

The Influence of Changes in the Jordan and Yarmouk Rivers on the International and Cadastral Boundaries

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SUMMARY

International and cadastral boundaries are important for ensuring stable legal territorial matters. As such, they should be accurately defined. In certain cases, boundaries are defined on the dynamic earth's physiographic features, such as rivers, glaciers, lakes, and on dynamic land, moving due to tectonic activities.

This article deals with the long-term location and management of boundaries in rivers. A few countries have agreed that the boundary will not follow changes in the river, whereas most agree that the boundary will follow slow, natural and gradual changes in the river.

The international boundary under the British Mandate between Palestine and Trans-Jordan in the Jordan and Yarmouk rivers was defined in 1922. The cadastral boundaries were defined in these rivers in the 1930s along the international boundary.

For more than 70 years, until the Israel-Jordan 1994 Peace Treaty, the rivers have changed their channels east and westward to distances up to hundreds of meters. During that period the mandatory boundaries in these rivers changed their political status to the armistice lines, the cease-fire lines, and to international boundaries between sovereign states.

These lines were usually delineated on topographic maps in the rivers, drawn by cartographers following contemporary map revision. During that entire period the cadastral boundaries were not changed in order to adapt them to the actual position of the rivers and to the delineated international boundaries.

Owing to large water works on both rivers, including the construction of dams and diversion

channels in order to meet the increasing needs of the population on both sides, the water flow of the rivers decreased dramatically to less than one tenth of the original natural flow. The population today is more than ten times than it used to be under the British Mandate. The changes in the water channels during the last 20 years since the 1994 peace treaty are in the magnitude of 10 meters versus hundreds of meters in the past. In addition, intensive land cultivation adjacent to the river banks has stabilized them.

In 2000, due to the construction of a dam on the Yarmouk River, both sides jointly fixed coordinates of the relevant boundary line in the river according to the boundary delineation in the peace treaty.

This article analyzes the theory and practice of boundary line management in rivers. It analyzes the special case, and introduces a proposal for stabilizing this boundary line.

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