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/samplewater 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)).
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

![Diagram of Legal Coverage of Groundwater]


## ADDITIONAL RESOURCES

**FURTHER READING**


