# Fresh Water in International Law

Laurence Boisson de Chazournes



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LAURENCE BOISSON DE CHAZOURNES



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#### FRESH WATER IN INTERNATIONAL LAW

# Preface and Acknowledgements

This book is the result of a long process. Fresh water has for many years been a topic of profound interest to me in the course of my activities as an academic and practitioner. Studying the treatment of fresh water in international law makes one aware of the complexity involved in the law's protection and management of this natural resource, and of the way in which different bodies of science (earth sciences, hydrology, engineering, meteorology, agronomy, and others) exert their influence on it. International law is an important tool in this respect but even its role cannot be defined in the singular. Indeed, various bodies of norms are applicable and have left their mark on the role and modalities of international law as regards fresh water: territorial and boundary regimes, economic law, environmental law, human rights, law of international organizations, etc. The real issue is the consistency and the coherence in the interpretation and application of these sets of norms. A variety of methods and techniques should give effect to them, allowing each to be applied in recognition of the vital nature of water for humans and the environment. The approach adopted in this book is to analyse the origin and scope of the various bodies of international norms, while emphasizing their interconnectedness and necessary adaptation to one another. This approach is accompanied by a detailed analysis of the practice of States and of international organizations, all the while taking into account the activities of the many non-State actors involved in the area of fresh water.

My thinking has also been stimulated by exchanges I have had with several generations of students at the University of Geneva, as well as at other universities in various parts of the world. I have also had the great pleasure of collaborating with PhD students and researchers associated with the Platform for International Water Law, which was launched in 2009 at the Faculty of Law of the University of Geneva. I would, in particular, like to thank Mara Tignino, Senior Researcher at the University of Geneva Faculty of Law, and Christina Leb, currently a counsel with the World Bank Legal Department, for their work as coordinators of the Platform and their cooperation in the research for the present book. I would also like to thank Komlan Sangbana and Brian McGarry for their research assistance, on Chapters 2 and 3 and on Chapters 3 and 7 respectively. Moreover, I express my deep appreciation to Jason Rudall for his great companionship, while he was working on the linguistic editing of the manuscript as well as for helping me with research on certain issues.

I am grateful to the Swiss National Science Foundation (SNSF) that has funded several research projects, enabling researchers of the Platform to make visits, conduct research, and participate in conferences.<sup>2</sup>

<a href="http://www.unige.ch/droit/eau/index\_en.html">http://www.unige.ch/droit/eau/index\_en.html</a>.

<sup>&</sup>lt;sup>2</sup> Project number 100015\_124610, 'Governing water: the contribution of international law on transboundary freshwater resources' (2009–2011) and Project number 100012\_138386, 'Non-state actors and the management of international freshwater resources' (2012–2013).

Finally, I am greatly indebted to all, including those mentioned above, who have accompanied me on the fascinating intellectual journey that was the writing of this book.

# Preface to the Paperback Edition of Fresh Water in International Law

The publication of the paperback edition of *Fresh Water in International Law* reflects the increasing attention drawn by the protection and management of fresh water at the international level. Without water, life could not exist. This fundamental character of water for all human beings and nature has implicated a role for international law in its regulation and has catalyzed the evolution of norms and principles to meet the various demands and challenges associated with water use. Increasing interaction at the international level and a dependency between States in respect of water issues require that effective multilateral water governance schemes are put in place. Treaties and other instruments have been adopted at the universal, regional, and national level in an effort to meet these challenges.

In this context, codification and harmonization endeavours play an important role. The entry into force of the UN Convention on the Law of the Nonnavigational Uses of International Watercourses on 17 August 2014 is emblematic of an emerging consensus among States to establish a universal framework for governing the various uses of international watercourses. This framework Convention lays down the constitutive foundations of a legal regime to be further elaborated through more specific instruments. Other corpuses of legal norms, such as international economic law, international environmental law, or international human rights law, bring their contribution to the protection and management of fresh water too. The case law of investment arbitral tribunals, compliance mechanisms provided under multilateral environmental agreements, and of human rights bodies and courts continues to be nurtured by disputes related to water resources. While these various strands of principles and rules are discernible from one another, they are also intertwined. There is a need for coherence among them in their interpretation and application, and to this end various legal avenues and techniques can be of assistance.

Enhanced reflection is necessary in this area and the paperback edition of *Fresh Water in International Law* is a contribution to this endeavour. Indeed, it is only through a better articulation and synthesis of the manifold legal developments that international law can most effectively make its contribution to the protection of an essential natural resource to human beings and nature.

