

Using Multi-Criteria Decision Analysis in Natural Resource Management

Edited by

GAMINI HERATH

Deakin University, Australia

and

TONY PRATO

University of Missouri-Columbia, USA

ASHGATE

Contents

<i>List of Figures</i>	<i>vii</i>
<i>List of Tables</i>	<i>ix</i>
<i>List of Contributors</i>	<i>xii</i>
<i>Preface and Acknowledgements</i>	<i>xiv</i>
1 Role of Multi-Criteria Decision Making in Natural Resource Management <i>Gamini Herath and Tony Prato</i>	1
2 Analysis of Forest Policy Using Multi-attribute Value Theory <i>Jayanath Ananda and Gamini Herath</i>	11
3 Comparing Riparian Revegetation Policy Options using the Analytic Hierarchy Process <i>M.E. Qureshi and S.R. Harrison</i>	41
4 Managing Environmental and Health Risks from a Lead and Zinc Smelter: An Application of Deliberative Multi-Criteria Evaluation <i>Wendy Proctor, Chris McQuade and Anne Dekker</i>	61
5 Multiple Attribute Evaluation of Management Alternatives for the Missouri River System <i>Tony Prato</i>	75
6 Multi-Criteria Decision Analysis for Integrated Watershed Management <i>Zeyuan Qiu</i>	93
7 Fuzzy Multiple Attribute Evaluation of Agricultural Systems <i>Leonie A. Marks and Elizabeth G. Dunn</i>	119
8 Multi-Criteria Decision Support for Energy Supply Assessment <i>Bram Noble</i>	143
9 Seaport Development in Vietnam: Evaluation Using the Analytic Hierarchy Process <i>Tran Phuong Dong and David M. Chapman</i>	177

vi	<i>Using Multi-Criteria Decision Analysis in Natural Resource Management</i>	
10	Valuing Wetland Aquatic Resources Using the Analytic Hierarchy Process <i>Premachandra Wattage and Simon Mardle</i>	205
11	Multiple Attribute Evaluation for National Park Management <i>Tony Prato</i>	219
12	The Future of MCDA in Natural Resource Management: Some Generalizations <i>Gamini Herath and Tony Prato</i>	231
	<i>Index</i>	237