

Contents

List of Figures	þа	ge xv
Preface		xvii
Acknowledgen	nents	xxi
Table of Treat	ies and Other Instruments	xxiii
Table of Cases	s	xliii
List of Abbrev	iations	xlvii
1 The Role	e of International Law in Addressing the Global	
Freshwa	ter Ecosystem Crisis	1
1.1 Origi	n of the Book and Key Questions	1
1.2 Resea	arch Scope and Implications	12
1.3 Struc	cture and Conceptual Framework	14
2 Concept	tualising the UNECE Water and Environmental	
Regime:	Establishing the Basis for Coherent Interpretation	
	itutional Interaction	16
2.1 Dispo	elling the Eurocentric Myth: The UNECE Water and	
Envii	ronmental Regime	16
2.2 Relat	tionship of the Regional Regime to International Law and	
Inter	national Institutions	19
2.2.1	Regionalism and Regional Approaches to International Law	19
2.2.2	The UNECE's Mandate and Relationship to Other	
	UN Bodies	22
2.2.3	Determining the UNECE Water and Environmental	
	Regime's Relationship to General International Law	
	and Other International Water Treaties: Is the	
	Regime lex specialis?	25



viii Contents

	2.3 Evolution and Scope of a UNECE Water and	
	Environmental 'Regime'	27
	2.3.1 What Is Meant by 'Regime' in This Context?	27
	2.3.2 Evolution and Scope of the Internal Dimension of the	
	UNECE Water and Environmental Regime	30
	2.3.2.1 Addressing Transboundary Harm to Human	
	Health through the Protocol on Water	
	and Health	33
	2.3.2.2 Filling Gaps on State Responsibility and Liability	
	through the Civil Liability Protocol	34
	2.3.3 UNECE Environmental Instruments: Understanding the	
	Wider Normative Context of the	
	Environmental 'Regime'	35
	2.3.3.1 Robust Procedures for Environmental Impact	
	Assessment through the EIA Convention and	
	SEA Protocol	36
	2.3.3.2 Preparing for Transboundary Incidents through the	
	Industrial Accidents Convention	37
	2.3.3.3 Convention on Public Participation, Access to	
	Information and Access to Justice	
	(Aarhus Convention) and Protocol on Pollutant	
	Transfer and Release Registers	38
	2.3.4 Overcoming (Non) Membership Issues: Exploring	
	Concepts of International Law that Legitimise	
	Normative Integration	39
	2.4 Regional Law Conceived to Reinforce	
	International Law within the Scope of International	
	Shared Values	49
3	Contemporary Status of International Law on Transboundary	
	Freshwater Ecosystems	51
	3.1 The Role of International Courts and the International Law	
	Commission in the Progressive Evolution of International	
	Water Law	51
	3.2 Customary International Law	53
	3.3 Principles and Rules of International Law Relevant to	
	Transboundary Freshwater Ecosystems	54
	3.3.1 Obligation to Prevent and Mitigate Significant	
	Transboundary Harm (Due Diligence 'No'	
	Harm Rule)	54



	Contents	ix
	3.3.1.1 Customary Status, the UN Watercourses	
	Convention and the International Law	
	Commission	54
	3.3.1.2 Cross-Fertilisation between International Water	71
	and Environmental Case Law	58
3.3.2	Equitable and Reasonable Use	61
	Obligation to Cooperate	64
,,,	3.3.3.1 Customary Status, the UN Watercourses	
	Convention and the International Law	
	Commission	64
	3.3.3.2 International Cases and Treaties	65
3.3.4	Obligation of Prior Notification and Good Faith	
	Consultation for Planned Measures with	
	Transboundary Risk	66
	3.3.4.1 Customary Status, the UN Watercourses	
	Convention and the International Law	
	Commission	66
	3.3.4.2 Cross-Fertilisation between Law of the Sea and	
	International Water Case Law	69
3.3.5	Transboundary Environmental Impact Assessment	74
	3.3.5.1 Customary Status, the UN Watercourses	
	Convention and the International Law	
	Commission	74
	3.3.5.2 Cross-Fertilisation between International Water	
	and Environmental Case Law	75
3.3.6	Exchange of Information	80
	3.3.6.1 Customary Status, the UN Watercourses	
	Convention and the International Law	
	Commission	80
	3.3.6.2 Cross-Fertilisation between International	
	Environmental and Water Law	82
	Inadequate Clarification of General Principles	0
	of Environmental Law in International Water Law	83
	3.3.7.1 Why the Need to Clarify?	83
	3.3.7.2 Growing Inter- and Intra-generational In(e)quity:	
	Poorly Represented Principles in International	O
	Water Law	83
	3.3.7.3 The Precautionary Principle: Transforming Due	
	Diligence and Environmental Impact Assessment	0.0
	HIDACL ASSESSIBERE	86



