



Article scientifique

Article

2020

Published version

Open Access

This is the published version of the publication, made available in accordance with the publisher's policy.

The role of international case law in implementing the obligation not to
cause significant harm

Tignino, Mara; Brethaut, Christian

How to cite

TIGNINO, Mara, BRETHAUT, Christian. The role of international case law in implementing the obligation not to cause significant harm. In: International Environmental Agreements: Politics, Law and Economics, 2020. doi: 10.1007/s10784-020-09503-6

This publication URL: <https://archive-ouverte.unige.ch/unige:143273>

Publication DOI: [10.1007/s10784-020-09503-6](https://doi.org/10.1007/s10784-020-09503-6)

© The author(s). This work is licensed under a Creative Commons Attribution (CC BY)

<https://creativecommons.org/licenses/by/4.0>



The role of international case law in implementing the obligation not to cause significant harm

Mara Tignino¹ · Christian Bréthaut²

Accepted: 10 July 2020
© The Author(s) 2020

Abstract

The no-harm principle is at the heart of the several international conventions focusing on the uses, allocation, management and protection of transboundary water resources. However, in the framework of these agreements, the meaning of “no-harm” remains rather vague. Through an analysis of six emblematic cases brought before the International Court of Justice and arbitration tribunals, we elucidate the various facets of this principle. In doing so, the paper identifies four facets. The first is characterized by concerns related to the protection of territorial integrity rather than those related to the protection of the environment. The second facet focuses on the principle of equitable and reasonable use of water, which testifies to the willingness to anticipate possible harms and to define conditions for cooperation between neighbouring countries. The third facet explores the use of three instruments and emphasizes their importance to clarify the very nature of harm: the conduct of environmental impact assessment, the consultation of local populations and the insurance of minimum environmental flows. The fourth facet develops a preventive perspective on harm by unravelling the duty to take appropriate measures to prevent and mitigate risks deriving from the obligations of notification and consultation.

Keywords Arbitration · International Court of Justice · International environmental law · International water law · Case law · No-harm · Water

Abbreviations

EIA Environmental impact assessment
ICJ International Court of Justice
IJC International Joint Commission

✉ Christian Bréthaut
Christian.Brethaut@unige.ch

Mara Tignino
mara.tignino@unige.ch

¹ Faculty of Law and Institute for Environmental Sciences, Platform for International Water Law, Geneva Water Hub, University of Geneva, Geneva, Switzerland

² UNESCO Chair on hydrogeopolitics, Institute for Environmental Sciences, Geneva Water Hub, University of Geneva, Geneva, Switzerland

1 Introduction

The “no-harm” principle lies at the heart of universal, regional and basin agreements as well as judgements and awards adopted by international courts and tribunals. For instance, this principle is a core dimension of the 1997 Convention on the Law of the Non-Navigational Uses of International Watercourses—hereafter “1997 Convention”—(articles 7, 12 and 21). It is also addressed by the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes—hereafter “1992 Convention”—through the notion of transboundary impacts (article 2). Among other key principles of international water law, this “no-harm” principle plays a crucial role from an inter-states perspective. Therefore, it contributes to frame and to define the functioning of upstream–downstream interactions and the way riparian states interact for the management and coordination of shared water resources (Kliot et al. 2001). However, in the framework of international water law, the meaning of “no-harm” remains rather vague and its implementation illustrates various understandings and interpretations of what a harm exactly means, of what scale should be considered and/or of what time-scale should be applied (Wegerich and Olsson 2010). As discussed by Spijkers (2016), the “no-harm” idea includes different dimensions such as intra-/inter-states, intra-/inter-generations or questions related to sustainable development in the broad sense. The notion itself is a source of litigation as it implies contested understandings and uses. It is one of the most complex and controversial principles of international water law. The reasons for this are various. First, this obligation includes both qualitative and quantitative aspects that are difficult to assess by a state sharing a transboundary water resource. The exchange of technical and scientific data is necessary to mitigate the risks of harms. Notification and consultation in good faith should be carried out with the potentially affected country regarding the appropriate measures to prevent and mitigate the risks of harms.

Second, the language used to refer to the obligation and to the concept of harm varies from one freshwater instrument to another. In its text, the UN Watercourses Convention uses the terms of “significant harm” (art. 7), “significant adverse effects” (art. 12) and “effects detrimental” (art. 22) (Salman 2018). Under this Convention, the obligation not to cause significant harm implicitly appears through the duty to prevent pollution and the mechanism of notification and consultation. Similarly, the UNECE Water Convention presents a terminology of its own by using the wording of “transboundary impact”, and the World Bank Policy for Projects on International Waterways makes reference to “appreciable harm” (Salman 2009).

A broad academic debate focuses on the “no-harm” principle and in particular on the relationship between the latter and the principle of equitable and reasonable use of water resources. The literature already provides substantial discussions regarding the relationship between existing principles, for instance, “Due diligence”, “Equitable use”, “Prevention” and “Precaution”, environmental and social concerns (McIntyre 2011; Calfisch 2018) and regarding how to assess the very nature of the harm. With this paper, our aim is to contribute to such debates by exploring how the “no-harm” principle is understood and materialized in practice. The paper argues that the notion of harm should be understood as the result of an evolving and incremental process that depends on contextual factors. To grasp such contested and evolving nature, our analysis builds on international case law and on the contribution of courts in refining the understanding of the “no-harm” principle in the light of concrete examples.

This perspective, focusing on the construction of the principle as a process, allows us to add two sets of analysis to the existing scholarly discussions. First, we explore the evolution of various conceptions of the “no-harm” principle over time. Second, the comparison of different cases allows us to explore and identify the critical variables that are involved in international case law when it comes to defining the very nature of harm. In this regard, we ask the following questions: (1) How can case law analysis contribute to define the “no-harm” principle? (2) Based on the analysis of international case law, how does the understanding of harm evolve over time? (3) What variables are considered in this process of definition, at what moment and for what reasons?

This paper is structured around three main sections. First, we explain for which reasons case law and jurisdictions analysis are relevant when focusing on the very nature of the “no-harm” principle. Second, we illustrate these different dimensions in practice through the presentation of six emblematic case studies related to the use of the “no-harm” principle: the Trail Smelter case, the Lake Lanoux case, the Gabcikovo–Nagymaros case, the Pulp Mills case, the Kishenganga case and the San Juan River cases. Third, analysing these cases, we provide a synthetic analysis of the key variables at play and explore how the notion of “no-harm” evolves over time. Fifth, we discuss our findings and answer our initial set of questions.

