



INTERNATIONAL LAW AND FRESHWATER

The Multiple Challenges



Edited by Laurence Boisson de Chazournes,
Christina Leb and Mara Tignino

NEW HORIZONS IN ENVIRONMENTAL AND ENERGY LAW

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Edited by

Laurence Boisson de Chazournes

*Professor of International Law, Faculty of Law, University of
Geneva, Switzerland*

Christina Leb

*Research Fellow, Platform for International Water Law,
Faculty of Law, University of Geneva, Switzerland*

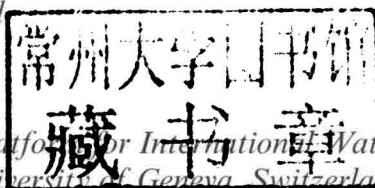
Mara Tignino

*Senior Researcher, Platform for International Water Law,
Faculty of Law, University of Geneva, Switzerland*

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NEW HORIZONS IN ENVIRONMENTAL AND ENERGY LAW

Series Editors: Kurt Deketelaere, *Professor of Law, University of Leuven, Belgium and University of Dundee, Scotland* and Zen Makuch, *Reader in Law, Barrister, Imperial College, London, UK*

Environmental law – including the pressing considerations of energy law and climate change – is an increasingly important area of legal research and practice. Given the growing interdependence of global society and the significant steps being made towards environmental protection and energy efficiency, there are few people untouched by environmental and energy lawmaking processes.

At the same time, environmental and energy law is at a crossroads. The command and control methodology that evolved in the 1960s and 1970s for air, land and water protection may have reached the limit of its environmental protection achievements. New life needs to be injected into our environmental protection regimes – perhaps through the concept of sustainability in its environmental, economic and social forms. The same goes for energy policy and law, where liberalisation, environmental protection and security of supply are at the centre of attention. This important series seeks to press forward the boundaries of environmental and energy law through innovative research into environmental and energy law, doctrine and case law. Adopting a wide interpretation of environmental and energy law, it includes contributions from both leading and emerging international scholars.

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Edited by Laurence Boisson de Chazournes, Christina Leb and Mara Tignino

Contributors

Undala Alam is a lecturer in the School of Politics, International Studies and Philosophy at the Queen's University, Belfast. She worked previously at Cranfield University and as a water resources specialist for the United Nations and the World Bank.

Awn S. Al-Khasawneh is the former Prime Minister of Jordan. Before taking up this office, he was a judge and former Vice-President of the International Court of Justice (2000–11) and prior to that a member of the International Law Commission (1986–99). He held senior legal posts in the Jordanian Ministry of Foreign Affairs. Later, he was Adviser to the King and Adviser of the State in International Law and Chief of the Royal Hashemite Court.

Laurence Boisson de Chazournes is Professor of International Law and International Organization at the University of Geneva and the Director of the Platform for International Water Law. She worked previously as Senior Counsel to the World Bank (1995–99) and is an adviser to various international organizations and governments, and has held international assignments as counsel, expert and arbitrator before the International Court of Justice and other judicial fora.

Lucius Caflisch is a member of the International Law Commission (UN). He was formerly a judge at the European Court of Human Rights and is Professor Emeritus at the Graduate Institute of International Studies in Geneva.

Marius Claassen is an aquatic ecologist, with broad experience in the fields of water resource assessment, risk assessment and decision support systems. As Principal Scientist, Dr. Claassen manages the water governance research portfolio at the Council for Scientific and Industrial Research (CSIR), South Africa.

Catarina de Albuquerque is the first UN Special Rapporteur on the human right to safe drinking water and sanitation since 2008 (formerly Independent Expert). She is also Professor at the Law Faculties of the Universities of Braga and Coimbra and of American University's Washington College of Law and is a Senior Legal Adviser at the Office for Documentation and Comparative Law, an independent institution

under the Prosecutor General's Office of Portugal. She was awarded the Human Rights Golden Medal by the Portuguese Parliament in 2009. Her work in human rights was also honored by the Portuguese President of the Republic with the Order of Merit.

Lilian del Castillo-Laborde is Professor of International Law at the School of Law at the University of Buenos Aires. She has been appointed member of the Argentinean Academy of Environmental Science.

Gabriel de los Cobos is a hydro-geologist in GESDEC (service of geology, soil and waste), Department of Security, Police and Environment of the Canton of Geneva. He is responsible for the management of groundwater resources in the canton.

