

# FRONTIERS IN WATER RESOURCE ECONOMICS

Edited by

RENAN-ULRICH GOETZ  
University of Girona

DOLORS BERGA  
University of Girona

# Contents

List of Figures	vii
List of Tables	ix
Contributing Authors	xi
Acknowledgments	xv
Introduction	xvii
1	
Application of stochastic cooperative games in water resources <i>Ariel Dinar, Stefano Moretti, Fioravante Patrone and Stefano Zara</i>	1
2	
Incentives and the search for unknown resources such as water <i>Jean-Jacques Laffont and Francois Salanie</i>	21
3	
Risk aversion and gains from water trading under uncertain water availability <i>Javier Calatrava Leyva and Alberto Garrido</i>	43
A	
Dynamic uncertainty and the pricing of natural monopolies: the case of urban water management <i>Ephraim Clark and Girard Mondello</i>	69
5	
Price risk and the diffusion of conservation technology <i>Georgina Moreno and David Sunding</i>	89
6	
Optimal management of groundwater over space and time <i>Nicholas Brozovid, David Sunding and David Zilberman</i>	109
7	
Nonpoint source pollution in a spatial intertemporal context - a deposit refund approach <i>Renan-Ulrich Goelz, Dolores Berga and Angels Xabadia</i>	137

8	Transboundary water management along the U.S.-Mexico border	153
	<i>Linda Fernandez</i>	
<b>9</b>		
	Irrigation, water quality and water rights in the Murray Darling Basin, Australia	177
	<i>Stephen Beare and Anna Heaney</i>	
10	Economic analysis of green payments to protect water quality	199
	<i>Madhu Khanna and Richard Farnsworth</i>	
11	Conjunctive use of surface and groundwater with quality considerations	225
	<i>Catarina Roseta-Palma</i>	
12	The impact of recovering irrigation water losses on the choice of irrigation technology with heterogeneous land quality and different crops	241
	<i>Petra J.G.J. Hellegers</i>	
13	Precision fanning in cotton	255
	<i>David Zilberman, Daniel Cohen-Vogel and Jeanne Reeves</i>	