1. The role of case law in clarifying and implementing the “no-harm” rule.

The multiplication and diversification of dispute settlement mechanisms have an impact on the development of principles, norms and rules applicable to freshwater resources. For this development to be consistent and continuous, jurisdictions refer to previous decisions, not only that they adopted in the past, but also that other jurisdictions and institutions have taken. This habit of jurisdictions, through dispute settlement mechanisms, to refer to decisions of other bodies in their own reasoning and conclusions, has created cross-fertilization and linkages between various institutions. On the one hand, cross-fertilization may contribute to overcome the risks of fragmentation in the practice of dispute settlement mechanisms. On the other hand, there are major challenges posed by normative competition: new norms might be created within particular subject matter or the same norm might be applied in different ways across subject matters (Sands 1998).

Consequently, international case law importantly contributes to the formation and development of international water law. Among many inputs, international decisions help identify international customary principles. This is the case of the obligation not to cause significant harm affirmed and developed by several jurisdictions, including the International Court of Justice (ICJ) and arbitration tribunals. In addition to this identification step, dispute settlement mechanisms also *clarify* the content of international customary principles. For example, in the case of the no-harm principle, the ICJ has clarified its procedural dimensions.

The concept of binding precedent—also called the principle of *stare decisis*—that is typically attached to the decisions of common law, does not apply to international judgments: judicial decisions are a subsidiary means for determining the rules of law under Article 38 of the Statute of the ICJ on the sources of international law. Accordingly, the ICJ’s Statute clearly states that “[t]he decision of the Court has no binding force except between the parties and in respect of a particular case” (Art. 59). As such, international tribunals do not create law in the manner of common-law courts.

In this context, in 1959, Eek considered that the lack of “binding precedent” in the ICJ’s case law would undermine the development of a clear body of law. Indeed, it is “extremely difficult” to cite a decision “as authority for interpretations of the law” because parties “may stipulate the law to be applied, and may reach an understanding with respect to the content of the applicable law contrary to the views held by other states” (Eek 1965, p. 89).

Nevertheless, while it is true that the principle of *stare decisis* does not apply in international law, international dispute settlement mechanisms are not only aware of but also regularly rely on the decisions of previous tribunals and courts in similar cases. In addition to this, the ICJ’s case law often clarifies the decisions of other international jurisdictions such as arbitral tribunals or the Tribunal of the Law of the Sea. As noted by the former President of the ICJ, judge Tomka, on the one hand, the World Court often relies on its own judgements when adjudicating disputes and formulating its judgments (Tomka 2013), and on the other hand, the ICJ also seeks inspiration from the decisions of other tribunals (Murphy 2013, p. 540).

The decisions of the ICJ and arbitral tribunals prove to be essential in establishing the current content of the principles of international water law. Given the paucity of details in the majority of freshwater agreements to which states have adhered, it is inevitable that the meaning and contours of the norms in those treaties are defined and clarified in case law. The implementation of the “no-harm” rule appears to be a process developed little by little, as tribunals make decisions in individual cases, and as those decisions are tested by other tribunals, by publicists and international organizations, and by states themselves.

2 An evolution of the no-harm principle: the analysis of six emblematic cases

The study of case law is essential to get a good grasp of the very nature of the “no-harm” principle and on its evolution over time, to understand how context influences and shapes its content and implementation. The analysis of the following cases shows how the dispute settlement mechanisms have addressed various facets of the “no-harm” principle. Our aim is to test the hypothesis that the “no-harm” principle is an evolving notion that comprises several variables in its definition and that encapsulates different concerns. To grasp such evolution, the next section will present six emblematic cases that contributed to shaping the understanding of the “no-harm” principle.

- (a) The Trail Smelter Case, the origin of the no-harm rule and its relationship with the Harmon doctrine.

The Trail Smelter case, brought by the USA against Canada before an arbitral tribunal in 1941, is often cited as the first arbitral award in international environmental law. While this case involves transboundary air pollution, it is less known that this arbitration also concerned transboundary harm caused by uses of water resources. Indeed, the tribunal referred to domestic case law of the USA regarding the pollution of water resources to affirm limitations to sovereign rights (RIAA, 3, 1964).

This dispute concerns the Columbia River valley. Mining and smelting companies heavily exploited this area at the beginning of the twentieth century. Intensive forestry and agricultural activities caused significant deforestation and degraded the biodiversity. Mining and smelting operations contributed to the environmental decline of the area. Following

a series of claims in domestic courts, smelting operations stopped in the USA. In contrast, the smelter at Trail continued its operations, as the Canadian owners, the Consolidated Mining and Smelting Company Ltd, acquired the smelter from its original American founders. The Trail Smelter became one of the world's largest lead and zinc smelter and was a key driver in the economic growth of the region.

The operations of the Trail smelter heavily affected the surrounding environment. Given the sulphur dioxide emissions and their large impacts, the USA and Canada agreed in 1928 that the matter should be referred to the International Joint Commission (IJC) established under the 1909 Treaty to prevent and resolve disputes over the use of the waters shared by Canada and the USA. In 1931, the IJC issued a unanimous report recommending that Canada pays an award of US\$350,000 for injury to private interests up to 1 January 1932 to the USA. For the damages occurred after this date, the IJC recommended that the two governments should determine an amount payable by Consolidated Mining and Smelting Company Ltd.

Two years after the adoption of the report, the USA complained to Canada that the conditions were not satisfactory and that damage was still occurring. Hence, the two parties entered into diplomatic negotiations to submit the dispute to arbitration. The arbitral agreement, signed on 15 April 1935 required the tribunal to apply "the law and practice followed in dealing with cognate questions in the United States of America as well as international law and practice" (RIAA, 3, 1908). In this context, the tribunal recognized that US federal legislation and international law have adopted the same approach, namely they both recognized a general obligation not to cause injury to the territory of another state. Thus, the tribunal concluded:

under the principles of international law, as well as of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence (RIAA, 3, 1965).

Applying the "no-harm" principle to the facts before it, the tribunal considered that Canada was responsible in international law for the operation of the Trail smelter and the damage caused by it.

