



Essential Readings in Environmental Law
IUCN Academy of Environmental Law (www.iucnael.org)

INTERNATIONAL WATER LAW

IUCN Environmental Law Centre, Bonn, Germany, and **Bjørn-Oliver Magsig**, Helmholtz Centre for Environmental Research – UFZ, Leipzig, Germany

OVERVIEW OF KEY SCHOLARSHIPS

State of the World's Water Resources

1. *The United Nations World Water Development Report 4: Managing Water under Uncertainty and Risk* (Vol. 1) (Paris: UNESCO, 2012).

Introduction to International Water Law

2. McCaffrey, S.C., *The Law of International Watercourses* (2d) (New York: Oxford University Press, 2007).
3. Aguilar, G., and A. Iza, *Governance of Shared Waters - Legal and Institutional Issues*, (Gland: IUCN, 2011).

A. Fundamental Principles

4. Vinogradov, S., P. Wouters and P. Jones, *Transforming Potential Conflict into Cooperation Potential: The Role of International Water Law* (UNESCO (2003), available at <http://unesdoc.unesco.org/images/0013/001332/133258e.pdf>).
5. McIntyre, O., *Environmental Protection of International Watercourses under International Law* (Ashgate Publishing, (2007).
6. Rieu-Clarke, A., and F. Rocha-Loures (eds) *The UN Watercourses Convention in Force: Strengthening International Law for Transboundary Water Management* (Abingdon: Routledge Publishing, 2013).

B. Procedural Rules

7. Rieu-Clarke, A., R. Moynihan and B.-O. Magsig, *UN Watercourses Convention : User's Guide*, IHP-HELP Centre for Water Law, Policy and Science (2012) available at <<http://db.tt/uU0yQYMj>> & <<http://www.unwatercoursesconvention.org/>>
8. Schmeier, S., *Governing International Watercourses: River Basin Organizations and the Sustainable Governance of Internationally Shared Rivers and Lakes* (New York: Routledge. 2012).

9. UNDP-GEF International Waters Project, *International Waters: Review of Legal and Institutional Frameworks* (2011) available at <http://www.undp.org/content/dam/aplaws/publication/en/publications/environment-energy/www-ee-library/water-governance/international-waters-review-of-legal-and-institutional-frameworks/IW_Review_of_Legal_Instl_Frameworks_Project_Report.pdf>
10. Global Water Partnership and International Network of Basin Organizations, *The Handbook for Integrated Water Resources Management in Transboundary Basins of Rivers, Lakes, and Aquifers* (GWP and INBO, 2012) available at <http://www.gwp.org/Global/About%20GWP/Publications/INBO-GWP%20Transboundary%20Handbook/MGIREB-UK-2012_Web.pdf>

Cross-cutting Issues:

11. Swain, A., “Global Climate Change and Challenges for International River Agreements” (2012) 4:1 *International Journal of Sustainable Society* 72-87.
12. McIntyre, O., “The Human Right to Water as a Creature of Global Administrative Law” (2012) 37:6 *Water International* 654-669.
13. Magsig, B.-O., “Overcoming State-Centrism in International Water Law: Regional Common Concern as the Normative Foundation of Water Security” 3:1 *Göttingen Journal of International Law* (2011) 317-344.

State of the World’s Water Resources

The sustainable management of the world’s freshwater resources is one of the most complex challenges facing the global community. Rising demand and declining quality are being aggravated by climate change, population growth and urbanization. These combined forces could lead to a ‘perfect storm’ of food, energy and water shortages. Water scarcity, droughts, and floods, already affect many countries – developing and developed – around the world. Some studies warn that by 2030 we will have a 40 percent gap between global freshwater supply and the various competing demands. With more than 270 major watercourses and around 300 aquifers shared by two or more states, cooperation among the riparian countries to better manage water resources and the environments in these basins is becoming imperative as the pressure on water resources is increasing due to the intensifying global changes. Not only do transboundary waters constitute an immensely important source of freshwater for the world’s population; they also entail a complex element of geopolitical risk, making transboundary freshwater governance even more multi-faceted. While the potential disputes over shared water resources may not have led to outright conflict, it nevertheless has been used as a political tool or even military target. Furthermore, even without the imminent threat of ‘water wars’, the disruptive socio-economic and environmental impacts of the global water crisis are immense.

