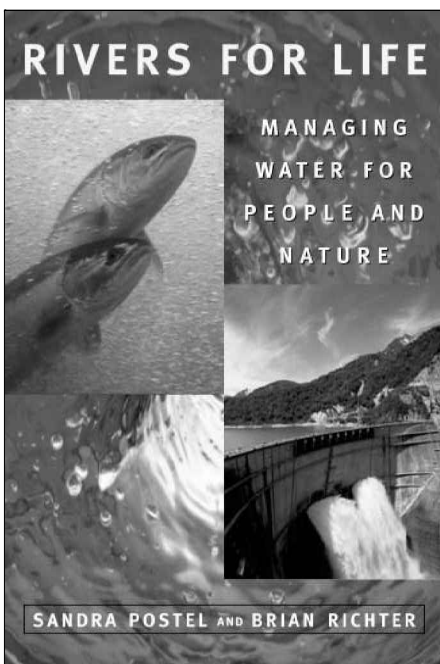
# books

## Rivers for Life: managing water for people and nature

Sandra Postel and Brian Richter, 2003, Washington: Island Press, ISBN: 1 55963 444 8, \$25.00.

This is a beautifully written polemic that can be unreservedly recommended to American readers for whom it was essentially written. Deciding its value to readers in other countries is more problematic, because the authors see the world through modern American eyes. The problem is that the USA is so atypical of the rest of the world: with a population density of only 28 people per square kilometre, nearly 0.7 hectares of arable land per capita, and almost 10 000 cubic metres of water per person per year, the USA does not have a water problem. What it does have is major management problems, a demonstration of the disastrous consequences of creating private property rights to water. It is, in turn, amazingly inefficient in its use of water, wheat yields being slightly worse than those in Mali.

The starting point for so many other countries is very different: the poor spend 40–70 per cent of their income on basic foodstuffs, a large proportion of the population are dependent upon agriculture and this is from farms of less than five hectares. What those other countries need to do is to develop a water management strategy that will respond to current problems whilst simultaneously providing a growth path to sustainable water manage-



ment in an economy that will increasingly shift to an industrial/service base. This is a transition that the USA has so far failed to make successfully.

The authors do not discuss why this failure has occurred, nor how it could be made more successfully. Instead, they assume that the solutions are obvious and that there are many free lunches to be had. But read as a critique of the current state of water management in the USA, and of some of the lessons that could be learnt from other countries, this is a valuable book.

Colin Green  
Flood Hazard Research Centre  
Middlesex University

## Losses in Water Distribution Networks: a practitioner's guide to assessment, monitoring and control

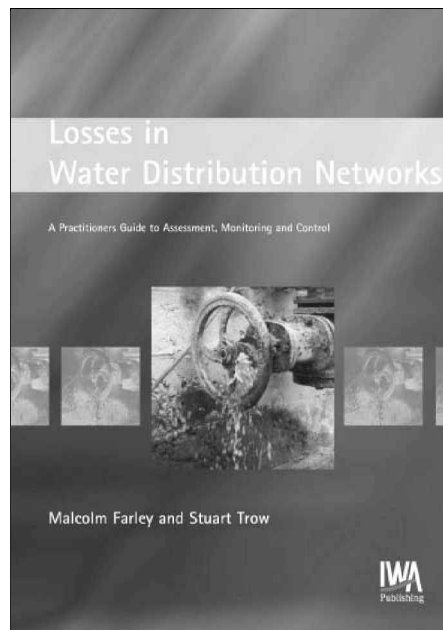
Malcolm Farley and Stuart Trow, 2003, IWA Publishing, 392pp ISBN: 1900222116, £60 (IWA members) or £80 (non-members)

*Losses in Water Distribution Networks* is a long-overdue and well-focused book. It is practical, authoritative and directed, and includes guidance and advice from authors who draw upon their extensive international experience and first-hand knowledge of managing audits of water networks and water loss reduction projects.

This book is a comprehensive guide to all issues related to water losses, and covers topics from methods to quantify losses to the various techniques to monitor and control losses. In addition it provides guidance on how to select network management practices and equipment appropriate to local conditions and constraints. The book also emphasizes the importance of operational and maintenance issues and the need for capacity building in order to sustain water loss policies and practices once in place.

However, the book does not present in sufficient detail the many computer-based methods available for assisting in water loss management. For example, the BABE concept is presented but not to a level of detail that enables the reader to really understand its principles and potential application. Also, in relation to pressure management, the book does not discuss in detail how network modelling and optimization can be used.

The book is divided into nine chapters and each chapter is designed to 'stand alone' so that readers can dip into each chapter according to their need for information and the level of advancement in the strategy process. In addition there are



three case study sections that, while being useful, are not presented in a consistent manner and also lack focus. These sections would be of more benefit to the reader if it were stated clearly what key concepts and ideas these case studies demonstrate and if they were cross-referenced to appropriate sections of the book.