In considering the pollution of air, the Trail Smelter tribunal based its reasoning on the concepts of sovereignty and territorial integrity. In fact, the so-called Harmon doctrine, affirming absolute territorial sovereignty, found one of its first expressions in the memorandum of the US agent in the Trail Smelter case. According to the American position: "It is a fundamental principle of the law of nations that a sovereign state is supreme within its own territorial domain and that it and its nationals are entitled to use and enjoy their territory and property without an interference from an outside source" (Whiteman 1965, p. 183). The sovereignty of a state over its territory was emphasized as being "limited" by the obligation not to use that territory in a way that harms other states.

The US agent in the Trail Smelter case pointed out that an international wrong had been committed in this case, because of "acts which deprive us of the free and untrammelled use of our territory in a manner which we as a sovereign state have an inherent and incontestable right to use" (Whiteman 1965, p. 183). This position, that gives unlimited action to a state irrespective of the harm caused in a neighbouring country, should be considered as extreme. The USA themselves rejected this position, limiting their rights to use the waters of the Rio Grande by signing the Treaty with Mexico on the Equitable Distribution of the Waters of the Rio Grande of 1906.

The Trail Smelter case also refuted this position by allowing the smelter to continue functioning and subjecting this authorization to a very stringent emissions regime designed to impede harm in the state of Washington. The tribunal took note of the desire of the parties to reach a “just solution”, which was defined as one.

which would allow the continuance of the operation of the Trail Smelter but under such restrictions and limitations as would, as far as foreseeable, prevent damage in the United States, and as would enable indemnity to be obtained, if, in spite of such restrictions and limitations damage should occur in the future in the United States (RIAA, 3, 1938–1939).

In this context, the tribunal put in place a detailed regime to monitor air pollution, considering several factors such as atmospheric, wind and temperature conditions, which are all parameters that affect smoke behaviour in the Trail area (RIAA, 3, 1968).

(b) The no-harm rule and the quality of waters in the Lake Lanoux dispute.

The Lake Lanoux case is the first arbitral award which expressly focuses on the uses of transboundary waters. It recognizes that an upper riparian state is prohibited to alter the waters of a river in a manner to cause a serious injury to the lower riparian country. However, this prohibition has not been linked by the tribunal to any environmental concerns.

The Lake Lanoux is an important reservoir in the Eastern Pyrenees, entirely situated in the territory of France. Its emissary river contributes, with other sources, to the Carol River, an international watercourse which crosses the territory of Spain and feeds the Rio Sègre. Since 1917, France proposed a project of derivation of water through the Ariège River. The difference in the elevation between the lake and this river would make possible the production of electricity, as the Lanoux lake naturally drains into the Carol River which discharges into the Mediterranean Sea. However, the French project supposed a derivation of the waters of the Ariège River, which empties into the Atlantic.

Because of the resulting modifications in the volume and flow of the Carol River, Spain opposed the project based on the provisions of the Bayonne Treaty of 25 May of 1866 on the delimitation of the French-Spanish border and its Additional Act, which regulates the regime of the common waters. Taking into consideration Spanish interests and concerns, France proposed an alternative project according to which, via an underground tunnel, the same quantity of water removed from its headwaters would return to the Carol. However, Spain rejected this scheme essentially because it implied that France would assume the control over the continued flow of the Carol River, saying that the project would alter

the natural conditions of the hydrographic basin of the Lake Lanoux by diverting its waters into the Ariège and thus making restoration of the waters of the Carol physically dependent on human will, which would involve the de facto preponderance of one Party in place of the equality of the two Parties as provided by the Treaty of Bayonne of May 26, 1866, and by the Additional Act of the same date (RIIA, 12, 19).

The two governments decided to conclude an arbitration agreement in 1956 to submit the dispute to an arbitration tribunal composed of four arbiters. The question asked to the tribunal was whether France could commence the modified project without the consent of Spain under the provisions of the Bayonne Treaty and its Additional Act. This formulation suggests that the competence of the tribunal was limited to the application and interpretation

of the 1866 Treaty. However, the tribunal found that “when the provisions call for interpretation this should be done according to international law; [...] we may therefore take into account the spirit that guided the framing of the Pyrenean Treaties as well as the rule of international [...] law” (RIAA, 12, 17). The tribunal concluded that the French project was not in violation of the 1866 Treaty nor its Additional Act and also made some general observations that are relevant for international water law. In particular, it recognized the right of upstream states to carry projects without seeking a prior agreement with a downstream. In fact, according to the tribunal:

To admit that in a given matter competence may no longer be exercised except on the condition of or by means of an agreement between two States is to place an essential restriction on the sovereignty of a State, and it may be allowed only if there is a conclusive proof (RIAA, 12, 22–23).

The “no-harm” rule was only affirmed by the tribunal by way of *obiter dicta* stating that “there is a rule prohibiting the upper riparian State from altering the waters of a river in circumstances to do serious injury to the lower riparian State” (RIAA, 12, 25). This statement recognized the principle affirmed in the Trail Smelter decision and linked the “no-harm” principle to the uses of transboundary waters. However, this principle was not linked to any environmental concerns, as Spain had not argued that the French works could pollute the waters of the Carol or that the returned waters would differ in chemical composition or temperature. The tribunal acknowledged that even if there was a principle prohibiting upstream states from modifying the waters of a river in a way that prejudiced the downstream state, such a rule was not relevant because the French project “will not alter the waters of the Carol” (RIAA, 12 24).

The tribunal considered that France had the right to put into place the proposed project. This suggests that the tribunal was of the view that at least when one riparian state holds extensive consultations with another—as France did with Spain—the former can enjoy a margin of appreciation concerning the project. France had the control of the flow to Spain and “the physical possibility of stopping the flow of the Lanoux water or the return of an equivalent quantity of water”. However, France gave to Spain “the assurance that it will not, in any case, interfere with the regime thus established”. Consequently, the tribunal dismissed the Spanish concerns on the ground that “it is a well-established general principle of law that bad faith is not presumed” (RIAA, 12, 21).

- (c) The Gabčíkovo–Nagymaros case and the ramifications of the no-harm rule for environmental protection.

