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ARTICLES

DEVELOPMENTS AT THE UNITED NATIONS INTERNATIONAL LAW COMMISSION ON SEA-LEVEL RISE

CLAUDIO GROSSMAN GUILOFF^{*}

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I. INTRODUCTION

Sea-level rise is a pressing global challenge that could generate catastrophic consequences for humankind. The implications for States and people all over the world are grave, making rising sea-levels a matter of utmost urgency. This paper will examine some of the challenges presented by the phenomenon of sea-level rise in relation to international law with a focus on the analysis undertaken by the Study Group on Sea-Level Rise ("Study Group") of the United Nations International Law Commission ("ILC").

There are more than 70 States that may be directly affected by sealevel rise. In particular, low-lying coastal areas are currently home to 680 million people, while Small Island Developing States ("SIDS") are home to 65 million people.¹ Some 146 million people will be at risk of having to evacuate their homes over the next century. In addition, some states are at risk of losing substantial parts, or even the entirety, of their territory. As some states lose territory–a crucial element of statehood under the Montevideo Convention on the Rights

^{1.} Nerilie Abram et al., *Framing and Context of the Report, in* IPCC SPECIAL REPORT ON THE OCEAN AND CRYOSPHERE IN A CHANGING CLIMATE 77 (Hans-Otto Pörtner et al. eds., 2022) [hereinafter IPCC Special Rep.].

and Duties of States— sea-level rise threatens the spread of *de facto* statelessness, meaning millions of people may lose the protection of their State of nationality and their access to basic services. This, in turn, could result in the denial of people's right to participate in the decision-making processes concerning their own well-being when decisions involving their rights are to be made. Other major legal challenges caused by sea-level rise include intergenerational equity and the rights of vulnerable people.

The international community, taking into account the severe consequences of sea-level rise, should not wait until States' territories are completely inundated. Although the legal issues raised by sealevel rise appear to be novel and there is a presumptive absence of state practice, we cannot simply conclude that international law is irrelevant to the problem. This issue is related, inter alia, to some of the most fundamental principles of international law enshrined in the United Nations Charter (UN Charter) and the United Nations General Assembly Resolution 2625 "The Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States" ("Friendly Relations Declaration"). Examples of principles of international law that may be relevant to the issue at hand are the sovereign equality of states, self-determination, and international cooperation. Therefore, the sources of international law—as established in article 38(1) of the Statute of the International Court of Justice ("ICJ Statute"), and as highlighted in academic writings and legal doctrine relating to these principles-should not be considered irrelevant in addressing the challenges and debates surrounding sea-level rise.

For the purposes of dealing with this phenomenon, the ILC decided to include the topic "Sea-level rise in relation to international law" in its 71st session in 2019.² The ILC also established an open-ended Study Group on the topic to assess the impact of sea-level rise on different domains, namely the law of the sea, statehood, and the

^{2.} This was specifically at the request of Pacific SIDS such as the Federated States of Micronesia, Fiji, Kiribati, Nauru, Palau, Papua New Guinea, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. *See* Int'l Law Comm'n, Rep. on the Work of Its Seventy-Fourth Session, U.N. Doc A/74/10, at 339 (Aug. 20, 2019).

protection of persons affected by sea-level rise.³

This study group, created in 2019, has issued four reports on these topics, received comments from States, and just recently presented a second report on the topic of the impact of sea-level rise on the law of the sea. As of now, the Commission has made the following developments: (i) in 2020, the Co-Chairs of the Study Group submitted a First Issues Report on the impact of sea level rise on the law of the sea ("First Report");⁴ (ii) in 2022, the Co-Chairs of the Study Group submitted a Second Issues report on the impact of sea level rise on statehood and the protection of persons ("Second Report); (iii) in 2023, the Co-Chairs of the Study Group submitted an Additional Paper to the First Issues Report, further addressing the impact of sea-level rise on the law of the sea ("Additional Paper"); (iv) in 2024, the ILC released a Memorandum from the Secretariat ("Secretariat Memorandum")⁵ detailing elements in the ILC's historical work that may be particularly relevant to the ongoing discussion of sea level rise; and (v) most recently, in 2024, the Co-Chairs of the Study Group distributed an Additional Paper to the Second Issues Report ("Second Additional Paper"), intended to develop and supplement the Second Report. In August 2023, the Commission considered and adopted the report of the Study Group on its work during the 74th session, which focused on the potential effects of sea level rise on issues relating to the law of the sea. This paper aims to provide comments on the contributions made by the ILC through April of 2024.

II. THE PRESSING ISSUE OF SEA-LEVEL RISE WITHIN INTERNATIONAL LAW

Rising sea-levels are a pressing concern for the entire international community. The implications for states and people's rights all over the

^{3.} *Id.* (noting that the study group would be co-chaired on a rotating basis by Mr. Bogdan Aurescu, Mr. Yacouba Cissé, Ms. Patrícia Galvão Teles, Ms. Nilüfer Oral and Mr. Juan José Ruda Santolaria).

^{4.} Id. at 339-40.

^{5.} Memorandum by the Secretariat on Sea Level Rise in Relation to International Law, U.N. Doc A/CN.4/768 (2024) [hereinafter Secretariat Memorandum].

world are extremely dire, making rising sea levels a matter of utmost urgency. In the past few years, various substantive ideas have been developed regarding rising sea-levels in relation to international law. However, there is still much to do. This is mainly due to the widereaching consequences this phenomenon will have on the Law of the Sea, statehood, and the protection of persons. Sea level rise also engages topics beyond these three, such as the law of state responsibility.

First, the sheer number of people who will be affected by sea-level rise demands an adequate response from international law. Coastal areas are home to approximately 28 percent of the global population, including around 11 percent living on land less than 10 meters above sea level.⁶ Forty percent of the world's population live within 100km, or 60 miles, off the coast.⁷ These populations include particularly vulnerable groups such as indigenous peoples, women and girls, children, refugees and asylum seekers, internally displaced persons, stateless persons, national minorities, migrant workers, persons with disabilities, and elderly persons.⁸ It is thus paramount for the works of the commission to assess the impact of sea-level rise on these vulnerable groups.

An array of human rights are directly implicated by rising sealevels,⁹ including the rights to life, self-determination, an adequate standard of living, development, food, water and sanitation, health, housing, and a healthy environment. Particularly affected are the rights of "indigenous peoples whose relationship to their environment tends to provide a key element in their identity."¹⁰ Indigenous peoples

9. See id. ¶¶ 8, 18, 36, 40, 50, n.90 (discussing the right to self-determination and right to adequate housing); U.N. Env't Programme, CLIMATE CHANGE & HUM. RTS., 1, 3, 4, 28 (2015) [hereinafter UNEP Rep.] (discussing the right to adequate standard of living, right to food, right to health and life, and right to cultural identity).

10. ANTHONY OLIVER-SMITH, SEA LEVEL RISE AND THE VULNERABILITY OF

^{6.} IPCC Special Rep., supra note 1, at 77.

^{7.} *Factsheet: People & Oceans*, U.N. OCEAN CONF. (2017), https://sustainable development.un.org/content/documents/Ocean_Factsheet_People.pdf.

^{8.} See U.N. High Comm'r for Hum. Rts., *Rep. on the Relationship between Climate Change & Hum. Rts.*, ¶ 42, U.N. Doc. A/HRC/10/61 (Jan. 15, 2009) ("The effects of climate change will be felt most acutely by those segments of the population who are already in vulnerable situations due to factors such as poverty, gender, age, minority status, and disability.").

face displacement from their ancestral lands in the face of sea level rise, which would have wide ranging social, cultural, and economic impacts for these vulnerable groups. It is imperative that States comply with their existing obligations towards indigenous peoples and members of traditional communities.¹¹

The right to water is also impacted by sea-level rise. The right to water has been recently recognized under international law and several human rights conventions protect it indirectly through other rights.¹² The right to water includes the "right to be free from interference, such as the right to be free from arbitrary disconnections or contamination of water supplies."¹³ Sea-level rise may cause such contamination; according to the UN Environment Programme, "sea-level rise, [sic] contributes to saltwater inundation of freshwater resources [... and] can lead to the degradation of water supplies for human consumption, agriculture, and other uses."¹⁴ Moreover, it is projected that even before islands are inundated, they may become uninhabitable due to

12. For example, the Inter-American Court of Human Rights found that indigenous peoples' right to water is based on the right to property and the right to life of the American Convention on Human Rights despite the fact that the convention does not explicitly mention the right to water. *See* Yakye Axa Indigenous Cmty. v. Para., Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 12.313, ¶¶ 144, 156, 176, 182, 208 (June 17, 2005).

COASTAL PEOPLES: RESPONDING TO THE LOCAL CHALLENGES OF GLOBAL CLIMATE CHANGE IN THE 21ST CENTURY 28 (2009).

^{11.} See U.N., Hum. Rts. Council, Rep. of the Special Rapporteur on the Issue of Hum. Rts. Obligations Relating to the Enjoyment of a Safe, Clean, Healthy & Sustainable Env't, 18, U.N. Doc. A/HRC/37/59 (Jan. 24, 2018). In the report, the Framework Principle 15, establishes the State obligations regarding the respect and protection of indigenous peoples and members of traditional communities. It establishes that States are obligated to uphold their commitments to indigenous peoples and members of traditionally possess. This includes consulting with these groups and obtaining their informed consent before any relocation or other actions that could affect their lands. Additionally, states must respect and protect indigenous practices related to the sustainable use of these areas and ensure these communities fairly share in the benefits derived from their lands and resources.

^{13.} U.N., Off. of the High Comm'r for Hum. Rts., General Comment No. 15: The Right to Water (Arts. 11 & 12 of the Covenant), \P 10, U.N. Doc. E/C.12/2002/11 (2002).

^{14.} UNEP Rep., *supra* note 8, at 3.

sea water invading the island's freshwater supplies.15

Additionally, sea-level rise will also provoke coastal baselines to shift landward, which would mean a reduction in the sovereignty and jurisdictional rights of coastal states and islands, as their maritime zones would be reduced.¹⁶ At the very core of the work of the Commission on this topic lies the law of the sea, as codified in the UN Convention on the Law of the Sea ("UNCLOS"). As a matter of interpretation, UNCLOS creates the law of the sea through its binding effect upon all 169 State parties.¹⁷ Moreover, many portions of UNCLOS are now considered to be part of customary international law and therefore binding upon non-parties as well.¹⁸ That said, the ILC members have taken into account that UNCLOS provides limited guidance on how to deal with some impacts of sea-level rise. Unfortunately, the travaux préparatoires of the UNCLOS do not include recorded discussions touching upon the phenomenon of sealevel rise itself. As the First report of the study group suggests, State practice and opinio juris are of great importance in the context of the law of the sea.¹⁹ Indeed, State practice is often the forerunner of any

16. See Bogdan Aurescu & Nilüfer Oral, Co-Chairs of the Study Group on Sea-Level Rise in Relation to International Law, *First Issues Paper on Sea-Level Rise in Relation to International Law*, ¶¶ 93–95, U.N. Doc A/CN.4/740 (2020) [hereinafter Aurescu & Oral, *First Issues Paper*] (discussing different views on shifting coastal baselines and maritime boundaries as a result of human-induced sea level rise).

17. Depositary: Status of Treaties: United Nations Convention of the Law of the Sea, UNITED NATIONS TREATY COLLECTION, https://treaties.un.org/doc/Publication/MTDSG/Volume%20II/Chapter%20XXI/XXI-6.en.pdf.

18. United Nations Convention on the Law of the Sea, art. 76(1), Dec. 10, 1982, 1833 U.N.T.S. 397 [hereinafter UNCLOS]; *see, e.g.*, Territorial and Maritime Dispute (Nicar. v. Colom.), Judgment, Advisory Opinion, & Order, 2012 I.C.J. 626, 666, 674 (Nov. 19) ("The Court notes that Colombia is not a State party to UNCLOS and that, therefore, the law applicable in the case is customary international law. The Court considers that the definition of the continental shelf set out in Article 76, paragraph 1, of UNCLOS forms part of customary international law."); Maritime Delimitation & Territorial Questions between Qatar and Bahrain (Qatar v. Bahr.), Merits, Judgment, 2001 I.C.J. 40, 91 (Mar. 16) (noting that most provisions of the 1982 UNCLOS that were relevant to the case reflect customary law).

19. See Nicar. v. Colom., 2012 I.C.J., at 674 (discussing Columbia and

^{15.} See JANE MCADAM, CLIMATE CHANGE, FORCED MIGRATION, AND INTERNATIONAL LAW 124 (2012) ("[T]hese countries are likely to become uninhabitable as a result of diminished water supplies long before they physically disappear.").

change or innovation in international law. In this regard, the International Law Association ("ILA") has stated that "there is at least prima facie evidence of the development of regional state practice in the Pacific islands—many of which are the most vulnerable to losses of territory and, consequently, of landmarks from sea-level rise."²⁰ This said, outside of Small Island Developing States ("SIDS"), there is a notable absence of state practice which could be used to interpret the effect of sea level rise on international law.

Although the legal issues raised by sea-level rise are novel and there is an absence of state practice, we cannot simply conclude that international law is irrelevant. Beyond the existing legal framework and CIL, previous legal debates, academic writings, and legal doctrines relating to these principles should not be considered irrelevant in addressing the challenges and debates surrounding sealevel rise. There are numerous interpretative examples that are an integral part of the legal tradition which demonstrate the adaptation of existing legal principles in a manner that preserves their legality.

III. POTENTIAL LEGAL EFFECTS ON THE LAW OF THE SEA

Concerning the shift of coastal lines, the first task undertaken by the Study Group was to identify and analyze the implications of sea-level rise on the law of the sea. Within this task, the Study Group identified the relevant provisions of UNCLOS for rising sea-levels and analyzed their interpretation in light of sea level rise.²¹

Considering the real-world issues that are affected by rising sea levels, the Study Group decided to interpret UNCLOS in a manner that placed the principle of stability in a prominent position when analyzing the topic.²² Additionally, the need to recognize a role for

Nicaragua's perceived obligations to act in accordance with customary international law laid out in UNCLOS).

