

**International Water Law**  
**Participant Exercise 1:**  
**Balancing different uses in a transboundary basin**

**Introduction**

The Brown River is a large international watercourse system shared by three riparian States. It rises in the Brown Mountains in State A and flows through State B before reaching the sea at the Brown Delta, which is situated entirely within the territory of State C. The watercourse largely flows through an arid and water-stressed region.

There are no binding conventional arrangements relating to the utilization, management or environmental protection of the entire watercourse, which apply to all riparian States. Instead, such matters are dealt with by a number of *ad hoc* bi-lateral treaties and further informal arrangements.

Despite the current lack of a comprehensive treaty on the Brown River, all three riparian States have adopted various international declarations and resolutions pledging to co-operate internationally in order to achieve the equitable and reasonable utilization and sustainable development of their shared water resources. All the riparian States are Parties to 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes and have signed up to the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses (not in force).

To date, the riparian States have achieved quite a good level of *ad hoc* co-operation in relation to water resources but increased competition for the finite waters of the Brown River is leading to greater tension. Also, the States have not been able to agree to the establishment of any permanent technical and administrative institutions, mainly due to the objections of State C. Efforts are now underway to agree a formal conventional regime for the allocation of uses of the waters of the Brown River which will bind all riparian States.

**State A**

State A is a very sparsely populated country covering a large territorial area which, despite having an abundance of hydrocarbon resources, remains economically underdeveloped. Approximately, 60% of the total area of the drainage basin of the Brown River falls within the territory of State A, contributing approximately 75% of the total flow. State A has recently unveiled plans to expand its agricultural output massively through large-scale irrigation of a number of currently arid areas. Successive governments have used the wealth generated from hydrocarbon exports to carry out large-scale but quite inefficient agricultural irrigation schemes with the aim of achieving self-sufficiency in food production and of becoming a major exporter of rice (a particularly 'thirsty' crop). Over the years, however, State A has not enjoyed much success in relation to either aim, due largely to unfavourable climatic conditions and other natural factors, including poor soil quality, transport infrastructure and farming practices. The large-scale irrigation currently practiced results in increased salination of the waters of the Brown River through run-off waters returned to the river, adversely affecting certain potential uses downstream.

Also, though State A enjoys abundant energy resources (in the form of hydrocarbons) it plans to develop a number of large-scale hydroelectric energy schemes and to export electricity throughout the region. However, it has suggested that the other (downstream) riparian States should pay a large proportion of the costs of building the hydroelectric infrastructure as it would also facilitate extensive inter-seasonal storage and release of waters.

## **State B**

State B is quite densely populated but economically underdeveloped. It is alone among its co-riparian States in having considerable groundwater resources, due to the large Brown Aquifer situated entirely within its territory. The Brown Aquifer is part of the same hydrological system as the Brown River. However, these groundwater resources have not yet been exploited due to the lack of necessary technical capacity and infrastructure. It is generally accepted that the development of these groundwater resources would be costly and could only be achieved over an extended period of time. State B is very concerned that new uses and projects planned upstream shall not adversely affect the quantity and quality of water available to it as a very large proportion of its population depends entirely on the waters of the Brown River for everyday domestic uses and for subsistence agriculture. State B has advanced plans for the development of lucrative eco-tourism and cultural tourism industries in the region of Lake Brown.

State B is very rich in mineral resources and mining activities have tended to be one of the mainstays of its economy. However, these activities have tended to result in significant pollution of the Brown River, thereby hindering the development of certain potential uses downstream. For some years now, State B has signaled its intent to put forward plans to promote and develop a number of large-scale value-added mineral processing activities and other manufacturing activities based on its mineral wealth. However, these will require considerably increased water resources and are likely to result in further pollution of the Brown River.

## **State C**

State C is a populous and highly economically developed coastal State which relies almost exclusively on the waters of the Brown River. It has traditionally been by far the largest user of Brown River waters for domestic, agricultural and industrial uses (using approximately 60% of all water abstracted from the Brown River), despite the fact that its territory makes up only a very small proportion of total area of the drainage basin and, due to its arid climate, contributes practically no water to the flow of the river. However, its use of the water is widely regarded as being very efficient, by virtue of national legal requirements to employ efficient technologies, water pricing structures and many other water conservation measures. It consistently opposes increased use of Brown River waters upstream on the basis that such use might come into conflict with its own established uses and that they may affect flows to the Brown River Delta, a wetland area of great beauty and recognized international importance for migratory wildlife. The Brown River Delta is also a very important source of tourism revenue for State C. To date, State C has strenuously resisted

efforts to establish institutional machinery for the common management of the Brown River.

State C now realizes that it could become a major agricultural producer and exporter if it substantially increased the water available to irrigate the potentially very fertile land in the sparsely populated Green Valley region, where traditionally there has not been enough water available in the Green River. Therefore, it has prepared advanced plans for the transfer of water from the Brown River and for the building of a state-of-the-art irrigation system based on the latest and most efficient technology. This scheme is a central component of State C's economic development strategy, under which it intends to use its proximity to world markets and favourable trading relations with third countries to develop a number of water-intensive agriculture-based industries, including wine-making, brewing, and food processing. There are, however, concerns over possible biota transfer to the fragile ecosystems of the Green River, which State C shares with State B.

### **Exercise**

On the basis of the relevant and applicable rules of international law and the factors identified under international law as relevant for determining the equitable and reasonable utilization of an international watercourse, each team is asked to:

1. Advise State A (Team A)
2. Advise State B (Team B)
3. Advise State C (Team C)