The Gabčíkovo–Nagymaros case is the first ICJ dispute where issues of international environmental law have been examined in depth. This case concerns a dispute between Hungary and Slovakia regarding the construction of a joint project of dams and locks on the Danube River. The features of this project are described in a bilateral Treaty of 1977 concerning the Construction and Operation of the Gabčíkovo–Nagymaros System of Locks. This instrument provides for the construction of two dams: one at Gabčíkovo, in Slovakia and one in Nagymaros, in Hungary which together constitute a “single and indivisible” operational system. The treaty also addresses the environmental impacts of the project stating that the contracting parties “shall ensure, by the means specified in the joint contractual plan, that the quality of the water in the Danube is not impaired as a result of the construction and operation of the System of Locks” (Article 15).

The project was heavily criticized in Hungary for its environmental impacts and the government suspended and then stopped the project of the Nagymaros dam in 1989. But when Hungary abandoned the project, Slovakia had already done enormous economic investments in the construction of the Gabčíkovo dam. Therefore, Slovakia started looking at alternative solutions to ensure the operation of this dam, among them, the “Variant C” project. In 1990, Hungary was informed of seven hypothetical alternatives developed by the firm Hydroconsult of Bratislava. Among these, only one, the “Variant C” did not require the approval by Hungary since it was presented as a provisional solution. The “Variant C” consisted in the unilateral deviation of the Danube River by Slovakia at the border with Hungary. While Hungary proposed the suspension of the works on the basis of the understanding that the parties would abstain from unilateral measures and that joint studies would be carried out, Slovakia confirmed its intention of pursuing the “Variant C” project and putting the Gabčíkovo power plant into operation. As the two countries failed to reach an agreement, Hungary decided to terminate the 1977 Treaty in 1992. The year after, in 1993, the dispute was submitted to the ICJ.

Three aspects of the judgement are particularly relevant in the context of the no-harm rule. The first aspect is related to the question whether Hungary was permitted to suspend and abandon the project without engaging its responsibility under a “state of necessity” justification. In this context, the ICJ indicated the conditions for a state of necessity to apply. One of the conditions is that the act of necessity should concern the protection of an “essential interest”. The Court noted that the environmental protection of a territory was among the situations that could trigger a state of necessity and recognized that it had “no difficulty in acknowledging that the concerns expressed by Hungary for its natural environment in the region affected by the Gabčíkovo–Nagymaros Project related to an ‘essential interest’ of that State” (par. 53).

Therefore, although the argument of Hungary based on the state of necessity was rejected, the Court expressly recognized the importance of the environmental concerns to trigger such a state. In this regard, some scholars have noted that the judgement participates in strengthening the principles of customary international law on environmental protection (McIntyre 2008; Viñuales 2008). Indeed, the Court emphasized “the great significance that it attaches to respect for the environment” and referred to the *Legality of the Threat or the Use of Nuclear Weapons* on the general obligation of states to ensure that their activities respect the environment of other states or of areas beyond national control as being part of “the corpus of international law relating to the environment” (par. 53).

The second aspect relevant to the no-harm rule is the argument made by Hungary about the relationship between the principle of prevention and the principle of precaution. Hungary argued that “the previously existing obligation not to cause substantive damage to the territory of another State had...evolved in an *erga omnes* obligation of prevention of damage pursuant to the ‘precautionary principle’” (par. 97). Hungary invoked this principle to justify the violation of a treaty signed with Czechoslovakia. Accordingly, their explanation was that the principle of precaution requires decision-makers to consider the risks of environmental damage and to take measures to minimize such risks. It imposes both obligations of means and of results. Together with prevention, both principles are intertwined with the requirement to conduct an environmental impact assessment which is now provided both in conventional and customary law. According to Hungary, states were required by international law.

to take measures to anticipate, prevent or minimize damage to their transboundary resources and mitigate adverse effects. While there are threats of serious or irrevers-

ible damage, lack of full scientific certainty should not be used as a reason for postponing such measures (Application of the Republic of Hungary, 31).

Overall the parties agreed on the need to adopt a precautionary approach, in principle. However, they disagreed on whether the conditions of application of this approach were met in the situation at stake. In the end, the precautionary principle did not play an important role. The Court only implicitly referred to it by calling for “vigilance and prevention” in the context of environmental protection (par. 140).

The third relevant aspect is that the Gabčíkovo–Nagymaros case tries to clarify the relationship between the principle of equitable and reasonable use and the obligation not to cause significant damage. While the Court referred to the equitable utilization principle on a number of occasions in the Gabčíkovo case, McCaffrey has noted that the Court decided not to follow Hungary who relied on the no-harm principle in its pleadings, by not referring to it at all in the decision (McCaffrey 1998, p. 27). McCaffrey nuances what can be deduced from this choice by emphasizing that it does not necessarily mean that “the ‘no-harm’ rule has been weakened; but it suggests that the Court views the principle of equitable utilization to be the more important of the two” (McCaffrey 1998, p. 27).

(d) Pulp Mills on the Uruguay River: the clarification of the due diligence obligation.

The Pulp Mills on the Uruguay River was the first ICJ case involving the environmental protection of an international watercourse. Indeed, even if the Gabčíkovo–Nagymaros case concerned issues of international environmental law, the judgement analysed these aspects in the context of the law of treaties and the law of state responsibility. The Uruguay River rises in Brazil and empties into the Rio de la Plata. The River forms parts of the boundaries between Brazil and Argentina, and then Uruguay and Argentina. This case involves the two pulp mills both situated in Uruguay on its side of the river and causing a potential environmental harm to Argentina.

In its judgement the Court addressed whether Uruguay had complied with its procedural obligations under the 1975 Statute of the River Uruguay (1975 Statute) in authorizing the construction of the CMB (Celulosas de M’Bopicuá S.A.) and the construction and commissioning of the Orion mill and a port adjacent to the latter. The ICJ judges also explored whether Uruguay had complied with its substantive obligations under the 1975 Statute since the Botnia plant was commissioned and commenced operations in November 2007. In summary, the Court held that Uruguay had breached its procedural obligations under the 1975 Statute but had not breached its substantive obligations under that agreement.

