

# The Utilisation of International Watercourses from an International Environmental Law Perspective

Nanik Trihastuti\*, Pulung Widhi Hari Hananto and Daniel Rene Kandou

Faculty of Law, Universitas Diponegoro, Semarang, Indonesia  
✉ naniktrihastuti@gmail.com

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**Abstract:** The international watercourse concept is one of the multilateral commitments to maintain water quality and control the utilisation of water. This concept aims to provide preventive measures for water pollution caused by the international community. With the importance of industrialisation, economic activities and uncontrolled use of water significantly impact water quality being polluted and resulting in reduced water discharge. Problems and conflicts will arise if there is an action from one of the States or the international community that violates international provisions. This research uses the normative legal research method. This study aims to examine and criticise forms of violations against international watercourses and discuss them from a legal perspective related to dispute settlement. The findings show that States must act in a fair and equitable manner in the utilisation of international watercourses, and prevent significant harm. Breaches of such obligations require compensation as a form of responsibility.

**Key words:** Water utilisation, international watercourses, international environmental law, legal perspective.

## Introduction

Water is the main element for living things on earth. This perspective of water as a basic human need was reaffirmed at the global level through the Declaration of the United Nations Committee on Economic, Social and Cultural Rights in November 2002, which stipulates that access to water is a fundamental human right. As water is a basic human need, it is the right of every human being to get water and easy access to water for their living. Therefore, State is obliged to provide equal and balanced water resources, without any differences in access and discrimination between the poor and the rich. Conflicts over water resources may occur within a State, or at a wider regional level, where it may impact an entire continent. Examples of international conflict that arise out of the use of water often concern the utilisation of rivers that pass through and are used by

more than one State or international watercourses. If a river flows through several States, then each State has a share of the river flowing through its territory. For example, more than 200 rivers that cover more than half of the earth's surface are shared by 2 (two) or more States. In addition, many layers of underground water sources stretch across national boundaries, and utilisation by one state can cause political tensions with its neighbours (Baihaqi, 2018).

The concept of 'watercourse' or 'river system' is not new in international law. The expression has long been used in international treaties to refer to rivers, their tributaries, and related canals. The utilisation of international watercourses has been conducted for a long time, and various bilateral agreements have been made by States to regulate their utilisation. Examples are the Treaty of Bayonne, a bilateral agreement between France and Spain in 1866; the Treaty of Versailles, which

\*Corresponding Author

contains a number of references to the river system; the Danube Convention 1929; and the Indus Waters Treaty 1960 which applies to named rivers, their tributaries, and the lakes that connect them. A number of other treaties further demonstrate that States recognise in practice the importance of addressing the international watercourse system as a whole (International Law Commission/ICL, 1994).

At its 52<sup>nd</sup> Conference in Helsinki in 1966, the International Law Association approved a series of draft provisions concerning the use of international watercourses. These rules for the use of international waters adhere to the basic principle of equitable utilisation of international watercourses, and establish new foundations in several respects, for example, that all States are obliged to prevent new forms of water pollution that will result in human rights violations massively in the territory of other basin-States (Starke, 2003).

The term ‘international watercourse’ is used to represent a shift in focus from one that initially focused on rivers to one that encompassed all transnational water flows, including lakes, canals, dams, reservoirs, waters above ground level, and groundwater sources (Starke, 2003). An international watershed is included in the term “international watercourses”, which includes the concept of an integrated area fed by a single river system that passes through two or more States, and has been defined as “*a geographic area encompassing the territory of two or more States delimited by the watersheds of a water system, all of which flow to a common last place*” (Starke, 2003).

The 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes further stated that its members are obliged to take all appropriate measures to prevent, control, and mitigate all significant adverse effects on the environment caused by changes in the conditions of transboundary waters arising from human activities. The effects on the environment include the effects on human health and safety, flora, fauna, soil, air, water, climate, and landscapes, as well as impacts on cultural heritage (Shaw, 2008).

The use of international watercourses is further regulated in the 1997 *International Watercourse Convention* (Watercourses Convention), which is based on the *Draft Articles on the law of the non-navigational uses of international watercourses and commentaries thereto and resolution on transboundary confined groundwater* prepared by the International Law Commission (ILC) (1994).

Under Article 2 paragraphs (a) and (b) of the Watercourses Convention, the terms ‘*watercourse*’ and ‘*international watercourse*’ are defined as follows:

- (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.

International obligations in relation to the use of international watercourses have been formulated in various international provisions.