1. The United Nations World Water Assessment Programme offers a comprehensive examination of current water-related issues and presents a collective UN update on key issues revolving around freshwater management. The most recent edition of the World

Water Development Report (WWDR4) entitled, *The United Nations World Water Development Report 4: Managing Water under Uncertainty and Risk*, seeks to demonstrate that water underpins all aspects of development, and that a coordinated approach to managing and allocating water is critical. The publication also underlines that in order to meet multiple goals water needs to be perceived as an intrinsic element in the decision-making processes across the whole development spectrum.

Introduction to International Water Law

International water law, which refers to the international treaty norms and customary rules applicable to the management of freshwater resources shared by two or more states, has evolved into an identifiable body of rules and practices over the past half-century. While originally merely concerned with boundary delimitation and navigation, current international water law relates to a wider range of challenges – including development needs (e.g., poverty alleviation), ecosystem services and the growing number of uncertainties (e.g., global climate change and migration).

In order to comprehend the complex issues concerning today's international water law, an understanding of the history, development and shortcomings of international water law is essential. Due to the fact that it is buttressed by the numerous agreements between states on the global and regional levels, sound knowledge of these legal instruments is necessary in order to be able to navigate the current international regimes that support transboundary water management. One of the challenges is that, despite the legal developments over the past four decades, the international legal architecture regulating transboundary waters remains fragmented. In this sense, the *1997 United Nations Convention on the Law of Non-navigational Uses of International Watercourses* (UN Watercourses Convention) can be considered one of the most comprehensive attempts to codify international law related to freshwater resources.

2. **S. McCaffrey's *The Law of International Watercourses*** is an essential textbook for students, academics and practitioners of water law alike. As an esteemed academic who contributed to the drafting process of the *UN Watercourses Convention*, his work is invaluable to understanding the evolution of international water law. This text provides a clear outline of the principles and legislation underpinning the current regimes while also addressing the challenges of transboundary water resources.
3. In ***Governance of Shared Waters - Legal and Institutional Issues*** **G. Aguilar** and **A. Iza** view law as a tool for good (water) governance. Their book offers an understanding of the legal rules and institutions necessary for the management of transboundary waters between multiple parties. The two authors help promote cooperation and capacity building by illustrating their arguments based on various case studies.

A. Fundamental Principles

Fundamental principles of international water law establish substantive, or material, rights and obligations of states utilizing a shared freshwater resource *vis-à-vis* each other. The implementation of these principles may vary depending on the circumstances of each particular case. The most important among them – the cornerstone of international law related to transboundary watercourses – is the principle of ‘equitable and reasonable utilization’ in accordance with the obligation not to cause significant transboundary harm.

4. The publication, *Transforming Potential Conflict into Cooperation Potential: The Role of International Water Law*, by **S. Vinogradov**, **P. Wouters** and **P. Jones** discusses the relevance and role of international water law in the promotion of cooperation over shared freshwater resources. It is aimed at water resource professionals, and seeks to make the rules and mechanisms of international law that govern interstate relations over water more accessible.
5. **O. McIntyre**’s work, *Environmental Protection of International Watercourses under International Law*, approaches the issue of international water law from the perspective of an environmental lawyer rather than one of an international lawyer. The book, therefore, is a solid resource for gaining an understanding of environmental law issues as they relate to international watercourses. This allows the reader to connect the environmental and legal issues surrounding freshwater to other resources.

The *UN Watercourses Convention* seeks to, ‘ensure the utilization, development, conservation, management and protection of international watercourses and the promotion of the optimal and sustainable utilization thereof for present and future generations’ (Preamble).

6. The edited book, *The UN Watercourses Convention in Force: Strengthening International Law for Transboundary Water Management*, by **A. Rieu-Clarke** and **F. Rocha-Loures** gives meaning to the relatively broad vision of the legal framework by exploring the basic elements in depth and with the help of a series of case studies at various levels: regional (e.g., West Africa and Central America), river basin (e.g., Mekong and Aral Sea) and national (e.g., Ethiopia). Even though the Convention has not yet entered into force, the book provides an assessment of its role and relevance as a key component of transboundary water governance. The authors describe the drafting and negotiation process of the Convention, while also illustrating its relationship to other multilateral environmental agreements. Furthermore, the book provides valuable insights as to how the fundamental principles enshrined in the *UN Watercourses Convention* address cross-cutting challenges like benefit sharing and water security. The final section of the book proposes how the Convention’s future implementation could strengthen not

only the principles of transboundary water management, but also international water cooperation as such.

