

# Contents

<b>1</b>	<b>International Wetland Policy and Management Issues</b>	<b>1</b>
	Introduction	1
	Wetland Stress and Loss	3
	Development of International Wetland Policy	5
	National Wetland Policy Developments Around the World	11
	Plan of the Book	16
	Acronyms	17
	References	17
<b>2</b>	<b>The Wadden Sea Wetlands: A Multi-jurisdictional Challenge</b>	<b>21</b>
	Introduction	21
	Historical Overview	21
	The Wadden Sea Physical Environment	24
	Specific Wetland Resource Management Issues and Threats	28
	The Dutch Wadden	28
	Lauwersmeer	29
	Ems–Dollart Area/the Netherlands and Germany	30
	Lower Saxony – Germany	31
	The Elbe – Germany	31
	Schleswig-Holstein – Germany	32
	The Danish Wadden	33
	Skallingen	33
	Varde A	33
	Romo and Fano	34
	Esbjerg	34
	Protection and Management To Date	34
	The Netherlands	36
	Germany	38
	Denmark	39
	International Rules and Implementation	40
	Ramsar Convention	41
	World Heritage Commission	42

Bonn Convention . . . . .	42
EC Directives . . . . .	43
The Beginning of Cooperative Management of the Wadden Sea . . . . .	44
Trilateral Wadden Sea Cooperation . . . . .	44
The Trilateral Wadden Sea Plan – Key Elements . . . . .	45
Shared Principles . . . . .	46
Policy and Management . . . . .	47
Summary and Missing Links . . . . .	50
The Role of the Wadden Sea NGOs . . . . .	50
The Role of Wetland Science in Monitoring, Modeling, and Future Impacts . . . . .	52
Summary . . . . .	54
Acronyms . . . . .	54
References . . . . .	54
<b>3 The Axios River Delta – Mediterranean Wetland Under Siege . . . . .</b>	<b>57</b>
Introduction . . . . .	57
Context of Greek Wetland Conservation . . . . .	57
Legislation . . . . .	58
Developing a Conservation and Protection Strategy . . . . .	58
Institutional Policy Constraints and Obstacles . . . . .	61
Mediterranean Context – the Grado Declaration . . . . .	61
Role of International NGOs . . . . .	62
Greek Plan for Action . . . . .	64
Introduction and History of Case Study . . . . .	65
Loss of the Interior Wetlands on the Thessaloniki Plain . . . . .	66
Wetland Description . . . . .	70
Wetland Vegetation . . . . .	70
Wetland Fauna . . . . .	72
Human Activities and Land Use . . . . .	74
Threats to the Delta . . . . .	74
Affect of Wetland Loss on Major Functions . . . . .	77
Remaining Wetlands and Current Management Issues . . . . .	81
Current Institutional Framework and Role of NGOs . . . . .	83
Joint Ministerial Decision . . . . .	83
Management Scheme . . . . .	84
Habitat Directive . . . . .	84
The Red Alert Project of WWF Greece . . . . .	84
Progress to Date with the Red Alert Project . . . . .	85
Institutional Development, Innovation, and Evaluation . . . . .	88
Acronyms . . . . .	89
References . . . . .	89

<b>4 The Kafue Flats in Zambia, Africa: A Lost Floodplain? . . . . .</b>	<b>93</b>
Introduction . . . . .	93
General Floodplain Ecology . . . . .	96
Human Use and Land Use History . . . . .	100
The National Parks . . . . .	103
Hydroelectric Development on the Kafue River . . . . .	104
Water Regulation . . . . .	106
Ecological and Other Impacts from a Modified Hydrologic Regime . . . . .	107
Vegetation . . . . .	107
Affects on Fauna . . . . .	108
Effects on Consumptive and Non-consumptive Uses . . . . .	109
Role of CBOs and NGOs . . . . .	110
Financial Arrangements and Revenue Streams . . . . .	114
Project Results to 1990s . . . . .	115
Summary and Evaluation of NGO Roles Post-2000 . . . . .	116
Acronyms . . . . .	118
References . . . . .	118
 <b>5 Community-Based Wetland Management: A Case Study of Brace Bridge Nature Park (BBNP), Kolkata, India . . . . .</b>	 <b>125</b>
Introduction – Urban Wetlands Utilization . . . . .	125
Introduction for India–Bangladesh Region . . . . .	126
Introduction for Case Study . . . . .	128
Ecological History of the Brace Bridge Nature Park . . . . .	131
History and Involvement of a Fisherman Community-Based Organization . . . . .	131
Past Use of the Locality . . . . .	132
History of Wetland Plant Community Change . . . . .	133
Plant Communities Prior to 1985 . . . . .	133
Major Changes in the Plant Community . . . . .	133
Present Wetland Plant Communities . . . . .	134
Present Use of the Brace Bridge Nature Parks . . . . .	135
Present Activities . . . . .	136
Disturbances and Threats to the BBNP . . . . .	138
Economic and Social Values of Wetlands . . . . .	141
Wetland Management Issues . . . . .	142
Water Quality Management . . . . .	142
Water Level Management . . . . .	143
Vegetation and Landscape Management . . . . .	143
Aquatic Species Management . . . . .	144
Organizational Development . . . . .	144
Controversy Surrounding the Protection of BBNP . . . . .	146
Summary . . . . .	148

