Foreword

Gabriel Eckstein

When speaking of the regulation of groundwater resources, you often hear the facetious phrases ‘out of sight, out of mind’¹ or ‘hydrochisophrania’² to describe the dearth of focus and interest in these subsurface waters. In my own work, I have called groundwater regulations and governance as the ‘neglected stepchild of water law’.³ While generally innocuous, these descriptors highlight the extent to which groundwater maintains much of its mysterious character, especially in the realm of law and policy, and even more so at the international transboundary level.

This lack of developed governance regimes for groundwater at the international level, and in many countries at the domestic level, is somewhat perplexing (and often frustrating) given the extent to which humanity has become dependent on groundwater resources. Groundwater today is the most extracted natural resource on the planet,⁴ and supplies at least 35 percent of all water used by humans on Earth for agriculture, manufacturing and drinking water.⁵ Yet, groundwater remains poorly managed or regulated in much of the world. And at the international level, countries have little guidance on how to assess whether and to what extent they can exploit a cross-border aquifer, or they simply ignore any sense of equity, sustainability or rights and extract with few self-restraints.

¹ LA Teclaff and E Teclaff. ‘Transboundary Groundwater Pollution: Survey and Trends in Treaty Law’ in LA Teclaff and AE Utton (eds), *International Groundwater Law* (1981), p. 84, contending that ‘[b]ecause groundwater pollution is out of sight it is also out of mind’.

² R Llamas, ‘Hydroschizophrenia’ (1974) 82 *Agua*, describing the attitude leading some decision-makers to apply disparate rules and processes for governing groundwater and surface water resources.

³ G Eckstein, *The International Law of Transboundary Groundwater Resources* (2017), p. 48.

⁴ J Margat and J van der Gun. *Groundwater around the World: A Geographic Synopsis*, (CRC Press 2013).

⁵ TC Frankel, ‘New NASA Data Shows How the World is Running Out of Water’, *Washington Post*, 16 June 2015.

This is why the publication before you, penned by Francesco Sindico, is so critical and welcomed! The following pages provide a wealth of information on international law as it applies to groundwater resources traversing international political boundaries. In the book, Francesco offers insight and analysis into the nascent international regime that is slowly evolving and that, undoubtedly, will become more important in international relations as nations begin to realize that they are hydrologically linked to their neighbors, and further expand their reliance on underground waters.

Of particular importance, Francesco writes in a style that identifies his audience as nations and national leaders. He does this intentionally, knowing that the ultimate decisions for the exploitation of transboundary aquifers must be made at those levels. In addition, while not delving too deeply into hydrogeology and hydrology, he underpins his analysis and explanations in the science of groundwater in a manner that is accessible for policy-makers and lawyers, and others with responsibility for the governance of transboundary groundwater resources.

On a personal note, I must commend Francesco for undertaking this project and producing such an excellent and useful work. I have had the pleasure of collaborating, co-authoring and engaging with Francesco for quite a few years, and at each exchange I have walked away feeling refreshed having learned something new and interesting. The same occurred each time I read a draft of this manuscript. Francesco is a top scholar and practitioner in the field of international water law, and international environmental law more generally, and this book is yet another example of his excellence and dedication to his craft.

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