Laurence Boisson de Chazournes Geneva, November 2014

# List of Abbreviations

ABC Abyei Boundaries Commission ACP African, Caribbean and Pacific States

AsDB Asian Development Bank
BIT Bilateral investment treaty
BOT Build-operate-transfer contract
C&SF Central & Southern Florida Project
CARU Comisión Administradora del Río Uruguay

(Administrative Commission for the River Uruguay)

CBD Convention on Biological Diversity
CCAI Climate Change and Adaptation Initiative
CCD Convention to Combat Desertification

CFC Chlorofluorocarbon

CHH Common heritage of humankind
CJEU Court of Justice of the European Union

CMS Convention on Migratory Species of Wild Animals CPWC Co-operative Programme on Water and Climate

COHRE Centre on Housing Rights and Evictions

COP Conference of Parties
CPC Central Product Classification

CTE Committee on Trade and Environment
DSU Dispute Settlement Understanding (WTO)
EBRD European Bank for Reconstruction and

Development

ECHR European Court of Human Rights

ECOSOC United Nations Economic and Social Council

EEZ Exclusive economic zone

EIA Environmental impact assessment

EU European Union

FAO Food and Agriculture Organization

FTA Free trade agreement

GATS General Agreement on Trade in Services
GATT General Agreement on Tariffs and Trade

GEF Global Environment Facility

GLAAS UN-Water Global Analysis and Assessment of

Sanitation and Drinking-Water

HCFC Hydrochlorofluorocarbon
HGA Host Government Agreement
HRC Human Rights Committee
HS Harmonized System

ICCPR International Covenant on Civil and Political Rights
ICESCR International Covenant on Economic, Social and

Cultural Rights

ICJ International Court of Justice

#### List of Abbreviations

ICPDR International Commission for the Protection of the

Danube River

ICSID International Centre for Settlement of Investment

Disputes

ICTY International Criminal Tribunal for the former

Yugoslavia

IDB Inter-American Development Bank
IDI Institut de droit international

xiv

IFAD International Fund for Agricultural Development

IFC International Finance Corporation
IFIs International financial institutions
IHP International Hydrological Programme

IISD International Institute for Sustainable Development

IJC International Joint Commission
ILA International Law Association
ILC International Law Commission

IPCC Intergovernmental Panel on Climate Change
IUCN International Union for Conservation of Nature

IWRM Integrated water resources management

JNA Yugoslav Peoples' Army

LHWP Lesotho Highlands Water Project MAB Programme UNESCO's Programme on Man

and the Biosphere

MDG Millennium Development Goal
MEA Multilateral environmental agreement

MERCOSUR Southern Common Market
MTBE Methyl tertiary butyl ether

NAFTA North American Free Trade Agreement

NBI Nile Basin Initiative

NGO Non-governmental organization

OCHA United Nations Office for the Co-ordination of

Humanitarian Affairs

ODA Official Development Assistance

OECD Organisation for Economic Co-operation and

Development

OHCHR United Nations Office of the High Commissioner

for Human Rights

OMVS Organisation pour la mise en valeur du fleuve Sénégal

OP Operational Policy

PCA Permanent Court of Arbitration

PCIJ Permanent Court of International Justice

POPs Persistent organic pollutants

RGDIP Revue générale de droit international public Rio+20 United Nations Conference on Sustainable

Development (2012)

SAB Great Lakes Science Advisory Board

SADC Southern African Development Community
SEA Strategic Environmental Assessment

SFWMD South Florida Water Management District

SOGED Agence de gestion et d'exploitation du barrage de

Diama

SOGEM Société de gestion de l'énergie de Manantali SPLM/A Sudan People's Liberation Movement/Army

SPS Agreement WTO Agreement on the Application of

Sanitary and Phytosanitary Measures

SNSF Swiss National Science Foundation

TEIA Transboundary environmental impact assessment

United Nations

UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural

Organization

UNFCCC United Nations Framework Convention on Climate

Change

UNICEF United Nations Children's Fund

UNIDO United Nations Industrial Development

Organization

UNOPS United Nations Office for Project Services

UNTS United Nations Treaty Series

US United States

UN

USACE US Army Corps of Engineers
VOC Volatile Organic Compound
WHO World Health Organization
WQB Great Lakes Water Quality Board

WSSCC Water Supply and Sanitation Collaborative Council

WTO World Trade Organization

WWAP World Water Assessment Programme

WWF World Wide Fund for Nature

YILC Yearbook of International Law Commission

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PCIJ, Series A No 23 1929
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ICJ Reports 2010, 14

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181, 208, 209, 244, 245, 248, 249