^{20.} INT'L L. ASS'N, SYDNEY CONFERENCE (2018): INTERNATIONAL LAW AND SEA LEVEL RISE 18 (2018) [hereinafter SYDNEY CONFERENCE].

^{21.} See Aurescu & Oral, First Issues Paper, supra note 16, ¶¶ 44–46 (outlining the scope of the Study Group's examination, limits on their actions, and declaring UNCLOS as the principal source of codified law for the findings).

^{22.} See Bogdan Aurescu & Nilüfer Oral, Co-Chairs of the Study Group on Sea-

equity was deemed to be essential as an integral part of international legal analysis.²³ Equity and stability can be best achieved by interpreting UNCLOS as a 'living document' that can respond to the challenges posed by sea-level rise, particularly in relation to provisions on baselines, maritime zones, and maritime delimitations. Thus, for the study group, UNCLOS is a living document that must be interpreted in full compliance with the norms established by international law—i.e. Articles 31 and 32 of the Vienna Convention on the Law of Treaties ("VCLT")—to address the challenges posed by sea-level rise.

To give a better view of the discussions and justification of the ultimate conclusions, this section outlines the practical implications of this approach and the related debates within the ILC including the importance of equity and legal stability as ambulatory baselines, and the exercise of sovereign rights.

A. THE IMPORTANCE OF EQUITY

The principle of equity should be used to support an international law regime that takes into account the needs of the most vulnerable States in relation to sea level rise. Some of the Members of the Study Group during the 74th ILC session expressed the view that a reading of UNCLOS that uses fixed baselines in the context of sea-level rise would advance the principle of equity.²⁴ The Chair of the Study Group "noted that the request for the issue of equity to be examined by the Study Group was made by several States," including small island developing States.²⁵ While climate change *per se* is outside the scope

24. For further discussion of the aforementioned baselines, see infra Part II.C.

25. Int'l Law Comm'n, Rep. on the Work of Its Seventy-Fourth Session, U.N. Doc. A/78/10, at 100 (Nov. 3, 2023) [hereinafter ILC Rep. 2023].

Level Rise in Relation to International Law, Additional Paper to the First Issues Paper on Sea-Level Rise in Relation to International Law, \P 68, U.N. Doc A/CN.4/761 (2023) [hereinafter Aurescu & Oral, Additional Paper to the First Issues Paper] (discussing the Study Group's adherence to the existing legal regime under UNCLOS as contributing to legal stability, certainty, and predictability in the effort to address the challenge of sea-level rise).

^{23.} See id. \P 216 ("As highlighted in several State submissions, this raises considerations of equity and fairness especially in the light of the disproportionate geographical impact of sea-level rise: as the land area of an island shrinks, so too would the size of the maritime entitlements, especially for archipelagic States.").

of the Study Group's syllabus, it is impossible to ignore issues of equity and fairness implicated by sea-level rise and the relevance of historical and current contributions to greenhouse gas emissions. During the 74th session, members recalled that those who stand to suffer the most from "human-induced sea level rise contributed least to the problem" and recalled the link between "equity and the principle of common but differentiated responsibilities."²⁶

In the 74th session, doubts regarding the applicability of equity in the context of sea-level rise were expressed by some Members.²⁷ The question of how to categorize the concept of 'equity' in international law was also discussed.²⁸ For instance, some members questioned whether equity could be classified as a rule of customary international law and noted that it had been excluded from Art 38 of the ICJ Statute.²⁹ It was also expressed "that the Study Group should conduct further research into the legal question of the application of the principle of equity to sea-level rise in the context of climate change."³⁰

Some members recalled that 'equity' is a broad concept, and as such, there is particular care needed in the application of this concept to the context of sea-level rise.³¹ It was also noted that the International Court of Justice (ICJ) had interpreted 'equity' in maritime delimitation cases in a different way from the concept of equity in general as it was being discussed by the Study Group.³² In this vein, it was proposed that the Study Group adopt a definition of equity for the purposes of its work on the topic, but some members disagreed with this

30. Id.

^{26.} *See id.* (discussing the link between the principle of equity and the principle of common but differentiated responsibilities, as mentioned by several members).

^{27.} *Id.* at 102 ("Some members expressed reservations about the applicability of equity in the context of sea-level rise. It was noted that the preliminary observations contained the assumption that any loss of maritime entitlement would be inherently inequitable.").

^{28.} *Id.* at 101 (discussing various questions raised as to equity's consideration as custom or general principle of law).

^{29.} Id.

^{31.} ILC Rep. 2023, 101 ("Some members recalled that equity was a broad concept and stressed that particular care was needed in its application to the context of sea-level rise.").

^{32.} *Id*.

understanding.33

However, it should be reiterated that equity is at the heart of the object and purpose of UNCLOS itself.³⁴ The preamble to UNCLOS recognizes the "economic and social advancement of all peoples of the world," the goal of a "just and equitable international economic order," and the aims of equity, peace, and friendly relations.³⁵ UNCLOS also emphasizes the importance of legal stability.

The Study Group's first report also made reference to specific applications of the principle of equity within UNCLOS, as a legitimizing factor that supports the notion of fixed base lines³⁶ in order to protect vulnerable States in the context of sea level rise. For example, the report noted that UNCLOS includes "the possibility for coastal States to extend their continental shelf beyond 200 nautical miles," which would create an obligation to make contributions to the Authority of the Area (Article 82(1) and (2)).³⁷ For reasons of equity, however, in certain instances, developing States are exempted from such obligation (Article 82(3)).³⁸ Further, equity as reflected in the principle of common but differentiated responsibilities is applied in many other international environmental law contexts. Take, for example, the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer, where under Article 5 developing States were given more time to meet their commitments under the Protocol.³⁹ Another

35. *Id*.

^{33.} Id.

^{34.} See UNCLOS, supra note 18, pmbl. ("Bearing in mind that the achievement of these goals will contribute to the realization of a just and equitable international economic order which takes into account the interests and needs of mankind as a whole and, in particular, the special interests and needs of developing countries, whether coastal or landlocked.").

^{36.} See ILC Rep. 2023, *supra* note 25, at 101 ("It was noted that the notion of equitable results was universally present in the United Nations Convention on the Law of the Sea and that it was possible to consider equity as a legitimizing factor that would support, for example, the notion of fixed baselines.").

^{37.} Aurescu & Oral, First Issues Paper, supra note 16, ¶ 162.

^{38.} See UNCLOS, supra note 18, art. 82(3) ("A developing State which is a net importer of a mineral resource produced from its continental shelf is exempt from making such payments or contributions in respect of that mineral resource.").

^{39.} Montreal Protocol on Substances that Deplete the Ozone Layer, art. 5, Sept. 16, 1987, 1522 U.N.T.S. 29.

example is the concept of nationally determined contributions enshrined in the Paris Agreement, which allows for different levels of commitments among States.⁴⁰ Also, the 1995 Fish Stocks Agreement calls for States to "give due consideration to the respective capacities of developing States" in undertaking the obligations in the Agreement.⁴¹

B. LEGAL STABILITY

UNCLOS also emphasizes the importance of legal stability.⁴² UNCLOS and the 1958 Geneva Conventions prioritize established uses and relations regarding the law of the sea, called Exclusive Economic Zones ("EEZs"). Article 74 on the delimitation of EEZs between adjacent and opposite States creates an exception to the rule of equidistant points in cases where the States concerned have an existing agreement delimiting their EEZs.43 Evidence that UNCLOS seeks to recognize and preserve existing uses is also found in Article 7, which creates an exception to the prohibition on using low-tide elevations as basepoints "in instances where the drawing of baselines to and from such elevations has received general international recognition," and provides that "account may be taken, in determining particular baselines, of economic interests peculiar to the region concerned, the reality and the importance of which are clearly evidenced by long usage."44 The same language is found in Article 4 of the 1958 Geneva Convention on the Territorial Sea and

^{40.} See Paris Agreement to the United Nations Framework Convention on Climate Change art. 7(6), Dec. 12, 2015, 3156 U.N.T.S. 79 [hereinafter Paris Agreement] (declaring goals and aims to be attained on the basis of equity and in the context of sustainable development).

^{41.} U.N. Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, *Agreement for the Implementation of the Provisions of UNCLOS Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, U.N. Doc. A/CONF.164/37, art. 3 (Sept. 8, 1995).

^{42.} *See* UNCLOS, *supra* note 18, pmbl. (outlining several concepts in line with legal stability at the heart of UNCLOS).

^{43.} See *id.* art. 74 ("Where there is an agreement in force between the States concerned, questions relating to the delimitation of the exclusive economic zone shall be determined in accordance with the provisions of that agreement.").

^{44.} *Id.* art. 7(4)–(5).

the Contiguous Zone.⁴⁵ Further evidence of favoring established uses is found elsewhere in UNCLOS, including Article 15 (exception for historic title),⁴⁶ Article 10 (exception for historic bays),⁴⁷ and Article 8 (creating an exception allowing for innocent passage in "new" internal waters if the establishment of straight baselines where the establishment of straight baselines "has the effect of enclosing as internal waters areas which had not previously been considered as such").⁴⁸ The 1958 Geneva Conventions also recognize the desire to preserve established uses of the seas. Article 13 of the Convention on Fishing and Conservation of the Living Resources of the High Seas allows coastal States to regulate fishing in the high seas adjacent to their territorial seas "where such fisheries have long been maintained and conducted by its nationals" or "where such fisheries have by long usage been exclusively enjoyed by such nationals."49 Article 47 of the Convention on the Territorial Sea allows a State neighboring an archipelagic State to exercise "existing rights and all other legitimate interests which the latter State has traditionally exercised in such waters."⁵⁰ This evidence demonstrates that UNCLOS intended to preserve established relations and uses of the seas.

C. EXERCISING OF SOVEREIGN RIGHTS AND JURISDICTION OF THE COASTAL STATE AND ITS NATIONALS

A related question is whether ambulatory baselines would cause maritime zones to shift. Put differently, if international law considered baselines ambulatory, how would that affect maritime rights such as innocent passage, freedom of navigation, and fishing rights? This

^{45.} See Geneva Convention on the Territorial Sea and the Contiguous Zone, art. 4(4), Apr. 29, 1958, 516 U.N.T.S. 206 (noting that clear evidence of long usage may be taken in determining particular baselines based on peculiar economic interests).

^{46.} *See* UNCLOS, *supra* note 18, art. 15 (discussing delimitation of territorial sea between States with opposite or adjacent coasts and recognizing that this provision does not apply where historical title requires a contrary delimitation).

^{47.} See id. art. 10(6) ("The foregoing provisions do not apply to so-called 'historic' bays, or in any case where the system of straight baselines provided for in article 7 is applied.").

^{48.} Id. art. 8(2).

^{49.} Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas, art. 13, Apr. 29, 1958, 559 U.N.T.S. 286.

^{50.} UNCLOS, *supra* note 18, art. 47(6).

section will therefore deal with the possible legal effects of sea-level rise on the exercise of sovereign rights and jurisdiction in the Exclusive Economic Zone, High Seas, Territorial Sea, and Continental Shelf.

If baselines shift as the sea-level rises, part of a State's internal waters may become Territorial Sea, part of the Territorial Sea may become Contiguous Zone and/or EEZ, and part of the EEZ may become High Seas.⁵¹ As the First Report explains, landward movement of the baseline and the outer limits of maritime zones could result in a significant loss of sovereignty and jurisdictional rights for coastal States.⁵² Further, it could result in a significant loss of resources utilized by States and their citizens and protected maritime areas.⁵³ It could also negatively affect the conservation of biological diversity in areas beyond national jurisdiction.⁵⁴ Due to the existing governance gaps that result from the weaknesses and limitations of flag-state jurisdiction, as well as from the insufficient capacity of open registry States to secure compliance and enforce UNCLOS obligations, the consequences of other maritime zones becoming part of the High Seas could be detrimental. In particular, it may undermine good governance of the oceans and the attainment of UNCLOS objectives, including the protection and preservation of the marine environment.

In regard to the EEZ: if baselines are considered ambulatory, then

^{51.} See Aurescu & Oral, *First Issues Paper*, *supra* note 16, ¶¶ 71, 76 (discussing how landward shifting of baselines and outer limits of maritime spaces affects a change in legal status and legal regime of maritime zones).

^{52.} See id. ¶ 190(a) ("With the exception of the situation where part of the territorial sea becomes part of the internal waters, the landward movement of the baseline and the outer limits of maritime zones would result in the coastal State losing sovereignty and jurisdiction rights over regulating the navigation of third States and their nationals.").

^{53.} See Sarra Sefrioui, Adapting to Sea Level Rise: A Law of the Sea Perspective, in THE FUTURE OF THE LAW OF THE SEA: BRIDGING GAPS BETWEEN NATIONAL, INDIVIDUAL AND COMMON INTERESTS 3, 11 (Gemma Andreone ed., 2017) (highlighting the huge potential loss of coastal States' resources, maritime areas, and rights).

^{54.} See G.A. Res. 66/288, ¶¶ 162, 165 (July 27, 2012) (stating that sea-level rise poses a severe risk for coastal regions and noting that conservation could negatively impact marine biodiversity in areas beyond national jurisdiction).

the outer limits of the EEZ are not permanent—if the baseline moves inward, so does the EEZ.⁵⁵ This landward movement of the EEZ would conflict with the notion of the EEZ as it has developed in customary international law. For example, it could cause overlapping areas of the EEZ of opposite coastal States, delimited by bilateral agreement, to no longer overlap, which is a situation that may give rise to controversy, since most treaties are silent on the subject. In this regard, we should recall the 1952 Declaration of Santiago which not only highlighted the coastal State's "obligation to ensure for their peoples the necessary conditions of subsistence," but also marked the first proclamation of the 200-miles economic zone principle.⁵⁶

On this point, the First Report observed that the EEZ has a close relationship "to the emergence of New International Economic Order ("NIEO") and the desire of developing countries in the then-emerging post-colonial period to safeguard their rights over their natural resources, including marine resources necessary for food security and development."⁵⁷ While various principles were controversial in the context of NIEO,⁵⁸ the central principle of a State's permanent sovereignty over natural resources was affirmed by the UN General Assembly by near consensus.⁵⁹ In this regard, the Co-Chair (Ms. Oral)

58. See JOHN LINARELLI ET AL., THE MISERY OF INTERNATIONAL LAW: CONFRONTATIONS WITH INJUSTICE IN THE GLOBAL ECONOMY 171–72 (2018) (reviewing various concerns surrounding the treaty's prescription of various standards of treatment).