Dustin Garrick is a researcher (economic geography) at the University of Oxford in the School of Geography and the Environment. He specializes in comparative water policy and economic analysis with a focus on water allocation and climate adaptation in transboundary rivers. Before joining Oxford, Dr. Garrick was a Fulbright Scholar in Australia, where he maintains an active research program as a research associate of Australian National University.

Jakob Granit is Centre Director at the Stockholm Environment Institute (SEI) and the International Waters Panel Member on the Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility (GEF). Previously, he was a Director, Knowledge Services, at the Stockholm International Water Institute (SIWI). He has 20 years of experience working with transboundary freshwater resources management and development for the World Bank as a senior water resources management specialist and the Swedish International Development Cooperation Agency (Sida). His research focuses on how to achieve collective action on shared water systems, regional integration and the water and energy nexus.

David Grey is visiting professor of water policy at the University of Oxford (Centre for the Environment) and honorary visiting professor at the University of Exeter (College of Social Science and International Studies). He was the Senior Water Adviser of the World Bank, where he worked for 27 years and was responsible for managing the bank's support for initiatives on major river basins, including the Nile, Zambezi, Indus, Ganges-Brahmaputra and the 'Rivers of the Greater Himalayas'. He serves on several international panels and acts as adviser on the Mekong, Tigris-Euphrates, Ganges, and Nile Rivers.

Ellen Hey is Professor and Head of the Department of Public International Law at the Erasmus School of Law at Erasmus University Rotterdam. She

is a member of the Aarhus Compliance Committee (UNECE) and of the Advisory Commission on Legal Aspects of Water Management and Public Works of the Netherlands Ministry of Transport, Public Works and Water Management. In that capacity she represented the Netherlands in negotiations regarding European rivers and in the first rounds of negotiations for the UNECE Helsinki Convention on International Rivers and Lakes. She also worked as a consultant on water law for various international institutions.

Valerie Hughes is Director of the Legal Affairs Division at the World Trade Organization (WTO) in Geneva. Previously, she was Director of the WTO Appellate Body Secretariat. Before moving to Geneva, Ms. Hughes spent 19 years with the Government of Canada, during which she held various positions in public and private international law. She also worked in private practice for two years.

Marcelo Kohen is Professor of International Law at the Graduate Institute of International and Development Studies, Geneva. He is an associate member of the *Institut de droit international* and acts as legal counsel and advocate for a number of States before the International Court of Justice.

Christina Leb is an associate member of the Platform for International Law at the Faculty of Law of the University of Geneva. Her research focuses on the topic of cooperation in transboundary water law. Dr. Leb frequently works as a consultant to international organizations, primarily on collaborative water resources management in the Nile Basin and the South Asia region.

Gabrielle Marceau works as Counselor at the Legal Affairs Division of the WTO and is Associate Professor at the Faculty of Law, University of Geneva. She was previously one of the adviser members of the cabinet of Pascal Lamy, Director-General of the WTO.

Makane Moïse Mbengue is an Associate Professor at the Faculty of Law of the University of Geneva. He is a Visiting Professor at Sciences Po Paris (School of Law). He is also a member of the Platform for International Water Law.

Stephen C. McCaffrey is Distinguished Professor of International Law at the McGeorge School of Law at the University of the Pacific. He is the former Special Rapporteur on the law of the non-navigational uses of international watercourses at the International Law Commission (UN). He acts as legal counsel and advocate for various governments in disputes brought before the International Court of Justice and other international tribunals.

Owen McIntyre is Senior Lecturer in environmental law at the Faculty of Law, University College Cork, a constituent college of the National University of Ireland. Since 2004, he has served as a panel member of the Project Complaint Mechanism (PCM) of the European Bank for Reconstruction and Development (EBRD). He is a member of the scientific committee of the European Environment Agency.

Salman M.A. Salman is an academic researcher and consultant on water law and policy. Until December 2009 he worked as Lead Counsel and Adviser on Water Law and the Safeguard Policies with the World Bank. Prior to that, he was a Legal Officer with the International Fund for Agricultural Development of the United Nations (IFAD), in Rome, Italy, and a law lecturer at the University of Khartoum in Sudan. He obtained his LL.B. from University of Khartoum, and holds an LL.M. and J.S.D. from Yale Law School.

Dinah Shelton is the Manatt/Ahn Professor of Law (emeritus) at the Law School at George Washington University. She is the former president of the Inter-American Human Rights Commission. She also served as a legal consultant to the United Nations Environment Programme, UNITAR, World Health Organization, European Union, Council of Europe, and Organization of American States.

