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Published by:
The Grassroots Institute
548 Jean Talon Ouest
Montreal, Quebec
Canada H3N 1R5

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CONCEPTUAL CHALLENGES TO THE RECOGNITION AND ENFORCEMENT OF THE RIGHT TO CLEAN, SAFE AND HEALTHY ENVIRONMENT

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ABSTRACT
The right to clean or healthy environment, or what may be called environmental right, is one of the most controversial emerging rights since the agitation for the recognition of the link between human rights and the environment started gaining momentum at international law forums. This is happening partly because, at the global level, no treaty attempts to delimit the scope of this right explicitly; an endeavour which would have served as a form of guide to national jurisdictions. Given that the UN General Assembly recently officially resolved that a clean, healthy and sustainable environment is a universal human right, and considering the implication this may have on national jurisdictions, it has become more imperative to redefine this right for the ease of enforcement. This paper seeks to examine the conceptual and the theoretical conundrum as well as the criticisms of the right to clean, safe and healthy environment that have largely played a prominent role against the enforcement of the rights in general. The paper also examines constitutional challenges associated with the recognition of the rights in Nigeria and the judicial effort in the case of Gbemre v SPDC in attempting to expound the constitutional right to life to include the right to the environment. The paper finds that the right to the environment has been described and qualified diversely from one jurisdiction to another rendering the same susceptible to the challenges of interpretation. The paper, however, suggests that given the importance of the right, same should be interpreted, no matter how it is qualified, to mean a right to an environment fit for human living, the courts being sufficiently able to draw the line between what environment is fit and what is not for human habitation.

Keywords: Recognition; Enforcement; Clean environment; Environmental right; Constitution; Justiciable; Nigeria

Received: 06 July 2022 | Accepted: 30 July 2022 | Published: 31 August 2022
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1. INTRODUCTION

The agitation for clean, safe and healthy environment has just assumed a more progressive dimension with the recent official resolution of the UN General Assembly recognising the right to clean, healthy and sustainable environment as a universal human right. There has always been high demand on modern governments to diversify, industrialise, promote and sustain a sound economy to enable them to create jobs, provide housing and meet other human and capital needs. While this crave is imperative and properly placed, same has thrown nature ‘out of balance’ and man has begun to grapple with a catalogue of environmental challenges whether in developing or developed countries. In order to strike a balance between preservation of the environment and promoting sound economy, many countries, including Nigeria, have had to adopt several approaches - legislative, ministerial, political and judicial to address the evolving environmental concerns. Thus, human rights advocates have found the

1 The necessity for development appears antithetical to the demand for a clean environment. As it is observed, “environmental concerns can negatively affect the short term needs and objectives of human beings. States and individuals could be in a situation of disadvantage, if they neglect their economic development in favour of environmental protection. Especially in developing countries, the struggle of parts of the population against poverty is often considered as more important than environmental protection.” S Nijhawan, “Human Rights to a Clean Environment.” (Unpublished Essay) submitted to the Faculty of Law and Social Sciences (London: School of Oriental and African Studies, 2004) pp. 3-4, <www.subin.de/environ.pdf> accessed 14 January 2015.


3 In Nigeria, environmental consciousness did not begin much early. As of 1990 there were still complaints about the pace of the awareness of environmental problems in Nigeria. See, Jelili A Omotola, (ed.) Environmental Laws in Nigeria including Compensation (Lagos: Faculty of Law, University of Lagos, 1990) 201. Until 1988 when the Federal Environmental Protection Agency Decree was promulgated, there was no distinct environmental regulatory regime in Nigeria. In fact, it was the national environmental emergency situation i.e. the discharged of imported containers of toxic waste product in Koko in 1988 that led to the promulgation of the Federal Environmental Protection Act. Martin Joe Ezeudu, “Revisiting Corporate Violations of Human Rights in Nigeria’s Niger Delta Region: Canvassing the Potential Role of the International Criminal Court” (2011) 11 African Human Rights Law Journal 36. Apart from scanty legislative instruments, legal discourse on the Nigerian environment too was rare until 1988 when the Faculty of Law of the University of Ibadan organized a conference on Environmental Law as part of the activities marking the 40th anniversary celebration of the University. See the Introduction to the book, Folarin Shyllon, The Law and the Environment in Nigeria (Ibadan: UI Press, 1989).


5 There is in Nigerian, both at the Federal and State levels, ministries of environment as well as departments, boards, agencies, commissions, etc. specially established to monitor the environment.

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need to extend the frontiers of human right campaign by seeking for the recognition and enforcement of an emerging right referred to as environmental right, particularly to provide a quality, adequate and satisfactorily⁷ safe environment for human living. Though laudable this project is, it is not absolved of controversies, challenges or even confusion both real and imagined in the attempt to insist on a right to clean, safe and healthy environment.

2. THEORETICAL ASPECT OF THE RIGHT TO CLEAN, SAFE AND HEALTHY ENVIRONMENT

2.1 Understanding the term Environment

Part of the challenges facing the recognition and the enforcement of the right to a clean environment anywhere stems from the intricate nature of the term ‘environment’ itself. Thus, as a corollary to the discussion on the concept of the right to clean environment, it is imperative to start with what the term environment connotes. It has been said that ‘the environment may encompass everything, and almost everything that happens in society can implicate the environment’⁸.

As simple as the term seems, the conceptual underpinnings are not devoid of divergence. While some see the environment from human right angle (anthropocentric), others see the right to the environment as right for the environment itself (ecocentric). Besides, the term ‘environment’ is inherently broad and neutral⁹ with diverse synonyms such as nature, earth,

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⁸ Daly (n 2) 73.


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The term ‘environment’ pervades scientific, political and media discourse and, yet its meaning remains unclear. As with the concept of ‘time’ of which Augustine said that we know what it means so long as we are not asked for a definition, the term ‘environment’ is as simple to understand intuitively as it is difficult to circumscribe precisely.”

The fact that the term lends itself to diverse interpretations has been cited as one of the major challenges facing the judicial enforcement and institutionalisation of the right. According to Daly:

“Constitutionally enshrined environmental rights are particularly challenging for courts for a number of reasons, many of which flow from the lack of certainty about what the “environment” actually entails and how a meaningful

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10 Encyclopedia of Earth states “an academic discipline, such as mathematics or physics, although in public or media use, it is often used to connote some sort of normative or evaluative issues...more properly ecology is used only in the sense that it is an academic discipline, no more evaluative than mathematics or physics. When a normative or evaluative term is needed then it is more proper to use the term ‘environmental,’ i.e., ‘environmental quality,’ or environmentally degrading.” Charles Hall, ‘Ecology,’ The Encyclopedia of Earth (2014) <https://editors.eol.org/eoearth/wiki/Ecology_(Biology)> accessed 14 August 2022.


12 This has been defined as the biological component of earth systems which also includes the lithosphere, hydrosphere, atmosphere and other ‘spheres’ (e.g., cryosphere, and anthroposphere, etc.). The biosphere includes all living organism on earth, together with dead organic matter produced by them.” See the Encyclopedia of Earth. <www.eoearth.org/view/article/150667/> accessed 23 August 2022.

13 The word ‘biodiversity’ is a contracted version of “biological diversity.” The Convention on Biological Diversity defines it as “the variability among living organisms from all sources including inter-alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are a part...” See n11, art. 2.


conception of the environment can be incorporated into the practice of constitutional adjudication.”

The question therefore is: what environment do we mean whenever there is reference to the phrase environment, and by extension, the right to clean, safe and healthy environment? Understanding what environment means is critical to whatever right that is attached to the environment. For instance, the environment has been defined as “everything which surrounds spatial entity, abiotic or alive.” In the Oxford Dictionary of Ecology, the term ‘environment’ is defined as: “[t]he complete range of external conditions, physical and biological, in which an organism lives. The environment also includes social, cultural, and (for humans) economic and political considerations, as well as the more usually understood features such as soil, climate, and food supply.”

The Supreme Court of Chile had this to say on the environment:
“[T]he environment, environmental heritage and preservation of nature, of which the Constitution speaks and which it secures and protects, is everything which naturally surrounds us and that permits the development of life, and it refers to the atmosphere as it does to the land and its waters, to the flora and fauna, all of which comprise nature, with its ecological systems of balance between organisms and the environment in which they live.”

In the same vein, the New Zealand Environment Act of 1986 defines the environment as including:
(a) ecosystems and their constituent parts including people and communities; and (b) all natural and physical resources; and (c) those physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes; and (d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters.

To some scholars, the environment constitutes “an object of religious, cultural, and historical importance”, while to others, it is “the physical landscape of a people's history and future.” From the above, it is apparent

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16 Daly n2, 73.
20 Section 2 of the New Zealand Environmental Act 1986.
21 Daly, n2 citing Advocate Prakash Mani Sharma for Pro Public v His Majesty Government Cabinet Secretariat and others (1995) WP 2991(Nepal Supreme Court Joint Bench 1997.06.09).
22 See the opinion of the Kenyan High Court in the case of Ogiek People v District Commissioner (1999) Case No. 238/1999. In this case, the plaintiffs are the indigenous people of Ogiek Community in Kenya. They sought declarations and orders that their eviction from Tinet Forest by the Government (acting by the provincial administration) contravened their rights to the protection of the law, not to be discriminated against, and to reside in any part of Kenya, having

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that though the definition of the term varies from place to place, there is a common denominator. That is, the term *environment* means more than the ecosystem - it includes everything in it. It is a description of the entire way of life of the people and people may not meaningfully enjoy full happiness if removed from what they understand as their environment.

2.2 The Concept of the Right to Clean Environment

Besides the challenge of ascertaining what the environment itself entails, there is also the more complex conceptual difficulty of underscoring the import of the various phrases which have been employed in describing the relationship between the environment and human rights being described in this work as the right to clean environment. The meaning of the phrases such as the ‘right to clean environment’ or the term ‘environmental human right’ are not delimited by any known human right or environmental law instrument whether international, regional or domestic. However, these phrases have emerged and have been accepted as relating to the nexus between human rights and the environment. Thus, in most discussions on the relationship between human rights and the environment, several terminologies and adjectives have been employed to denote the meaning of the concept. Some of these terms are ‘environmental rights,’ ‘fundamental...
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environmental rights,27 ‘right to healthy28 or clean29 or quality30 or adequate31 environment’, etc. Most of the times, when these terms are used in legal instruments or discourses, they are intended to explain the relationship between the environment and human rights,32 or those rights described as fundamental rights in the Constitution.33 According to Rodriguez-Rivera:34

“There is the issue of the quality of environment involved in the right to a satisfactory environment. As yet, there is no agreement on the proper descriptive adjective; some of the adjectives employed by various authors and instruments include: healthy, healthful, adequate35, satisfactory, decent, clean, natural, pure, ecologically sound, balanced and viable. Even so, it has been questioned whether it is realistic to have a precise minimum standard of environmental quality that allows for a life of dignity and well-being, given the scientific uncertainty surrounding the issue.”

May and Daly observe that:

“Adjudicating constitutionally entrenched environmental rights comes with certain unavoidable challenges. New concepts and vocabulary need to be developed. Does the noun “environment” mean human environment, natural environment, or both? And which adjective to choose:

29 The adjective ‘clean’ as qualifying the environment has provoked certain scholars to ask if there is any right to clean environment at all. See generally, Nijhawan, n1.
31 See the Preamble to the Convention on Access to Information, Public Participation in Decision making and Access to Justice in Environmental Matters, June 25,1995 2/U.N.T.S. 447 (hereafter referred to as Convention on Access to Information) which states expressly that “Every person has the right to live in an environment adequate to his or her health and well-being.”
32 Shelton n26, 89.
33 See for instance, Chapter 4 of the Constitution of the Federal Republic of Nigeria 1999 (as amended).
35 Okorodudu-Fubara, particularly expresses the view that ‘the requirement that environment must be “adequate for [human] health and well-being” is extremely vague.’ M Okorodudu-Fubara, Law of Environmental Protection (Caltop Publications, 1998) 80.
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quality,” “healthful,” “clean,” “adequate,” or something else? What does a fundamental right to a quality environment entail?”