59. See G.A. Res. 1803(XVII), supra note 57, at 15–16 ("The right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in *t*he interest of their national development and of the well-being of the people of the State concerned."); *Permanent Sovereignty Over Natural Resources General Assembly Resolution 1803 (XVII)*, AUDIOVISUAL LIBR. OF INT'L L., https://legal.un.org/avl/ha/ga_1803/ga_1803.html (discussing the focus of the resolution, which obtained 87 votes for and 2 votes against, on promoting and

^{55.} Aurescu & Oral, *First Issues Paper*, *supra* note 16, \P 75 (outlining permanence of outer limits of the continental shelf and impermanence of outer limits of exclusive economic zones).

^{56.} Declaration on the Maritime Zone, Chile-Ecuador-Perú, ¶ 1, Aug. 18, 1952, 1006 U.N.T.S. 326.

^{57.} Aurescu & Oral, *First Issues Paper*, *supra* note 16, ¶ 166; *see also* G.A. Res. 1803(XVII), at 15 (Dec. 14, 1962) (discussing the importance of mutual respect of States based on their sovereign equality as paramount in the free and beneficial exercise of peoples and nations over their natural resources).

at the sixth meeting of the Study Group, noted that this principle is widely recognized as a principle of customary international law.⁶⁰ The members of the Commission agreed on this point.⁶¹ Thus, the principle of permanent sovereignty over natural resources should not be negatively impacted by any interpretation of UNCLOS in the context of rising sea-levels.

It should be recalled that, while NIEO was emerging, parallel negotiations led to the UN International Human Rights Covenants, which addressed the relationship between self-determination and permanent sovereignty over natural wealth and resources.⁶² Several members of the Commission agreed on the link between these two subjects. Indeed, it was a Chilean proposal that first introduced the principle of permanent sovereignty over natural resources in those negotiations.⁶³ In 1966, when the two UN Human Rights Covenants were adopted, the international community came to recognize self-

61. Id.

financing economic development in under-developed countries and the importance of the right of self-determination).

^{60.} See ILC Rep. 2023, supra note 25, ¶¶ 204–05 (highlighting the Co-Chair's observation that the principle was widely recognized as a principle of customary international law, as well as concurrence among Members outlined in an additional paper).

^{62.} See, e.g., International Covenant on Civil and Political Rights, arts. 1, 47, Dec. 19, 1966, 999 U.N.T.S. 171 [hereinafter ICCPR] (discussing all peoples' right of self-determination, their right to freely dispose of their natural wealth and resources, and that nothing may impair the inherent right of all peoples to fully enjoy and utilize the natural resources available to them); International Covenant on Economic, Social, and Cultural Rights, arts. 1, 11(2)(a), 25, Dec. 16, 1966, 993 U.N.T.S. 3 [hereinafter ICESCR] ("All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence.").

^{63.} See Comm. on Hum. Rts., Rep. to the Economic and Social Council on the Eighth Session of the Commission, ¶¶ 58, 67, U.N. Doc. E/CN.4/669 (1952) (showing record of Chile's submission of proposal for self-determination over natural resources); see Natalie Kaufman Hevener, Drafting the Human Rights Covenants: An Exploration of the Relationship Between U.S. Participation and Non-Ratification, 148 WORLD AFFS. 233, 239 (1986) (explaining that the Chilean submission initiated the Commission debate and centered around sovereignty over natural resources).

determination, means of subsistence, and natural wealth and resources as key elements in the Bill of Rights.⁶⁴ In a parallel track, the principle of permanent sovereignty over natural resources found its way into various provisions of UNCLOS, including Article 62 which allows flexibility in the way coastal States take advantage of rights concerning the harvesting of living resources (States can either harvest themselves or give other States access to fish in their EEZs).⁶⁵ It was noted by members of the Commission that permanent sovereignty over natural resources was linked also with Statehood in the process of decolonization.⁶⁶ However, the Co-Chair (Ms. Oral) emphasized that this principle continues to play an important role for many developing States, and it was particularly relevant in the context of sea-level rise because it brings additional layers of support for the concept of preservation of maritime entitlements.⁶⁷

More recently, the international community has recognized the importance of access to resources for sustainable development. The United Nations Framework Convention on Climate Change ("UNFCCC"), for example, recognizes "that all countries, especially developing countries, need access to resources required to achieve sustainable social and economic development."⁶⁸

The significant impact of shifting baselines—and thereby decreasing maritime zones—on the resources contained in states' EEZs is clear and highlighted in various parts of the Issue Paper. While this impact may be minor for some States, it could be major for many

^{64.} *E.g.*, ICCPR, *supra* note 62, arts. 1, 47 (declaring the universal rights of self-determination, authority over a people's own natural resources, and the principle against deprivation of a people's own means of subsistence); ICESCR, *supra* note 62, arts. 1, 11(2)(a), 25 (recognizing the universal rights of self-determination, people's freedom of choice over the disposition of their natural resources, and the people's right to not be deprived of their own means of subsistence).

^{65.} *See* UNCLOS, *supra* note 18, art. 62 (stating coastal States' sovereignty over their EEZ's living resources).

^{66.} See Aurescu & Oral, Additional Paper to the First Issues Paper, supra note 22, \P 184 (explaining that sovereignty over natural resources stemmed from the principles of decolonization and self-determination).

^{67.} See id. ¶¶ 192–94 (emphasizing the continued importance of sovereignty over natural resources for developing States' and their marine resources).

^{68.} United Nations Framework Convention on Climate Change pmbl., May 9, 1992, 1771 U.N.T.S. 165 [hereinafter UNFCCC].

others. Consequently, we should consider this issue more closely especially from a human rights perspective. The EEZ and the High Seas fisheries conservation regime of UNCLOS have a clear connection with the right to an adequate standard of living,⁶⁹ including the right to adequate and nutritious food. Effective enjoyment of this right may be undermined if States lose significant parts of their EEZs as a result of rising sea-levels. When States' maritime zones are restricted, important food sources—such as fish—could be lost.

Moreover, it is of utmost importance for island and coastal States that their marine environment is preserved. The critical link between preserving maritime rights and maintaining access to life-sustaining food sources was also significantly featured in the innovative Part XII of UNCLOS which dealt with the general protection and preservation of the marine environment. It is well known that Part XII took inspiration from the landmark 1972 Stockholm Declaration on the Human Environment,⁷⁰ where the international community strongly proclaimed the critical importance of environmental protection, including with respect to the oceans as well as human rights. The conclusion that the marine environment must be protected has been reiterated in many UN Resolutions, Declarations and Conventions, most recently in the 2012 UN Conference on Sustainable Development⁷¹ and in the 2019 UNFCCC COP25 in Madrid.⁷²

A State's enjoyment of rights related to exploration and exploitation of natural resources within its continental shelf could also be affected if the classification of what was previously a State's continental shelf

^{69.} See UNEP Rep., supra note 9, at 1, 3 (stating that the environment and human rights have always been connected, with a clean, healthy environment being key to enjoying the right to a life of adequate living, and that climate change will reduce water levels and diminish the adequate life standards human rights protect).

^{70.} See Conf. on the Hum. Env't, Report of the U.N. Conference on the Human Environment, at 4, U.N. Doc. A/CONF.48/14/Rev.1 (1973) (declaring States' responsibility to prevent sea pollution so as to not damage living resources or uses of the sea).

^{71.} See G.A. Res. 66/288, ¶¶ 113, 158, 162–64 (July 27, 2012) (stating that a healthy marine ecosystem is vital for food security, nutrition, and livelihoods of people).

^{72.} See Proposal by the President, Chile Madrid Time for Action, \P 30, U.N. Doc. FCCC/CP/2019/L.10 (Dec. 15, 2019) (stressing the importance of the ocean to the Earth's climate system and its continued health).

changes, resulting in a loss of the State's rights over its shelf. This might also have adverse impacts on public and private parties holding contractual relationships on the use of the Continental Shelf. If Continental Shelves shift, this could lead to unnecessary disputes and long-lasting litigation.

To conclude this section, two final areas are relevant to discuss. The first concerns the coastal State's criminal and civil jurisdiction in its Territorial Sea, in respect of foreign vessels exercising the right of passage. The First Report notes that "[t]he coastal State cannot exercise criminal jurisdiction, including any investigation or arrest of a person on board a foreign vessel, or exercise civil jurisdiction or impose any levy for passage."⁷³ This provision explicitly articulates critical exceptions to the limitation on the coastal state's criminal jurisdiction on board a foreign ship exercising passage. These exceptions reflect the balance of rights and obligations of UNCLOS. It is precisely this balance that would be upset if baselines were to be considered ambulatory, and if waters formerly internal were to be regarded as Territorial Seas.

Secondly, a brief mention should be given to the potential use of historic title to preserve maritime entitlements if baselines are considered ambulatory. It is well known that UNCLOS Article 15 on the delimitation of the Territorial Sea creates an exception for historic title and special circumstances.⁷⁴ The recent decision of the Permanent Court of Arbitration in the *South China Sea Arbitration* analyzed at length historic rights and historic title.⁷⁵ Previously, the International Court of Justice offered a similarly detailed analysis in the *Tunisia/Libya* case, where it stated that "[h]istoric titles must enjoy

^{73.} Aurescu & Oral, First Issues Paper, supra note 16, ¶ 153.

^{74.} UNCLOS, *supra* note 18, art. 15; *see* Massimo Lando, *Judicial Uncertainties Concerning Territorial Sea Delimitation Under Article 15 of the United Nations Convention on the Law of the Sea*, 66 INT'L & COMPAR. L. Q. 589, 599 (2017) (stating that Article 15 provides exceptions of special circumstances and historic title to the rule of equidistance).

^{75.} See The South China Sea Arbitration (Phil. v. China), Case No. 2013-19, PCA Case Repository, 131, 214–15, 220, 225, 227 (Perm. Ct. Arb. 2016) (referencing China's claim over the South China Sea through historic rights and denoting that historic title is "historic sovereignty to land or maritime areas").

respect and be preserved as they have always been by long usage."76 The ICJ's Gulf of Fonseca⁷⁷ case also reiterated an important statement made in the Tunisia/Libva case: "It seems clear that the matter continues to be governed by general international law which does not provide for a single 'regime' for 'historic waters' or 'historic bays', but only for a particular regime for each of the concrete, recognized cases of 'historic waters' or 'historic bays.'"78 The ICJ's reasoning thus invites a particular inquiry into specific situations where waters may have changed legal status as a result of sea-level rise, and the potential use of historical title to preserve maritime entitlements. It also raises the question of whether state practice could crystallize into a general norm on historical title and sea-level rise that would preserve maritime entitlements.⁷⁹ Thus, further exploration of historic titles in light of sea-level rise is warranted. Right now, this approach would be considered on a case by case basis rather than as a universal regime for historic waters, titles or rights, as was noted by the Co-Chair (Ms. Oral).⁸⁰ However, this could change if the baselines are ambulatory, as this principle would become more relevant.

D. AMBULATORY BASELINES

In most cases, maritime zones of coastal States are measured from their normal baselines, *i.e.*, the "low-water line along the coast as

80. See Aurescu & Oral, Additional Paper to the First Issues Paper, supra note 22, $\P\P$ 166, 168–69 (explaining that historic title could be one method States use to freeze their maritime boundaries in the face of changing sea-levels).

^{76.} Continental Shelf (Tunis./Libya), Judgment, 1982 I.C.J. 18, ¶ 100 (Feb. 24).

^{77.} See Land, Island, and Maritime Frontier Dispute (El Sal. v. Hond.), Judgment, 1992 I.C.J. 350, ¶ 384 (Sept. 11) (quoting ICJ Report 1982 and denoting that historic title is governed by general international law and amounts to a reservation to the rules otherwise laid out).

^{78.} Continental Shelf, 1982 I.C.J. ¶ 100.

^{79.} See Clive R. Symmons, *Historic Waters and Historic Rights in the South China Sea: A Critical Appraisal, in* UN CONVENTION ON THE LAW OF THE SEA AND THE SOUTH CHINA SEA 191, 200 (Shicun Wu et al. eds., 2015) (referencing the Tunisia/Libya case in which the ICJ supported deciding historic titles cases ad hoc and thus amounting to no general rule, calling into question the correct State practice that would give rise to historic title); Sophia Kopela, *Historic Titles and Historic Rights in the Law of the Sea in the Light of the South China Sea Arbitration,* 48 OCEAN DEV. & INT'L L. 181, 191, 198–99 (2017) (detailing the myriad of State practices that could enter the realm of historic title).

marked on large-scale charts officially recognized by the coastal State."⁸¹ The breadth of the following maritime zones are then measured based on these baselines: Territorial Sea (UNCLOS, article 3),⁸² Contiguous Zone (UNCLOS, article 33), ⁸³ Exclusive Economic Zone (UNCLOS, article 57),⁸⁴ and the Continental Shelf (UNCLOS, article 76).⁸⁵

If normal baselines are considered ambulatory—meaning sea level rise will cause the baselines to shift—then the maritime zones will shift as well.⁸⁶ This will have far-reaching implications. For example, defining normal baselines as ambulatory could create uncertainty for maritime boundaries, the respect of which is essential to relations between States. Legal uncertainty regarding boundaries would likely create conflicts and instability for coastal neighboring States. States may want to use the "newly available" areas created by shifting maritime zones, while the State which has "lost" all or part of its maritime zones will likely not accept that it has lost jurisdiction over undefined areas, resulting in conflict between the States. Thus, following the ambulatory theory of baselines would contravene the purpose of UNCLOS⁸⁷ and the UN Charter⁸⁸ to maintain international peace and security.

