

UN Watercourses Convention

User's Guide Fact Sheet Series: Number 3

Groundwater Systems

Does the Convention apply to groundwater systems?

The UN Watercourses Convention applies to groundwater systems, but only to the extent that an **aquifer is connected hydrologically to a system of surface waters, parts of which are situated in different States** (Art. 2(a)(b)). According to the International Law Commission's (ILC) 1994 commentary on the Convention (see additional resources), in this context: *"the phrase 'ground waters' refers to the hydrologic system composed of a number of different components through which water flows, both on and under the surface of the land. These components include rivers, lakes, aquifers, glaciers, reservoirs and canals. So long as these components are interrelated with one another, they form part of the watercourse"*.

Under the Article 2 definition of "watercourse" a particular aquifer containing **groundwater does not have to be situated across a boundary to be covered by the Convention**; it is sufficient for such groundwater to be located in one State yet connected to transboundary surface water.

In the ILC's preparatory work prior to the adoption of the UN Watercourses Convention, **agreement could not be reached on whether "confined" (not connected to surface waters) groundwater should be included within the scope of the Convention**. Despite Robert Rosenstock's (Special Rapporteur to the ILC) recommendation in 1992 that confined aquifers/groundwater be governed by the same rules as those applicable to international watercourses, the final text of the Convention does not directly apply to confined aquifers.

Following this discussion, **in 1994 the ILC adopted a Resolution on Confined Transboundary Groundwater which recognised the need for continuing efforts to create rules regarding confined transboundary groundwater** and encouraged States to be guided, where appropriate, by the principles contained in the UN Watercourses Convention when regulating confined transboundary groundwater.

ILC Draft Articles on Transboundary Aquifers

Subsequently, the ILC commenced further study on transboundary groundwater in 2003. This work culminated in the adoption of the ILC Draft Articles on the Law of Transboundary Aquifers in 2008 (see additional resources). These ILC Draft Articles apply to single transboundary aquifer systems which are defined in Article 2(b) as a series of two or more hydraulically connected aquifers. An aquifer itself is defined as a permeable water-bearing geological formation underlain by a less permeable layer and the water contained in the saturated zone of the formation. Hence, **unlike the UN Watercourses Convention, the ILC Draft Articles also apply to transboundary confined aquifers** (Arts. 1(a) and 2(a)).

UN WATERCOURSES CONVENTION TEXT

ART. 2 - Use of terms

For the purposes of the present Convention:

- a) "Watercourse" means a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus;
- b) "International watercourse" means a watercourse, parts of which are situated in different States;

ILC'S DRAFT ARTICLES ON TRANSBOUNDARY AQUIFERS

ART. 1 – Scope

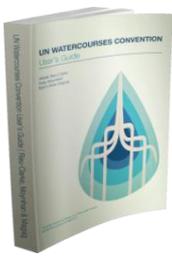
The present draft articles apply to:

- a) Utilization of transboundary aquifers or aquifer systems;

ART. 2 – Use of terms

For the purpose of the present draft articles:

- a) "aquifer" means a permeable water-bearing geological formation underlain by a less permeable layer and the water contained in the saturated zone of the formation;
- b) "aquifer system" means a series of two or more aquifers that are hydraulically connected;
- c) "transboundary aquifer" or "transboundary aquifer system" means, respectively, an aquifer or aquifer system, parts of which are situated in different States;
- d) "aquifer State" means a State in whose territory any part of a transboundary aquifer or aquifer system is situated;