As confusing as these adjectives may be (and even in the absence of any qualification of the environment), it is apparent that an environment suitable for human living is the focus of every draftsman, jurist, legal commentator, or human right activist in the pursuit of human right to the environment. For instance, the Supreme Court of Montana faced with the task of elucidating the implications of a right to a specified environmental quality in the case of Montana Environmental Information Center et al. v. Department of Environmental Quality refused to be carried away by the description qualifying the word “environment” in the Montana Constitution. Article II, Section 3 of the Montana Constitution provides in part that: “All persons are born free and have certain inalienable rights. They include the right to a clean and healthful environment.”

In this case, the contention of the plaintiff, inter alia, was that part of the Montana Constitution violated by the legislatures when they amended a State law to provide a blanket exception to requirements governing discharges from well water without regard to the degrading effect that the discharges would have on the surrounding or recipient environment. The Court held that:

“... the right to a clean and healthful environment is a fundamental right because it is guaranteed by the Declaration of Rights found at Article II, Section 3 of Montana’s Constitution, and that any statute or rule which implicates that right must be strictly scrutinized and can only survive scrutiny if the State establishes a compelling state interest and that its action is closely tailored to effectuate that interest and is the least onerous path that can be taken to achieve the State’s objective.”

The Court held that:

The holding of the Court was predicated upon what the court felt was the intentions of the drafters of the Constitution as regard the scope of

36 May and Daly, n27, 370-371. Weston and Bollier also have this to say: “we use the phrase ‘clean and healthy environment’ to encapsulate the numerous adjectives that, alone or in combination, are used to identify or define this right, e.g., ‘adequate,’ ‘decent,’ ‘balanced,’ ‘biodiverse,’ ‘resilient,’ ‘safe,’ ‘sustainable,’ and ‘viable,’ in addition to ‘clean’ and ‘healthy.’ In no way, however, should this or other abbreviated usages (e.g., ‘human right to environment,’ ‘right to environment’) be interpreted to diminish the right from its fullest protective meaning.” BH Weston, and D Bollier, ‘Toward a Recalibrated Human Right to a Clean and Healthy Environment: Making the Conceptual Transition’ (2013) 4 (2) Journal of Human Rights and the Environment 117.

37 I am not unmindful of the fact that even the adjective “suitable” could raise sufficient linguistic questions as any other adjective.

38 This is a state in the Western United States of America.


42 Supra n39.
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environmental quality guaranteed by the Constitution. The Court considered the drafting history of the constitutional amendment and noted that the original draft had no adjectives preceding the word environment. The Court did not allow itself to be restricted by the adjectives: ‘clean’ and ‘healthful’ describing the kind of environment anticipated by the Constitution. The Court recalled a delegate involved in the drafting as explaining that descriptive adjectives such as ‘healthful’ or ‘unsoiled’ were not initially included in the Montana Constitution. It was because the majority felt that the use of the word ‘healthful’ would create room for environment polluters. The court was of the view that, in excluding water discharges from well tests, the statute makes it impossible for the State to “prevent unreasonable depletion and degradation of natural resources” as required in the Montana Constitution, an act that could undermine the fundamental right of the Montana people to clean and healthy environment. The Court stated further:

“We have not had prior occasion to discuss the level of scrutiny which applies when the right to a clean and healthful environment guaranteed by Article II, Section 3 or those rights referred to in Article IX, Section 1 are implicated. Nor have we previously discussed the showing which must necessarily be made to establish that rights guaranteed by those two constitutional provisions are implicated. However, our prior cases which discuss other provisions of the Montana Constitution and the debate of those delegates who attended the 1972 Constitutional Convention, guide us in both respects...we conclude that the right to a clean and healthful environment guaranteed by Article II, Section 3, and those rights provided for in Article IX, Section 1 were intended by the constitution’s framers to be interrelated and interdependent and that state or private action which implicates either, must be scrutinized consistently. Therefore, we will apply strict scrutiny to state or private action which implicates either constitutional provision.”

According to Boyle:

“Undoubtedly, definitional problems are inherent in any attempt to postulate environmental rights in qualitative terms. Surely, what constitutes a satisfactory, decent, viable, or healthy environment is bound to suffer from uncertainty and ambiguity. Arguably, it may even be incapable of substantive definition, or prove potentially meaningless and
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ineffective, like the right to development, and may undermine the very notion of human rights."

It is also imperative to examine whether some of these terms e.g., ‘right of the environment,’ ‘right to the environment,’ ‘environmental rights’ and the ‘right to clean environment’ mean one and the same thing. Some suggests that there is a difference between the “right of the environment” and “right to the environment.” Citing Rodriguez–Rivera, Ebeku reiterated:

“The right of the environment is founded upon the notion that the environment possesses rights derived from its own intrinsic value, separate and distinct from human use of the environment.”

In other words, the environment itself has certain rights for itself that should be preserved. This is the view of those who see the environment from eco-centric standpoint. However, May and Daly admit that “definitional issues abound, including whether ‘environment’ is anthropogenic or should include eco-centric interests such as biodiversity…” Cullet on the other hand sees environmental protection “not only as a meaningful instrument for the realization of all human rights but also as a goal in itself.”

The term ‘environmental right,’ on the other hand, is seen as encapsulating both the substantive and the procedural human rights necessary for the implementation and realisation of the right to a satisfactory environment. Boyle’s analysis of the right is more embracing. According to him:

“Environmental rights do not fit neatly into any single category or “generation” of human rights. They can be viewed from at least three perspectives, straddling all the various categories or generations of human rights.”

Some others see the environment as “an independent value and needs a strict protection as other commonly agreed value such as right to property

45 Cullet, emphasizes the point that “The formulation of the right as a plain ‘right to environment’ is no more imprecise than a right to a healthy or clean environment as these qualifying adjectives are themselves vague and subject to divergent interpretations.” P Cullet, “Definition of an Environmental Right in a Human Right Context” (1995) 13 Netherlands Quarterly of Human Rights 30.
46 See Ebeku, n7 Error! Bookmark not defined., 150.
47 May and Daly, n27, 380-381.
48 Emphasis mine. See Cullet, n45, 33. The right of environment confers right directly on the environment-as the best way of protecting the environment. See Ebeku, n7,150.
49 See Rodriguez-Rivera, cited in Ebeku, n7, 150.
50 Boyle, n6, 1.
51 The first perspective is that “civil and political rights can be used to give individuals, groups and nongovernmental organizations (NGOs) access to environmental information, judicial remedies and political processes. On this view their role is one of empowerment: facilitating participation in environmental decision-making and compelling governments to meet minimum standard of protection for life, private life and property from environmental harm. A second possibility is to treat a decent, healthy or sound environment as an economic or social right, comparable to those whose progressive attainment is promoted by the 1966 UN Covenant on Economic Social and Cultural Rights. Ibid.
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or the right to life and health.\textsuperscript{52} Mushkat,\textsuperscript{53} on his part identifies a distinction between ‘environmental human right’ and ‘ecological right.’ According to her:

“A degree of discord may be observed between those who focus on environmental human rights in the narrow sense of the term and those who seek to promote the broader idea of ecological rights. This stems from the intellectual tension, real or apparent, between the anthropocentric and ecocentric philosophical perspectives. The former conceives the environment whether explicitly or implicitly, as a mere good which serves to satisfy human needs and possess no intrinsic value in itself. … The ecological viewpoint posits that the environment is a condition of all life on earth. It follows that limitation on individual human freedom may be required in order to protect nature, which encompasses the human species.”

Given that most instruments creating or alluding to the right to the environment do not set out the meaning and scope of the right, and given that various instruments qualify the right using diverse languages and descriptions, some authors have fallen into the temptation of interpreting some of the terms as though they could represent different ideas. Having regard to the spirit behind the pursuit of human right within the context of the environment, it is safer to conclude that the terms such as ‘environmental right,’ ‘right to environment,’ ‘right to clean environment,’ etc. are all employed towards the objective of securing a habitable environment for man.\textsuperscript{54} According to Onvizu,\textsuperscript{55} “The right to a healthy environment is controversial, but scholars have attempted to link the environment to human rights.” Some\textsuperscript{56} are of the view that:

“Environmental rights are even broader as they include non-human phenomenal as well.\textsuperscript{57} They have the potential to reach most matters affecting the human condition, including right to life, dignity, health, food, housing, education, work,

\textsuperscript{54} It is of paramount importance to note that the Preparatory Committee for the Stockholm Conference was given the recommendation “to draw up a declaration on the human environment dealing with the rights and obligations of citizens and governments with regard to the preservation of the human environment.” See generally LB Sohn, ‘The Stockholm Declaration on Human Environment’ (1973) 14 The Harvard International Law Journal 425–426.
\textsuperscript{55} W Onvizu, ‘International Environmental Law, the Public's Health, and Domestic Environmental Governance in Developing Countries’ (2005) 21 American University International Law Review 666.
\textsuperscript{56} May and Daly are right when they state that “the purpose here is not to quibble about which adjective is most appropriate. Both authors use “quality” as the default and “adequate”, “healthy”, and “clean”, generally except as applied to the constitutional nomenclature of a specific constitution.” See May and Daly, (n27) 371.
\textsuperscript{57} May and Daly, Ibid citing T Hayward, ‘Constitutional Environmental Rights’ (2005)
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Culture, non-discrimination, peace and children’s health, as well as the health of the earth’s water, ground, and air.”

Other scholars have exercised some care in dealing with the terms by delimiting the scope to avoid confusion. However, in arguing a case for eco-centric approach to the environment, Boyle appears to have compounded the dichotomy between the right to the environment and environmental rights. He asks:

“Should we continue to think about human right and the environment within the existing framework of human rights law in which the protection of human is the central focus - essentially a greening of the rights to life, private life and property - or has the time come to talk directly about environmental rights in other words a right to have the environment itself protected? Should we transcend the anthropocentric in favor of the eco-centric?”

Boyle appears to have used the term environmental right as if it relates to the right to have the environment itself protected. This is what others understand as the right to the environment. One may want to ask, therefore: is environmental right only about having “the environment itself protected? Is it strictly relating to the environment from eco-centric perspective? Is the protection of the environment strictly for the sake of the environment itself? When the environment is safe, is it only for the sake of nature? The answers to these questions are not in the affirmative. This is because the term environmental rights literally should connote a right derived from the environment and this right should be all inclusive. The result of environmental rights should be beneficial to both the environment and man.

It is a common ground that from the context in which some of these adjectives are used by scholars, environmental and human rights advocates agree that, broadly speaking, ecological or environmental rights suggest a connection between the environment and human rights. It can be suggested, therefore, that “by implication, environmental rights are akin in all respects to other rights that reflect morally justified individual demands.” To this extent, the meaning and scope of each of these terms should be limited to the context in which the author puts them as there appears to be no agreement as to what strictly each of these terms represent other than they represent a right to live in a suitable environment, the court being in a better position to determine the suitability of the environment in each case.