Acronyms . . . . .	150
References . . . . .	150
<b>6 Restoration of the Tram Chim National Wildlife Preserve, Vietnam . . . . .</b>	<b>153</b>
Introduction . . . . .	153
Historical Context . . . . .	156
Wetland Soils . . . . .	156
Wetland Flora . . . . .	157
Wetland Fauna . . . . .	161
Early Restoration Efforts . . . . .	161
Eastern Sarus Cranes Rediscovered . . . . .	162
Initiation of Joint Agreement, International Meetings Toward a Management Plan . . . . .	165
Hydrological Restoration . . . . .	167
Implementation of Hydrologic and Water Quality Restoration . . . .	168
Monitoring and Evaluation . . . . .	170
Conservation Issues . . . . .	173
The Role of the International Crane Foundation and Other NGOs . .	174
Other Key Actors . . . . .	174
Summary . . . . .	175
Acronyms . . . . .	176
References . . . . .	176
<b>7 The Great Lakes Wetlands Policy Consortium – Bilateral NGO Action Aimed at the Great Lakes . . . . .</b>	<b>179</b>
Background . . . . .	179
The Resource . . . . .	181
Threats . . . . .	187
Protection Policies . . . . .	190
Regulations . . . . .	191
Tax Incentives . . . . .	191
Acquisition/Securement . . . . .	192
Restoration . . . . .	192
Significant Tri-national Wetlands Management Efforts . . . . .	192
Tip of the Mitt Watershed Council's History . . . . .	193
History of the Great Lakes Wetlands Policy Consortium . . . . .	193
Development of the Great Lakes Wetlands Policy Consortium . . . .	194
Summary . . . . .	202
Acronyms . . . . .	204
References . . . . .	204
<b>8 Estuaries on the Edge, Yucatan Peninsula, Mexico . . . . .</b>	<b>211</b>
Introduction . . . . .	211
Regional Context . . . . .	211

Mexican Coastal Zone Management History . . . . .	213
Current Coastal Zone Planning in Mexico . . . . .	214
The Case Study Areas Ría Celestún and Ría Lagartos . . . . .	215
Climate . . . . .	215
Geomorphology . . . . .	216
Northern Yucatan Hydrology . . . . .	216
Northern Yucatan Vegetation . . . . .	218
Ría Lagartos Preserve . . . . .	219
Ría Celestún . . . . .	220
Ría Lagartos and Ría Celestún Preserves Hydrology . . . . .	221
Ría Lagartos Vegetation . . . . .	222
Wetland Vegetation Ría Celestún . . . . .	224
Ría Lagartos Fauna . . . . .	226
Fish of Ría Celestún and Ría Lagartos . . . . .	230
Fauna of Ría Celestún . . . . .	230
Human Use of the Preserves – Historical . . . . .	231
Land Use/Current Economic Activity at Ría Lagartos . . . . .	232
Agriculture . . . . .	236
Residential Growth . . . . .	237
Land Use and Tenancy at Ría Celestún . . . . .	238
Management of the Preserves . . . . .	239
Actors Involved with Preserve Management . . . . .	241
Institutions and Major Actors Involved in Mexico's Protected Natural Areas . . . . .	241
Threats/Management Issues . . . . .	245
Impact on Fish Productivity . . . . .	245
Salt Industry Operations . . . . .	248
Tourism and Ecotourism Impacts . . . . .	250
Disturbance of Wildlife . . . . .	251
Impacts of Agricultural Activities and Other Land Uses . . . . .	253
Impacts of Development . . . . .	253
Institutional Analysis . . . . .	256
Lack of Resources and Decision-Making Power . . . . .	256
Lack of Inter-agency Cooperation . . . . .	256
Lack of Site Data and Plans . . . . .	257
Lack of Public Participation in Planning and Management . . . . .	258
Acronyms . . . . .	259
References . . . . .	260
<b>9 The Mankote Mangrove: Microcosm of the Caribbean . . . . .</b>	<b>267</b>
Introduction and Caribbean and Latin American Wetland Policy	
Context . . . . .	267
The Wetland Resource . . . . .	269
Causes of Mangrove Wetland Stress and Degradation . . . . .	271
Introduction to Mankote Mangrove Case Study . . . . .	272

Geographical Context . . . . .	273
Wetland Ecology . . . . .	274
Local Land Use/Cultural History . . . . .	278
Early Problems . . . . .	278
Charcoal Production . . . . .	279
Era of Increased Wetland Management . . . . .	282
Current Management of the Mankote Mangrove . . . . .	285
Policy and Government Stakeholders . . . . .	288
The Role of Scientific Assessment . . . . .	289
Management and Social Structure . . . . .	290
Summary/Roles of CBOs and NGOs . . . . .	291
Acronyms . . . . .	293
References . . . . .	294
 <b>10 Review of Wetland Management Roles, Functions, and Innovations . . . . .</b>	 <b>301</b>
Introduction . . . . .	301
Stakeholder Roles . . . . .	301
Biosphere Reserves and Stakeholder Management History . . . . .	304
Wetland System Management Innovations . . . . .	306
International Wetland Management Principles . . . . .	307
Acronyms . . . . .	309
References . . . . .	309
 <b>Index . . . . .</b>	 <b>313</b>



<http://www.springer.com/978-0-387-49428-9>

Sustaining the World's Wetlands  
Setting Policy and Resolving Conflicts  
Smardon, R.  
2009, XVI, 326 p., Hardcover  
ISBN: 978-0-387-49428-9