Attila Tanzi is Professor of International Law at the University of Bologna and Chairman of the Legal Board of the 1992 UNECE Water Convention (2005–present). He was the Chairman of the Compliance Committee of the UNECE 1999 Protocol on Water and Health (2007–10) and a consultant to the Italian Ministry for Foreign Affairs (1987–2001). He has served as counsel and arbitrator in several inter-State arbitrations.

Mara Tignino is a Senior Researcher at the Platform for International Water Law at the Faculty of Law of the University of Geneva. She also serves as a consultant to governments, international organizations, NGOs, and the private sector. Dr. Tignino received a Ph.D in International Law from the Graduate Institute of International and Development Studies in Geneva. She has been a Visiting Scholar at the George Washington University School of Law in Washington, D.C.

Bahakal Abate Yimer is a practitioner and part-time lecturer (at Addis Ababa University School of Law) from Ethiopia focusing on investment law, dispute settlement and transnational corporate law matters. He holds an LL.M. in International Dispute Settlement from the MIDS-Geneva joint program, and an LL.M. in International Economic and Business Law from the University of Groningen.

Foreword

The global water crisis is one of the most important challenges of this century, as demand for freshwater dramatically increases. With the world's freshwater resources under mounting pressure, we have to respond to a challenge that presents a magnitude and pace that are unique in the history of our sector. Some of the issues to face are population growth, migration, urbanization, water pollution, climate change, land-use changes and economic alterations that impact directly on water resources, water services and ecosystems services. These issues increase the difficulty of water management within a watershed, particularly in transboundary river basins.

The global water crisis is multiform. Its expression is the dwindling of water availability per capita (on this aspect an enormous effort has to be made to tackle the inefficiency of water use in agriculture). The water crisis is also qualitative: in developing countries, 80 percent of waste water and solid waste go directly into the environment without treatment, and sanitation is now a fundamental part of water management. The 1 billion people without access to drinking water and the 2.6 billion without access to basic sanitation are also part of this global water crisis. On this particular aspect, the recognition by the UN General Assembly that water and access to sanitation is a human right is a historical step forward. It constitutes a fundamental change and progress compared with the Millennium Development Goals. The challenge now is to translate this into reality in the field. This human rights recognition gives a particular status and priority within water management to drinking water. At the same time, human rights address the questions of inequity, vulnerability, and marginality.

Freshwater demand continues to be on the rise, while overall water quality is deteriorating. There is enough water worldwide to respond to these challenges but we need to mobilize the whole water sector of our society (public, private, academia and, of course, civil society). This requires the mobilization of all the tools we have, particularly international law.

I am very grateful to the Faculty of Law of the University of Geneva and its Platform for International Water Law for the work the latter has

undertaken to stress the contribution of international law to the protection and sustainable management of freshwater resources. The present volume constitutes a milestone in this endeavor.

François Münger

Head of the Water Initiatives Division
Federal Department for Foreign Affairs (FDFA)
Swiss Agency for Development and Cooperation (SDC)

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Abbreviations

ACRWC	African Charter on the Rights and Welfare of the Child
ACSAD	Arab Center for the Studies of Arid Zones and Dry Lands
AHPFM	Ad Hoc Project Facilitation Mechanism
AISD	Agriculture Investment Support Directorate
bcm/BCM	billion cubic meters
BGR	Institute for Geosciences and Natural Resources (Germany)
BIT	bilateral investment treaty
CAO	Office of Compliance Advisor/Ombudsman
CARU	<i>Comisión Administradora del Río Uruguay</i>
CESCR	Committee on Economic, Social and Cultural Rights
CFA	Cooperative Framework Agreement
CIRT	International Transboundary Resources Center
CKGR	Central Kgalagadi Game Reserve
COMESA	Common Market for Eastern and Southern Africa
CRA	cooperative regional assessment
CRC	Convention on the Rights of the Child
CSR	corporate social responsibility
DDA	Doha Development Agenda
DSB	Dispute Settlement Body
EBRD	European Bank for Reconstruction and Development
ECLAC	Economic Commission for Latin America and the Caribbean
EIA	environmental impact assessment
ELSAP	Equatorial Lakes Subsidiary Action Program
ENSAP	Eastern Nile Subsidiary Action Program
ENTRO	Eastern Nile Technical Regional Office
EPR	energy-intensive, highly-polluting, resource-based
ESCR	economic, social and cultural rights
ESCWA	Economic and Social Commission for Western Asia
ESIA	environmental and social impact assessment
EU	European Union
FAO	Food and Agriculture Organization