It is in this light that Justice Feliciano of the Philippine refused to see difficulty or complication in the interpretation of the phrase “a balanced and

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59 According to Weston and Bollier, “We use the phrase “clean and healthy environment” to encapsulate the numerous adjectives that, either alone or in various combination, are used to identify or define this right, e.g., “adequate,” “decent,” “ecologically balanced,” “resilient,” “sustainable,” and “viable” in addition to “clean” and “healthy.” Weston and Bollier, n24.1.
60 Boyle, n6, 3
61 Mushkat, n53, 122.
healthy ecology”. According to the jurist’s claims on the right to a balanced and healthful ecology can be founded on almost every wrong against the environment. He said:

“It is in fact very difficult to fashion language more comprehensive in scope and generalized in character than a right to ‘a balanced and healthful ecology’. The list of particular claims, which can be subsumed under this rubric appears to be entirely open-ended: prevention and control of emission of toxic fumes and smoke from factories and motor vehicles; of discharge of oil, chemical effluents, garbage and raw sewage into rivers, inland and coastal waters by vessels, oil rigs, factories, mines and whole communities; of dumping of organic and inorganic wastes on open land, streets and thoroughfares...”

The position, therefore, is that the right to clean environment is at the root of very breach committed against the environment.

3. DEFINING THE RIGHT TO CLEAN ENVIRONMENT

Admittedly, defining a term has been one of the most Herculean tasks in the field of law. But where definition becomes inevitable, it is irrelevant how much ink is spilled in attempting to proffer one. It has been identified that the meaning of a word lies in its use in the language. It may be true too that the meaning of a word is just more words that stand in for them. However, it is not out of place if one considers the meaning of the term environmental rights (as if this subsumes other related terms) with the hope of arriving at a near universally acceptable definition, even though the term may be coloured, some of the time, by its contextual appearance. Trying to develop a general platform to cover the terms is to improvise a framework to ensure that each term does not have to depend on the context in which it is used at all times but on the general notion of what it is accepted to mean.

The term “environmental rights” has raised a lot of dust and it is still generating more issues, moral, social, legal, and so forth, some of these issues having to do with the ambit of the entire idea of the linkage between human rights and the environment. It is, therefore, a complex term. Some authors rather embarking on the difficult task of proffering a definition have decided to draw inspiration from available relevant legal instruments as aid in elucidating the import of the term. Wet and Plessis state that:

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62 Minors Oposa v. Factoran, n2, 224.
63 Arnold, has said that law for instance can never be defined with equal obviousness, however it should be said that adherence of legal instrument must never give up the struggle to define. See Arnold T., The Symbol of Government, 1935 p.36 cited in MI Jegede, ‘What’s Wrong with the Law?’ (1993) NIALS Annual Lecture Series 12 at 2.
65 Ibid.
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“Environmental rights contained in domestic bills of rights and international human rights instruments often consist of a complex combination of legal obligations. Their interpretation tends to be a particularly challenging task. Arguably, this also holds true for the environmental right in section 24 of the Constitution of the Republic of South Africa Act, 1996 (Constitution). Fortunately, however, there is a growing body of public international law, as well as foreign domestic law, on which one may draw to render the abstract language of section 24 [of the South Africa Constitution] more concrete for judicial application.”

Why Wet and Plessis feel that public international laws and domestic laws may be helpful in clarifying the language of the South Africa Constitution relating to environmental rights provisions, it may even be more confusing in some other jurisdictions. This is because according to May and Daly “the almost complete lack of evidence of framers’ intent about environmental provisions reinforces the sense of randomness.” It is thought, therefore, that it will rather be more rewarding if legislators and drafters of Constitutions have a near-generally acceptable scholarly idea of what is *environmental rights* to aid in formulating environmental right provisions than to look forward to discordant legislative provisions, whether domestic or otherwise, for guidance.

Notwithstanding that these terms present a contextual conundrum (i.e., “the right to clean environment,” “environmental human rights,” “environmental rights,” the right to healthy environment, etc), all terms are used interchangeably in this study as though all mean the same thing. However, it is desirable to underscore what they represent by way of definition.

Some scholars have made some attempts at defining the concept. According to MacDonald:

“[E]nvironmental rights are those rights related to environmental standards or protection that are safeguarded so as to benefit someone or something. That someone or something could be the environment itself, humans or combinations thereof. Environmental rights thus concern the

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346. They lament that the South African Constitutional Court has not yet had sufficient opportunity to clarify the meaning of section 24 of the South African Constitution. Section 24 of the South African Constitution, 1996 provides: “Everyone has the right [a] to an environment that is not harmful to their health or well-being; and [b], to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that—

i. Prevent pollution and ecological degradation; ii. Promote conservation; and iii. Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.” Ibid. Wet and Plessis, however, draw inspiration from the way in which international human rights bodies (both universal and regional) have interpreted and applied the relevant provisions of the respective human rights instruments within their jurisdiction. Ibid.

67 See, May and Daly, n27, 376.

68 For instance, Ebeku uses the term ‘right to a satisfactory environment’ to denote the three ramifications on human right to a satisfactory environment which he noted in his work. See Ebeku, n.
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right to protect human health and private or common property (including the “natural” environment) from damage or potential damage sourced through the environment.”

Otubu, on the other hand, states that:

“Environmental right ...[is the] right that gives human beings a primary right to a sustainable global environment. It has been defined as the right of individuals and peoples to an ecologically sound environment and sustainable management of natural resources conducive to sustainable development. The term manages to be both elusive and controversial: elusive because there is no universal definition, controversial because many from the environmental sector define it from an eco-centric perspective (environment first) while the human rights constituency is predominantly anthropocentric (humans first).”

According to Alan Boyle, “Environmental rights, give environmental quality comparable status to the other economic and social rights...[and] would recognize the vital character of the environment as a basic condition of life, indispensable to the promotion of human dignity and welfare, and to the fulfillment of other human rights.”

It is imperative to note at this point that the terms “the right to clean environment,” “environmental human rights” and “environmental rights” or even the right to healthy environment may not mean exactly one and the same thing even though it is obvious that all terms relate to the relationship between the environment and human being. For instance, if attention must be given to the definition of the word ‘health’ by the World Health Organisation (WHO) then not every clean environment in the strict sense of the word ‘clean’ denotes a healthy environment. WHO defines ‘health’


See the Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June 1946, which came into force on 7 April 1948. The issue of health as regard the determination of what is a safe environment cannot be brushed aside because “the right to health extends to the underlying determinants of health, which include a healthy environment.” See The Report of a Regional Seminar by World Health Organization n. 23, 12.

For instance, AS Hornby, Oxford Advanced Learner’s Dictionary (8th edn, Oxford University Press, 2010) defines clean as ‘not dirty.’
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as “a complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity.”

Several other generally accepted definitions of the word ‘health’ exist. Bircher defines health as “a dynamic state of well-being characterized by a physical and mental potential, which satisfies the demands of life commensurate with age, culture, and personal responsibility.” Saracci defines it as “a condition of well-being, free of disease or infirmity, and a basic and universal human right.” The Australian Aboriginal people generally have this to say about health: “…Health does not just mean the physical well-being of the individual but refers to the social, emotional, spiritual and cultural well-being of the whole community.” Health can be “a whole of life view and includes the cyclical concept of life-death-life.” The question therefore is: if the word ‘health’ connotes a state of healthiness, taking a bearing from the WHO’s definition, can there be a ‘healthy’ environment in that sense? And if we have a healthy or healthful environment, does this simply mean a clean environment? Most governments feel threatened by obnoxious fumes and smokes in the atmosphere (and do not have problem treating these situations as unhealthy) but not with noise (suggesting that if the issue is that of noise alone, the environment is clean enough) even though both situations affect the health of man.

The definition by WHO may be aspirational yet if analyzed within the context of environmental right, it has the possibility of sharpening government policies on the environment. According to Erika, “the ‘critical aspect of the contribution that the right to health can offer to law and policy involves challenging conventional assumptions regarding the nature of

See the Principle of the WHO Constitution at <https://www.afro.who.int/sites/default/files/2017-07/constitution_of_health_en.pdf> accessed 15 August 2022. Though, a critic argues that the “WHO’s definition of health is utopian, inflexible, and unrealistic, and that including the word “complete” in the definition makes it highly unlikely that anyone would be healthy for a reasonable period of time. It also appears that ‘a state of complete physical mental and social well-being’ corresponds more to happiness than to health.” Niyi Awofeso, ‘Re-defining ‘Health’ at <https://courses.sfcollege.edu/courses/398612/files/33934478/download?wrap=1> accessed 15 August 2022.


Final Report and Recommendations of the National Health and Medical Research Council-Promoting the Health of Indigenous Australians: A Review of Infrastructure Support for Aboriginal and Torres Strait Islander Health Advancement (NHMRC, 1996) part 2. This Report was, however, rescinded by the National Health and Medical Research Council on 24 March 2005. The Report now exists only for historical purposes.


Until around 1975 most governments viewed noise as a ‘nuisance’ rather than environmental problem let alone a human issue. Up till today, noise pollution is only redressable in Nigeria under the common law of tort. In Oregon, however, the word “unreasonable” which is used to qualify the word noise is “commonly defined as: “not conformable to reason, irrational, not governed or influenced by reason, immoderate, excessive, exorbitant, foolish, unwise, absurd, silly, preposterous, senseless and stupid.” See State v Marker (1975) 21 Or. App. 671, 675.
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constraints and the consequences of policy choices in order to provide new possibilities for improving health.”

4. THE NIGERIAN EXPERIENCE

The issue of the right to clean environment has not been robustly articulated in Nigerian courts. The first authority on the right to clean, safe and healthy environment in Nigeria is the famous Federal High Court case of Mr. Jonah Gbemre and Shell Petroleum Development Company Nigeria Ltd and 2 Other. This authority, though very weak, has given that it is a lonely Federal High Court decision whose substance was not tested on appeal, has heightened the campaign for the recognition of the right to clean environment in Nigeria. Since then there has never been any scholarly discussion on the right to clean environment or on Chapter Two of the Constitution, or on social, economic and cultural rights in Nigeria without some pontifications on Gbemre v SPDC. In this case, the Applicants alleged, inter alia, that the operation of the Respondents in continuing to flare gas in their community contaminated and polluted their environment and exposed them to several diseases including respiratory illnesses, asthma, cancer, increased premature deaths and also reduced crop yield on the land. As a result, the applicants urged the Court to declare their right to pollution-free environment entrenched under the Constitution and the African Charter on Human and Peoples’ Rights. The substance of the claim of the applicants was that the Constitutionally guaranteed fundamental rights to life and dignity of the human person provided in the Constitution and reinforced by the African Charter on Human and peoples’ Right (Ratification and

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82 (Unreported) Suit no: FHC/B/CS/53/05.
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Enforcement) Act inevitably includes the right to clean and healthy environment. All the reliefs of the applicants were granted.

The Judge has been highly commended for giving a purposeful interpretation to the fundamental rights contained in the Constitution and the African Charter. Some scholars feel that even though the Supreme Court did not have the opportunity to pronounce on the case, Gbemre v SPDC gives the sign that the African Charter can ground a valid application for the enforcement of socio-economic and cultural rights in the Nigerian Courts. According to Ladan, “[t]his is a landmark judgment in the sense of application of fundamental human rights to an environmental case for the first time in Nigeria, consistent with the trend in other jurisdictions.”

