

Contents

1	Securing Water and Wastewater Systems: Global Perspectives	1
	Robert M. Clark and Simon Hakim	
2	Protecting Water Supply Critical Infrastructure: An Overview	29
	Robert Janke, Michael E. Tryby and Robert M. Clark	
3	Industrial Control System (ICS) Cyber Security for Water and Wastewater Systems	87
	Joe Weiss	
4	Implementing Machine Learning Algorithms for Water Quality Event Detection: Theory and Practice	107
	Eyal Brill	
5	Sensor Placement Under Nodal Demand Uncertainty for Water Distribution Systems	123
	Hailiang Shen, Edward McBean and Yi Wang	
6	Waterborne Transport Modeling of Radioactivity from the Fukushima Nuclear Power Plant Incident	135
	William B. Samuels, Rakesh Bahadur and Christopher Ziemniak	
7	Quantitatively Assessing Water Asset Reliability in the Netherlands: 15 Years of Experience	149
	R. H. S. Beuken, H. de Kater and J. H. G. Vreeburg	
8	Environmental Management of the Puyango–Tumbes River Basin in Ecuador and Peru	161
	Napoleon Puño	

9	Water Scarcity in Asia and its Long-Term Water and Border Security Implications for Australia	189
	Gurudeo Anand Tularam and Patrick Marchisella	
10	Water Diversion Projects in China	213
	He Chen and Robert B. Wenger	
11	Feasibility of Using Satellite Water Tanks for Protecting Drinking Water in Urban Communities in Developing Countries	233
	Manish Shrestha and Steven G. Buchberger	
12	The Impacts of Global Climate Change on Water Treatment Design and Operations	251
	Robert M. Clark	
13	Integrated Control and Detection of Accidental Occurrences in Water Distribution Networks	273
	Slobodan Macan and Edo Macan	
14	Plan, Prepare and Safeguard: Water Critical Infrastructure Protection in Australia	287
	Dave Birkett and Helena Mala-Jetmarova	
15	Latvian Practices for Protecting Water and Wastewater Infrastructure	315
	Anatolijs Zabašta, Tālis Juhna, Kristina Tihomirova, Jānis Rubulis and Leonīds Ribickis	
16	Austrian Activities in Protecting Critical Water Infrastructure	343
	M. Möderl, W. Rauch, S. Achleitner, A. Lukas, E. Mayr, R. Neunteufel, R. Perfler, C. Neuhold, R. Godina, H. Wiesenegger, F. Friedl, D. Fuchs-Hanusch, J. Lammel, P. Hohenblum, F. Skopik, T. Bleier, K. Weber, F. Eder and M. Brugger	
	About the Author	375
	Index	395