B. Procedural Rules

Procedural rules of international water law provide the means through which the fundamental principles are implemented and the transboundary watercourse is managed. These rules establish a whole range of obligations: from a general duty to cooperate to more specific obligations concerning data and information exchange, prior notification and consultation.

7. *The UN Watercourses Convention: User's Guide* by **A. Rieu-Clarke, R. Moynihan and B. Magsig** provides an article by article explanation of the text of this global framework instrument. In so doing, the Guide explains the meaning and purpose of each provision, and offers guidance on how the rights and obligations contained therein might be implemented. The User's Guide is written for a wide range of readers, including policy makers and decision makers, implementation agencies and other bodies responsible for transboundary water issues.
8. **S. Schmeier's *Governing International Watercourses : River Basin Organizations and the Sustainable Governance of Internationally Shared Rivers and Lakes*** looks into the black box of river basin organizations (RBOs), going beyond the institutionalist claim that institutions matter and actually analyzes the different internal mechanisms of RBOs. In so doing, she provides important lessons learned to policy makers by testing the developed hypotheses on three river basins (Mekong, Danube and Senegal). Throughout her work, **S. Schmeier** presents a thoughtful analysis of the effectiveness of each RBO as well as the internal and external factors which contribute to the evaluation of each particular case.
9. The publication, *International Waters: Review of Legal and Institutional Frameworks*, by **UNDP-GEF International Waters Project** provides an overview of various transboundary river basins across the world through numerous case studies. It presents a systematic approach to water governance by analyzing a set of evaluation criteria. The text allows for the reader to understand the process of capturing the empirical reality of transboundary waters and translating it into legal frameworks. The global scope of the book also introduces the reader to the highly diverse range of regional organizations that govern water basins across the world.
10. **Global Water Partnership and International Network of Basin Organizations'** handbook, **The Handbook for Integrated Water Resources Management in Transboundary Basins of Rivers, Lakes, and Aquifers** is a comprehensive guide for the implementation of the concept of Integrated Water Resources Management (IWRM) in an international setting. It argues that the catchment areas of rivers, lakes and aquifers

represent the spaces where hydrological, social, economic and environmental interdependences emerge most vividly and where the integrated development and management of water and land resources has the greatest potential. The handbook demonstrates that existing international freshwater agreements for many transboundary basins allow for a positive evaluation of the contribution of IWRM – where strong support of the stakeholders concerned exists.

Cross-cutting Issues

New challenges related to the use and allocation of the world's diminishing water resources abound around the globe, affecting local, regional and international communities in various ways. Given the integral and finite nature of freshwater, cross-cutting themes – like human rights, climate change and security studies – become ever more important in improving the international legal regimes governing transboundary freshwater resources.

11. **A. Swain's** article *Global Climate Change and Challenges for International River Agreements* addresses the challenge global climate change poses on the management of transboundary river basins. While many of the world's basins are already experiencing the pressure of an increase in demand and a decrease in supply, climatic changes may complicate things further by raising the possibility of long-term changes to runoff patterns in many internationally shared river systems. The author critically examines the suitability of existing freshwater agreements in order to address the challenges posed by climate change.
12. **O. McIntyre** in *The Human Right to Water as a Creature of Global Administrative Law* shines a light on the debate about the human right to water by looking at it from a global administrative law perspective. His approach illustrates the diversity of sources cited in support of the human right to water and sanitation, and thus helps understanding how and why the concept might influence a wide range of actors other than states, including private investors and international institutions involved in the provision of water and sanitation services.
13. **O. Magsig's** work on water security, *Overcoming State-Centrism in International Water Law: Regional Common Concern as the Normative Foundation of Water Security*, contributes to the progressive legal discourse by asking how the notion of 'regional common concern' can serve as a normative foundation of the still embryonic concept of water security. The author argues that in order to help overcome the observed state-centrism in orthodox international water law, refinement of the underlying legal principles is inevitable. Only if it manages to pave the way for a perception of cooperative sovereignty in transboundary water interaction will it be able to play a more prominent role in addressing the future challenges of global water insecurity.