The Pulp Mills on the Uruguay River case is particularly helpful to determine the content of the no-harm rule. Indeed, the Court points out that this is an obligation of due diligence requiring that it is

every State’s obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States (*Corfu Channel (United Kingdom v. Albania)*, I.C.J. Reports 1949, p. 22). A State is thus obliged to use all means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State. This Court has established that this obligation “is now part of the corpus of international law relating to the environment (*Legality of the Threat or the Use of Nuclear Weapons*, Advisory Opinion, I.C.J. Reports 1996 (I), p. 241, par. 29) (par. 101).

According to the Court, there was no conclusive evidence to show that Uruguay had failed to act with the required due diligence or that pollution had caused a damage to the quality of the waters of the Uruguay River.

The obligation, or “principle” of prevention of transboundary harm, is closely related to the duty to carry out an environmental impact assessment (EIA). Indeed, it would be difficult to properly implement the duty to prevent transboundary harm without having conducted such an assessment. The ICJ explained how the EIA obligation is intertwined with the obligation of due diligence:

Moreover, due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the regime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works (par. 204).

Interestingly, the Court went beyond the recognition that an EIA had to be conducted prior to an economic activity. It went on to recognize that “once operations have started and, where necessary, throughout the life of the project, continuous monitoring of its effects on the environment shall be undertaken” (par. 205). This obligation of continuous monitoring should be understood as part of the due diligence required to implement the obligation to prevent transboundary harm.

The Court also considered whether the Uruguayan and Argentine riparian populations should have been consulted as part of the EIA process. The ICJ found “no legal obligation to consult the affected populations arises from the instruments invoked by Argentina” (par. 216). These instruments included the Espoo Convention on Environmental Impact Assessment in a Transboundary Context, the International Law Commission’s Draft Articles on Prevention of Transboundary Harm from Hazardous Activities of 2001 and UNEP’s Goals and Principles of Environmental Impact Assessment. In any case, even if such an obligation had existed, the ICJ found that consultation by Uruguay of the affected populations did take place (par. 219). This consultation was most probably considered by Uruguay, and can generally be viewed as part of the due diligence exercised by the state prior to implementing a project (McCaffrey 2019).

(e) *Kishenganga* arbitration case

The Indus Waters Kishenganga case is the latest arbitration in the field of international water law. After the Lake Lanoux case, this is the second arbitration specifically dealing with transboundary waters. As in the Lake Lanoux, the fact that a treaty governed the issues at stake did not prevent the tribunal from making statements of general applicability. This case is the first arbitration instituted under the 1960 Indus Waters Treaty.

This case concerned the application and interpretation of the 1960 Indus Waters Treaty and, specifically, the effects of a hydroelectric project carried out by India on the waters flowing to Pakistan. The Kishenganga tribunal rendered two unanimous awards in February 2013 and December 2013. In the initial partial award, the tribunal found that the project was consistent with the Indus Treaty but that the Treaty barred the method for controlling sediment in reservoirs proposed by India. In its final award, the tribunal specified the minimum downstream flows that India had to maintain.

The rivers of the Indus system rise in India and Nepal and flow into Pakistan. The 1960 Treaty divides the six rivers of the Indus between the parties, allocating the three “Western rivers” (the Indus, the Jhelum and the Chenab) to Pakistan and the three “Eastern rivers”

(the Sutej, the Beas and the Ravi), to India. One of the uses that India is permitted to make of the Western rivers including their tributaries, is the generation of hydroelectric power. The Kishenganga River (called the Neelum in Pakistan-administered Kashmir) originates in India-administered Jammu and Kashmir, crosses the line of control separating the portions of Kashmir administered by the two countries, and joins the Jhelum River at Muzaffarabad in Pakistan-administered Kashmir.

In the Kishenganga case, the arbitral tribunal linked the obligation to prevent transboundary harm to the need to manage natural resources in a sustainable manner. The tribunal recognized that this obligation is a “fundamental principle of customary international environmental law”. It noted that the duty to avoid transboundary harm had already been recognized in the Trail Smelter case well before the 1960 Indus Waters Treaty (Partial Award 2013, par. 448). The arbiters used the principle of prevention of transboundary harm to note that the hydroelectric projects had to be planned, built and operated with environmental sustainability in mind (Partial Award 2013, par. 454). The tribunal also reaffirmed the customary nature of the duty to prevent, or at least mitigate significant harm to the environment, when pursuing large-scale construction activities (Final Award 2013, par. 112). To strengthen its decision, the tribunal noted that it was incumbent upon this Court “to interpret and apply this 1960 Treaty in light of the customary international principles for the protection of the environment in force today”.

On the basis of this finding, the tribunal set a minimum of environmental flow that would prevent harm from occurring to the environment as a result of the hydroelectric project undertaken by India. Although the preventive approach found in the Indus Waters Treaty is closely related to no-harm, the tribunal used customary international law and, more specifically, the duty to prevent harm to determine the minimum environmental flow as the level of water that would satisfy human needs but also the level that would ensure that the ecosystem was protected (Final Award, 2013, par. 112). While the tribunal refused to apply a precautionary approach (Final Award, 2013, par. 112), it used the principle of prevention to interpret and apply the Indus Treaty from the perspective of environmental protection (Boisson de Chazournes 2015).

(f) The San Juan River cases.

The Case concerning Certain Activities Carried Out by Nicaragua in the Border Area (the Certain Activities case) and the Case concerning the Construction of a Road in Costa Rica along the San Juan River (the Road case) clarify the environmental dimension of the “no-harm” principle. These cases deal with the consequences of the dredging activities carried out by Nicaragua and the construction of a road undertaken by Costa Rica. Both Parties claimed environmental impacts of these activities on the San Juan River, the flow of the Colorado River and the wetlands. In conformity with the principle of judicial economy and sound administration of justice, the ICJ decided to join the proceedings of these two cases. Moreover, in 2017, Costa Rica requested the Court to decide on the issue of compensation for environmental damage. As the two cases have been joined and the judgement on compensation follows up the decision of 2015, we present these judgements as one case.

As already noted, the duty to prevent environmental harm is closely linked to the EIA obligation. The preparation of an EIA gives substance to the duty to exercise due diligence to prevent significant transboundary harm. This is a two phases process: firstly, an EIA is needed to assess if a proposed activity entails a risk of significant transboundary harm; secondly, if the preliminary screening study indicates that the proposed activity poses a

risk, the state must prepare a full EIA. In the case in which the EIA confirms that there is a risk of transboundary harm, new procedural obligations may arise for the state planning the new activity. These obligations include notification and consultation in good faith with the potentially affected country regarding the appropriate measures to prevent and mitigate that risk (Certain activities and Road cases 2015, par. 104).

