



# Contents

Preface .....	v
Who Should Read This Series? .....	vi
<b>I. Earth's Life Support Systems</b>	
Climate Modeling	
<i>Leo J. Donner and William G. Large</i> .....	1
Global Carbon Emissions in the Coming Decades: The Case of China	
<i>Mark D. Levine and Nathaniel T. Aden</i> .....	19
Restoration Ecology: Interventionist Approaches for Restoring and Maintaining Ecosystem Function in the Face of Rapid Environmental Change	
<i>Richard J. Hobbs and Viki A. Cramer</i> .....	39
<b>II. Human Use of Environment and Resources</b>	
Advanced Passenger Transport Technologies	
<i>Daniel Sperling and Deborah Gordon</i> .....	63
Droughts	
<i>Giorgos Kallis</i> .....	85
Sanitation for Unserved Populations: Technologies, Implementation Challenges, and Opportunities	
<i>Kara L. Nelson and Ashley Murray</i> .....	119
Forage Fish: From Ecosystems to Markets	
<i>Jacqueline Alder, Brooke Campbell, Vasiliki Karpouzi, Kristin Kaschner,     and Daniel Pauly</i> .....	153
Urban Environments: Issues on the Peri-Urban Fringe	
<i>David Simon</i> .....	167
Certification Schemes and the Impacts on Forests and Forestry	
<i>Graeme Auld, Lars H. Gulbrandsen, and Constance L. McDermott</i> .....	187

### III. Management, Guidance, and Governance of Resources and Environment

Decentralization of Natural Resource Governance Regimes <i>Anne M. Larson and Fernanda Soto</i> .....	213
Enabling Sustainable Production-Consumption Systems <i>Louis Lebel and Sylvia Lorek</i> .....	241
Global Environmental Governance: Taking Stock, Moving Forward <i>Frank Biermann and Philipp Pattberg</i> .....	277
Land-Change Science and Political Ecology: Similarities, Differences, and Implications for Sustainability Science <i>B.L. Turner II and Paul Robbins</i> .....	295
Environmental Cost-Benefit Analysis <i>Giles Atkinson and Susana Mourato</i> .....	317
A New Look at Global Forest Histories of Land Clearing <i>Michael Williams</i> .....	345
Terrestrial Vegetation in the Coupled Human-Earth System: Contributions of Remote Sensing <i>Ruth DeFries</i> .....	369
A Rough Guide to Environmental Art <i>John E. Thornes</i> .....	391
The New Corporate Social Responsibility <i>Graeme Auld, Steven Bernstein, and Benjamin Cashore</i> .....	413

### IV. Integrative Themes

Environmental Issues in Russia <i>Laura A. Henry and Vladimir Doubovnikoff</i> .....	437
The Environmental Reach of Asia <i>James N. Galloway, Frank J. Dentener, Elina Marmer, Zucong Cai, Yash P. Abrol, V.K. Dadwal, and A. Vel Murugan</i> .....	461

### Indexes

Cumulative Index of Contributing Authors, Volumes 24–33 .....	483
Cumulative Index of Chapter Titles, Volumes 24–33 .....	487

### Errata

An online log of corrections to *Annual Review of Environment and Resources* articles may be found at <http://environ.annualreviews.org>