Thus, in light of the principles of stability and equity, baselines should not be considered ambulatory and maritime boundaries should

85. See id. art. 76 (defining the limits of a State's continental shelf).

86. See Aurescu & Oral, First Issues Paper, supra note 16, ¶ 112 (claiming that renegotiation of maritime boundaries shall either happen by treaty or adjudication, because simple renegotiation will open up State disputes).

87. *See* UNCLOS, *supra* note 18, pmbl. (establishing the international standards surrounding maritime laws and territorial boundaries).

88. See U.N. Charter arts. 1, 2 (reaffirming the international principles of human rights, peace, and security).

^{81.} UNCLOS, supra note 17, art. 5.

^{82.} *See id.* art. 3 (stating that each State is allowed to establish its own maritime territorial borders up to 12 nautical miles).

^{83.} *See id.* art. 33 (explaining that each State may establish a contiguous zone up to 24 nautical miles from where the territorial sea is also measured from and within this zone, each State may exercise certain controls).

^{84.} *See id.* art. 57 (detailing that the exclusive economic zone may not exceed 200 nautical miles).

be preserved.⁸⁹ As the First Report notes, "UNCLOS does not indicate *expressis verbis* that new baselines must be drawn, recognized . . . or notified. . . ."⁹⁰ Accordingly, there are various options for determining how existing baselines may be maintained in the face of sea-level rise.⁹¹ For example, the ILA opted for an option wherein:

States should accept that, once the baselines and the outer limits of the maritime zones of a coastal or an archipelagic State have been properly determined in accordance with the detailed requirements of the 1982 Law of the Sea Convention, that also reflect customary international law, these baselines and limits should not be required to be readjusted should sea level change affect the geographical reality of the coastline.⁹²

This general notion is supported by many states. For example, New Zealand, Jamaica, Fiji, and various other States take the position that "coastal States' baseline and maritime boundaries should not have to change because of human-induced sea level rise."⁹³

The landward movement of baselines would lead to a reduction of sovereignty and jurisdictional rights for coastal states and islands, as their maritime zones would shrink.⁹⁴ Therefore, we need to take an approach based on the principle of equity and stability which achieves practical solutions to preserve baselines, outer maritime limits, and

^{89.} See ILC Rep. 2023, *supra* note 25, at 101 (noting that equity considerations support the position that marital baselines should be fixed); UNCLOS, *supra* note 18, pmbl. (recognizing that the creation of a legal order for the seas is a primary goal of UNCLOS and the important of sovereignty in creating this legal order).

^{90.} Aurescu & Oral, First Issues Paper, supra note 16, ¶ 78.

^{91.} See Mathew Moorhead, Legal Implications of Rising Sea Levels, 44 COMMONWEALTH L. BULL. 701, 703, 705 (2018) (stating "[t]he first option would be to propose a new rule freezing existing baselines in their current position, using 'the large-scale charts officially recognized by the coastal state' referred to in Article 5 of the Convention. The second option is to establish a new rule under international law that freezes the existing defined outer limits of maritime zones measured from the baselines established in accordance with the Convention.").

^{92.} INT'L L. ASS'N, INTERNATIONAL LAW AND SEA LEVEL RISE: REPORT OF THE INTERNATIONAL ASSOCIATION COMMITTEE ON INTERNATIONAL LAW AND SEA LEVEL RISE 19 (2019) [hereinafter ILA Report].

^{93.} Aurescu & Oral, First Issues Paper, supra note 16, ¶ 93–95.

^{94.} See id. ¶ 190 (explaining the movement of baselines would lead to the reduction of States' ability to control the navigation of third States).

maritime entitlements.⁹⁵ Many States already follow this approach by utilizing the charts system established by UNCLOS.⁹⁶ Such state practice indicates a *prima facie* establishment of a new rule of customary international law that preserves baselines, maritime limits, and maritime entitlements.⁹⁷

Moreover, the preservation of maritime delimitations is in accordance with UNCLOS and general international law, and it coincides with the position and practice of many States.⁹⁸ The ILC has the opportunity to clearly affirm that maritime boundaries are not affected by changes of circumstances including sea-level rise, in accordance with VCLT, Article 62(2).⁹⁹ The First Report rightly points out that State practice in the Asia-Pacific region regarding the preservation of maritime delimitations, too, indicates the emergence of a new rule of customary international law upon which maritime delimitations are fixed.¹⁰⁰

Additionally, various questions arise in the context of the artificial preservation of coasts. Maintaining existing baselines through artificial means becomes especially important if baselines are considered to be ambulatory. In such a situation, all maritime zones of a State would be under the threat of being reduced. In the *South China Sea* arbitration, the Permanent Court of Arbitration (PCA) ruled that

^{95.} See id. \P 104 (revealing the complications in preserving maritime boundaries in the face of sea-level rise just from treaty requirements).

^{96.} *See id.* (highlighting the developing State practice of "freezing" notifications and ensuring physical protection of coastlines from sea-level rise).

^{97.} See *id.* (recognizing that there is state practice, including physical acts, verbal acts, and inaction, supporting a prima facie determination that there is rule of customary international law preserving maritime baselines).

^{98.} See id. ¶ 141 (highlighting the submissions of States to the Committee as evidence of State practice preserving maritime delimitations).

^{99.} See Vienna Convention on the Law of Treaties, art. 62, May 23, 1969, 1155 U.N.T.S. 331 [hereinafter VCLT] (explaining when change of circumstances may not be used to terminate or withdraw from a treaty); Aurescu & Oral, *First Issues Paper, supra* note 16, ¶ 141 (explaining the State practice of the preservation of existing maritime delimitations in the face of sea-level changes).

^{100.} See Aurescu & Oral, First Issues Paper, supra note 16, \P 141(g) (declaring that the State practice preserving the maritime delimitations has coincided with the requirements of customary international law and is reinforced by international organizations, acts, and inaction).

artificial islands cannot generate maritime entitlements.¹⁰¹ Artificial conservation of coastlines, on the other hand, is considered permissible under existing international law and is supported by State practice.¹⁰² When baselines are fixed, such artificial conservation does not shift the boundaries of maritime delimitations.

Yet, the resources required to artificially reinforce coasts are significant. For example, Singapore has projected it will likely spend about S\$ 100 billion (USD 72 billion) over the next 100 years to fortify its coasts.¹⁰³ The high cost of artificial preservation puts it outside the fiscal capacity of many of the most vulnerable countries. As a result, several States will need significant support in their efforts to preserve their existing baselines artificially. The importance of cooperation in the context of climate change was pointed out by Article 7(6) of the Paris Agreement, stipulating that: "[p]arties recognize the importance of support for and international cooperation on adaptation efforts and the importance of taking into account the needs of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change."¹⁰⁴ As a matter of climate justice wellresourced States should support States in need. This is especially true of SIDS, considering the IPCC's finding that they contributed only 0.5 percent to historical cumulative CO₂ emissions from fossil fuels and industry between 1850 and 2019.105

104. Paris Agreement, supra note 40.

^{101.} See The South China Sea Arbitration, Case No. 2013-19, *supra* note 75, at 131, 214–15, 220, 227 (stating that the status of maritime entitlements does not change due to human modification).

^{102.} See Snjólaug Árnadóttir, Stability of Maritime Entitlements De Lege Lata: Is There a need for Legal Reform?, ELSA ICELAND 4 (forthcoming) (showing the internationally accepted method of preserving coastlines through artificial creation); A.H.A. Soons, The Effects of a Rising Sea Level on Maritime Limits and Boundaries, 37 NETH. INT'L L. REV. 207, 222 (1990) (declaring that artificial conservation is protected by public international law arising from State practice).

^{103.} Aradhana Aravindan, *Protecting Singapore from Rising Sea Levels Could Cost S\$100 Billion*, REUTERS (Aug. 18, 2019), https://www.reuters.com/article/us-singapore-economy-prime-minister/protecting-singapore-from-rising-sea-levels-could-cost-s100-billion-idUSKCN1V80GU.

^{105.} IPCC, CLIMATE CHANGE 2022: MITIGATION OF CLIMATE CHANGE: WORKING GROUP III CONTRIBUTION TO THE SIXTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE ¶¶ B.3–B.3.2 (Priyadarshi R. Shukla et al. eds., 2022) [hereinafter IPCC POLICYMAKERS SUMMARY].

Preserving baselines and maritime entitlements gives expression not only to the foundational principles of equity and stability, but also to notions of climate justice rooted in human rights and general principles of international law. This is especially critical when considering that those who stand to suffer the most from humaninduced sea-level rise have contributed the least to the problem. Due to these considerations, it is valuable to note that in its last report to the International Law Commission, UNCLOS recommended to fix the baselines.¹⁰⁶

E. MAINTAINING EXISTING MARITIME BASELINES AND ENTITLEMENTS

In light of the importance of preserving stability, security, certainty, and predictability,¹⁰⁷ it seems that the best interpretative option would be to maintain maritime baselines and entitlements that have been drawn in accordance with UNCLOS.¹⁰⁸ If coastal States or island States lose entitlements, this would have an impact on the achievement of climate justice and may have serious impacts on human rights. Further, if other States acquire new maritime entitlements due to rising sea-levels, the balance of rights and obligations established by UNCLOS may be destabilized. UNCLOS enshrines in its provisions a balance of interests, rights, and duties; one reason that it is frequently referred to as a "package deal"; meaning that adjustments in one area are likely to impact a wide variety of State obligations and entitlements.

As the First Report points out, the major issue at hand is that "[t]he interpretation of [UNCLOS] that baselines . . . have, generally, an ambulatory character does not respond to the concerns of the Member States prompted by the effects of sea-level rise."¹⁰⁹ The ILA Baselines

^{106.} See ILA Report, *supra* note 92, at 19 (recommending that once maritime zones have been properly defined in accordance with the 1982 Law of the Sea that they should not need to be recalculated in the face of changing sea-levels).

^{107.} See Aurescu & Oral, *First Issues Paper*, *supra* note 16, \P 111 (highlighting the necessity of centering stability, security, certainty, and predictability in the talks around maritime preservation).

^{108.} See id. \P 104(e) (explaining how States can lodge their preservations within the confines of UNCLOS).

^{109.} *Id.* ¶ 79.

[39:4

Committee's findings reported that "the normal baseline is ambulatory," and "if the legal baseline changes with human-induced expansions of the actual low-water line to seaward, then it must also change with contractions of the actual low-water line to landward" are considered non-related with the many concerns of States.¹¹⁰ The ILA Committee on International Law and Sea-Level Rise, on the other hand, came to a different and proper conclusion, contending that "on the grounds of legal certainty and stability... baselines and the outer limits... should not be required to be recalculated should sea-level change affect the geographical reality of the coastline."¹¹¹ Ultimately, the preservation of rights, the collective responsibility of the international community, as well as equity considerations, should be of paramount importance for deciding how baselines and maritime entitlements are best addressed.

Maintaining certainty is not only important to reduce potential conflicts, it also implicates specific consequences for maritime zones. While Continental Shelves are widely considered permanent when UNCLOS procedures are followed,¹¹² there is no clear agreement on the permanency of the EEZ.¹¹³ If Continental Shelves continue to be considered permanent but EEZs are considered ambulatory, rising sea levels could cause a discrepancy wherein the EEZ will shrink but the Continental Shelf will stay the same. Such unnecessary confusion could be avoided by maintaining baselines in the face of sea-level rise.¹¹⁴

The goal of reducing uncertainty is found in State practice, as was

^{110.} INT'L L. ASS'N, SOFIA CONFERENCE (2012): BASELINES UNDER THE INTERNATIONAL LAW OF THE SEA 28, 31 (Dolliver Nelson & Coalter Lathrop eds., 2012) [hereinafter SOFIA CONFERENCE].

^{111.} INT'L L. ASS'N COMM. ON INT'L L. & SEA LEVEL RISE, RESOLUTION 5/2018 (2018), https://www.ila-hq.org/en_GB/documents/conference-resolution-sydney-2018-english-2.

^{112.} See Aurescu & Oral, First Issues Paper, supra note 16, $\P\P$ 72, 75 (denoting the permanency of the outer continental shelf and the regulations surrounding delineating said shelf).

^{113.} See id. \P 75 (revealing that the UNCLOS does not provide for permanency regarding the exclusive economic zone of States).

^{114.} *See id.* (arguing that discrepancies between the continental shelves and the EEZs would cause unnecessary burdens for coastal states and should be resolved through maintaining baselines).

carefully analyzed by the First Report,¹¹⁵ and in judicial decisions. The ICJ has often addressed delimitation of the EEZ and continental shelf jointly, including to prevent any potential discrepancies. This approach was taken, for example, in *Maritime Delimitation in the Black Sea*,¹¹⁶ *Maritime Delimitation in the Caribbean Sea and the Pacific Ocean*,¹¹⁷ and the *Territorial and Maritime Dispute Case Between Nicaragua and Colombia*.¹¹⁸ As Part III of the First Report also emphasizes, UNCLOS' delimitation of the EEZ and Continental Shelf involves a dynamic process of considering relevant circumstances to achieve equitable results.¹¹⁹

UNCLOS supports the permanency of baselines. This interpretation can be reached by applying the normal rules of treaty interpretation. The terms of UNCLOS show that the Convention was drafted so as to ensure its ability to adapt to changing circumstances. Provisions that embody this flexibility include, for example, those dealing with "special circumstances" (Articles 15 and 211(6)(a)),¹²⁰ the drawing of straight baselines depending on "international recognition" (Article 7(4)),¹²¹ and common references to "applicable international

^{115.} See id. ¶ 18 (highlighting the State practice of Australia, China, Greece, Indonesia, New Zealand, Papua New Guinea, and Tonga in raising the issue of legal stability and security when met with maritime uncertainty).