However, controversy still often arises regarding the issue of when a State’s act is considered as violating international obligations. As freshwater supplies diminish globally, States may begin to compete more aggressively for the remaining supplies, thereby causing a conflict of interest. An example is a conflict between Ethiopia, Egypt, and Sudan regarding the construction of the Grand Ethiopian Renaissance Dam (GERD) in the Blue Nile River, which flows downstream from Ethiopia into Sudan and Egypt. The conflict arises between these States since the Nile is the primary water source of Egypt and Sudan, whereas the GERD is critical for energy production and development of rural and urban areas in Ethiopia. This is interesting in the study of international law, considering the legal conception of international watercourses has consequences for international transboundary and water resources. This in turn requires active efforts in bilateral, regional and international cooperation to determine the usefulness of international watercourses and the rights and responsibilities of each country. In addition, disagreements over international watercourses will cause conflicts and tensions between countries considering the struggle for resources and access from the interior to the high seas.

In this regard, the study aims to determine the main substantive obligations for the utilization of international watercourses and the settlement of disputes for such conflicts. In terms of originality, this study attempts to conceptualise the use of international watercourses and relate them to available alternatives in resolving disputes between countries.

## Research Methodology

This study aims to examine forms of violation of international environmental legal obligations related to the use of international creeks and how conflicts between

countries are resolved according to international law. This study uses a normative legal research approach, which is an approach that conceptualises law as a norm or applicable rule in society and becomes a reference for human behaviour (Ishaq, 2017). The object used in this study is the regulatory reference used in the conception of international watercourses in international law. Secondary data, which is the main data in this study, was analysed mainly from The Convention on the Law of Non-Navigational Uses of International Watercourses or commonly known as UN Watercourses Convention. In addition, several treaties and conventions between countries are also used as historical comparisons regarding the importance of regulating international watercourses. Within this scope, some secondary data referred to include the Treaty of Bayonne, the Treaty of Versailles, the 1929 Danube Convention, and the 1960 Indus Treaty of Waters. All of these conventions generally refer to the river system.

The data in this study were collected using the library research method and further analysed using a juridical normative approach. The data analysis technique in this study was carried out using a qualitative descriptive technique that emphasised the conceptualisation of the use of international tributaries and how conflicts between countries were resolved according to international law. Furthermore, from the findings presented, several alternative dispute resolutions are formulated to serve as a frame of reference in international environmental law related to the use of international watercourses.

## Results

The concept of the watercourse system is not new in international law. The expression has long been used in international treaties to refer to rivers, their tributaries, and related canals. For example, the Treaty of Versailles contains references to the river system, the 1929 Danube Convention, and the 1960 Indus Treaty of Waters which applies to named rivers, their tributaries, and the lakes connecting them. Several other treaties further demonstrate that States recognise in practice the importance of addressing the international watercourse system as a whole (ICL, 1994). However, the only universal agreement that contains provisions for the protection of international watercourses is the Watercourses Convention (McCaffrey, 2011).

The Watercourses Convention contains the principles of the utilisation of international watercourses as regulated in Article 5:

1. *“Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits there from, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.”*
2. *“Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.”*

Article 5 defines the rights and obligations of States regarding the use of international watercourses by laying down the principle of fair and equitable use in paragraph (1) and the principle of fair participation in paragraph (2). Although the use of transboundary watercourses does not have an inherent priority in States, special attention must be paid to the vital needs of citizens and international watercourse ecosystems must be protected.

The principle of equitable and reasonable utilisation can be interpreted as the principle of fair and reasonable use. This principle is a fundamental principle of international law regarding the flow of water across national borders. This principle gives the State the right to get a share of a certain watercourse, thus creating an obligation not to harm other States for its use. In addition, this principle is based on the theory of “limited territorial sovereignty” which in the context of international watercourses stipulates that States enjoy equal rights to the use of international watercourses (Rieu-Clarke et al., 2012).

Utilisation of international watercourses by several States must comply with the provisions as stipulated in Article 7 of the Watercourses Convention which states that:

- “1. *Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.*
2. *Where significant harm is nevertheless caused to another watercourse State, the States whose use causes such harm, in the absence of agreement to such use, take all appropriate measures, having*

*due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.”*

Based on these provisions, States are obliged to take “all appropriate measures” to ensure that activities carried out on their territory will not cause significant damage to other States, and this is an obligation of due diligence in the use of international watercourses (ICL, 1994). When it comes to international watercourses, States are required not to use watercourses in their territory which can cause significant damage to other states. This principle is widely recognised not only in bilateral agreements on transboundary watercourses but also in international environmental law (Rieu-Clarke et al., 2012).