The clarification of the obligation to prevent transboundary harm and its related duties to carry out an EIA and notify and consult with potentially affected states offers a guidance to states. In the specific context of the Certain Activities case, the Court found that the dredging programme carried out by Nicaragua did not require a full EIA given the absence of risk of significant transboundary harm (par. 105). In the context of the Road case, the Court found that Costa Rica did not provide evidence that it actually carried out a preliminary assessment (Certain activities and Road cases, 2015, par. 154). The Court considered various elements to assess the risk of transboundary harm, including the magnitude of the road project and the location near an international river and a wetland of international importance. Given these specific features of the project, the Court concluded that the construction of a road by Costa Rica carried out a risk of significant transboundary harm and the threshold for triggering the obligation to evaluate the environmental impact of the road project was therefore met (Certain activities and Road cases, 2015, par. 156). As a consequence, after the preparation of an EIA, Costa Rica would have to consult with Nicaragua to determine the appropriate measures to prevent significant transboundary harm and the risk thereof.

The Certain Activities and Road cases also offer a guidance in the analysis of the concept of harm. In the former case, Nicaragua was considered responsible for the harm caused by the violation of the territorial sovereignty of Costa Rica. In the Road case, Nicaragua contended that the construction of the road caused harm to the river because of the increase in sediment concentration. In the view of the Court, not any harm constitutes a significant damage. In the light of the evidence brought to the Court, the judges considered that neither the fact that sediment concentrations increased in the river following the construction of the road, nor that this increase caused a significant transboundary harm was established. This finding shows the difficulties to prove a significant transboundary harm, especially when the damage takes place over a certain period of time and not suddenly, as for example after an industrial accident. This raises the question of the possibility for the Court to rely on experts to grasp the wide range of scientific disciplines and techniques that a dispute can involve.

Another guidance offered by the San Juan River cases concerns the compensation for an environmental damage. There was no dispute between Costa Rica and Nicaragua on the principle that damage to the environment is compensable under international law. What is important, though, is that the ICJ recognized that the impairment or loss of the ability of the environment to provide goods and services is also compensable. Besides, the Court indicated that even in the absence of clear evidence as to the extent of material damage, this will not, in all situations, preclude an award of compensation for that damage (Compensation judgement, 2018, par. 33). The Court stated its view that “damage to the environment, and the consequent impairment or the loss of the ability of the environment to provide goods and services is compensable under international law” (Compensation judgement, 2018, par. 42). This represents a clear recognition by the Court of the value of environmental services: while an area may be in natural state and not used for economically productive activities, it nonetheless may have value and its impairment may give rise to an obligation to make reparation to the territorial state.

Table 1 Law-cases and key dimensions related to the no-harm principle

Law-cases	Key dimensions of the “no-harm” principle as underlined by decisions
<i>The Trail Smelter case</i> (arbitration awards of 16 April 1938 and of 11 March 1941)	States have the obligation not to cause serious injury to the territory of other states Adaptability of the implementation of the dictum to multiple contexts Implementation of detailed monitoring regime related to pollution
<i>The Lake Lanoux case</i> (arbitration award of 16 November 1957)	Emphasis on the importance of extensive consultations and negotiations between parties Emphasis on the general principle of law according to which bad faith cannot be presumed
<i>The Gabčíkovo–Nagyymaros case</i> (Judgment of the International Court of Justice of 25 September 1997)	The state of necessity invoked by a state to suspend and abandon a treaty may include the protection of essential interests related to environmental concerns States have to ensure vigilance and prevention to minimize the risks of damage to the environment Relationship between the principle of equitable and reasonable use over the obligation not to cause a significant harm
<i>The Pulp Mills case</i> (Judgment of the International Court of Justice of 20 April 2010)	Clarification of the obligation of due diligence to prevent transboundary harm State’s obligation to exercise due diligence to prevent transboundary harm includes the duty to undertake an Environmental Impact Assessment related to planned activities Consultations with local populations should be part of the due diligence process
<i>The Kishenganga case</i> (arbitration awards of 18 February 2013 and 20 December 2013)	The obligation to ensure a minimum environmental flow derives from the duty to prevent transboundary harm The principle of prevention is used to interpret a freshwater agreement
<i>The San Juan River cases</i> (judgments of the International Court of Justice of 16 December 2015 and 2 February 2018)	Preparation of an Environmental Impact Assessment gives substance to the duty to exercise due diligence to prevent significant transboundary harm Obligations of notification and consultation in good faith with potentially affected country in order to define appropriate measures to prevent and mitigate risk Damage to the environment and the consequent losses of environmental goods and services is compensable under international law

3 Exploring the evolution of the “no-harm” principle based on case law analysis

Building on these six emblematic cases, this section provides a transversal analysis of the key dimensions related to the definition of the “no-harm” principle (see Table 1). Each decision provides a unique perspective on this principle and expresses contextual concerns. Based on our comparative analysis, we then identify the main facets related to the

development of the “no-harm” principle over time that illustrate how the principle is understood and shaped by the successive decisions.

- Facet 1: National sovereignty and sector-based perspectives

This facet is linked to a first phase that groups together the Trail Smelter (decisions in 1938/1941) and the Lake Lanoux case (decision of 1957). Anchored in the Harmon Doctrine and in the context of the second World War, decisions provided by these arbitration tribunals underline the importance and prevalence of national sovereignty regarding the notion of possible harms. As such, decisions are focused on the protection of the national territories and states have the obligation not to cause serious impacts on the territory of others. This facet is characterized by concerns related to the protection of territorial integrity rather than concerns related to the protection of the environment in general and of water in particular. A sector-based perspective comes out from the decisions studied with the prevailing idea that activities causing possible harms should be maintained with all possible measures to avoid potential impacts on the territory of another state. As a consequence, the implementation of a monitoring regime related to pollution is suggested without necessarily considering a reduction of industrial activities causing harm in the spotlight. The establishment of monitoring mechanisms has also been evoked in other cases such as the ICJ’s judgement on the Pulp Mills on the Uruguay River.