x Contents

	3.3.7.4 The Polluter Pays Principle: Missing Principle Could Guide Costs of Pollution Prevention	
	and Compensation	88
	3.3.7.5 Sustainable Development and Sustainable Use:	00
	Central to Interpretation of Four Key Rules of	
	International Water Law	90
	3.4 Principal Shortcomings in International Water Law and	
	Contemporary Custom Going beyond the UN Watercourses	
	Convention?	93
4	The Common Normative Framework of the UNECE	
	Environmental Regime and Its Contribution to International	
	Water Law	101
	4.1 Establishing the UNECE Legal Framework for Regional and	
	Global Water Cooperation	101
	4.2 Transboundary Water Cooperation, Reporting Mechanisms	
	and SDG 6 on Water and Sanitation	104
	4.2.1 A Legacy of Resilient Cooperation	104
	4.2.2 The Impact of the New UNECE Reporting Mechanism	
	on SDG 6 on Water and Sanitation	111
	4.2.2.1 The Rationale behind Reporting and Streamlining	
	the SDG and UNECE Reporting Processes	111
	4.2.2.2 A Critical Review of the SDG Targets and	
	Indicators Relevant to Transboundary	
	Freshwater Ecosystems	114
	4.2.2.3 Combined Impact and Coordination of SDG	
	Indicator 6.5.2 with Other Relevant SDG	
	Targets and Indicators	118
	4.2.2.4 Overarching Observations on the Impact of the	
	UNECE and SDG Reporting Processes	121
	4.3 The UNECE Regime on Prevention of Significant	
	Transboundary Harm	123
	4.3.1 Interaction within the UNECE Water and Environmental	
	Regime and Contribution to International Law	123
	4.3.2 The UNECE Regime Clarifies the Role of	
	General Principles	129
	4.4 The UNECE Regime on Transboundary Environmental	
	Impact Assessments	132
	4.4.1 Interaction and Coherence within the UNECE	
	Regime Regarding Transboundary Environmental	
	Impact Assessments	133



	Contents	xi
	4.4.2 Contribution to International Law4.5 Equity, Equitable and Sustainable Use in the UNECE	135
	Regime 4.6 The UNECE Environmental Regime: Going beyond International Water Law and Contributing to the 2030	146
	Agenda for Sustainable Development	147
5	An Ecosystem Approach in International Law Concerning	
	Transboundary Freshwater Ecosystems 5.1 The Great Decline of Our Freshwater Ecosystems and	152
	Desperate Need for a Stronger Legal Response 5.2 A New Legal Frame for an Ecosystem Approach to the Protection of Freshwater Ecosystems and Their Communities	152
	in International Law	157
	5.2.1 International Law and Freshwater Ecosystems5.2.1.1 Normative Foundations of an Ecosystem	157
	Approach in International Environmental Law 5.2.1.2 The First Four Elements of an	158
	Ecosystem Approach	163
	5.2.1.3 Ecosystem Services and Links to Human Rights	168
	5.2.1.4 The Fifth Element of an Ecosystem Approach 5.2.1.5 The Ramsar Wetlands Regime: Linking Wise	174
	Use to an Ecosystem Approach	176
	5.2.2 International Water Agreements: Protecting Ecosystems but Falling Short on an Ecosystem Approach Including	
	Ecosystem Services	179
	5.2.3 International Courts Increasing Support for an	
	Ecosystem Approach	184
	5.3 The UNECE Water and Environmental Regime on the Protection of Ecosystems, an Ecosystem Approach and	
	Ecosystem Services	190
	5.4 Reorienting International Law towards an	_
	Ecosystem Approach	196
	5.4.1 Between Ambition and Reality	196
	5.4.2 What Value for a Stronger Ecosystem Approach in International Water Law?	200
6	Public Participation: Its Contribution to Procedural Justice	
	and Intra-generational Equity in a Water Scarce Future	202
	6.1 The Critical Importance of a Largely Absent Norm	202
	6.2 A Lack of Public Participation in International Water Law	205