Groundwaters, according to the ILC, are a hydrological system made up of a variety of components through which water moves both above and below the ground surface. Rivers, lakes, aquifers, glaciers, reservoirs, and canals are among the components. These are part of the watercourse, insofar as they are interconnected. The statement “constituting a unified whole by virtue of their physical connectedness” implies this (ICL, 1994).

The definition in paragraph (b) also requires that to form a “watercourse”, the surface water system and groundwater usually must flow into the “common terminus”, where, this phrase is modified with the word “normally”. This is intended to reflect modern hydrological knowledge of the movement of water. The specific characteristics of the watercourse referred to by this provision can be seen in the Nile River, Irrawaddy River, Mekong River, and also the Rio Grande River.

In addition to the provisions of international law, the use of international watercourses must comply with the principles of international environmental law, among others, the no-harm principle as recognised under international custom. In this regard, although a State has sovereign rights to exploit its natural resources, it must ensure that activities within its jurisdiction will not cause damage to other States, especially if these natural resources are also in the jurisdiction of another State and are also utilised by that State.

In cases of international watercourses, disputes are caused by, among other things, claims by one State regarding the status of an international watercourse, as well as the actions of a State in its territory that are detrimental to other States.

## **Discussion: Disputes Settlements of International Watercourse Utilisation**

There are at least three forms of dispute settlements of international watercourse utilisation, which are dispute settlement forums, legal considerations and forms of state responsibility. The first is dispute settlement forums. According to Black’s Law Dictionary, a ‘dispute’ means a conflict or controversy; conflict of claims or rights. In the Permanent Court of International Justice (PCIJ) *Mavrommatis* case, a dispute is a “disagreement on a point of law or fact, a conflict of legal views or interests between two persons” (Rieu-Clarke et al., 2012). Meanwhile, ‘water disputes’ are conflicts over the use of cross-border water resources, both surface water, and groundwater (Vinogradov et al., 2003).

Environmental conflicts between States can be resolved through a variety of procedures and mechanisms. Traditional flora, such as negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, or other procedures based on the option of the disputing parties, are defined in Article 33 of the UN Charter. The system is separated into diplomatic and legal settlement methods (Sands & Peel, 2012).

There have been several cases of disputes regarding international watercourses that have proceeded with adjudication (McCaffrey, 2001). The cases in Table 1 below generally involve disputes over access to water resources and disputes concerning pollution or other environmental damage affecting international watercourses (Stephens, 2009).

Settlement of disputes relating to the use of international watercourses is regulated in Article 33 of the Watercourses Convention. In this article, dispute settlement mechanisms are regulated, among others, negotiation, mediation or conciliation, joint watercourse institutions, fact-finding commissions, and the Permanent Court of Arbitration or the International Court of Justice (ICJ).

However, States generally do not rely on legal mechanisms to resolve international watercourse disputes and ensure compliance with international water law. In recent decades, they have used various alternative ways of resolving disputes (Tignino & Bréthaut, 2018). States have freely negotiated numerous ad hoc river restoration agreements, established an international civil liability regime for water-related environmental harm, and employed other compliance agreement procedures in this area (McIntyre, 2020).



**Table 1: Cases relating to the utilisation of International Watercourses**

<i>Case</i>	<i>International Watercourse</i>	<i>Dispute Settlement</i>
<i>Lake Lanoux Case</i> (Spain v. France)	Ariège River dan Carol River	Arbitration
<i>Gut Dam</i> (United States v. Canada)	St Lawrence River	Lake Ontario Claims Tribunal
<i>River Order Case</i> (United Kingdom, Czechoslovakia, Denmark, France, Germany, Sweden v. Poland)	Danube River	PCIJ
<i>Gabcikovo-Nagymaros Project case</i> (Hungary v. Slovakia)	Danube River	ICJ
<i>Pulp Mills Case</i> (Argentina v. Uruguay)	River Uruguay	ICJ
<i>Dispute over the Status and Use of the Waters of the Silala</i> (Chile v. Bolivia)	Silala River	ICJ

The second alternative is legal considerations. Legal considerations must be taken into account to establish the wrongdoing or responsible State. The main issue of international responsibility is whether there is an act that is wrong internationally. In the Tehran Hostages case in 1980, the ICJ explained that two elements must be proven, namely the subjective element and the objective element. The subjective element is the attribution of the act, whether in the form of an act or omission by a State to another State, while the objective element is the incompatibility of the act or omission with international obligations (International Court of Justice, 1980). Such elements are recognised as customary international law (De Stefano, 2020) and were codified in Article 2 of Articles on the Responsibility of States for International Wrongful Acts (ARSIWA) adopted by the ILC in 2001 (Focarelli, 2020).