This notwithstanding, there are pockets of scepticisms shrouding Gbemre’s case, particularly, having regard to the provisions of sections 6(6) (c) and 20 of the Nigerian Constitution. Section 20 of the Constitution provides that “the State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria.” The provision of section 20 is under Fundamental Objectives and Directive Principles of State Policy (FODPSP). By section 6(6) (c) of the same Constitution, FODPSP are not enforceable. Section 6(6) (c) provides:

“The judicial powers vested in accordance with the foregoing provisions of this section …shall not except as otherwise provided by this Constitution, extend to any issue or question as to whether any act of omission by any authority or person or as to whether any law or any judicial decision is in conformity with the Fundamental Objectives and Directive Principles of State Policy set out in Chapter II of this Constitution…”

This section has been the major setback to the recognition and enforcement of all socio-economic rights as well as the right to clean, safe and healthy environment in Nigeria. The Court in Gbemre’s case was exceptionally courageous by giving a broader interpretation to the provisions of the Constitution (which guarantee the right to life and the dignity of the human person) to include the right to live in a clean, safe and healthy environment. However, it has been correctly observed that “broadly interpreting the right to life to include the protection of environmental rights is not yet an established legal principle in Nigeria.”

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Brown Etareri Umukoro, Oghenerukevwe Ituru
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Gbemre’s case has not opened up the way to right-based environmental justice in Nigerian. Apart from the un easiness which trailed the political environment after the judgment, some constitutional lawyers feel that only the Constitution should protect the calibre of rights envisaged in Article 24 of the African Charter and that section 6(6) (c) of the Nigerian Constitution having made mockery of section 20 of the same Constitution, there exists no further basis for upholding environmental rights in Nigeria. Others wonder why the Court did not make a statement on section 20 of the Constitution. As such, Gbemre not having been directly predicated on the Constitution appears to lack necessary force of law associated with fundamental rights provisions.

In summary, it must be admitted that the Court in Gbemre’s case refused to be carried away by any conceptual, theoretical or constitutional limitation which has always been canvassed against the enforcement of the right to clean environment in jurisdictions where the right is inexplicit. No court has followed Gbemre’s path since over 17 years of the decision.

In the more recent case of Centre for Oil Pollution Watch v. Nigeria NNPC the Appellant was a Non-Governmental Organisation [NGO] involved in the reinstatement, restoration and remediation of environments impaired by oil spillage/pollution; it also ensured that environments are kept clean and safe for human and aquatic live/consumptions. It sued the Respondent at the Federal High Court, Lagos, wherein it claimed inter alia for the:

1. Reinstatement, restoration and remediation of the impaired and/or contaminated environment in Acha autonomous community of Isukwuato Local Government Area of Abia State of Nigeria particularly the Ineh and Aku Streams, which environment was contaminated by the oil spill complained of.

2. Provision of portable water supply as a substitute to the soiled and contaminated Ineh/Aku Streams, which are the only and/or major source (sic) of water supply to the community.

The Respondent on its part contended that the Appellant lacked the requisite locus standi to institute or maintain the action as presently constituted, as the Appellant had neither suffered damage nor been affected by the injury allegedly caused to the Acha Community. The Court of Appeal in dismissing the appeal of the Appeal Court had this to say:

“"The position of the law may have changed to cloak ‘pressure groups, NGOs and public-spirited taxpayers’ with locus standi to maintain an action for public interest, as argued by the Appellant, but that is in other countries, not Nigeria. The truth of the matter is that there is a remarkable divergence in the jurisprudence of locus standi in jurisdictions like England; India; Australia, etc., and the Nigerian approach to same,"

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89 The decision in Gbemre’s case discloses a strong desire on the part of the trial court to do environmental justice notwithstanding existing technical hitches.

90 (2013) LPELR-20075(CA).
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which has not evolved up to the stage, where litigants like the Appellant can ventilate the sort of grievance couched in its Amended Statement of Claim. As it is, the position of the law on the subject is that the plaintiff must show [enough] interest in the suit.”

Thus, the Acha community was denied access to justice on the basis of locus standi. The court again failed to look at the issue of the right to live in a clean, safe and healthy environment in Nigeria. As it stands in Nigeria today, the government is not under any compelling duty to improve on the environment as there is no enforceable right to clean, safe and healthy environment. Accordingly, more depends on the judiciary in the struggle for the enforceability of environment rights in Nigeria. A vibrant judiciary must seek alternative pathways to environmental justice.

5. THE IMPLICATION OF THE UN GENERAL ASSEMBLY RESOLUTION ON THE RIGHT TO THE ENVIRONMENT

The 28 July 2022 is a very remarkable day for the struggle for the recognition of the right to clean environment as a universal human right. the United Nations General Assembly finally categorically recognised that a “clean, healthy and sustainable environment is a universal human right.”

The UN General Assembly with 161 votes and eight absentees adopted a significant resolution calling upon States, international organisations, and business enterprises to intensify efforts to ensure a healthy environment for all. This, no doubt, is a historic resolution. The Resolution recognises that “the impact of climate change, the unsustainable management and use of natural resources, the pollution of air, land and water, the unsound management of chemicals and waste, and the resulting loss in biodiversity interfere with the enjoyment of this right - and that environmental damage has negative implications, both direct and indirect, for the effective enjoyment of all human rights.”

The struggle for the recognition of the right to clean environment started 50 years ago when the United Nations Conference on the Environment in Stockholm adopted the Stockholm Declaration which was the first statement by international community to address environmental issues from human rights angle and “marked the start of a dialogue between industrialised and developing countries on the link between economic growth, the pollution of the air, water and the ocean, and the well-being of people around the world.” The Declaration of Principle on the Human Environment was meant to inspire and guide the people of the world in the

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94 UN News, n91.
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preservation and enhancement of the environment. 50 years after the UN General Assembly has found the need to categorically and officially resolve that the right to clean, safe and sustainable environment is a universal human right.

With the official recognition of the right to clean environment at international level there is hope as the stage is now set for the advancement of the right at domestic level in jurisdictions where the right has not been given outright recognition. Some countries like Nigeria identify environmental rights in a manner that makes it difficult to enforce directly.95 Nigeria with a rapidly deteriorating environment as a result of decades of unabated exploration and exploitation of oil, pollution victims still have no clear constitutional guarantee to clean environment. This legislative and judicial inertia is not common to Nigeria and has remained largely so in some countries partly, because of lack of sufficient force at international level. In the African continent, there is the African Charter on Human and Peoples’ Rights which clearly recognises the right to ‘satisfactory environment’ in article 24.96 This Charter has also been domesticated in Nigeria97 but the judiciary in Nigeria has not been able to give effect to the right because it is listed as non-justiciable right in the Constitution98 which makes the Ratification and Enforcement Act a toothless dog. On the hand, the African Charter is not enforceable because section 12 of the Constitution states that treaties must be domesticated before they can be enforced in Nigeria. While the recent UN General Assembly Resolution may mean well for many other nations without explicit and enforceable environmental rights provisions, it may not be the same for some countries like Nigeria until the various constitutional challenges have been addressed.

6. CONCLUSION

In the history of the struggle towards the recognition of the right to a clean, safe and healthy environment all over the world, many governments have begun to give a thought to the recognition of environmental rights particularly through constitutional provisions.99 This is likely going to

95 Other countries in this category are Afghanistan, Algeria, Cameroon, Comoros and Norway. May and Daly, n27, 388.
96 Article 24 of the Charter provides that ‘all peoples shall have the right to a general satisfactory environment favourable to their development.’ For a fuller discussion on this, see generally, M Linde and L Louw, ‘Considering the interpretation and implementation of article 24 of the African Charter on Human and Peoples’ Rights in light of the SERAC communication’ (2003) 3 African Human Rights Law Journal 167-187.
98 Section 20 and 66(c) of the Constitution.
99 Boyd states that “Today [environmental right] ... is widely recognized in international law and endorsed by an overwhelming proportion of countries. Even more importantly, despite their recent vintage, environmental rights are included in more than 90 national constitutions. These provisions are having a remarkable impact, ranging from stronger environmental laws and landmark court decisions to the cleanup of pollution hot spots and the provision of safe drinking water.” DR Boyd, ‘The Constitutional Right to a Healthy Environment’ (2012) 54 (4) Science and Policy for Sustainable Development 3.
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receive a higher recognition with the recent resolution of the UN General Assembly clearly and officially stating that a clean, healthy and sustainable environment is a universal human right. With this bold step by the international community, the interpretation of the concept and enforcement of this right at different levels now calls for further attention. There is a measure of disharmony between those who emphasis on environmental human rights in the narrow sense of the term and those who seek to promote the broader idea of ecological rights. These later agitators see the right as the centre of human existence. Thus, whether the right is termed as ‘environmental right,’ ‘right to environment,’ ‘right to clean environment,’ ‘right to satisfactory environment,’ or ‘right to decent or healthy environment,’ all are descriptions towards the objective of securing a habitable environment for man. It is suggested that whatever context in which the right is used, or whatever conceptual challenges that may be associated with the import of the right, judicial efforts should be geared towards interpreting the right to provide the full enjoyment as envisaged by the UN General Assembly Resolution and other instruments especially where environmental right is not explicitly provided for.100

Taking lead from the Montana’s Case,101 it does appear that there is a general understanding of the import of the right to clean and healthy environment no matter how it is described. Even if all a statute states are that citizens shall have right to the environment it should be interpreted by the courts102 to mean a right to an environment fit for human living, the courts being sufficiently able to draw the line between what environment is fit and what is not for human habitation.

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100 Some constitutions, such as South Africa explicitly provide for the progressive realization of some environmental rights. See generally Wei and Plessis n66, 345-376.
101 Montana v DEQ n39.
102 For instance, in South Africa, the Constitutional Court had interpreted section 24 of the South African Constitution to the effect that the section implies that environmental rights should be accorded recognition and respect even in administrative processes. The Director: Mineral Development, Gauteng Region and Sasol Mining (Pty) Ltd v Save the Vaal Environment and Others (1999) 2 SA 709 (SCA).
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AUTHORS’ DECLARATIONS AND ESSENTIAL ETHICAL COMPLIANCES

Authors’ Contributions (in accordance with ICMJE criteria for authorship)

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Funding
No funding was available for the research conducted for and writing of this paper.

Research involving human bodies (Helsinki Declaration)
Has this research used human subjects for experimentation? No

Research involving animals (ARRIVE Checklist)
Has this research involved animal subjects for experimentation? No

Research involving Plants
During the research, the authors followed the principles of the Convention on Biological Diversity and the Convention on the Trade in Endangered Species of Wild Fauna and Flora. Yes

Research on Indigenous Peoples and/or Traditional Knowledge
Has this research involved Indigenous Peoples as participants or respondents? No

(Optional) PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)
Have authors complied with PRISMA standards? Yes

Competing Interests/Conflict of Interest
Authors have no competing financial, professional, or personal interests from other parties or in publishing this manuscript.

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INTERNATIONAL LAW APPLICATION TO TRANSBOUNDARY POLLUTION: SOLUTIONS TO MITIGATE MINING CONTAMINATION IN THE ELK–KOOTENAI RIVER WATERSHED

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Received: 09 July 2022 | Accepted: 30 July 2022 | Published: 31 August 2022

ABSTRACT
The Elk Valley is home to five of the six largest mines in British Columbia, with ongoing plans for further expansion. These headwater coal mines have contributed to selenium pollution in the freshwater ecosystems of the transboundary Elk – Kootenai River watershed, evidenced in part by the $60 million fine imposed on Teck Resources Ltd. under Canada’s Fisheries Act in 2021 for the ‘deposit of deleterious substances’. Indigenous communities, including the Ktunaxa Nation, and various other organizations on both sides of the border, alongside governments in the United States, have been calling for higher standards of mining pollution control originating in Canada and for the International Joint Commission to make recommendations on this issue. Two agreements exist between the countries that may be relevant here, including the Boundary Waters Treaty (1909) and Columbia River Treaty (1964). In this article, these agreements describing the potential role of the International Joint Commission are analyzed, along with the outlining of the current process for this organization to make recommendations to resolve this ongoing, hot-button issue. The examples from case law and other international agreements pertaining to pollution are used to formulate a two-part conclusion in the form of (1) a short-term solution to effectively communicate and facilitate a resolution of transboundary mining pollution in the Elk – Kootenay River watershed; (2) a long-term solution to settle future disagreements regarding transboundary pollution between Canada and the United States.