xii Contents

	6.3 Gold Standard: Public Participation in the UNECE	
	Environmental Regime	206
	6.4 Public Participation: Enhancing Procedural Justice and Intra- generational Equity in a Time of Resource Scarcity	220
7	River Basin Organisations, Basin Agreements and European	
,	Environmental Law in the UNECE Regime	224
	7.1 Acknowledging Rich Regional Diversity through Distinct and	
	Coordinated Legal Responses	224
	7.2 The River Basins of Pan-Europe	230
	7.3 Supporting Normative Development and Institutional	
	Cooperation at the River Basin Level	236
	7.4 River Basin Commissions and Member States: Normative	
	Development, Implementation and Compliance	240
	7.5 The Relationship between the UNECE and EU Law	
	and Institutions	242
	7.6 The Danube River Basin: A Comprehensive	
	Legal Framework	249
	7.6.1 The Role of the UNECE in the Danube	249
	7.6.2 Synergies between EU and UNECE Law in	_
	the Danube	256
	7.7 The Western Bug River Basin: A Basin without a	
	Transboundary Agreement	257
	7.7.1 Post-Soviet, Non-EU Countries: What Role for the	
	UNECE and EU?	257
	7.7.2 Transitioning from Former Soviet-Era Administration	-6-
	towards EU and UNECE Obligations	260
	7.8 The Sava River Basin: Exploring an Ecosystem Approach 7.8.1 Post-conflict Peace Building and Regional Stability	264
	through Water Cooperation	264
	7.8.2 The Sava Basin Leads on an Ecosystem Approach	265
	7.9 An Intermediary Supporting Multi-dimensional Normative	20)
	Development and Non-state Actors	269
	7.9.1 A Multi-dimensional Regime	269
	7.9.2 Advancing a Common Normative Framework at the	7
	Basin Level	270
	7.9.3 Reflecting on the Overarching Role of EU	, -
	Environmental Law	276
	7.9.4 Tailoring Institutional Cooperation and Engaging	,
	Non-state Actors	277



Contents	xiii
8 Transboundary Freshwater Ecosystems in International Law: The Role, Impact and Future of the UNECE	
Environmental Regime	280
8.1 The Role and Impact of the UNECE	
Environmental Regime	280
8.1.1 Strong Foundations for a Deeper Response to the	
Global Water Crisis	280
8.1.2 The Collective Contribution of the UNECE	
Environmental Regime to International Law on	
Transboundary Freshwater Ecosystems	282
8.2 Cross-cutting Reflections on the Role and Impact of the	
UNECE Water and Environmental Regime	292
8.2.1 Spearheading a Paradigm Shift towards an Ecosystem	
Approach in International Law	292
8.2.2 The Future Promise of Non-compliance Mechanisms	
for Promoting Coherence	295
8.2.3 The UNECE Reporting Mechanism and the SDGs	297
8.2.4 A New Direction in International Environmental Law	
and Championing Non-state Actors	298
8.3 Global Future of the UNECE Environmental Regime	300
Bibliography	306
Index	319