^{116.} See Maritime Delimitation in the Black Sea (Rom. v. Ukr.), Judgment, 2009 I.C.J. Rep. 61, ¶¶ 115–22 (Feb. 3) (denoting how the ICJ decides to delimit shelves, EEZS, or lines).

^{117.} See Maritime Delimitation in the Caribbean Sea and the Pacific Ocean (Costa Rica v. Nicar.) and Land Boundary in the Northern Part of Isla Portillos (Costa Rica v. Nicar.), 2018 I.C.J. Rep. 139, ¶¶ 176–204 (Feb. 2) (delimiting the boundary between the EEZ and continental shelf in the Pacific Ocean).

^{118.} See Territorial and Maritime Dispute, 2012 I.C.J. Rep. 624, ¶¶ 111, 132–39 (reinforcing the principle that islands have the same status as other land territories as are thus subject to the same regime as States).

^{119.} See Aurescu & Oral, First Issues Paper, supra note 16, ¶¶ 142–48 (showing the nuances in decisions around an island and its reclassification that could be equitable but change the legal status).

^{120.} See UNCLOS, supra note 18, arts. 15, 211(6)(a) (claiming that special circumstances can arise and change the responsibilities and delimitations of States in regard to boundaries and pollution).

^{121.} See *id.* art. 7(4) (stating that, generally, straight baselines shall not be drawn from low-tide elevations unless the baselines have received general international recognition).

standards" or "regulations" (e.g. Article 21(2), 60(5), 94(2)(a)).¹²²

One approach to maintaining stability is utilizing the charts system articulated by UNCLOS. "If States do not update their charts to reflect the loss of land territory or base points," they are effectively "freezing" their baselines.¹²³ In this regard, the First Report concludes that nothing obstructs Member States from making notifications, in conformity with UNCLOS, "regarding the baselines and outer limits of maritime zones measured from the baselines, and, after the negative effects of sea-level rise occur, to stop updating these notifications in order to preserve their entitlements."¹²⁴ This approach, however, will only be successful if "official maritime charts, and not the actual lowwater line, can serve as conclusive evidence of baselines."¹²⁵ There seems to have been controversy over this. The now defunct ILA Baselines Committee, for example, concluded that "where significant physical changes have occurred so that the chart does not provide an accurate representation of the actual low-water line at the chosen vertical datum, extrinsic evidence has been considered by international courts and tribunals to determine the location of the legal normal baseline."126 The ILA Baselines Committee's observation might have been correct in the past; however, it is unlikely to be correct or appropriate now. Its conclusions have not been followed by the ILA's Committee on International Law and Sea-Level Rise. In addition, when determining baselines International Courts are bound

^{122.} See *id.* arts. 21(2), 60(5), 94(2)(a) (including generally accepted language incorporates an element of flexibility, as generally accepted standards or regulations can change over time).

^{123.} See Clive Schofield & David Freestone, Options to Protect Coastlines and Secure Maritime Jurisdictional Claims in the Face of Global Sea Level Rise, in THREATED ISLAND NATIONS: LEGAL IMPLICATIONS OF RISING SEAS AND A CHANGING CLIMATE 162 (Michael B. Gerrard & Gregory E. Wannier eds., 2013) (noting that coastal states become the arbiter of their maritime baselines if they do not update their official charts).

^{124.} Aurescu & Oral, First Issues Paper, supra note 16, ¶ 104(a).

^{125.} See Belize National Statement, Report of the International Law Commission on the Work of its Seventy-First Session, ¶ 9 (Nov. 5, 2019), https://www.un.org/en/ga/sixth/74/pdfs/statements/ilc/belize_2.pdf (stating that using the official charts system provides coastal states with greater agency in the stability of their maritime entitlements).

^{126.} SOFIA CONFERENCE, *supra* note 110, at 31.

to take into account State practice and opinio juris. As outlined in various sections above, there is significant support for maintaining baselines to secure the principles established by UNCLOS. However, the question of updating charts remains. Indeed, it has been argued that "a policy of not updating charts would pose potential dangers to seafarers as official charts become more and more inaccurate over time."127 In this regard, the Co-Chair (Ms. Oral) noted that the "depiction of baselines or maritime zones was a supplementary function" of the nautical charts¹²⁸ and that the main use is for the safety of navigation. Also, the Co-Chair expressed "there was no evidence in practice or in sources of international law of an obligation on States to regularly update their nautical charts"¹²⁹ with which Member States also concurred. It was further expressed "that the need for legal stability should not have any effect on the question of updating navigational charts."¹³⁰ However, sea-level rise is likely to push baselines inwards, not outwards, and so potential dangers to navigation may be exceptional rather than the norm. Furthermore, access to satellite technology also aids in the safety of navigation. Finally, while the "dual charts system" referenced in the First Report may not sufficiently cover all problems connected with the outlined issue,¹³¹ it could be part of a solution.

On another note, it is important to highlight that the practice of relying on coordinates for purposes of identifying maritime zones could introduce more clarity and stability than the charts system alone. For example, States such as Mexico chose to register marine charts and not specific geographic coordinates, to avoid establishing an unstable baseline.¹³² Whether all States should be obliged to submit geographical data for reasons of clarity in the long-run remains an

^{127.} Schofield & Freestone, *supra* note 123, at 162.

^{128.} Hong Thao Nguyen (Rapporteur), *Draft Rep. of the Int'l L. Comm'n on the Work of its Seventy-Fourth Session*, ¶ 89, U.N. Doc. A/CN.4/L.980 (July 19, 2023). 129. *Id.*

^{130.} *Id.* ¶ 91.

^{131.} Aurescu & Oral, *First Issues Paper*, *supra* note 16, at 27 n.148, 28 n. 153 (noting that the dual charts system, with both official maritime jurisdictional and navigational charts, could address navigational safety concerns for seafarers).

^{132.} Sefrioui, *supra* note 53, at 16 (declaring that States mention geographic coordinates generally, without specific coordinates, to increase baseline flexibility, the ease of updating baselines, and to avoid unstable baselines).

open question. However, States would have to dedicate significant resources in order to regularly update maritime charts or geographical data and submit these updates to the United Nations. This would place a particular burden on developing countries, especially on SIDS. Most developing countries and especially small island States not only lack the resources to cover the high costs involved, but also face significant challenges in meeting the UN Sustainable Development Goals (SDGs).

F. MARITIME DELIMITATION

By choosing an approach that would put into question existing maritime delimitations, the Commission would contravene its mandate by creating uncertainty and legal insecurity and increasing the risk of disputes between states.¹³³ As the Republic of Maldives explained, the principle of pacta sunt servanda requires maritime boundary treaties to be maintained, regardless of sea-level rise.¹³⁴ This conclusion is supported by State practice, such as that of Singapore, the United Kingdom, and the United States, wherein treaties that set maritime boundaries are considered permanent and do not allow for amendments.¹³⁵ Further, it is in line with the jurisprudence of the ICJ-for example, in the Temple of Preah Vihear case, the Court stated that "when two countries establish a frontier between them, one of the primary objects is to achieve stability and finality."136 Additionally, the decision of the PCA in the Bay of Bengal Maritime Boundary arbitration between Bangladesh and India stated, "maritime delimitations, like land boundaries, must be stable and definitive to ensure a peaceful relationship between the States concerned in the long term."137

^{133.} See Aurescu & Oral, First Issues Paper, supra note 16, ¶¶ 111–12 (stating that opening up maritime delimitations for reconsideration would result in legal instability, and thus increased risk of state disputes, in violation of the purpose of the United Nations Convention on the Law of the Sea).

^{134.} Id. ¶ 122 (detailing that under the *pacta sunt servanda* principle, maritime boundary treaties are binding).

^{135.} *Id.* ¶¶ 124–25, 134–35.

^{136.} Temple of Preah Vihear (Cambodia v. Thai.), Judgment, 1962 I.C.J. 6, 34 (June 15).

^{137.} Bay of Bengal Maritime Boundary Arbitration (Bangl. v. India), Case No. 2010-16, PSA Case Repository, ¶ 216 (Perm. Ct. Arb. 2014).

These considerations are equally in line with the relevant international customary and treaty law dealing with the sea. For example, the preambular paragraphs of UNCLOS refer to the desire to settle all issues relating to the law of the sea¹³⁸—and to foster peace, security and cooperation¹³⁹—which would be contravened if clearly established maritime delimitations were not considered to be binding between the parties.

Changing maritime boundaries due to sea-level rise could require nations to renegotiate maritime boundary agreements. However, such renegotiations should be disfavored because they decrease the stability and security that currently exists in the international system. Any change to delimitations can create new conflicts over the exploitation of natural resources or ignite old disputes. Maritime disputes can threaten local, regional, and even international peace. Moreover, if amicable solutions cannot be found between States this could result in unresolved disputes, or lengthy and costly litigation, if available. This would not only further strain the limited budgets of developing States but would also create uncertainty regarding delimitations with all its consequences.¹⁴⁰

G. FUNDAMENTAL CHANGE OF CIRCUMSTANCES

Another relevant matter to consider is whether sea-level rise amounts to a fundamental change of circumstances upon which parties can terminate the treaties establishing existing maritime delimitations. Questions in this context include: does VCLT article 62(2)(a), or the equivalent rule in customary international law, apply to maritime delimitation boundaries? Can sea-level rise be considered "not foreseen by the parties" under VCLT article 62(1)?¹⁴¹ Does sea-level at the time of the agreement constitute an "essential basis of the consent of the parties"?¹⁴²

^{138.} UNCLOS, supra note 18, pmbl.

^{139.} Id.

^{140.} Aurescu & Oral, *First Issues Paper*, *supra* note 16, ¶¶ 112–13 (recognizing that revisiting already established maritime delimitations would result in legal instability in the international legal system).

^{141.} VCLT, supra note 99, art. 62(1).

^{142.} Id. art. 62(1)(a).

Before dealing with the specific requirements of a fundamental change of circumstances, we must first address the preliminary question of whether this concept can be applied at all to maritime delimitations. Article 62(2)(a) stipulates that the concept may not be invoked "if the treaty establishe[d] a boundary."¹⁴³ The First Report kept the question open and only hinted at a direction for the delimitations of territorial seas.¹⁴⁴ Likewise, no explicit answer is to be found in the *travaux préparatoires* of the VCLT.¹⁴⁵ The First Report observes that "[s]ea-level rise cannot be invoked in connection with [Article 62(2)]" and that "maritime boundaries enjoy the same stability as any other boundaries.'¹⁴⁶ Further, the Study Group used international jurisprudence¹⁴⁷ to support their contention that maritime delimitations are qualifying boundaries under Article 62(2)(a) of the VCLT.

This conclusion also finds support in the drafting history of Article 62 VCLT—though not explicitly regarding maritime boundaries. Firstly, the "instrument of peaceful change" was meant not to "become a source of dangerous frictions" which would be the case if the *rebus sic stantibus* rule applied to boundaries.¹⁴⁸ Allowing a country to

^{143.} *Id.* art. 62(2)(a).

^{144.} Report of the International Law Commission to the General Assembly on the Work of the Thirty-Fourth Session, [1982] 2 Y.B. Int'l L. Comm'n 16, U.N.Doc. A/CN.4/SER.A/1982/Add.1(Part 2) (stating that conventions in which international organizations are parties only serve their purpose if those convention's rules are binding).

^{145.} See id. at 12 (articulating that the draft articles concerning States and international organizations, or between international organizations, cannot be separated from fundamental text that is the Vienna convention); SYDNEY CONFERENCE, *supra* note 20, at 20 (noting that some scholars take the position that the Vienna Convention's applicability to maritime boundaries remains an open question and that the ILC made some implicit statements about maritime boundaries in the context of the Vienna Convention).

^{146.} See Press Release, General Assembly, Spotlighting International Law Commission Study on Sea-Level Rise, Sixth Committee Speakers Urge that Maritime Regime Reflect Reality of Climate Threat, U.N. Press Release GA/L/3626 (Nov. 5, 2020) (noting observations expressed by delegates and the First Report).

^{147.} Aurescu & Oral, *First Issues Paper*, *supra* note 16, ¶¶ 117–18; Aegean Sea Continental Shelf Case (Greece v. Turk.), Judgment, 1978 I.C.J. 3, 36–37 (Dec. 19); Bay of Bengal Maritime Boundary Arbitration (Bangl. v. India), Case No. 2010-16, PSA Case Repository, ¶ 216 (Perm. Ct. Arb. 2014).

^{148.} Report of the International Law Commission on the Work of Its Fifteenth

terminate a maritime delimitation agreement would go against the very rationale of the instrument, especially since opening the issue of delimitations again would likely lead to conflicts between States. Secondly, the Commission opted for a broader approach in referring to boundary agreements by deciding that the former expression of "treaty establishing a boundary" should be changed to "treaty fixing a boundary."149 This shows that various boundaries were meant to be included, either provisional or permanent ones. Thirdly, the ILC was aware of, and had already dealt with, the implications of a changing physical environment in the context of Article 62. Canada proposed to add an exception to the boundary treaty exception upon which Article 62(2) cannot be invoked for boundary treaties "if such a boundary is based directly on a thalweg or other natural phenomenon the physical location of which subsequently significantly altered as the result of a natural occurrence."¹⁵⁰ The Special Rapporteur declined the proposal, stating "that an extraordinary flood, an earthquake or a landslide might conceivably alter the location of a thalweg, watershed or other feature used in a treaty delimitation of a boundary,"¹⁵¹ and he doubted "whether such a case could be said to raise a question of the termination of the treaty on the ground of a fundamental change of circumstances."152 It seems "to raise a problem as to the correct interpretation and application of the treaty in the light of the changed geographical facts."¹⁵³ Thus, even a physical change of the environment will not permit invoking Article 61(1) of the VCLT.

The application of VCLT Article 62(2)(a) to maritime boundaries means that the question of whether sea-level rise was foreseen by the Parties is not material to a change of circumstances as in any event Article 62 cannot be invoked to alter a maritime boundary.