Keywords: International law; Environmental law; Transboundary impacts; Mining pollution; International Joint Commission; United States; Canada

How to cite this paper: Kieran Simpson, and Ben R. Collison, ‘International Law Application to Transboundary Pollution: Solutions to Mitigate Mining Contamination in the Elk–Kootenai River Watershed’ (2022) 02 (02) Journal of Environmental Law & Policy 29-55 <https://doi.org/10.33002/jelp02.02.02>
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1. INTRODUCTION

One year ago, the headlines read, “Teck Coal given record-breaking $60 million fine for contaminating BC rivers,” as media outlets broke down the largest fine ever imposed under Canada’s federal Fisheries Act (ss. 36(3)), prohibiting the deposit of deleterious substance. The company, Teck Resources Ltd., hereafter referred to as “Teck”, was found to have been polluting the Fording River in south-eastern British Columbia (BC) with selenium at concentrations well above BC’s safety guidelines or the permissible limits granted by the Government of the Province of BC for almost a decade. Teck’s four coal mines in question are located in the rural Elk Valley, approximately 130 kilometres from the Canada-United States Roosville border crossing. From the upper Fording River watershed, where the highest selenium levels were found, water flows into the Elk-Kootenai River watershed, a drainage that straddles BC and Montana (USA) and is part of the larger Columbia River Basin that flows into the Pacific Ocean. While the BC Provincial Court handed Teck their $60 million fine, Teck has yet to answer to selenium pollution flowing into Montana, and it is unsure when or if they will.

There are few agreements or cases that can be applied to this issue. One agreement, over a century old, is the Boundary Waters Treaty of 1909 (“BWT”). Under the BWT, the International Joint Commission (“IJC”) was established to solve issues over transboundary water between Canada and the United States. Another treaty, which has been under negotiations to modernize for several years, applies only to this specific area at issue: the Columbia River Treaty (“CRT”). Here, we seek to determine if either of these agreements can apply to this issue; what is the possible role of the IJC? What has prior case law said on the subject of transboundary pollution and use of the IJC? If no solution is apparent through these means, are there other international laws or policies that can apply to this situation?

A solution is needed to address the contentious international aspect of this issue, but it is unclear whether existing international agreements help reaching a solution. After discussing the history of selenium pollution in the Elk Valley and Lake Koocanusa, what progress, if any, has been made so far.

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2 ECCC Investigation, supra note 1; Weber, supra note 1.


5 Columbia River Treaty, Canada & US, January 17, 1961, came into force September 16, 1964 [CRT].
to solve this issue, and how issues of transboundary pollution have been solved in the past between Canada and the United States, we analyze different approaches to reaching a solution, such as through the BWT and IJC. The IJC has been called on in the past to help reach conclusions for similar issues and should be again here as we conclude it is the most effective existing agreement; however, evaluating the role of the IJC raises another problem: The BWT is not an effective agreement for dealing with transboundary pollution between Canada and the United States. It is recommended that the BWT undergoes amendments to better consider and resolve transboundary pollution issues.

2. BACKGROUND

2.1 Selenium Pollution from Coal Mines in the Elk Valley, BC

The Elk Valley has a rich, mining history. Coal mining has occurred in the Elk Valley since 1898, with Teck operating the Fording River mine and Greenhills mine since 1971 and 1981, respectively.6 When the Fording River mine was built, settling ponds were built nearby as an attempt to minimize sediment deposits in the river resulting from the mine; however, fish, including the Westslope Cutthroat trout (Oncorhynchus clarkii lewisi), which is a species listed as a "species of special concern" under Canada’s Species at Risk Act, eventually made their way into the ponds, signifying the inability to ensure the ponds remained disconnected from the Fording River.7 In addition, waste rock from the mines can often precipitate dissolved calcium and selenium when exposed to oxygen or water.

Selenium is a naturally occurring, non-metal trace mineral that is found naturally in many living organisms, including humans, required in trace amounts for normal body function.8 Selenium is often precipitated into water systems as a byproduct of surface mining operations due to overburden waste rock storage and exposure to gradual weathering over time, resulting in accumulations that can be toxic in high concentrations.9 The element has a tendency to bioaccumulate in the food chain of freshwater ecosystems where inorganic selenium becomes bioavailable to higher tropic levels in its organic form after ingestion and interaction with primary producers (e.g., bacteria and phytoplankton).10 For context, selenium concentrations in the Fording River have recently been as high as 208 micrograms per litre (µg/L;

6 R v Teck, supra note 1 at para 2.
7 Ibid, at para 5; Species at Risk Act, SC 2002, c 29 [SARA].
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February, 2021), more than twice their permitted discharge limit (90 µg/L) and significantly higher than BC’s ‘safe for aquatic life’ limit of 2 µg/L, yet just upstream of the mines, selenium concentrations typically rest around 1 µg/L.

The issue of selenium pollution also has a history in the Elk Valley. Selenium was first discovered in the Fording River in 1995. However, it was still close to a decade before scientific consensus found that high selenium concentrations could be harmful to the biotic environment. In 2012, Environment and Climate Change Canada (“ECCC”) determined through water quality and fish sampling that the Upper Fording River had selenium levels within a range categorized as “adverse effects.” Studies on selenium, its concentrations, and preventative measures had been conducted for years prior through independent expert studies and by Teck’s own employees. In 1995, when it was discovered that soluble selenium was mobilizing due to the waste rock, there were “990 million cubic metres of waste rock placed in the Fording River and Greenhills mines.” That number increased to 2.2 billion cubic metres by 2008, 2.5 billion by 2011, and 2.62 billion by 2012. Teck was also given approval for an amendment to their Fording River mine certificate (under the BC Environmental Assessment Act) in 2017 to increase the amount of waste rock stored at the facility, transferred from the Greenhills operation. Though, 2012 is an important year, because in 2012, Teck admitted depositing a deleterious substance into the Fording River. Teck’s $60 million fine in 2021 under Fisheries Act was formulated only in relation to the year 2012. However, it was recognized that pollution occurred, at the very least, between a timeframe of 2009 to 2021. Since 2012, Teck has also been charged two times under the Environmental Management Act, British Columbia, AJ Downie, Director of Mining Authorizations, Permit 107517 under the Environmental Management Act, <https://j200.gov.bc.ca/pub/ams/download.aspx?PosseObjectId=139003236>. Weber, supra note 1; Cruickshank 2022, supra note 3; R v Teck, supra note 1 at para 8, 9 & 10; ECCC Investigation, supra note 1; Weber, supra note 1; Cruickshank 2021, supra note 1; Behnaz Rezaie, & Austin Anderson, “Sustainable resolutions for environmental threat of the acid mine drainage” (2020) 717 Science of the Total Environment 137211, <https://doi.org/10.1016/j.scitotenv.2020.137211> [Rezaie & Anderson]; Nosa O Egiebor & Ben Oni, “Acid rock drainage formation and treatment: a review” (2007) 2 (1) Asia-Pacific Journal of Chemical Engineering 47-62, <https://doi.org/10.1002/apj.57> [Egiebor & Oni]; K Rambabu, Fawzi Banat, Quan Minh Pham, Shih-Hsin Ho, Nan-Qi Ren, & Pau Loke Show, "Biological remediation of acid mine drainage: Review of past trends and current outlook” (2020) 2 Environmental Science and Ecotechnology 100024, <https://doi.org/10.1016/j.esse.2020.100024> [Rambabu et al].

R v Teck, supra note 1 at para 11.


R v Teck, supra note 1 at para 11.

Ibid.


R v Teck, supra note 1 at para 22.
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Act, and ordered by the Minister of Environment to create an Elk Valley Water Quality Plan. These charges were laid because of continuous damage resulting from selenium and calcite from waste rock, harm to species in the Fording River and the larger watershed, and harm identified to the Ktunaxa Nation in their traditional territory by polluting their water supply.

2.2 International Aspect of the Issue

The Ktunaxa Nation traditional territory spans across the Kootenay Region of BC, including the Elk Valley, Fording River and Lake Koocanusa, and through the states of Montana, Idaho, and Washington. European settlement led to the creation of the present six Bands: four solely in BC and two within the United States. In R v Teck, Vickie Thomas, the operational director of the Ktunaxa Nation Council Lands Sector, provided a statement in which she said, “Ktunaxa believe that they must care for all living things, and in doing so, we must ensure that the water is clean and pure as it is the giver of life.” Thomas followed by identifying concerns about water quality and the safety for Ktunaxa to consume contaminated fish and impair their fishing rights. In her address to the court she also said this pollution had led to “alienation of [her] people from [their] lands and waters.” This harm identified by the Ktunaxa Nation in their traditional territory was cited as an aggravating factor in determining Teck’s fine. In 2013, Teck and the Ktunaxa Nation signed a joint management agreement to conserve 700 hectares of land Teck had just purchased; they agreed to manage the land for conservation purposes to protect fish and wildlife habitat. This includes land on the Canada side of the Canada-United States border near the Elk-Kootenai watershed and Lake Koocanusa.

Lake Koocanusa, downstream of the Fording and Elk rivers, spans the Canada-US border between BC and Montana. In 2020, Montana’s Department of Environmental Quality determined that 95 percent of selenium entering the lake came from the Elk River. This assessment delivered by Kelly and Sullivan (2020) had been worked on since 2015 in partnership with BC officials, local Indigenous peoples and scientists. This study proposed a selenium standard of 0.8 µg/L, and the level in Lake
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Koocanusa as of 2020 was 1 µg/L and slowly increasing. After negotiation, Montana, BC and the Ktunaxa Nation Council agreed to a selenium standard of 0.85 µg/L in the Koocanusa reservoir and Montana officially adopted these new limits in December of 2020; however, because Teck’s coal mines are located in Canada, they are not subject to Montana’s state rules. While BC approved the 0.85 µg/L standard, BC water quality guidelines, which are not legally binding, are still 2 µg/L. Lawyers for Teck submitted a petition to the Board of Environmental Review in Montana opposing the new Montana standard, arguing it is illegal and targets their mining operations. Several environmental organizations and Montana’s Department of Environmental Quality wrote to the Board in support of the standard. To date, the Board of Environmental Review has not reached a conclusion and the transboundary pollution conflict remains unresolved.

2.3 Historical Dealings of Transboundary Harm between Canada and the United States

No transboundary pollution issue between Canada and the United States can be assessed without reference to the Trail Smelter case. This case is described as a “touchstone for international environmental law,” and it is often the only case cited in instances of transboundary damage settled by applying international law principles on State liability for cross-border damage. This case was over an issue of air pollution from a smelter in Trail, BC, causing damage to Washington State farmlands for 13 years. Canada and the United States brought the matter before the IJC under Article 9 (looking for a recommendation but not a decision), and the IJC recommended the American farmers be paid $350,000 as compensation for the damages from air pollution. The countries then submitted this case to a separate special arbitration tribunal in 1935, where Canada agreed to pay the damages recommended by the IJC that were supported by the tribunal. In 1941, during the tribunal’s final decision, they stated that “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.” This case established several international environmental law principles, including: the state has a duty to

32 Cruickshank 2022, supra note 3; Kelly & Sullivan, supra note 29.
33 Cruickshank 2022, supra note 3.
34 Ibid.
35 Cruickshank 2022, supra note 3.
36 Ibid.
39 Bratspies & Miller, supra note 38 at page 27.
40 Bratspies & Miller, supra note 38 at page 27 & 28; Brunnée, supra note 38 at page 395.
41 Trail Smelter Arbitration, supra note 37; Bratspies & Miller, supra note 38 at page 127.
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prevent transboundary harm, and the “polluter pays” principle requiring the polluting state to pay for transboundary damage they cause. Many international agreements have ever since adopted these principles; however, no agreements between Canada and the United States have included these principles. The existing agreements between Canada and the United States that may be relevant are discussed next.

