

### **Water Wells—Implementation, Maintenance and Restoration**

by *M. Detay* (translated from the French by *M. N. S. Carpenter*)

Published 1997 by John Wiley & Sons, Baffins Lane, Chichester, West Sussex PO19 1UD, UK; 394 pp; price £34.95, US\$60.00; ISBN 0 471 96695 9

*Water Wells—Implementation, Maintenance and Restoration* is the English-language translation of a book originally published in French in 1993 (*Le forage d'eau. Réalisation, entretien, réhabilitation*). As the title implies, this is a technical treatise on water wells, covering all steps from well design through restoration, including basic hydrogeology, geophysical prospecting, well drilling and development, capture zones, and with a particular emphasis on well hydraulics, and techniques for well maintenance and restoration. Brief case studies are presented to supplement the discussion.

Although the original French-language edition of this book is undoubtedly of considerable use to French-speaking water-resources professionals, I cannot recommend the English-language edition. First and foremost, this book suffers greatly from an inadequate translation. The translator clearly had little experience in hydrology. This inexperience makes the technical discussion difficult to follow and will induce chuckles with faulty translations such as “naked hole” for an open (uncased) borehole. Second, a number of existing books for English-speaking hydrologists cover these same topics. On my bookshelf, these topics are covered in a thorough and readable fashion by Fletcher Driscoll in *Groundwater and Wells* and by the Roscoe Moss Company in *Handbook of Ground Water Development*.

Despite my disappointment with the translation-marred presentation, I did find much of interest in this book. Most hydrologists will agree with the emphasis on well maintenance and aquifer protection. The overview of standard practices in the water-well industry in France makes for interesting cross-national comparisons, although I found the statistic that 60% of abandoned wells in France are not plugged (according to a cited 1991 study) a rather depressing reminder that we all face an uphill battle on this issue. Several of the case studies were quite informative, particularly the study of stream–aquifer interactions on the Seine. I also enjoyed the quotations at the start of each chapter. However, as a practitioner of well hydraulics, I must admit to being a bit mystified by the Nietzsche quote for the chapter on well hydraulics (“Rather know nothing than half-know much”).

In summary, if French is your primary language for professional activities, get the original French edition of this book: you will find much of value there. If English is your primary language, get one of the alternatives.

**Jim Butler**

Kansas Geological Survey  
University of Kansas, USA

### **The Engineering Geology and Hydrogeology of Karst Terranes**

edited by *Barry F. Beck & J. Brad Stephenson*

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This is the sixth in the series of multidisciplinary conferences on karst terranes. The conference (6–9 April 1997) was held in Springfield, Missouri, USA and included a field trip through portions of Missouri.

Introduction. Water object " concentration of water on a land surface and in forms of its relief or in the bowels. Water object have borders, volume and lines of a hydrological mode. Processes promoting increase maintenance of harmful components: 1. Escalating of organic weight by water plants by eutrophication. The basic principle of economic regulation of the use, restoration and protection of water bodies is a payment for water use. Economic regulation of the use, restoration and protection of water bodies provides for the establishment of systems: payments associated with the use of water bodies; finance the rehabilitation and protection of water bodies; economic incentives for sustainable use, restoration and protection of water bodies. Water Wells Implementation, Maintenance and Restoration. By M. Detay; translated by M. N. S. Carpenter. J. Wiley & Sons and Masson, 1997. xiii+379 pp. ISBN 0 471 96695 9 (Wiley) and 2 225 85622 2 (Masson). \$64.95. Michel Detay is the author of Water Wells: Implementation, Maintenance and Restoration, published by Wiley. Table of contents. Preface xi. Chapter 1 Basic Concepts of Hydrogeology 1. Chapter 2 Well Design and Construction 53. Chapter 3 Well Hydraulics 103. Chapter 4 Supervision and Final Acceptance Tests 159. Chapter 5 Water Well Protection 189. Chapter 6 Water Well Management 203. Chapter 7 Restoration of Water Wells 267. Chapter 8 Management Tools 313. Chapter 9 Conclusion 329.