Affaire concernant l'apurement des comptes entre Le Royaume des Pays-Bas et La République Française en application du Protocole du 25 Septembre 1991 Additionnel à la Convention relative à La Protection du Rhin contre la pollution par les chlorures du 3 Décembre 1976 (Netherlands/France)—Case concerning the audit of accounts between the Netherlands and France in application of the Protocol of 25 September 1991 Additional to the Convention for the Protection of the Rhine from Pollution by Chlorides of 3 December 1976 (Netherlands/France), Arbitral Award 2004, <a href="http://www.pca-cpa.org/showpage.asp?pag\_id=1156">http://www.pca-cpa.org/showpage.asp?pag\_id=1156</a> (accessed 15 August 2012)...... 118, 198, 210, 211, 244

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# Contents

			X111
Sei	lected	d Cases	xvii
1.	Inti	roduction: Fresh Water and its Features	1
	I.	Water challenges: a contextual overview	1
	II.	The finite character of water	3
	III.	Water opportunities: a disciplinary inquiry	5
2.	Reg	gulation of Fresh Water Uses: Evolution, Scope, and Developments	7
	I.	Introduction	7
	II.	International watercourses and their uses	8
		A. International watercourses and boundary delimitation	8
		B. International watercourses and navigation	13
		C. International watercourses and fishing activities	16
		D. International watercourses and other uses	20
		E. Conflicts of uses and their resolution	22
	III.	Codification and harmonization endeavours in the	
		law applicable to international watercourses	25
		A. The UN Convention on the Law of the Non-navigational Uses of	
		International Watercourses 1997	26
		B. The Helsinki Convention on the Protection and Use of Transboundary	22
	** *	Watercourses and International Lakes 1992	33
	IV.	Other sources of fresh water and their legal regime	36
		A. Transboundary aquifers	37 39
		B. Ice formations	46
	17	C. Atmospheric fresh water	40
	v.	The regulation of international fresh water resources	48
		and its various dimensions	48
		<ul><li>A. The interplay between universal, regional, and basin-specific instruments</li><li>B. The legal interactions between universal, regional, and basin-specific norms</li></ul>	51
		B. The legal interactions between universal, regional, and basin-specific norms	71
3.	Eco	onomization of the Law Applicable to Fresh Water	54
	I.	Economic uses and the law applicable to international	
		watercourses	54
		A. Navigation and its contours	54
		B. Infrastructure along watercourses	65
	II.	Water, international trade, and investment law	78
		A. The progressive emergence of the economic facets of fresh water	79
		B. Fresh water and international trade	83
		C. Fresh water and international investment	96
		D. International transfers of water and international law	104
		E. Concluding remarks	107

x Contents

4.	Envi	conmentalization of the Law Applicable to Fresh Water	109
	I.	Introduction	109
	II.	Linkages between fresh water and environmental protection	109
		A. Pollution and its impact on fresh water	109
		B. Biodiversity and fresh water	111
		C. Climate change and fresh water	112
		D. Large-scale changes in water resources	114
		E. Links between fresh water and marine environments	116
	III.	Environmental protection and the law applicable to fresh water  A. Practice prior to the Stockholm Conference on the  Human Environment	117
		B. International agreements and instruments adopted after the	110
		Stockholm Conference on the Human Environment	119
		C. The role of institutions in fresh water instruments	129
	IV.	The contribution of multilateral environmental agreements	
		to the protection and management of fresh water	131
		A. Instruments having a universal scope	132
		B. Instruments having a regional scope	139
		C. The role of treaty bodies	143
	V.	Coherence trends	143
5.	Hum	nanization of the Law Applicable to Fresh Water	147
	I.	Introduction	147
	II.	Human needs and the law applicable to international	
		watercourses	147
	III.	Emergence and recognition of a right to safe drinking	
		water and sanitation	149
		A. Political and legal mobilization	149
		B. The effectiveness test	153
	IV.	The contribution of human rights in the field of access to	
		water and sanitation	155
	V.	The right to water and health, environmental, and	
		cultural protection	158
		A. The right to water and health	158
		B. The right to water and environmental and cultural protection	160
	VI.	Human needs, public participation, and access to	11
		water and sanitation	161
		A. The emergence of public participation guarantees in	160
		international law	162
	3.711	B. Participation guarantees and economic and investment activities	164
	VII.	Human needs, the right to water, and development assistance	167
		Water in times of an armed conflict	169
	IX.	Individuals and access to remedies	173
	X.	Concluding remarks	175
6.	Insti	tutionalization Trends in Fresh Water Governance	176
	I.	Introduction	176