153. *Id*.

Session, [1963] 2 Y.B. Int'l L. Comm'n 187, 210, U.N. Doc. A/CN.4/163.

^{149.} Report of the International Law Commission on the Work of Its Eighteenth Session, [1966] 2 Y.B. Int'l L. Comm'n 169, 259, U.N. Doc. A/CN.4/191; MARK VILLIGER, COMMENTARY ON THE 1969 VIENNA CONVENTION ON THE LAW OF TREATIES 775–76 (stating that the *travaux préparatoires* implies a broad interpretation of establishing boundaries).

^{150.} *Fifth Report on the Law of Treaties by Sir Humphrey Waldock*, [1966] 2 Y.B. Int'l L. Comm'n 39, U.N. Doc. A/CN.4/183 and Add.1–4.

^{151.} Id. at 44.

^{152.} *Id.*

It was also noted by individual members there was a need of establishing a cut-off date on which baselines had been established; the distinction in international jurisprudence regarding delineation and delimitation of boundaries; studying specific cases on the application of the *rebus sic stantibus* principle; and the application of VCLT Article 62 to different types of boundaries, namely provisional boundaries, permanent boundaries, or regimes for the shared exploitation of resources.¹⁵⁴

H. THE STATUS OF ISLANDS, ROCKS, AND LOW-TIDE ELEVATIONS

Another serious issue is the permanent inundation of an island and/or its re-classification into a rock or low-tide elevation.¹⁵⁵ As sealevels rise, several islands may become submerged at high tide; therefore, the legal status of the island could be reclassified as a "lowtide elevation." This is a key area of concern and deserves special attention. If an island is reclassified as a low-tide elevation, it would not "generate any maritime zone and, as stated by the International Court of Justice, cannot be appropriated by any State."¹⁵⁶ Loss of territory, or loss of EEZ and Continental Shelf entitlements, would have serious consequences for the State and its people. On this, equity and climate justice should be the basis of the solution. While material restitution may be impossible, it certainly is possible to consider the *ex-ante* situation, i.e., "the earlier, natural condition,"¹⁵⁷ to determine

156. Aurescu & Oral, *First Issues Paper*, *supra* note 16, ¶¶ 205, 208 (emphasizing that the reclassification is especially important in the event of human habitation or economic life when islands are made inhabitable due to sea-level rise).

157. *E.g.*, The South China Sea Arbitration, Case No. 2013-19, *supra* note 75, ¶¶ 305–06 (reviewing platforms in the South China Sea based on their natural condition as opposed to their current state after being filled by "tons of landfill and concrete").

^{154.} Nguyen, *supra* note 128, ¶¶ 44–46 (noting that the above points of discussion were raised by individual members of a Study Group put together to discuss sealevel rise in relation to international law).

^{155.} See, e.g., Press Release, Security Council, Climate Change-induced Sea-Level Rise Direct Threat to Millions around World, Secretary-General Tells Security Council: Speakers Warn of Vanishing Coastlines, Endangered Nations, Forced Migration, Competition over Natural Resources, U.N. Press Release SC/15199 (Feb. 14, 2023) (finding that 10 percent of the world's population live in coastal zones at low elevations and citing numerous examples of islands in the Caribbean, West Africa, Antarctica, North Africa, and the Himalayas that are facing issues related to rising coasts).

that an island does not cease to have maritime entitlements as a result of sea-level rise.

On the other hand, the legal status of rocks and low-tide elevations carries significance for less vulnerable states. Recent controversies over the legal classification of various maritime geological formations-their status as islands, rocks, or low-tide elevations and corresponding entitlements-has increased the salience of this issue. In particular, efforts to artificially develop geologic formations to augment their legal entitlements may be affected by the international community's position on the appropriate legal principles governing baselines.¹⁵⁸

An interpretative open question worth further attention relates to the definitional element of islands: "permanently above the high tide mark."¹⁵⁹ The ILC's 1956 Articles concerning the law of the sea articulated the following definition: "[a]n island is an area of land, surrounded by water, which in normal circumstances is permanently above high-water mark."¹⁶⁰ However, the ILC's qualification was not adopted by UNCLOS.¹⁶¹ Whether the "in normal circumstances" concept can be tied to the earlier, natural condition of an island, so as to prevent loss of territory or maritime entitlements, deserves further attention in the light of rising sea-levels. In these matters, like in others, the principles of stability and legal certainty should inform the approach to the ILC's study.

^{158.} *Id.* (rejecting China's claims in the South China sea, some of which related to claims on geological formations it had substantially altered in order to raise their legal status and corresponding entitlements).

^{159.} Aurescu & Oral, *First Issues Paper, supra* note 16, ¶ 191 (defining an island as a naturally formed area of land surrounded by water and permanently above the high tide mark); *Acts of the Conference For The Codification of International Law*, 133, League of Nations Doc. C.351.M.145. 1930 V (1930) ("[T]he term 'island' does not exclude artificial islands, provided these are true portions of the territory and not merely floating works, anchored buoys, etc.").

^{160.} Aurescu & Oral, *First Issues Paper*, *supra* note 16, ¶ 191; *Report of the International Law Commission to the General Assembly*, [1956] 2 Y.B. Int'l L. Comm'n 253, 257, A/CN.4/SER.A/1956/Add.1 (defining island and noting that every island has its own territorial sea).

^{161.} Aurescu & Oral, *First Issues Paper*, *supra* note 16, ¶ 191 (noting that the Convention retained the definition of the 1930 Hague Codification conference).

IV. POSSIBLE LEGAL EFFECTS ON STATEHOOD

The first substantive portion of the Second Report concerns statehood. Chapter IV of the Second Report examines the aspects of the phenomenon of sea-level rise in relation to statehood, including: (a) the land area of the State could be completely covered by the sea or become uninhabitable; (b) the progressive displacement of people to the territories of other States; (c) the legal status of the government of a State affected by sea-level rise that had established itself in the territory of another State; (d) the preservation of the rights of the States affected by the phenomenon of sea-level rise with respect to maritime zones; and finally (e) the right to self-determination of the populations of the affected States.¹⁶² Chapter V then discusses some preliminary alternatives for mitigating the effects of sea-level rise in relation to Statehood in the event of complete inundation of a State's territory. The first of the proposed alternatives was to assume continued statehood.¹⁶³ A second alternative is to maintain some form of international legal personality without territory, similar to those of the Holy See and the Sovereign Order of Malta. For instance: (a) cession or assignment of segments or portions of territory to other States, with or without transfer of sovereignty; (b) association with another State; (c) establishment of confederations or federations; (d) unification with another State, including the possibility of a merger; and (e) eventual hybrid schemes combining elements of more than one modality.¹⁶⁴

A. CREATION AND PERMANENCY OF STATEHOOD

As the Second Report explains, Articles 4 and 5 of the Convention

^{162.} Patrícia Galvão Teles & Juan José Ruda Santolaria (Co-Chairs of the Study Group on Sea-Level Rise in Relation to International Law), *Second Issues Paper on Sea-Level Rise in Relation to International Law*, ¶ 164 U.N. Doc A/CN.4/752 (2022) [hereinafter Teles & Santolaria, *Second Issues Paper*] (considering these aspects when analyzing sea-level rise with a particular focus on statehood).

^{163.} *Id.* ¶¶ 54–56, 158 ("[I]t is valid to hold that once a State exists as such... it has full capacity to exercise its rights, in accordance with international law.... Those rights, which may not be impaired, undoubtedly include the right of the State to provide for its preservation....").

^{164.} See id. ¶¶ 198–226 (defining and expanding on the use of the four modalities when a State is completely covered by the sea or becomes uninhabitable by international legal definition).

on the Rights and Duties of States provide that the rights of a State derive from its existence as a subject of international law, an existence that cannot be affected.¹⁶⁵ This principle is also reflected in Articles 10 and 12 of the Charter of the Organization of American States ("OAS CHARTER").¹⁶⁶ In addition, Article 13 of the OAS Charter and Article 1 of the Convention on the Rights and Duties of States provide that a State has the right to advocate for its preservation.¹⁶⁷ Thus, the Co-Chair concluded that States have the right to take measures within international law to preserve their integrity and continued existence.¹⁶⁸ Therefore—in line with the comments of Samoa, Solomon Islands, Tuvalu, Cuba, Latvia, Cyprus, Liechtenstein and the ILA-there should be a strong presumption of continuity of statehood, as this seems to be the only fair approach to deal with this issue.¹⁶⁹ That said, in the name of the principle of sovereign equality of States, the extinction of a State cannot be forced but must be a voluntary process based on the consent of the State in question.¹⁷⁰

^{165.} Montevideo Convention on the Rights and Duties of States, arts. 4–5, Dec. 26, 1933, 165 L.N.T.S. 19 ("States are juridically equal, enjoy the same rights, and have equal capacity in their exercise. The fundamental rights of states are not susceptible of being affected in any manner whatsoever.").

^{166.} Charter of the Organization of American States, arts. 10–12, Apr. 30, 1948, 2 U.S.T. 2394, 119 U.N.T.S. 3 (mimicking the language of the Montevideo Convention Articles 4 and 5 and adding that "[e]very American State has the duty to respect the rights enjoyed by every other State in accordance with international law").

^{167.} *Id.* art. 13 ("Even before being recognized, the State has the right to defend its integrity and independence, to provide for its preservation and prosperity, and consequently to organize itself as it sees fit. . . ."); *see also* Montevideo Convention, *supra* note 165, art. 1 ("The state as a person of international law should possess the following qualifications: (a) a permanent population; (b) a defined territory; (c) government; and (d) capacity to enter into relations with other states.").

^{168.} See Teles & Santolaria, Second Issues Paper, supra note 162, ¶¶ 155–58 (citing the Convention on the Rights and Duties of States, the Charter of the Organization of American States, and the Charter of the Organization of African Unity).

^{169.} See U.N. HIGH COMM'R FOR REFUGEES, SUMMARY OF DELIBERATIONS ON CLIMATE CHANGE AND DISPLACEMENT 2, 7 (2011), https://www.unhcr.org/media/

unhcr-bellagio-expert-meeting-summary-deliberations-climate-change-and-displac ement-2011 ("[S]tatehood is not lost automatically with the loss of habitable territory nor is it necessarily affected by population movements.").

^{170.} Unmekh Padmabhushan & Devesh Kumar, Land ahoy? Solutions for Statehood in a post climate change world, VÖLKERRECHTSBLOG (Mar. 16, 2020),

B. CRITERIA FOR STATEHOOD

With regard to the criteria for the creation of a State, there is no one generally accepted concept of a State.¹⁷¹ However, it is generally accepted that for a State to be a subject of international law it must meet four requirements stipulated in Article 1 of the 1933 Convention on the Rights and Duties of States (Montevideo Convention), namely, it must have: "(a) a permanent population; (b) a defined territory; (c) government; and (d) capacity to enter into relations with other States."¹⁷²

That said, we must remember that territory has not always been considered a necessary requirement. For example, in 1864, Latin American scholar Andrés Bello wrote that every nation that governs itself independently of its form and that has the ability to communicate with others, will be an independent and sovereign State in the eyes of other nations.¹⁷³ Thus, in accordance with this definition, territory is not considered an essential element of statehood. Likewise, we should not forget that in the 20th century there were as many as forty States that lost one or more of the constituent elements of statehood but continued to be recognized as States.¹⁷⁴

172. Montevideo Convention, supra note 165, art. 1.

https://voelkerrechtsblog.org/de/land-ahoy-solutions-for-statehood-in-a-post-

climate-change-world ("The forced relocation of the entire population from the submerged land is due to geological compulsions rather than a voluntary renunciation of sovereignty and would not lead to extinction of the State.").

^{171.} *Id.* (introducing three definitions of State—the constitutive theory, the theory or recognition, and the Montevideo criteria—but finding that none are universally accepted).

^{173.} ANDRÉS BELLO, PRINCIPIOS DE DERECHO INTERNACIONAL [PRINCIPLES OF INTERNATIONAL LAW] 23–24 (1864) (highlighting that the essential quality that make a State is its power to govern itself and remain independent and sovereign); SANTIAGO BENADAVA, DERECHO INTERNACIONAL PÚBLICO [PUBLIC INTERNATIONAL LAW] 102–03 (8th ed. 2004) (citing Andrés Bello) (defining an independent and sovereign state as any nation that governs itself under any form whatsoever and has faculty to communicate directly with others).

^{174.} See, e.g., Stefan Talmon, Who is a Legitimate Government in Exile? Towards Normative Criteria for Governmental Legitimacy in International Law, in THE REALITY OF INTERNATIONAL LAW: ESSAYS IN HONOUR OF IAN BROWNLIE 500, 506–07, 522–23 (Guy S. Goodwin-Gill & Stefan Talmon eds., 1999) (providing examples of States where politics overwhelmed considerations of principle and law, including Algeria and Western Sahara).

Although the criteria of statehood are necessary for the birth of States,¹⁷⁵ it is necessary to consider whether their absence necessarily implies the end of a State. Neither the Montevideo Convention nor customary international law include any argument that continued statehood depends on the fulfillment of all the requirements for the recognition of new States. These are two separate and distinct legal issues. In this regard, our late colleague, Judge James Crawford, argued that a State is not necessarily extinguished by changes in its territory, population, or government.¹⁷⁶ Moreover, the definition of territory has changed and acquired different nuances over the years. Furthermore, Judge Lauterpacht defined territory as "'both the object of a State's law and the space within which its sovereignty and jurisdiction is exercised."¹⁷⁷ However, he also stressed that territorial sovereignty is not absolute and that property is subject to modification, division, and adjustment.¹⁷⁸ Shaw also argues that this is the most

^{175.} References to the elements, which are identified as essential elements for the existence of a State in the Convention on the Rights and Duties of States, can be found in various doctrinal opinions. *E.g.*, HUGO LLANOS MANSILLA, TEORÍA Y PRÁCTICA DEL DERECHO INTERNACIONAL PÚBLICO. TOMO II [THEORY AND PRACTICE OF PUBLIC INTERNATIONAL LAW. VOLUME II] 26–27 (2008); BENADAVA, *supra* note 173, at 103 (concluding that the four main elements of a sovereign State are the territory, including the mainland, internal waters, the sea, and its airspace; the population; the government which monopolizes the use of force and exercises control over the territory and its people; and independence or sovereignty); EDMUNDO VARGAS CARREÑO, DERECHO INTERNACIONAL PÚBLICO. DE ACUERDO A LAS NORMAS Y PRÁCTICAS QUE RIGEN EN EL SIGLO XXI [PUBLIC INTERNATIONAL LAW. IN ACCORDANCE WITH THE STANDARDS AND PRACTICES THAT GOVERN THE 21ST CENTURY] 227 (2007).