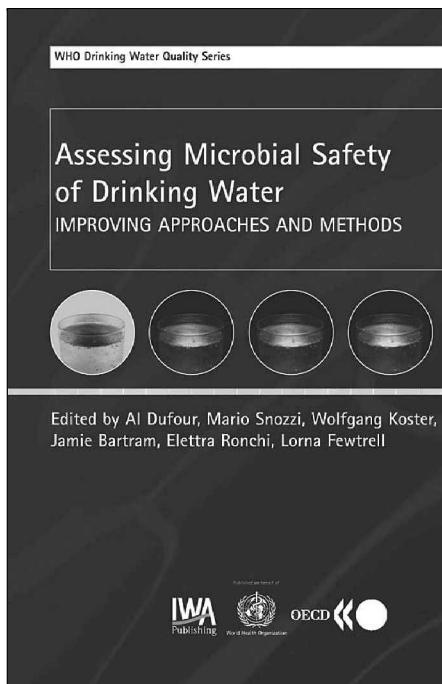
Overall, this book is well written and comprehensive in its coverage and will be of great benefit to water network operators, consultants and other industry practitioners who are about to embark on a water loss management programme, or who wish to review their existing procedures.

K. Vairavamoorthy, Senior Programme Manager, WEDC, Loughborough University.

## Assessing Microbial Safety of Drinking Water – improving approaches and methods

A. Dufour, M. Snozzi, W. Koster, J. Bartram, E. Ronchi and L. Fewtrell (Editors), 2003, 214pp, ISBN: 1843390361, £60 (IWA members) or £80 (non-members)

This book has been published on behalf of the World Health Organization (WHO) and the Organisation for Economic Co-operation and Development (OECD), focusing on the need to improve the assessment and management of the microbiological safety of drinking water. It offers guidance on how to select and use multiple parameters to meet specific information needs as a support to safe practice throughout the whole water system.



assessment and management of drinking water throughout the whole water system. The clear diagrams and tables will be particularly useful for lecturers and trainers. However, the high price of the book may mean that it is not accessible to professionals working in developing countries.

*Dr Luiza Cintra Campos, Federal University of Goiás, Brazil*

The book has eight chapters, summarized as follows. The first chapter describes the problem and establishes the need for monitoring water quality. In Chapter 2, both microbial and non-microbial parameters are examined and their uses and applications are outlined. This chapter introduces the parameters that can be used to assess drinking water quality.

Chapter 3 reviews the indicator parameters of water quality for risk assessment in the context of epidemiological methods, quantitative microbial assessment and qualitative assessment. The sources of faecal contamination in catchments are characterized, and the microbial quality of source water is determined in Chapter 4 for both surface water and groundwater systems.

In Chapter 5, microbial treatment efficiency is reviewed for processes such as coagulation, sedimentation, filtration, and chemical inactivation. Chapter 6 provides a summary of possible sources of faecal contamination in drinking water, and describes recognized sampling regimes in order to detect contamination during storage and distribution.

The investigation of contamination incidents and waterborne outbreaks are presented in Chapter 7 through the illustration of case studies. Finally, Chapter 8 describes the analytical methods for water-quality testing used for the major indicator organisms and many of the pathogens of concern. The main characteristics, advantages and limitations of the detection methods described are summarized in a table at the end of Chapter 8.

In general, this book is highly recommended and will be of interest and practical use for water industries and for professionals working with water-quality

## Advocacy guide to private sector involvement in water services

Joanne Green, Tearfund, 36pp, Download free from: <http://www.tearfund.org/watsan> policy

The aim of this guide is to equip NGOs and other civil society organizations to engage with water policy reform processes that involve the private sector.

It is based on the findings of research conducted by WaterAid and Tearfund entitled 'New roles, new rules: does private sector participation (PSP) benefit the poor?' This research was composed of eight case studies and five desk studies looking at rural and urban situations in 12 countries.

One of the main findings of this research was the need for community-based organizations, NGOs and civil society to become involved in advocacy work, especially in advocating the needs of poor people during government-led reforms involving the private sector. Involvement by civil society groups in influencing the outcomes of all water policy decision making and implementation is absolutely vital. The increased participation of the private sector has acted as a catalyst for what Tearfund and WaterAid hope will be greater civil society influence and mobilization to increase access to safe water and basic sanitation.

This guide draws on the many useful lessons learnt by the authors of the case studies. Part I provides background information on why the role of the private sector is growing, types of private sector involvement, the process of privatization, and issues behind the financing of the private sector. Part 2 derives lessons from the case of England and Wales, and in Part 3 an advocacy strategy is set out, including examples from NGOs in Africa and Asia.

## Books received

### Environmental Information in European Transboundary Water Management

J. Timmerman and S. Langaas (Editors), 2003, 258pp, ISBN: 1843390388, £45 (IWA members) or £60 (non-members)

This book aims to examine the role of information in transboundary river basin and water management, and the way it is used (not not) in policy and decision making within the wider European area.

While having a forward-looking perspective justified by the ongoing implementation of the EU Water Framework Directive among EU Member States and Candidates' Countries, many of the chapters draw on the experiences gained from past and existing transboundary river basin co-operation experiences.

Chapters are organized according to a framework that shows the sharing of water resources to be based upon a foundation of integrated water resources management, supported by the three pillars: political, technical and legal-institutional co-operation.