In the context of international water law, one of the watercourse State's substantive obligations is the obligation to protect, which imposes a due diligence standard. The ILC defined the due diligence standard as an obligation of conduct, not an obligation of result. This means that the State is considered as failing to conduct its due diligence if it negligently caused harm to international watercourses. Consequently, the State is not considered as failing in its due diligence for the sole reason of causing the harm, since the obligation is not a guarantee that the harm would not occur.

The aforementioned due diligence obligation reflects the objective element of State Responsibility, while the subjective elements consider acts by the State (organs or officials), as well as omissions relating to non-State actors as forms of attribution to the State (ICL, 2019). Omissions in the environmental regime may include

a State's failure to regulate non-State entities, such as companies, to prevent pollution of an international watercourse, or perhaps degradation of the watercourse ecology as a result of the overuse of shared water resources (McIntyre, 2020). In addition, the article reaffirms the principle of objective responsibility. The principle provides that a State is responsible for unlawful acts that cause harm, regardless of its intentions (Shaw, 2008). In this regard, State responsibility may arise on the basis of a State's failure to act.

The third is State Responsibility. As discussed above, a breach of international law invokes the responsibility of the State. In the environmental field, the principle of State responsibility is recognised as a customary rule since the Trail Smelter case (Tignino & Bréthaut, 2018). The law of State responsibility is generally known as 'secondary rules', whereas its application is triggered when 'primary rules' (the law governing relations between subjects of international law) has been breached (Focarelli, 2020). The primary rules in this context are the various convention and customary rules that govern the utilisation of international watercourses, which converge upon three substantive obligations, that is: 1) equitable and reasonable utilisation; 2) prevention of transboundary harm; 3) protection of international watercourses and their ecosystem. Therefore, the law of State responsibility applies after a State fails to fulfill the aforementioned obligations, whether through commission or omission.

According to Boyle, State responsibility for environmental damage is based on objective fault, and considered to be the failure to act with due diligence, breach of treaty, or carrying out prohibited acts (Boyle, 2005; McIntyre, 2020). For example, Article 7(1) of the

Watercourses Convention provides for the obligation of States to ‘take all appropriate measures to prevent causing significant harm to other watercourses States’, including the obligation to undertake due diligence in the use of international watercourses. This sets the threshold for lawful State activities (ICL, 1994). Thus, the failure of a State to regulate the pollution of international watercourses within its territory constitutes a failure to conduct due diligence.

The form of reparation for violations of the use of international watercourses is compensation. Recent developments in international water law practice concerning the preservation of water resources, particularly international watercourses, have clarified State standards of behaviour and the types of harms that can be compensated for (Andriansyah et al., 2021; McIntyre, 2020; Tignino and Bréthaut, 2018). The obligations and standards of State behaviour in the use of international watercourses that can be compensated include the equitable and reasonable utilisation, the duty to prevent significant transboundary harm, and the duty to cooperate (Tignino and Bréthaut, 2018; McIntyre, 2020).

Significantly, the ICJ in the *San Juan River* decision unambiguously endorsed the concept of a watercourse ecosystem while also acknowledging the significance of benefits to the State from ecosystem services associated with watercourses. For the first time, the court determined that environmental damage, as well as damage or loss of the environment’s potential to supply goods and services, can be compensated (International Court of Justice, 2018). Furthermore, the court also mentioned that disruption to the international watercourse ecology can be regarded as significant transboundary harm (International Court of Justice, 2015).

## Conclusion

Based on the discussion, the utilisation of an international watercourse has been long regulated by the Watercourses Convention and customary international environmental law. The convention governs States’ conduct in the utilisation of international watercourses to prevent harm to other watercourses States. In its utilisation, States must exercise due diligence to prevent harm to other States. Moreover, State must utilise an international watercourse in a fair and equitable manner, involving the duty to consult and cooperate. Much of the key provisions in the Watercourses Convention regarding the utilisation of international watercourses

derive from the principles of environmental law. Although regulated, disputes regarding the utilisation of international watercourses still occur today. Dispute settlement mechanisms vary in their practice. States have negotiated numerous ad hoc river restoration agreements, established an international civil liability regime for water-related environmental harm, and employed other compliance agreement procedures to prevent the conflict. As for the legal mechanism, jurisprudence shows international disputes proceed to be settled in the ICJ as well as arbitration, with attribution as an element in the legal assessment. Finally, the practical form of reparation for breaches of the obligations regarding the utilisation of international watercourses would be compensation.

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