^{176.} James R. Crawford, *The Creation of States*, *in* THE CREATION OF STATES IN INTERNATIONAL LAW 700–01 (2nd ed., 2006) (examining many political and social changes a State may undergo and noting that none of these eliminate the legal identity of a State over time).

^{177.} See H. LAUTERPACHT, INTERNATIONAL LAW AND HUMAN RIGHTS 364–65 (1950) (explaining that the International Bill of Human Rights applies to all persons within a State's jurisdiction, which includes people who live in "metropolitan territory enjoying full self-government or within a colony or other dependent territory"); M.N. Shaw, *Territory in International Law*, XIII NETH. Y.B. INT'L L. 77 (1982).

^{178.} See LAUTERPACHT, supra note 177, at 107 ("There is no compelling reason for assuming that the notion of natural law will be used, as in the past, for safeguarding entrenched interests and for retarding the cause of human freedom. The indications are to the contrary."); Shaw, supra note 177, at 77.

satisfactory definition, as it is a highly flexible view of the concept.¹⁷⁹

The definition of territory has changed and acquired various nuances over the years. In particular, as noted above, although territory is one of the criteria for the creation of a State, this does not necessarily mean that the absence of territory implies the extinction of the State. For example, although the Holy See lost control of its territory between 1870 and 1929, its statehood has never been questioned.¹⁸⁰ Moreover, although the ICJ has noted that the right to maritime zones is based on the principle that the land dominates the sea,¹⁸¹ exceptions to this principle have been made, as in the case of the *Bay of Bengal Maritime Boundary Arbitration between Bangladesh and India*.¹⁸² In my view, an exception to this rule can also be made in the context of sea-level rise.¹⁸³ This conclusion is in line with the ICJ's statement in

^{179.} *See* Shaw, *supra* note 177, at 77 (arguing that accepting the dynamic nature of territorial sovereignty and property is the most acceptable approach to defining the elements of sovereignty).

^{180.} See Ori Sharon, To Be or Not To Be: State Extinction through Climate Change, 51 ENV'T L. 1041, 1055 (2021) (providing that despite the Holy See's loss of sovereign control over its territory from 1870 to 1929, its statehood remained unaffected).

^{181.} See North Sea Continental Shelf Cases (Ger. v. Den.; Ger. v. Neth.), Judgment, 1969 I.C.J. $3 \P 96$ (Feb. 20) ("The contiguous zone and the continental shelf are in this respect concepts of the same kind [as they both apply the principle] that the land dominates the sea.").

^{182.} See Bay of Bengal Maritime Boundary Arbitration (Bangl. v. India), Case No. 2010-16, PSA Case Repository, ¶ 216–17 (Perm. Ct. Arb. 2014). The case concerned the delimitation of the maritime boundary between Bangladesh and the Republic of India pursuant to Art 287 and Annex VII, Art 1 of UNCLOS. Specifically, the termination of the coastline was the main issue of contention in relation to the instability of Bangladesh's coastline. The PCA held that the terms "island" and "rock" within Art. 121 of UNCLOS have never been defined in international jurisprudence. States retain a wide margin of discretion on a case-by-case basis with respect to their own consideration of specific island characteristics. Likewise, the question of whether they are creating a territorial sea of their own, an exclusive economic zone and a continental shelf is also a discretionary question.

^{183.} See Giovanny Andrés Vega et al., La delimitación marítima en el contexto de la desaparición del territorio estatal como consecuencia del cambio climático: análisis de los problemas jurídicos procedimentales y sustanciales de un escenario ya no tan hipotético [Maritime delimitation in the context of the disappearance of state territory as a consequence of climate change: analysis of the procedural and substantial legal problems of a no longer so hypothetical scenario], 21 REVISTA IUS ET PRAXIS 373, 400–06 (2015) (providing for example the argument raised by

the Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, that the notion of State survival is a paramount concern in international law.¹⁸⁴ Moreover, Judge Crawford confirmed that, once a State is established, a natural disaster cannot affect the personality of that State.¹⁸⁵ Some of these examples, rather than covering the specific situation of the total disappearance of territory, refer to the modification, reduction, and other similar actions of territory, but they provide us with concepts that recognize the complexity and flexibility necessary to deal with an ever-changing reality. Therefore, we cannot simply determine that a State whose territory is submerged under water— which is an extreme situation—ceases to exist.

C. EXERCISE OF SOVEREIGNTY

Sovereignty refers to the entire territory and not exclusively to the land territory, which means that statehood is based on sovereignty over the previously controlled surface, regardless of whether it is now above or below water. Judge Huber in the *Island of Palmas* case before the Permanent Court of Arbitration mentioned how "sovereignty in relation to a portion of the surface of the globe is the legal condition necessary for the inclusion of such portion in the territory of any particular State."¹⁸⁶

There are three different types of solutions for States to exercise their sovereignty in the event of sea-level rise. First, States can implement some preventive measures to protect their land masses and, consequently, their maritime rights. Artificial reinforcement of

Bangladesh in the Bay of Bengal Maritime Boundary Arbitration that climate change and the general methodology of Article 15 of the 1982 United Nations Convention on the Law of the Sea are a sufficient legal basis to exempt the principle that the land dominates the sea).

^{184.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 263 (July 8, 1996) ("Furthermore, the Court cannot lose sight of the fundamental right of every State to survival, and thus its right to resort to self-defence, in accordance with Article 51 of the Charter, when its survival is at stake.").

^{185.} JAMES CRAWFORD, BROWNLIE'S PRINCIPLES OF INTERNATIONAL LAW 127 (9th ed. 2019) (naming natural disaster among a list of interferences, including extensive civil strife and extensive strife caused by foreign invasion, as interferences which do not affect personality).

^{186.} The Island of Palmas Case (U.S. v. Neth.), Case No. 1925-01, PSA Case Repository, at 8 (Perm. Ct. Arb. 1928).

landforms surrounded by water has been mentioned as a possible solution during these discussions last year.¹⁸⁷ Secondly, as mentioned in the Second Report, States can seek adaptive measures, such as the transfer of sovereignty over a piece of land; the transfer of territory without a corresponding transfer of sovereignty, but covered by a special agreement to decide matters such as, for example, the settlement of the population of the developing island State in the "new" geographical area; or the establishment of the Government.¹⁸⁸ As the Pacific Islands Forum argues, a treaty could also be established that provides for the continuation of territorial rights, despite changes in territory, while maintaining sovereignty over maritime zones.¹⁸⁹ An interesting solution that could be studied further is the concept of an "ex-situ State," as promoted by Burkett of the University of Hawaii.¹⁹⁰ This status would allow citizens of States to relocate while maintaining their governmental structures. This transition could be facilitated by the UN and financially supported by the international community.¹⁹¹ Third, States may choose to partner with other States. This solution is also supported by examples such as the Cook Islands with New Zealand, as well as the Federated States of Micronesia, the Marshall Islands and Palau with the United States.¹⁹² In addition,

190. Maxine Burkett, *The Nation* Ex-Situ: *On Climate Change, Deterritorialized Nationhood and the Post-Climate Era* 2 CLIMATE L. 345, 346 (2011) (explaining how ex-situ nationhood would protect sovereignty in perpetuity).

191. *Id.* at 364 (positing that the international community's involvement vis a vis a UN structure would support the deterritorialized state).

192. Mariano J. Aznar Gómez, *El estado sin territorio: la desaparición del territorio debido al cambio climático*, 26 REV. ELEC. DE STUD. INT. 8 (2013) (proposing that States may temporarily lend part of its territory to a vulnerable State

^{187.} See, e.g., Strengthening Singapore's Coastal Defenses, PUB SINGAPORE'S NAT'L WATER AGENCY (Mar. 4, 2021), https://www.pub.gov.sg/Resources/News-Room/PressReleases/2021/03/Strengthening-Singapore-Coastal-Defences (listing nature-based enhancements including mangroves and earthen bunds as potential solutions).

^{188.} Examples of such agreements, despite not involving sea-level rise, include the agreements between the Holy See and Italy, and Peru and Ecuador.

^{189.} See Secretary of the International Law Commission, Letter dated Dec. 30, 2019 from the Pacific Islands Forum, Submission of the Members of the Pacific Islands Forum to the International Law Commission on the Topic of Sea-Level Rise in Relation to International Law (Dec. 30, 2019) [hereinafter Pacific Islands Forum] (recounting how Pacific Islands Forum Leaders committed to develop international law to secure maritime zones in the face of sea-level rise).

another option could be the creation of a confederation. However, this historical solution has not occurred in recent years.¹⁹³ In a similar vein, a developing island State could also join an existing federation. Another option could be unification with another State,¹⁹⁴ as well as the possibility of merger.¹⁹⁵

In addition to these alternatives, there are hybrid possibilities that could provide interesting solutions. For example, Spain and the United Kingdom have an agreement on the sovereignty of Gibraltar.¹⁹⁶ Another hybrid alternative can be derived from the case of the Faroe Islands, which constitutes an autonomous community within the Kingdom of Denmark.¹⁹⁷ However, we should bear in mind that these solutions may require a detailed discussion in relation to the law of State succession.

D. MARITIME BORDERS AND RIGHTS TO MARITIME ZONES

Rising sea levels may affect international boundaries and rights over maritime areas, which may in turn give rise to disputes in the absence of clear legal guidance. In this regard, Papua New Guinea stated that maintaining statehood is essential to preserve existing maritime zones, which is consistent with the presumption of continuity of the State in question.

State submissions to the Commission have maintained that the boundaries established by a treaty are not affected by subsequent changes to the baseline.¹⁹⁸ In fact, since most coastlines may be

to prevent statelessness).

^{193.} The most recent example is the confederation of Serbia and Montenegro, which existed from 2003 until 2006.

^{194.} For instance, an illustrating example is the absorption of the German Democratic Republic by the Federal Republic of Germany in 1990.

^{195.} See, e.g., the cases of the United Arab Republic, formed by the merger of Egypt and Syria in 1958, and the United Republic of Tanzania, formed by the merger of Tanganyika and Zanzibar in 1964.

^{196.} Peace and Friendship Treaty of Utrecht, Gr. Brit.-Spain July 13, 1713, 28 C.T.S. 295, *in* A COLLECTION OF TREATIES BETWEEN GREAT BRITAIN AND OTHER POWERS 340, 377–79 (George Chalmers ed., 1790).

^{197.} See Home Rule Act of the Faroe Islands § 1 (1948) ("Within the framework of this Act the Faroe Islands shall constitute a self-governing community within the state of Denmark.").

^{198.} See Pacific Islands Forum, supra note 189 (providing that the PIF Members

affected by sea-level rise, if corresponding changes in legal rights occur there will be risks of conflict over maritime resources and confusion over rights of way, among many other difficult challenges. Thus, as reiterated above, baselines should not be ambulatory.

In accordance with statements made by Pacific Island States, baselines should be established in accordance with UNCLOS on a permanent basis, regardless of sea-level rise.¹⁹⁹ Other States that have included their support for this position are Belize, Cuba, Fiji, Jamaica, New Zealand and Thailand, among others. Therefore, it is necessary to preserve baselines, outer limits, and maritime boundaries that have been established in accordance with UNCLOS and the law of the sea, and pursuant to agreements or judicial or arbitral decisions. Fixed baselines are necessary in this regard to ensure peaceful international relations.²⁰⁰ Moreover, maritime zones can be managed by an authority for the benefit of the displaced persons. In this way, displaced persons can finance their relocation and support themselves in a new host State.

V. POTENTIAL LEGAL EFFECTS ON THE PROTECTION OF PERSONS

The second substantive portion of the Second Report concerns the protection of persons affected by sea-level rise. At present, the international legal framework for people affected by sea-level rise is fragmented and general.²⁰¹ The framework needs to be further

submission reveals a consistent practice of maintaining maritime zones in the face of current sea-level rise); *see also* U.S. Mission to the U.N., Diplomatic Note to the U.N. dated Feb. 18, 2020 (Feb. 18, 2020) (generalizing that the United States considers maritime boundaries as final once established by treaty, meaning that sea-level fluctuations would not impact boundaries).

^{199.} Taputapuātea Declaration on Climate Change, at 3, July 16, 2015; Delap Commitment on Securing Our Common Wealth of Oceans: Reshaping The Future To Take Control Of The Fisheries, March 2, 2018.

^{200.} See Aznar Gómez, supra note 192, at 14 (providing Cuba and the United States' state of Florida as examples which require fixed baselines to maintain peaceable political international relations).

^{201.} See Aurescu & Oral, First Issues Paper, supra note 16, ¶ 18 (providing the varied positions of numerous Member States echoing a desire for more stability and security in international law of maritime zones given climate change and sea-level rise).

developed in order to address the specific needs of people affected by sea-level rise.²⁰² The ILC's Draft Articles on the Protection of Persons in the Event of Disasters could serve as a basis for developing this framework.²⁰³

People living in coastal environments and SIDS are particularly vulnerable to sea-level rise and are consequently exposed to risks of displacement and statelessness. In addition to migration trends, attention must also be paid to the effects of sea-level rise on sustainable development, poverty eradication, and the exacerbation of existing inequalities. Sea-level rise has particularly severe effects on vulnerable groups such as children, women, the elderly, people with disabilities and indigenous peoples. Therefore, special attention must be paid to protecting the rights of these vulnerable populations.