2.4 Agreements Regarding Transboundary Pollution between Canada and the United States

The Boundary Waters Treaty, 1909

The BWT was signed between Canada and the United States to settle disputes between the two countries over the rights, obligations, and interests of each other regarding the use of boundary waters. The Preliminary Article of the BWT defines “boundary waters” as “waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and Canada passes...” which, using this definition, would include the Elk-Kootenai watershed. Applying the BWT to pollution issues, the relevant article is Article IV, which prohibits pollution to boundary waters on either side if it would injury health or property of the other side. This is recognized as the “first international pollution treaty in history” by some, but it should also be noted that the main priority is not to prohibit pollution, but to protect the rights of each country.

Since its inception, the BWT has regulated and solved disputes regarding boundary waters between the two countries. This has largely been done through the IJC, which was formed as a permanent Commission under the BWT and is responsible for its implementation. The IJC has many vital roles as established under the BWT. Article VII establishes that the IJC “shall have jurisdiction over and shall pass upon all cases involving the use or obstruction or diversion of the waters with respect to which under Article III or IV...” This establishes, therefore, that the IJC is to control and decide on “uses or obstructions or diversions, temporary or permanent” of boundary waters on either side and construction, such as dams or pollution along any boundary waters.

42 Trail Smelter Arbitration, supra note 37; Bratspies & Miller, supra note 38 at page 3.
43 Ibid.
44 Ibid, preliminary article.
45 Ibid, art IV.
47 BWT, supra note 4, art VII.
48 BWT, supra note 4, art VIII.
49 BWT, supra note 4, arts III &IV.
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The BWT and IJC have played essential roles in resolving issues of transboundary pollution between Canada and the United States for over a century (the Trail Smelter dispute, for example), and continue to do so.\textsuperscript{50}

Columbia River Treaty, 1964
The CRT was ratified in 1964 as an agreement between Canada and the United States primarily as a transboundary water management agreement for the Columbia River Basin, specifically regarding development.\textsuperscript{51} This is important to the region for two reasons: power generation and flood control, both were of upmost importance in the region.\textsuperscript{52} The CRT was deemed necessary after several disastrous floods in the late 1940s and 1950s, including the Vanport City, Oregon flood which killed 50 people and resulted in over $102 million in damages (equivalent to over $900 million now).\textsuperscript{53} The CRT allowed for rapid development of flood control systems that could also produce hydroelectricity.

While the CRT may have been important for flood control and has been positively viewed in some ways, local Indigenous peoples were excluded in the creation of the CRT and many local First Nations communities experienced loss because of flooding to create new reservoirs and facilities for hydropower. The building of dams under the CRT also changed the ecology of the rivers in the Columbia River system, blocked salmon from migrating and flooded cultural territory.\textsuperscript{54} In 2018, Canada and the United States began negotiations to modernize the treaty by 2024, focused on addressing concerns about environmental impacts and Indigenous rights.\textsuperscript{55} On January 10, 2022, Canada and the United States met for the 12th round of negotiations; the latest informal meeting was on May 17, 2022.\textsuperscript{56} While the CRT does not explicitly relate to selenium pollution from coal mines in the Elk Valley, the Elk-Kootenai watershed is within the greater Columbia River watershed boundary, and given the contentious ongoing negotiations to amend it, it should be considered. Other international agreements and cases on transboundary pollution may be relevant to this issue, but our analysis will focus on these agreements and cases, which we believe to be the most pertinent international resources to discuss the case of transboundary selenium pollution mining operations in southern British Columbia.

\textsuperscript{50} Some more case examples where the IJC were called on to solve transboundary pollution issues are expanded upon in the analysis section of this paper.
\textsuperscript{51} CRT, \textit{supra} note 5, preamble.
\textsuperscript{54} Cohen & Norman, \textit{supra} note 52, at page 15.
\textsuperscript{55} Bob Keating & Tom Popyk, “Calls to terminate Columbia River Treaty sparks concern after 2 years of negotiations,” CBC News, 2018 [Keating & Popyk].
3. ANALYSIS AND APPLICATION OF INTERNATIONAL LAW

3.1 The International Joint Commission Should be Called Upon for Recommendations

The IJC is already aware of the issue of selenium pollution and Montana’s increasing concern about its effect on Lake Koocanusa.57 In 2016, the BC Auditor General, Carol Bellringer, stated that the Ministry of Environment had been monitoring selenium levels in the Elk Valley for 20 years, but because there is no regulatory oversight, no necessary action has been taken to solve the problem.58 In 2018, two US commissioners on the IJC released a letter to the US State Department stating Canada’s three representatives would not endorse a report showing risk to aquatic and human life in Lake Koocanusa from selenium pollution. These US commissioners accused BC of negligence in addressing the issue of selenium pollution and said they are at risk of violating the BWT.59 Additionally, Teck and the BC government are required to regularly perform water testing in the area, but this data is not made available to the public; these US representatives on the IJC criticized this testing process, stating that Teck and Canadian representatives were “suppressing science.”60 As such, the apparent lack of transparent, peer-reviewed scientific monitoring that is independent from Teck and the BC government is a significant concern in this case.61 The IJC has knowledge of the selenium pollution issue and knows that there is ongoing conflict between Montana and BC (therefore, Canada and the US), yet they have not provided recommendations to solve the issue. However, the real issue is that the IJC has not been asked to provide recommendations.

While the IJC commissioners are aware of the issue and seemingly in dispute themselves, they cannot do anything under the treaty because the treaty is not self-activating. Canada and the United States must jointly decide to invoke the treaty if they think a project may affect such things as water levels, water flow, and water quality by sending the issue to the IJC for investigation.62 Article X states that the two countries may jointly request a reference to the IJC on any matters they disagree on under the treaty over the “rights, obligations, or interests” of either countries or their citizens.63 As mentioned, BC has yet to update its water quality guidelines to follow the selenium standard of 0.85 µg/L; BC will not likely take any action, or request

58 Ibid.
60 Lavoie, supra note 57.
62 Walker, supra note 46.
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the federal government to call upon the IJC for recommendations, if their selenium standard is not updated first. However, the issue remains that if BC is to update their standard for Lake Koocanusa, it is still Canada that must request the IJC recommendations in partnership with the US. Though, since studies began analyzing selenium levels in the lake around 2015, there has been increasing concern from the US side and local Indigenous people and increasing tension between all sides because Canada has not been interested in calling on the IJC; if the IJC is not called upon for recommendations, tensions between Canadian and American counterparts will likely only increase as they make their contradicting arguments to the wind.

One aspect of the BWT that can be blamed for lack of calling on the IJC is the vague mention of pollution despite attempts of the IJC to adopt stronger recognition of environmental concerns. Currently, the BWT states that concerns over pollution is engaged under the agreement only when it could cause injury to the health or property of the other country. This suggests not a general prohibition against pollution, but rather a protection of rights afforded to each country; pollution is not prohibited until it harms the other side. It is understandable, then, why BC has been hesitant to adopt a water quality standard that would support the accusation of harmful pollution from a company in their jurisdiction and why Teck has been so adamant against Montana’s new standard.

The BWT has continued to use this vague definition of pollution, but the IJC has slowly moved forward toward an ecosystem approach to addressing local concerns by creating the International Watersheds Initiative (“IWI”). The IWI is an approach of the IJC to resolving transboundary water issues through partnership with local communities affected by a given issue out of recognition those closest to issues will likely have more knowledge and understanding of how the specific ecosystem functions, and how it has been impacted. Canada also developed the International Boundary Waters Treaty Act (“BWT Act”), recognizing First Nations treaty rights as affirmed under section 35 of the Constitution Act.

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64 Cruickshank 2022, supra note 3.
66 Williams, supra note 39.
67 BWT, supra note 4, art IV.
68 Walker, supra note 46.
70 Walker, supra note 46; International Boundary Waters Treaty Act, RSC 1985, c I-17, s 21 [BWT Act]; Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), 1982, c 11 [Constitution].
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in the BWT Act of environmental concerns specifically over the “bulk removal” of water within section 12, but other than this there are only vague mentions of environmental concerns as aggravating factors under section 36(2). For example, section 36(2)(a) states that an offence causing “damage or risk of damage to the environment” is an aggravating factor; section 36(2)(c) states if the damage was “extensive, persistent or irreparable,” it is also an aggravating factor. While it may appear promising, these provisions offer several issues: they are only listed as aggravating factors for an offence under the BWT, and environmental damage or harm does not trigger an offence on its own; these factors are still vague, with no standard or definition to suggest what constitutes environmental damage, or what is meant by “extensive, persistent or irreparable” (s. 36(2)). Therefore, while the IJC attempts to move forward and modernize, the BWT still only consists of one vague article on pollution, and the BWT Act only introduces vague mentions of environmental harm that are solely aggravating factors and not triggering factors. The BWT has existed for over a century now in its current form, while the law and world it operates around have changed drastically.

If the IJC were called upon for recommendations, they would likely consider both Indigenous rights and concerns over environmental harm, given their evolution to an ecosystem-based approach. Even back in 1975, when called upon to evaluate the effects of the Garrison Diversion on Canadian waters, the IJC demonstrated their ability to modernize by considering risks of irreversible damage to the environment and adopting the precautionary approach. The IJC is not the issue; what needs improvements is the triggering of the BWT and the considerations under the treaty that should result in consulting the IJC. Under the current treaty, neither Indigenous concern nor environmental harm is reason enough, and consulting the IJC is only necessary if there is harm to the health or property of people. Additionally, while the IJC can enforce the BWT, jurisdictions cannot force each other to respect recommendations or decisions of the IJC; both countries seem to prefer only using the IJC for recommendations, so they may refuse to accept the recommendations provided if it does not fit with political agendas, economic objectives, or other environmental and social factors. There needs to be more power afforded to the IJC to execute the BWT and provide recommendations regardless of whether both Canada and the United States call upon them. Providing self-execution to the IJC could solve many problems such as the case of transboundary pollution in Lake Koocanusa, or in the case of Devils Lake where the IJC was asked to "survey fish pathogens and parasites in Devils Lake, the Sheyenne and Red

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72 BWT Act, supra note 71, s 12 & 36(2).
73 Ibid, s 36(2)(a) & 36(2)(c).
75 IWI, supra note 69.
76 Andrea Signorelli, “Devils Lake Outlet and the Need for Canada and the United States to Pursue a New Bilateral Understanding in the Management of Transboundary Waters” (2011) 34 Manitoba Law Journal 183 [Signorelli].
77 Signorelli, supra note 76.
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Rivers, and Lake Winnipeg in order to better understand their potential risk of transference from Devils Lake to downstream systems. In the Lake Koocanusa case, even allowing a single party to invoke the IJC rather than needing a joint agreement to request the IJC’s recommendations would result in the IJC being involved.