Although the no-harm principle affirmed in the Trail Smelter case concerns air pollution, it can also be extended to other forms of transboundary damage, including those caused to shared water resources (McCaffrey 2019). Legal scholars agree that the tribunal’s finding expresses the state of customary international law: namely that states do not have the right to cause serious injury to the territory of others, including shared water resources. (Okowa 2000; Nanda and Pring 2013).

The longevity of this dictum is explained by its adaptability. States are required to prevent transboundary harm “of serious consequence”. This means that the damage should be of serious magnitude. The injury should also be “established by clear and convincing evidence”. This threshold may render difficult to prove the risk of future harm to the environment.

In the context of the Lake Lanoux dispute, the dictum of the Trail Smelter was again recognized. However, the “no-harm” principle was not interpreted in the light of environmental concerns but took into account the protection of sovereign rights. In fact, the tribunal considered that France had the right to put into place the proposed project. This conclusion was motivated by the extensive consultations held between France and Spain on the project. France had the control of the flow to Spain and “the physical possibility of stopping the flow of the Lanoux water or the return of an equivalent quantity of water”. However, France gave to Spain “the assurance that it will not, in any case, interfere with the regime thus established”. Consequently, the tribunal dismissed the Spanish concerns on the ground that “it is a well-established general principle of law that bad faith is not presumed” (RIAA, 12, 21).

- Facet 2: Environmental concerns and consideration of multiple scales

The second facet is framed by the decision related to the Gabčíkovo–Nagymaros case (decision of 1997). Five to six decades after the Trail Smelter and Lake Lanoux cases, the Gabčíkovo–Nagymaros case illustrates a change of paradigm to define the nature of the “no-harm principle”: the scale of reference is based on the protection of environmental

interests and the focus on states' sovereignty is less important. Judges do not build their reasoning on the sector-based perspective, as developed in facet 1, and expect states to focus on their missions of vigilance and prevention in order to minimize risks of damage to the environment. This second facet also entails a focus on notions of equitable and reasonable use of water which demonstrate the will to anticipate possible harms and to define conditions for cooperation between neighbouring countries.

- Facet 3: Defining tools to grasp the very nature of harm

The third facet includes both the Pulp Mills (decision of 2010) and Kishenganga cases (decisions of 2013). Decisions are adopted over five years and emphasize the necessity to use three main instruments to clarify the very nature of harm: the conduct of Environmental Impact Assessment, the consultation of local populations and the insurance of minimum environmental flows. These three instruments contribute to framing procedures and to anticipating possible harms at the transboundary level. In this regard, EIA provides a way to make concerned actors interact, to get diverse stakeholders involved and to quantify the possible consequences of water management practices. These instruments also allow to make various environmental and social concerns visible with the consultation of public. The decisions consider the harm not only in the light of geopolitical and international concerns but also by taking into account other types of narratives, such as concerns at regional and/or local levels. As such, this third facet implies a preventive and multi-levels perspective of the nature of harm.

- Facet 4: Formalizing a preventive perspective on harm

This last facet is illustrated by the decisions related to the San Juan River cases (decisions of 2015 and 2018) and maintains the emphasis of facet 3 on the necessity to craft anticipative processes. In addition to EIA procedures, the ICJ establishes two additional obligations in this facet: notification and consultation. The 2015 judgment indeed indicates the objective to ensure that appropriate measures are in place to prevent and mitigate risks. To do so, the two obligations of notification and consultation allow to frame the decision-making and operational procedures and to ensure early discussions at the transboundary level regarding possible impacts and ways to address it. Finally, this last facet does not only ensure that preventive measures are undertaken. It also ensures that parties cooperate in the prevention of the harm.

Despite scientific developments, the San Juan cases show that it might be still challenging to prove that a transboundary harm is significant, especially when the negative impacts of an economic activity span over a long period of time. In this regard, the ICJ conclusion reminds us in some ways of the judgement on the Pulp Mills, as in neither case was the applicant able to prove a significant transboundary harm. Joining scientific and legal expertise increases the opportunities to build evidence about a significant transboundary harm.

The prevention of the harm may also be strengthened through the recognition of the compensation for environmental damages. Judges point to the fact that "harms" also concern ecosystem services in the broad sense. Thereby, they provide a framework to deal with negative externalities taking place at the transboundary level and causing negative impacts to the environment. Although the evaluation of environmental damages may be difficult in many cases, international law clearly provides that the author of a damage that has been identified has an obligation to make reparation in adequate form (Permanent Court of International Justice, Case concerning the Factory at Chorzów 1927, 21).

Nevertheless, it might be difficult to prove the link of causation between the breach of an international norm and an environmental damage. Oftentimes, a multiplicity of causes is at the

origin of environmental damages, which makes it difficult to establish a certain causality link between the wrongful act and the damage itself. However, the lack of scientific certainty on the causality link does not preclude to establish an award for the compensation of the damage.

4 Conclusions

This contribution focused on the role of international case law in shaping the “no-harm” principle. Through the comparison of different cases, we explore this principle and identify the different facets of an understanding that evolves across time and contexts. In conclusion, we briefly come back to our initial set of questions. Our first interrogation was the following: (1) How can case law analysis contribute to define the “no-harm” principle? As shown by our analysis, in a context of terminological diversity, international courts and tribunals have played an essential role in clarifying and implementing the “no-harm” principle at the basin level. Indeed, they have contributed to highlighting the various facets of this principle in both substantive and procedural terms, considering previous cases in shaping taken decisions. The second question was: (2) Based on the analysis of international case law, how does the understanding of harm evolve over time? Our examination provides a chronological analysis of emblematic cases that played a role in the definition of the “no-harm” principle. This historical perspective sheds light on the development of each case and on existing pathways between the different decisions provided by international courts. Finally, our last question focused on: (3) What variables are considered in this process of definition, at what moment and for what reasons? Our analysis notably illustrates the role played by contextual factors. Through the identification of facets, we observe that the understanding of the “no-harm” principle greatly depends from sociopolitical variables that intervene at specific moments of time. We analyse how such principle is notably shaped by evolving concerns related to national sovereignty and the protection of the environment. By doing so, we illustrate the iterative dimension of the harm notion but also the possible triggers related to the evolution of its understanding.