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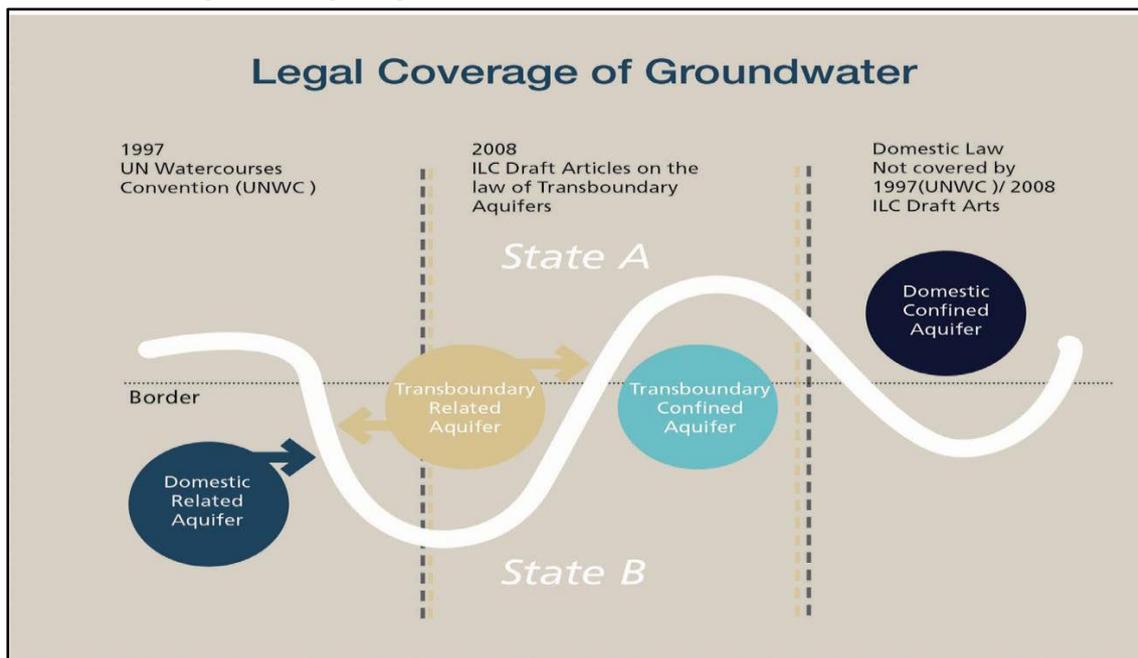


This fact sheet is based on the *UN Watercourses Convention User's Guide*:

- Electronic version available on-line at: www.dundee.ac.uk/water
- Hardcopy available to order by emailing: water@dundee.ac.uk

The inclusion of groundwater systems in the UN Watercourses Convention is important given that the total available volume of global groundwater represents 97 per cent of our planet's freshwater resources (excluding Antarctica) and the annual consumption of groundwater world-wide is estimated at 900 cubic kilometres. Approximately 12 per cent of global groundwater has a very low rate of "recharge" (the process of replenishment), but it is unknown exactly what percentage of this groundwater is from transboundary "fossil" (non-renewable, fossilised sources which are therefore likely to be classified as "confined") aquifers.

The legal coverage of groundwaters under international and domestic law



Source: Rieu-Clarke, et al. *UN Watercourses Convention – User's Guide* (2012), at 32

ADDITIONAL RESOURCES

FURTHER READING

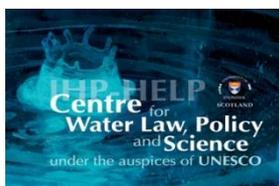
Rieu-Clarke, A., Moynihan, R. and Magsig, B., *UN Watercourses Convention – User's Guide* (CWLPS 2012), at 79-83

International Law Commission, *Draft Articles on the Law of Transboundary Aquifers* UN Doc. A/CN.4/L.724, 29 May 2008, Yearbook of the International Law Commission, Geneva; United Nations Publications.

International Law Commission, *Draft articles on the law of the non-navigational uses of international watercourses and commentaries thereto and resolution on transboundary confined groundwater*, Yearbook of the ILC, 1994, vol. II, Part Two. Available from: http://untreaty.un.org/ilc/texts/instruments/english/commentaries/8_3_1994.pdf

Mechlem, K. *Moving Ahead in Protecting Freshwater Resources: The International Law Commission's Draft Articles on Transboundary Aquifers* (2009) 22 *Leiden Journal of International Law* at 801.

McIntyre, O. *International Water Resources Law and the International Law Commission Draft Articles on Transboundary Aquifers: A Missed Opportunity for Cross-Fertilisation?* (2011) 13(3) *International Community Law Review* 237



This fact sheet series, online resource and User's Guide have been produced through generous financial support from the **Norwegian Ministry of Foreign Affairs**, and in partnership with **WWF**. Since 2006, WWF has promoted the UN Watercourses Convention through a global initiative that encompasses a wide range of partners and activities. For further details visit: http://wwf.panda.org/what_we_do/how_we_work/policy/conventions/water_conventions/un_watercourses_convention/