3.2 Case Law: Calling on the IJC to make Recommendations would Facilitate Solutions

Looking back to Trail Smelter, calling on the IJC for recommendations can facilitate discussions between Canada and the United States, leading to a solution, whether through arbitration or not. The arbitration tribunal, who decided the case, adopted the damages recommended by the IJC. The IJC recommendations also helped facilitate discussions in the tribunal that established key international principles of transboundary pollution and international law. Notably, the tribunal concluded that in the debate over following domestic law or international law, in a matter of transboundary pollution, the domestic law should be in conformity with general international rules. Additionally, they stated that it was Canada’s responsibility to ensure the smelter’s conduct adhered to international law obligations. In the Lake Koocanusa case, this would suggest a responsibility of Canada to ensure Teck is not polluting Montana waters. The tribunal reached these conclusions with helpful recommendations from the IJC, and summarized their reasoning with what is now known as the Trail Smelter principles: the state has a duty to prevent transboundary harm, and the polluter pays principle recognizing polluting states should pay compensation for transboundary harm they cause. If these principles are to be followed in the case of selenium pollution in Lake Koocanusa, they both support that Canada needs to take action to prevent pollution flowing from Teck’s mines and provide compensation for any damage already caused.

While the Trail Smelter principles were important to set precedence through the issue of transboundary pollution in international law, and demonstrated the benefits of calling on the IJC for recommendations, the established principles have potentially vague application as the arbitration tribunal stated other things that contradict those principles. For example, by saying that only when a “case is of serious consequence and the injury is established by clear and convincing evidence” can a state intervene, they suggest that producers still have the right to do what is necessary to maximize production and economic benefit. Therefore, while some key international pollution principles have come from this case, there have also been many critical views of Trail Smelter for its failure to impose an


79 Hall, supra note 74.

80 Ibid.

81 Bratspies & Miller, supra note 38 at page 3.

82 Trail Smelter Arbitration, supra note 37; Bratspies & Miller, supra note 38 at page 18.

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obligation to prevent damage. Because of this, it is difficult to apply to cases of transboundary pollution currently unless clear evidence of damage has occurred; it introduced an obligation to pay for pollution but not to prevent it from the outset. The threshold of transboundary environmental effects "of a serious consequence" is inherently ambiguous. Because of this, Trail Smelter could be used to support Canada paying for damages to the United States because of Teck pollution, but the case can also be used as support for the use of the IJC.

The eventual fine required to be paid by Canada in Trail Smelter, and the international pollution principles that came from the case, stemmed from the research and recommendations of the IJC. The IJC’s investigation was conducted by scientists from both countries who presented scientific impacts on the pollution. While it did take some time to reach a final decision even after the IJC provided their recommendations, these recommendations facilitated the final discussions and tribunal decisions. Since Trail Smelter, the IJC has continued to help solve disputes between Canada and the United States and examples show how the IJC has attempted to modernize while the BWT has not.

Past cases the IJC have been involved in demonstrate the ability of the IJC to help facilitate solutions and show their willingness to adopt more modern principles over time. In 1944 a study and recommendations by the IJC eventually led to the creation of the CRT. In 1975, the IJC was asked for recommendations and evaluations on the effect of the Garrison Diversion on Canadian waters. The IJC’s conclusion in the 1975 Garrison Diversion case was that a project involving water transfer between basins should not proceed “unless and until Governments agree that methods had been proven that would eliminate the risk of biota and disease were no longer of concern” and that the project does not proceed until then. The IJC adopted a precautionary approach after concluding that the risk of irreversible damage caused by foreign biota was inconclusive as it was impossible to measure all effects. Ultimately, these IJC recommendations were not adopted; however, these recommendations illustrate the IJC’s adaptability and openness to adopt modern principles. While not explicitly using the precautionary principle, the conclusion that a project should not proceed unless a "risk" is "no longer of concern" is following the principle. Regardless, the recommendations still facilitated further discussion between the countries. Notably, the issue and ideas in the Garrison Diversion Project were discussed in the later Devils Lake Outlet case mentioned above.

83 Bratspies & Miller, supra note 38 at page 126.
84 Ibid, at page 129.
85 Bratspies & Miller, supra note 38 at page 28.
87 Signorelli, supra note 76.
89 Signorelli, supra note 76.
90 Ibid.
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recently, and regarding an issue close to Lake Koocanusa, the IJC provided recommendations for a proposed mine in the Elk Valley, stating that it should not be approved until there were no potential impacts on the trout fishery in the Flathead River.\(^91\)

While IJC recommendations and investigations are not required to be followed, the suggestions made by the IJC are respected and historically have at the very least, facilitated further discussion between Canada and the United States over a given dispute. However, this discussion also illustrates that, while the IJC is attempting to modernize, the BWT remains unchanged. Ironically, the CRT, another transboundary treaty relevant to the area at issue, which was created and signed as a direct result of discussions and cooperation of the IJC,\(^92\) is already undergoing amendments despite being created 50 years after the BWT.

### 3.3 The Columbia River Treaty is not Applicable to the Situation but Supports Reform of the Boundary Waters Treaty

Unfortunately, the CRT is not applicable to this case; however, amending of the CRT supports possibly amending the BWT, and the CRT may be applicable once amendments are finished. The CRT is a specific treaty governing flood control, infrastructure, electricity and energy production and does not address the issue of pollution. While Lake Koocanusa is within the Columbia River system, and the Libby Dam (southern end of the lake) was created through this treaty, there is no provision in the treaty that can help solve the conflict over selenium pollution in Lake Koocanusa. Before the CRT was formed, flooding was largely only an issue in the United States. The creation of the CRT demonstrates that there can be international solutions to issues once viewed as solely domestic ones.\(^93\) Given the ongoing negotiations to amend the treaty, notably to address concerns about environmental impacts and Indigenous rights, the amended product could apply to pollution issues in Lake Koocanusa upon the 2024 release, or, at the very least, support amending the BWT.\(^94\) Of course, there is no certainty as to what the amendments will include.

When the CRT was first created, many important factors were not considered, and issues are now apparent with the approach taken to damming the rivers and preventing flooding. For example, grizzly bears were separated onto either side of newly formed lakes, which resulted in two weaker breeding populations, and bull trout numbers are continually dropping because these lakes are not natural and do not have the necessary nutrients to sustain all life.\(^95\) One of these lakes is Lake Koocanusa, formed

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\(^{91}\) IJC History, \textit{supra} note 86.  
^{92}\) Hall, \textit{supra} note 74.  
^{93}\) Hundley, \textit{supra} note 53.  
^{94}\) Keating & Popyk, \textit{supra} note 55.  
by the damming of the Kootenai River. It is possible that if environmental concerns are to be included in CRT amendments, any environmental issue within a body of water formed by the damming of waterways through the CRT could fall under the control of the newly amended CRT.

A notable goal of amending the CRT is to ensure that Indigenous Nations in the Columbia Basin have their interests reflected in the treaty.96 This could also provide support the CRT having some jurisdiction over Lake Koocanusa and other water bodies formed by dams in the Columbia River system in cases of pollution because the Ktunaxa, for example, could hopefully raise concerns about pollution within the Columbia River system under the CRT. As already mentioned, the damming of the Kootenai River, which formed the Koocanusa reservoir, resulted in the harm of several species which were of importance to First Nations, including kokanee salmon and bull trout.97 CRT amendments are occurring, in part, out of recognition of harm caused to local Indigenous peoples and their traditional territory, including their food and water supply.

While amendments are focused on including considerations of both Indigenous rights and environmental concerns, it is not clear what these amendments will look like, and it remains unclear if they will aid in preventing or controlling selenium pollution. Even if they addressed pollution in water bodies formed by damming waterways in the Columbia River system, selenium pollution is unrelated to infrastructure, which the CRT controls. A key takeaway from an analysis of the CRT’s possible role in this issue should be that if a 1964 treaty can undergo significant amendments to include both Indigenous rights and environmental concerns, why can a 1909 treaty, which clearly needs to be modernized, not undergo similar amendments as well?

3.4 What can We Learn and Apply from Other International Agreements?

There are no other applicable treaties that can be directly used to solve the transboundary selenium pollution because Canada and/or the United States is not a party to any agreements that could be relevant. However, while no treaties apply directly to the issue at hand, there are several that can be looked to for possible suggestive amendments to the BWT, including the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses (“UN Watercourses Convention”),98 the 1992 United Nations Economic Commission for Europe Convention on the Protection and Use of Transboundary Watercourses and International Lakes (“UNECE Water
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Convention”\textsuperscript{99}, the Berlin Rules on Water Resources (“Berlin Rules”)\textsuperscript{100} and the United Nations Declaration on the Rights of Indigenous Peoples (“UNDRIP”)\textsuperscript{101}

The International Court of Justice (“ICJ”), the official "judicial organ" of the United Nations tasked with settling international legal disputes submitted to it could\textsuperscript{102} in theory, be requested to decide on the issue. However, similar to the IJC, cases have to be referred to the ICJ by the parties involved\textsuperscript{103} so both countries would have to agree to refer the case. Given that a court decision would be binding, it is unlikely either country would prefer this outcome over coming to an agreement together. Therefore, the ICJ has no real power or ability to help solve this problem. For this reason, we have chosen not to look at ICJ cases in this paper and instead we focus on illustrating key principles that could be taken from the above agreements when considering what amendments could be included in the BWT to make it more effective at resolving transboundary pollution issues between Canada and the United States.

1997 UN Watercourses Convention

The 1997 UN Watercourses Convention cannot be applied to the Lake Koocanusa dispute because neither Canada nor the United States is a party to the Convention, but it can be looked to for possible BWT amendments. It is unclear why neither country is a party to Convention; perhaps it is because the UN Watercourses Convention provides more weight to countries with a greater population and economic activity, which contradicts the equality provided in the BWT.\textsuperscript{104} Or, perhaps Canada and the United States take issue with the greater access to shared waters. It is unfortunate that the countries are not parties, and the principles within the Convention cannot apply, but equality between the two countries in the BWT is also an important aspect that should remain; as it stands, Commissioners in the BWT reach decisions based on consensus, requiring at least one Commissioner from the other country to be in the quorum\textsuperscript{105}. Regardless, some of the key principles and provisions from the UN Watercourses Convention should be considered in a BWT amendment process, especially the cooperative nature of the Convention which is based on the idea of limited territorial sovereignty\textsuperscript{106}.

Under the UN Watercourses Convention, specific definitions are provided for key terms that are likely to arise in cases, which aids in solving


\textsuperscript{101} United Nations Declaration in the Rights of Indigenous Peoples, adopted by the UN General Assembly, 2 October 2007, A/RES/61/295 No 68 [UNDRIP].


\textsuperscript{103} Statute of ICJ, supra note 102 at art 36(1).

\textsuperscript{104} Walker, supra note 46.

\textsuperscript{105} Ibid.

\textsuperscript{106} Signorelli, supra note 76.
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transboundary disputes; the BWT can draw on these. First, under Article 21, a pollutant is considered anything that could alter the quality of downstream waters.\textsuperscript{107} One of the criticisms of the BWT has been its vague provisions, notably article IV where pollution is mentioned. A definition such as this one provided in the UN Watercourses Convention would greatly benefit the BWT, making it more applicable to transboundary pollution issues, as the lack of an explicit definition of pollution under the BWT has made it difficult to assess conflicts correctly.\textsuperscript{108} Additionally, Article 7 of the Convention adopts the polluter pays principle.\textsuperscript{109} The BWT does not include the polluter pays principle, yet the IJC appears to already recognize the principle; adopting it into the BWT would create less conflict between the BWT and IJC and provide more guidance for the IJC to make recommendations.