Nowadays, and as emphasized in the facet 4 of our analysis, the recognition of the duty to carry out an EIA and the obligation of notification and consultation are key elements in the protection of the environment of transboundary water resources and the duty to cooperate between neighbouring countries. The inclusion of the notion of “risk” of environmental damage is also increasingly present in the case law. However, the practical implications of these decisions on the ground are not always clear. Still, the concept of “long-term damage” seems to be excluded from the judgements and awards. Still, as shown in the Pulp Mills decision, the recognition of the involvement of the local communities in the due diligence process is still weak, if not absent.

To conclude, the centrality of this “no-harm” principle in the implementation of international water law also distinctly comes out from the dispute over the status and use of the waters of the Silala, which is a currently pending case before the ICJ between Chile and Bolivia. The dispute stems from the Bolivian claim that the Silala River system is not an international watercourse. The international nature of this River was never disputed until Bolivia, for the first time in 1999, claimed its waters as exclusively Bolivian. In its application submitted to the Court, Chile requests that the ICJ declares that the Silala River system is in fact and in law an international watercourse. Accordingly, it argues that its use by Chile and Bolivia is governed by customary international law and principles, among which Chile invokes the principle of equitable and reasonable use, the obligation to prevent

transboundary harm as well as the obligation of notification. This case could greatly contribute to clarifying the content of the customary rules of international water law, including the “no-harm” rule.

Funding Open access funding provided by University of Geneva.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article’s Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article’s Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Application of the Republic of Hungary v. Czech and Slovak Republic on the Danube River. (1994). In P. Sands, R. Tarasofsky, M. Weiss (Eds). *Principles of International Environmental Law* (pp. 693–698). Manchester: Manchester University Press.
- Award in the Arbitration regarding the Indus Waters Kishenganga between Pakistan and India (2013). *Reports of International Arbitration Awards XXXI*, 1–358.
- Boisson de Chazournes, L. (2015). Water: Challenges for international law and policy. The notion of environmental flows and the law applicable to international watercourses. In *Proceedings of the 108th annual meeting—The effectiveness of international law*. American Society of International Law (pp. 293–297).
- Caffisch, L. (2018). Settlement of disputes concerning international watercourses. In M. Tignino & C. Bréthaut (Eds.), *Research handbook on freshwater law and international relations* (pp. 234–258). Cheltenham: Edward Elgar Publishing.
- Eek, H. (1965). International law: The first encounter. *Nordic Journal of International Law*, 35(1–2), 81–102.
- International Court of Justice, Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica). (2015). Judgment, *I.C.J. Reports*, 665.
- International Court of Justice, Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica). (2018). Judgment, *I.C.J. Reports*.
- International Court of Justice, Gabčíkovo–Nagymaros Project (Hungary/Slovakia). (1997). Judgment, *I. C. J. Reports*, 7.
- International Court of Justice, Legality of the Threat or the Use of Nuclear Weapons. (1996). Advisory Opinion, *I.C.J. Reports*, 226.
- International Court of Justice, Pulp Mills on the Uruguay River (Argentina v. Uruguay). (2010). Judgment, *I. C. J. Reports*, 14.
- Kliot, N., Shmueli, D., & Shamir, U. (2001). Institutions for management of transboundary water resources: Their nature, characteristics and shortcomings. *Water Policy*, 3(3), 229–255.
- Lake Lanoux (Spain/France). (1957). *Reports of International Arbitration Awards*, XII, 281–317.
- McCaffrey, S. (1998). The UN convention on the law of the non-navigational uses of international watercourses: Prospects and Pitfalls. In S. M. A. Salman & L. B. de Chazournes (Eds.), *International watercourses: Enhancing cooperation and managing conflict: Proceedings of a World Bank Seminar* (pp. 17–28). Washington: World Bank.
- McCaffrey, S. (2019). *The law of international watercourses*. Oxford: Oxford University Press.
- McIntyre, O. (2008). *Environmental protection of international watercourses under international law*. London: Routledge.
- McIntyre, O. (2011). The World Court’s ongoing contribution to international water law: The pulp mills case between Argentina and Uruguay. *Water Alternatives*, 4(2), 124–144.

- Murphy, S. (2013). What a difference a year makes: The international court of justice's 2012 jurisprudence. *Journal of International Dispute Settlement*, 4(3), 539–552.
- Nanda, Ved P., & Pring, G. (2013). *International environmental law and policy for the 21st century*. The Hague: Martinus Nijhoff Publishers.
- Okowa, P. (2000). *State responsibility for transboundary air pollution in international law*. Oxford: Oxford University Press.
- Permanent Court of International Justice, Case concerning the Factory at Chorzów (Germany v. Poland). (1927). Claim for Indemnity. Jurisdiction. *Series A* No. 9, 21.
- Salman, M. A. Salman. (2009). *The World Bank Policy for projects on international waterways: An historical and legal analysis*. Washington, D.C.: The World Bank.
- Salman, M. A. Salman. (2018). The obligation not to cause significant harm. In L. Boisson de Chazournes, M. M. Mbengue, M. Tignino, & K. Sangbana (Eds.), *The UN convention on the law of the non-navigational uses of international watercourses. A commentary* (pp. 95–122). Oxford: Oxford University Press.
- Sands, P. (1998). Treaty, custom and the cross fertilization of international law. *Yale Human Rights and Development Journal*, 1(4), 85–105.
- Spijkers, O. (2016). The cross-fertilization between the sustainable development goals and international water law. *Review of European, Comparative & International Environmental Law*, 25(1), 39–49.
- Tomka, J. P. (2013). President of the International Court of Justice, Inaugural Hilding Eek Memorial Lecture (2 December 2013). Stockholm Center for International Law and Justice, The Rule of Law and the Role of the International Court of Justice in World Affairs. Retrieved from <https://www.icj-cij.org/files/press-releases/8/17848.pdf>
- Trail Smelter case (United States, Canada). (1938 and 1941). *Reports of International Arbitration Awards*, III, 1905–1982.
- Viñuales, J. (2008). The contribution of the International Court of Justice to the development of international environmental law. *Fordham International Environmental Law Journal*, 32(1), 232–258.
- Wegerich, K., & Olsson, O. (2010). Late developers and the inequity of “equitable utilization” and the harm of “do no harm”. *Water International*, 35(6), 707–717.
- Whiteman, M. M. (1965). *Digest of international law* (Vol. 5). Washington DC: US Government Printing Office.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.