Contents	xi

	II.	Basin organizations and commissions	176
		A. The evolving profile of basin organizations and commissions	177
		B. Basin organizations and commissions as forums for dialogue	
		and cooperation	178
		C. Basin organizations and commissions, dispute resolution, and	
		the maintenance of international peace and security	181
		D. The contribution of basin organizations and commissions to	
		the development and implementation of international law	184
	III.	International organizations and institutions	185
		A. The United Nations system: environmental protection and	
		fresh water	185
		B. The need for multi-stakeholder partnerships and institutional	
		cooperation	189
	IV.	The provision of technical and financial assistance	190
		A. The contours and functions of financial and technical assistance	191
		B. Non-State entities and technical and financial assistance	193
		C. The contribution of technical and financial assistance to respect for	
		international law	195
	V.	Conclusion	196
7	D:	C I I F I W T I M I D	107
/ .		pute Settlement and Fresh Water: Trends, Means, and Practice	197
	I.	Introduction	197
	II.	The multiplicity of dispute settlement mechanisms in	
		water-related disputes	198
	111.	Inter-State dispute settlement mechanisms, with particular	
		emphasis on judicial means	200
		A. Treaty practice and codification endeavours	200
		B. Resort to the PCIJ and ICJ	204
		C. Inter-State arbitration	209
		D. Trade dispute settlement mechanisms and other	
		specialized procedures	212
		E. Intervention of a third party, negotiations, and negotiated	216
	T3 7	settlement	216
	IV.	Non-State actors and water disputes	218
		A. Investor-State dispute settlement mechanisms: the ICSID	210
		and the NAFTA experiences	218
		B. Human rights procedures and water-related disputes	226
		C. Recent trends in dispute settlement procedures	233
	* 7	D. The contribution of compliance mechanisms	239
	V.	Dispute settlement and issues of interpretation and	2/2
	3.77	development in the law applicable to fresh water	243
	VI.	Concluding remarks	247
8.	Loc	king Ahead: Trends and Prospects	250
Se	lected	d Bibliography	255
	der	0.1.7	259

### Introduction: Fresh Water and its Features

#### I. Water challenges: a contextual overview

The protection and management of fresh water is attracting increasing attention at the international level. In this context, the recent meeting of the Millennium Development Goal to halve by 2015 the proportion of people without sustainable access to safe drinking water is a significant achievement for fresh water governance.1 Furthermore, the emerging recognition of a right to water is a source of much promise.2 Harmonization endeavours in the management of international watercourses are also bearing fruit through the conclusion of agreements and the strengthening of basin commissions and organizations. However, despite the developments made in respect of access to water and water resources management, there remain significant challenges. Indeed, water is neither an inexhaustible resource nor a valueless good in economic terms. This is in spite of the fact that our planet's surface is more than three-quarters covered by water. However, the largest portion of accessible water around 98 per cent of it<sup>3</sup>—is neither suitable for human consumption nor fit for use in agricultural or industrial activities as a result of its salinity or frozen state. Fresh water resources, i.e. waters in which the salt content is lower than 3 grams per litre, represent only 2.53 per cent of overall global water resources. Over two-thirds of these fresh water resources (68.7 per cent) are frozen in the polar ice caps, continental ice sheets, and alpine glaciers. Liquid fresh water is primarily found underground (30.1 per cent), whereas surface water in lakes and rivers (0.26 per cent) and atmospheric water content (0.04 per cent) represent only a small volume of overall fresh water resources.4

Additionally, while the size of the world's population has tripled over the last century, water consumption has increased by a factor of six. Attempts to increase

<sup>2</sup> See WHO and UN Water, GLAAS Report 2012: UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water: The Challenge of Extending and Sustaining Services [electronic report], <a href="http://apps.who.int/iris/bitstream/10665/44849/1/9789241503365\_eng.pdf">http://apps.who.int/iris/bitstream/10665/44849/1/9789241503365\_eng.pdf</a> (accessed 27 November 2012), 44.

<sup>&</sup>lt;sup>1</sup> WHO and UNICEF, *Progress on Drinking Water and Sanitation: 2012 Update* (Geneva: UNICEF and WHO, 2012). Electronic version available at: <a href="http://www.unicef.org/media/files/JMPreport2012">http://www.unicef.org/media/files/JMPreport2012</a>. pdf> (accessed 12 November 2012).

<sup>&</sup>lt;sup>3</sup> World Water Assessment Programme, 'Water for People, Water for Life', *The United Nations World Water Development Report* [online report], <a href="http://unesdoc.unesco.org/images/0012/001297/129726e.pdf">http://unesdoc.unesco.org/images/0012/001297/129726e.pdf</a> (accessed 8 April 2013), 68.