While many other articles in the Convention could be relevant to the BWT, two of the most important amongst the rest are Articles 8 and 9. These articles state there is a general duty for States to cooperate with one another and watercourse States will regularly exchange data and information related to the condition of a watercourse.\textsuperscript{110} This would positively apply to the selenium pollution issue and could dissolve the conflict between Canadian and American IJC Commissioners due to accusations of the Canadian side withholding information and preventing this issue.\textsuperscript{111} Lastly, it should be noted that Article 21 of the Convention presents several provisions for the prevention and reduction of pollution; for example, Article 21(2) explicitly states that a watercourse State shall “prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment.”\textsuperscript{112} These are simple provisions recognizing the duty to prevent and reduce pollution causing harm to other States that could easily be adopted into an amended BWT.

1992 UNECE Water Convention

Like the UN Watercourses Convention, the UNECE Water Convention cannot be directly applied to this situation, as neither Canada nor the United States is a party to it, but it does provide more examples of general provisions that an amended BWT should include to effectively address transboundary pollution issues. The UNECE Water Convention efficiently describes the detailed duties of each party to the Convention under Article 2; for example, Article 2, section 2(a) states that parties shall take all appropriate measures “to prevent, control and reduce pollution of waters causing or likely to cause transboundary impact.”\textsuperscript{113} While this is a general obligation for parties, it does more than the BWT to identify the obligations of parties regarding pollution as there is a specific definition provided for “transboundary

\textsuperscript{107} UN Watercourses Convention, supra note 98 at art 21; Signorelli, supra note 76.
\textsuperscript{108} Signorelli, supra note 76.
\textsuperscript{109} UN Watercourses Convention, supra note 98 at art 7.
\textsuperscript{110} UN Watercourses Convention, supra note 98 at art 8 & 9.
\textsuperscript{111} Lavoie, supra note 57.
\textsuperscript{112} UN Watercourses Convention, supra note 98, art 21(2).
\textsuperscript{113} UNECE Water Convention, supra note 99, art 2, s 2(a).
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impact” under Article 1.114 Also of note is section 5, which specifically states the parties in the Convention will apply both the precautionary principle and polluter-pays principle.115 As a transboundary water agreement, these principles should be essential in the BWT; as mentioned, the IJC has adopted both principles in decisions and recommendations, so again, by making these amendments to the BWT there will be less conflict between the BWT and how the IJC has evolved.

Lastly, another key aspect the BWT could integrate is Article 5 of the UNECE Water Convention, which encourages cooperative research and development between States; for example, under (d), parties should cooperate to research and develop a technique for “phasing out and/or substituting substances likely to have a transboundary impact.”116 A provision like this would facilitate better cooperation between Canada and the United States and encourage more use of the IJC.

Berlin Rules

The Berlin Rules is a summary of international laws currently in existence that apply to freshwater resources adopted by the International Law Association; a useful resource summarizing key provisions governing transboundary waters and pollution in particular that could be of interest for BWT amendments. Chapter III of the Berlin Rules should be of particular interest to BWT amendments as it consists of provisions on internationally shared waters.117 First, under Article 10, States that share an international water basin have the right to participate in the management of its waters “in an equitable, reasonable, and sustainable manner.”118 This is another simple provision that would be a useful addition to the BWT and aid in preventing issues such as selenium pollution in Lake Koocanusa because of the focus on sustainably managing the waters and equal right to do so. Article 11 requires basin States to cooperate in good faith over the management of transboundary waters.119 As suggested in commentary on the Berlin Rules, this provision speaks for itself as it would be impossible for States to share transboundary water resources sustainably without this type of obligation.120 The BWT could use more recognition of an obligation of good faith between Canada and the United States to ensure shared resources are handled sustainably. Next, Article 12 requires the management of waters in an international basin in an “equitable and reasonable manner having due regard for the obligation not to cause significant harm to other basin States.”121 Again, a principle that would hopefully facilitate greater respect for shared water resources if incorporated into the BWT.

114 Ibid, art 1.
115 Ibid, art 2, s 5.
116 UNECE Water Convention, supra note 99 at art 5(d).
117 Berlin Rules, supra note 100 at page 18.
118 Ibid, art 10(1) at page 18.
119 Berlin Rules, supra note 100, art 11 at page 19.
120 Ibid, at page 20.
121 Ibid, art 12 at page 20.
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The Berlin Rules also establish the factors that should be considered when determining what is “equitable and reasonable use” and these factors support the prioritization of using transboundary water to “satisfy vital human needs” and the populations “dependent on the waters of the international drainage basin.” While there are other factors listed, these stand out. First, prioritizing water use to satisfy vital human needs suggests that this should come first if it is needed as drinking water. In the case of selenium pollution, the Ktunaxa Nation arguably had some of their water resources polluted. This provision of the Berlin Rules could be aligned with the goals and provisions of UNDRIP, detailed more below, which promote sustainability and health, and should be looked to as a provision to adopt in the BWT. The factor requiring consideration of the population dependent on the water resource also supports this.

United Nations Declaration on the Rights of Indigenous Peoples

On June 21, 2021, Bill C-15, known as “An Act respecting the United Nations Declaration on the Rights of Indigenous Peoples” (“UNDRIP”), received royal assent. Through this Act, Canada recognized UNDRIP and committed to implementing it in legislation. Some possible provisions under UNDRIP that should be recognized are, first, Article 8(2), which provides that States will prevent or provide redress for any action depriving Indigenous peoples of “their integrity as distinct peoples,” or “any action dispossessing them of resources.” Studies have already illustrated the negative effects of selenium pollution on both the water quality and fish stocks in the Elk River system and Koocanusa watershed, both of which are resources of the Ktunaxa Nation. Articles such as this should be adopted into the BWT to ensure that not only is UNDRIP respected but that Indigenous peoples are afforded the equality they have been promised.

There are several other UNDRIP Articles that should be looked to. Article 18 exemplifies the equality promised to Indigenous peoples stating, “Indigenous peoples have the right to participate in decision-making matters affecting their rights.” Under the current circumstances of the selenium pollution issue, if this is to be truly respected by Canada, this should suggest that the Ktunaxa Nation, whose traditional territory spans both sides of the Canada-US border around Lake Koocanusa, should have the right to participate alongside Canada and the United States under the BWT now that UNDRIP has been recognized, meaning they could also request the IJC get involved. Under Article 26, Indigenous peoples have the right to use or occupy the lands and resources of their traditional territories, and States shall give legal recognition and protection to these lands and resources. The

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122 Ibid, art 13(2)(c) & 14 at page 21.
123 R v Teck, supra note 1 at para 16 & 17.
125 UNDRIP, supra note 101, art 8(2).
126 Ktunaxa Nation, supra note 22.
127 UNDRIP, supra note 101 at art 18.
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Ktunaxa Nation traditional territory covers the entirety of Lake Koocanusa. While the United States has not adopted UNDRIP, if Canada is to respect their commitment to UNDRIP, this should include the entirety of the Ktunaxa Nation traditional territory if they impact this territory through pollution in Lake Koocanusa. Regardless, the Ktunaxa Nation supported the Lake Koocanusa selenium standard of 0.85 µg/L; if they are to have equal decision-making power and their traditional territory be respected, this standard should be adopted on the Canadian side of the border, and they should have the option of requesting the IJC make recommendations.

4. CONCLUSION: A TWO-PART SOLUTION

Based on this analysis, two conclusions are reached regarding a solution to the issue of selenium pollution in Lake Koocanusa. These conclusions consist of (1) a short-term solution: hopefully facilitating discussions to conclude the Lake Koocanusa conflict and possibly a greater level of oversight and transparency in monitoring and data availability for selenium levels by calling on the IJC for recommendations; and (2) a long-term solution: necessary to solve future disagreements regarding transboundary pollution between Canada and the United States.

4.1 Short-Term Solution

First, specific to how a solution can be reached swiftly in the current case, the IJC needs to be called upon to provide recommendations. Given the recent studies on selenium in the Elk-Kootenai watershed, and the growing concern from Montana and American commissioners on the IJC, Canada and the US requesting recommendations is most likely to facilitate the necessary discussions to reach a solution. Clearly there is disagreement between the two countries with regards to how to address this problem and whether it is a problem at all, and recommendations from IJC would help facilitate a solution. Case law has shown that the IJC provides thorough and respected recommendations and the IJC has been modernizing itself. The IJC is likely equipped to handle environmental concerns and Indigenous rights matters. There are prominent examples of how solutions have been reached after IJC recommendations, such as in the case of Trail Smelter.

A recognizable issue, though, is that both countries need to be open to requesting recommendations from the IJC, but Canada is withholding. However, given Canada’s recognition of s.35 Constitution rights under the BWT Act, their recognition of UNDRIP, and because both BC and the Ktunaxa Nation (who possess s.35 rights), have recognized and agreed to the selenium concentration standard of 0.85 µg/L, Canada should jointly call upon the IJC for recommendations.

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129 Ktunaxa Nation, supra note 23.
130 Cruickshank 2022, supra note 3; Kelly & Sullivan, supra note 30.
131 Weber, supra note 1; Cruickshank 2022, supra note 3; Rezaie & Anderson, supra note 8; Egiebor & Oni, supra note 8; Rambabu et al, supra note 8; Kelly & Sullivan, supra note 30.
132 Cruickshank 2022, supra note 3.
4.2 Long-Term Solution

Second, and most important for the future of transboundary water disputes between the countries, the BWT needs to be amended. At the very least, amendments need to include updating the treaty to include environmental concerns and Indigenous rights, and the IJC needs to have more power, even if this means the ability to self-execute or only require one party request recommendations rather than both. Key amendments need to include specific definitions of pollution. While Canada and the United States are not parties to the 1997 UN Watercourses Convention or the 1992 UN Water Convention, they can take key principles from these Conventions, along with the Berlin Rules and UNDRIP, to amend the BWT. Additionally, there should be a possibility for the IJC to be activated from any interested party rather than both parties jointly, such as in the 1997 Convention. While this is a tall order, it has been called for already.\textsuperscript{133}

We see the CRT going through substantial amendments, yet a treaty from 1909 remains unaltered. The CRT amendments show that an amendment process can and should include environmental concerns and Indigenous rights. The IJC is already beginning to reflect these concerns, but the BWT needs to provide them with the ability to be more involved in transboundary water disputes.

Canada handing down the largest fine under the \textit{Fisheries Act} in Canadian history may have made for good press, but in the context of Canada-United States transboundary pollution agreements, this fine (pale in comparison to Teck’s multi-billion dollar per year revenue stream) did little but bring the flaws of the century-old BWT to the surface.\textsuperscript{134} The BWT does not need to become a transboundary pollution treaty, but if it is all Canada and the United States are going to have between them to address transboundary pollution, it needs to be amended.

\textsuperscript{133} Signorelli, \textit{supra} note 76.
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<td>Contributed to data analysis &amp; interpretation</td>
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<td>Yes</td>
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<td>Project Administration</td>
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<tr>
<td>Overall Contribution Proportion (%)</td>
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<td>15</td>
</tr>
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Funding
No funding was available for the research conducted for and writing of this paper.

Research involving human bodies (Helsinki Declaration)
Has this research used human subjects for experimentation? No

Research involving animals (ARRIVE Checklist)
Has this research involved animal subjects for experimentation? No

Research involving Plants
During the research, the authors followed the principles of the Convention on Biological Diversity and the Convention on the Trade in Endangered Species of Wild Fauna and Flora. Yes

Research on Indigenous Peoples and/or Traditional Knowledge
Has this research involved Indigenous Peoples as participants or respondents? No

(Optional) PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)
Have authors complied with PRISMA standards? Yes

Competing Interests/Conflict of Interest
Authors have no competing financial, professional, or personal interests from other parties or in publishing this manuscript.

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