FDI	foreign direct investment
FDRE	Federal Democratic Republic of Ethiopia
FRY	Federal Republic of Yugoslavia
FVRP	Fossil Valley Regeneration Programme
GAS	Guaraní Aquifer System
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GC	General Comment
GDP	gross domestic product
GEF	Global Environment Facility
GHG	greenhouse gases
GTP	Growth and Transformation Plan
GWP	Global Water Partnership
HRC	Human Rights Committee
IACHR	Inter-American Commission on Human Rights
IAEA	International Atomic Energy Agency
ICAs	international commodity agreements
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICIM	Independent and Consultation Investigation Mechanism
ICJ	International Court of Justice
ICPE	International Commission for the Protection of the Elbe
ICPOAP	International Commission for the Protection of the Oder Against Pollution
ICPR	International Commission for the Protection of the Rhine
ICWC	Interstate Commission for Water Coordination
IEBL	Inter-Entity Boundary Line
IFC	International Finance Corporation
IFIs	international financial institutions
IFPRI	International Food Policy Research Institute
IIL	Institute of International Law
ILA	International Law Association
ILC	International Law Commission
ILO	International Labour Organization
INBO	International Network of Basin Organizations
IPCC	Intergovernmental Panel on Climate Change
IRM	Independent Review Mechanism of the African Development Bank
IRSA	Indus River Systems Authority
IWAC	International Water Assessment Centre

IWRM	integrated water resource management
J&K	Jammu and Kashmir
LGTC	Local Grouping of Transboundary Cooperation
MARD	Ministry of Agriculture and Rural Development
MAS	<i>Mission d'Aménagement du Bassin du Fleuve Sénégal</i>
MCM	million cubic meters
MDB	multilateral development bank
MDG	Millennium Development Goal
MEAs	multilateral environmental agreements
MERCOSUR	<i>Mercado Común del Sur</i>
MFN	most-favored nation
MIGA	Multilateral Investment Guarantee Agency
MoWE	Ministry of Water & Energy
MW	megawatt
NAFTA	North American Free Trade Agreement
NAMA	non-agricultural market access
NBA	Niger Basin Authority
NBI	Nile Basin Initiative
NEL-COM	Nile Equatorial Lakes Council of Ministers
NGO	non-governmental organization
Nile COM	Nile Council of Ministers
NJHP	Neelum-Jhelum Hydroelectric Project
OAS	Organization of American States
OAV	<i>Organisation Autonome de la Vallée</i>
OERS	<i>Organisation des Etats Riverains du Sénégal</i>
OHCHR	Office of the High Commissioner for Human Rights
OMVS	<i>Organisation pour la mise en valeur du fleuve Sénégal</i>
OPIC	Overseas Private Investment Corporation
PASDEP	Plan for Accelerated and Sustainable Development to End Poverty
PCA	Permanent Court of Arbitration
PCIJ	Permanent Court of International Justice
PIC	Permanent Indus Commission
ppm	parts per million
PTAs	preferential trade agreements
RADWQ	rapid assessment of drinking water quality
RBO	river basin organization
RCADI	<i>Receuil des cours de l'Académie de droit international</i>
REDD	Reduced Emissions from Deforestation and Forest Degradation in Developing Countries
RIO+20	UN Conference on Sustainable Development (2012)
RS	Republika Srpska

RTAs	regional trade agreements
SADC	Southern African Development Community
SAP	Strategic Action Program
SCM	subsidies and countervailing measures
SEA	strategic environmental assessment
SFRY	Socialist Federal Republic of Yugoslavia
SIG	<i>Services Industriels de Genève</i>
SIWI	Stockholm International Water Institute
SNNP	Southern Nations, Nationalities and Peoples
TCA	Technical Cooperation Agency
TECCONILE	Technical Cooperation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin
TNC	transnational corporation
TRIMS	trade-related investment measures
TVA	Tennessee Valley Authority
TWOA	Transboundary Waters Opportunity Analysis
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNRWA	United Nations Relief and Works Agency for Palestine Refugees
US	United States
USD	United States dollars
USSR	Union of Soviet Socialist Republics
WCED	World Commission on Environment and Development
WHA	World Health Assembly
WHO	World Health Organization
WRDF	Water Resource Development Fund
WTO	World Trade Organization

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