A. RELATED FUNDAMENTAL HUMAN RIGHTS

The right to life is a fundamental right, codified in almost all international and regional human rights treaties. As the Second Report emphasizes, the adverse effects of climate change can directly and indirectly threaten people's right to life. States are therefore obliged to protect people's right to life in relation to climate disasters and must take measures to that effect. Other fundamental rights affected by rising sea levels include the right to an adequate standard of living, the right to food, and the right to water. Both States directly affected by sea-level rise and those receiving people displaced by it are equally obliged to uphold the aforementioned fundamental human rights, among others. The ILC has established that the human right to dignity is related to each of these fundamental rights should guide the protection of persons with respect to sea level rise.²⁰⁴ Equally, these

^{202.} See *id.* (summarizing New Zealand's position that stability is important to protect the boundaries of maritime zones belonging to coastal states vulnerable to sea-level rise).

^{203.} Report of the International Law Commission on the Work of Its Sixty-Eighth Session, [2016] 2 Y.B. Int'l L. Comm'n 24, 25, A/CN.4/SER.A/2016/Add.1 (Part 2) (including eighteen articles which collectively provide an international legal structure to protect persons in the event of disasters).

^{204.} See Patrícia Galvão Teles & Juan José Ruda Santolaria, Co-Chairs of the Study Group on Sea-Level Rise in Relation to International Law, *Additional Paper to the Second Issues Paper on Sea-Level Rise to International Law*, ¶ 305, U.N. Doc

States cannot argue for the absolute absence of norms and the nonexistence of emergent processes that generate obligations of varying degrees in this area.

It should be noted that relevant State practice is still scarce on a global scale, although it has been more extensively developed by those States already affected by sea-level rise.²⁰⁵ That being said, recently, on 28 July 2022, the UN General Assembly adopted resolution A/RES/76/300, "[t]he human right to a clean, healthy and sustainable environment," in which it recognizes that the impact of climate change interferes with the enjoyment of a clean, healthy, and sustainable environment, as well as that human rights implications of environmental damage are felt most acutely by populations in vulnerable situations, including women and girls, indigenous peoples, children, older persons, and persons with disabilities.²⁰⁶ Moreover, the resolution also recognizes that, inter alia, environmental degradation and climate change constitutes some of the most pressing and serious threats to the ability of present and future generations to effectively enjoy all human rights.²⁰⁷

The Second Report reviewed a *corpus iuris*,²⁰⁸ namely: the Guiding Principles on Internal Displacement,²⁰⁹ the African Union Convention

208. Aurescu & Oral, *First Issues Paper*, *supra* note 16, \P 20 (providing for the formation of a Study Group to develop international law surrounding sea-level rise).

209. Comm'n on Hum. Rts., Further Promotion and Encouragement of Human Rights and Fundamental Freedoms, Including the Question of the Programme and

A/CN.4/774 (2024) [hereinafter Teles & Santolaria, *Additional Paper to the Second Issues Paper*].

^{205.} See Aurescu & Oral, First Issues Paper, supra note 16, ¶ 19 (identifying 57 delegations at the seventy-fourth General Assembly which referred to the need for international legal stability and security regarding climate-induced maritime zone fluctuations).

^{206.} G.A. Res. 76/300, at 2 (July 28, 2022).

^{207.} See Meetings Coverage, General Assembly, With 161 Votes in Favour, 8 Abstentions, General Assembly Adopts Landmark Resolution Recognizing Clean, Healthy, Sustainable Environment as Human Right, U.N. Meetings Coverage GA/12437 (July 28, 2022). Resolution A/RES/76/300 was adopted by 161 votes in favor and 8 abstentions. Originally, the UN Human Rights Council adopted resolution 48/13 on 8 October 2021 recognizing that a clean, healthy and sustainable environment is a human right. See generally Human Rights Council Res. 48/13 (Oct. 8, 2021) (recognizing the wide-scale and devastating implications of climate change on human rights as defined and protected by other international legal provisions).

for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention),²¹⁰ the New York Declaration for Refugees and Migrants,²¹¹ the Global Compact for Safe, Orderly and Regular Migration,²¹² the Sendai Framework for Disaster Risk Reduction 2015-2030,²¹³ the Agenda for the Protection of Persons Displaced across Borders in the Context of Disasters and Climate Change under the Nansen Initiative,²¹⁴ and the International Law Association's Sydney Declaration of Period Persons Displaced Persons in the Context of Sea-Level Rise.²¹⁵

In parallel, the Second Report highlights the importance of the recent United Nations Human Rights Committee (HRC) case, *Teitiota v. New Zealand*.²¹⁶ In 2020, for the first time in the history of international human rights law, an international body ruled on the obligations of States in relation to migration and climate change under the ICCPR.²¹⁷ In the landmark decision, addressing the *Ioane Teitiota* case against New Zealand after his deportation to the Republic of

215. See generally SYDNEY CONFERENCE, supra note 20 (highlighting the Committee's focus on the protection of displaced populations due to sea-level rise); see also International Law Commission Res. 6/2018, at 2 (2018) (showing that the International Law Association has specifically adopted the Sydney Declaration of Principles on the Protection of Persons Displaced in the Context of Sea Level Rise).

216. Hum. Rts. Comm., Views Adopted by the Committee Under Article 5(4) of the Optional Protocol, Concerning Communication No. 2728/2016, U.N. Doc. CCPR/C/127/D/2728/2016, ¶¶ 1.1, 2.1 (2020) [hereinafter Views Adopted by the Committee under Article 5(4)].

217. Simon A. Behrman & Avidan Kent, *Prospects for Protection in Light of the Human Rights Committee's Decision in* Teitiota v. New Zealand, POLISH MIGRATION REV. (forthcoming) (written May 16, 2020) (noting that this decision sets a precedent for the future protection of climate refugees).

Methods of Work of the Commission, U.N. Doc. E/CN.4/1998/53/Add.2, Annex, at 16–17 (Jan. 21, 1993) (providing guidance and analysis of the international legal standards controlling issues affecting internally displaced persons).

^{210.} Convention for the Protection and Assistance of Internally Displaced Persons in Africa, African Union, Oct. 23, 2009, 3014 U.N.T.S. 52375.

^{211.} G.A. Res. 71/1 (Sept. 19, 2016).

^{212.} G.A. Res. 73/195 (Dec. 19, 2018).

^{213.} G.A. Res. 69/283, Annex II (June 3, 2015).

^{214.} See generally NANSEN INITIATIVE, AGENDA FOR THE PROTECTION OF CROSS-BORDER DISPLACED PERSONS IN THE CONTEXT OF DISASTERS AND CLIMATE CHANGE (2015) (recognizing forced displacement due to natural disasters, including climate change, is one of the biggest humanitarian challenges of the 21st century).

Kiribati, the HRC made clear: "without robust national and international efforts, the effects of climate change in receiving states may expose individuals to violations of their rights [...] thereby triggering the *non-refoulement* obligations of sending states."²¹⁸ The decision elaborates further, saying: "[g]iven that the risk of an entire country becoming submerged under water is such an extreme risk, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized."²¹⁹

Teitiota represents an historical²²⁰ landmark and a significant development in the protection of climate refugees under international human rights law.²²¹ In this case, the HRC established a set of standards relating to Ioane Teitiota, a citizen of the Island State of Kiribati, who had applied for refugee status and the principle of nonrefoulement to the State of New Zealand because of the dangers of climate change in his State of origin.²²² In that precedent, the HRC held that States must refrain from deporting a person where "there are substantial grounds for believing that there is a real risk of irreparable harm" as contemplated in Article 6 (right to life) and Article 7 (prohibition of torture or cruel, inhuman or degrading treatment or punishment) of the ICCPR.²²³ The HRC found no violation of the ICCPR by New Zealand for deporting Teitiota and his family to his country of origin, although it noted that "in the absence of vigorous national and international efforts, the effects of climate change in receiving States may expose individuals to a violation of their rights

^{218.} Views Adopted by the Committee under Article 5(4), *supra* note 216, ¶ 9.11.
219. *Id.*

^{220.} Caso histórico de la ONU para las personas desplazadas por el cambio climático, AMNESTY INT'L (Jan. 20, 2020), https://www.amnesty.org/es/latest/news/2020/01/un-landmark-case-for-people-displaced-by-climate-change (identifying *Teitiota* as an unprecedented, historical landmark case in international asylum law).

^{221.} Adaena Sinclair-Blakemore, Teitiota v New Zealand: A Step Forward in the Protection of Climate Refugees under International Human Rights Law?, OXFORD HUM. RTS. HUB (Jan. 28, 2020), https://ohrh.law.ox.ac.uk/teitiota-v-new-zealand-a-step-forward-in-the-protection-of-climate-refugees-under-international-human-

rights-law (summarizing that the HRC's ruling created the obligation for states to not forcibly return individuals when their place of return would pose a real risk to life due to climate change).

^{222.} Views Adopted by the Committee under Article 5(4), *supra* note 216, ¶ 9.11.
223. *Id.*

under Articles 6 or 7 of the Covenant, thereby triggering the non-refoulement obligations of States of origin."²²⁴

B. STATELESSNESS, MIGRATION, AND REFUGEES

The ILC's Reports support the presumption of continuity of statehood.²²⁵ However, even if one agrees that sea-level rise may not lead to a change in the legal personality of States, there are risks of *de facto* statelessness. *De facto* statelessness could be prevented and addressed in a number of ways. Because of the close relationship between the issue of statehood and statelessness, many of these solutions have been noted above. The option of ceding part of the territory together with the transfer of sovereignty, or without such transfer, is an interesting possibility. For example, Kiribati recently announced its intention to transfer its entire population and has purchased 2,000 hectares of land in Fiji.²²⁶ In my view, it is relevant to recognize the importance of considering the existence of an *erga omnes* obligation to avoid *de jure* or *de facto* statelessness.

A related issue to that of statelessness is that of refugees and displacement. Currently, for some, people fleeing their country because of climate change are not considered refugees.²²⁷ Under this view, such people can only be granted refugee status if climate change is intertwined with armed conflict and violence.²²⁸ Such a restrictive approach means that many of those affected by rising sea levels, and by climate change in general, would not be able to claim this protection status. This is despite the fact that the UN Human Rights Committee has recognized the application of and protection under the

^{224.} Id.

^{225.} Teles & Santolaria, *Additional Paper to the Second Issues Paper, supra* note 204, ¶ 294 (affirming the ILC's support of the presumption of continued statehood).

^{226.} A similar example is that of Tuvalu. In recent years, Tuvalu has been in talks with Australia and New Zealand to accept the entire population of Tuvalu when the island becomes uninhabitable due to sea level rise.

^{227.} See Views Adopted by the Committee under Article 5(4), supra note 216, \P 9.14 (recognizing that persons deported due to the sea-level rise situation at the time in the Republic of Kiribati are not considered climate refugees).

^{228.} *Climate Change and Disaster Displacement*, UNHCR, https://www.unhcr. org/en-us/climate-change-and-disasters.htm (providing that the UNHCR ensures that people forced to flee across borders for violation of their human rights which occurred in relation to climate change and disaster are protected and safe).

principle of non-refoulement for people whose right to life is endangered by climate change, as Tuvalu mentioned in its comments.²²⁹ However, in its current state, international refugee law has not been sufficiently updated with regard to new challenges and realities, such as that of climate change, and we must consider new approaches in light of the risks of rising sea levels.²³⁰ For this reason, further studies are needed to highlight and clarify the obligations of States in relation to the principle of non-refoulement and the rights derived from refugee status in relation to sea-level rise and climate change phenomena in general. In the same vein, more studies should be conducted in relation to the protection of and rights of those who do not flee their country as a result of sea-level rise, but who migrate

C. Self-determination

internally, thus qualifying as internally displaced persons.²³¹

The right to self-determination is a fundamental principle of international law that is reflected not only in the UN Charter, but also in multiple human rights instruments and in the Friendly Relations Declaration.²³² Moreover, the ICJ has ruled that the *erga omnes* character of the right of peoples to self-determination is irreproachable.²³³ As Liechtenstein's comment explains, the right to self-determination is also fundamental in addressing the protection of

^{229.} Pacific Islands Forum, Submission to the International Law Commission on the Sub-Topics of Sea Level Rise in Relation to Statehood And The Protection Of Persons Affected By Sea-Level Rise at 25, NY 6/10/4 (Dec. 31, 2021) (providing that refoulement in the face of serious threat to life due to climate change would breach the UNHRC's non-refoulement principle).

^{230.} See Convention Relating to the Status of Refugees, art. 1(A)(1)–(2), July 28, 1951, 189 U.N.T.S. 137 (defining "refugee" without provision accounting for climate refugees).

^{231.} GLOBAL PROTECTION CLUSTER WORKING GROUP, HANDBOOK FOR THE PROTECTION OF INTERNALLY DISPLACED PERSONS 484–85 (2010) (listing climate disasters which would and have internally displaced people).

^{232.} U.N. Charter art. 1, ¶ 2 (providing that the purpose of the United Nations is based in part on respect for self-determination of peoples); ICCPR, *supra* note 62, art. 1 (providing that all people have the right to self-determination); ICESCR, *supra* note 62, art. 1 (recognizing that the right to self-determination extends to all people); G.A. Res. 2625 (XXV), at 121–23 (Oct. 24, 1970) (including the right of all people to self-determination as also tied to the principle of equal rights).

^{233.} East Timor (Port. v. Austl.), Judgment, 1995 I.C.J. 90 ¶ 29 (June 30).

people affected by rising sea-levels.²³⁴ This right is, of course, manifested through statehood. Therefore, this reiterates the need to recognize a strong presumption in favor of the continuation of statehood so that the right to self-determination can be maintained despite sea-level rise. The maintenance of the right requires preserving the right of a people to the former territory and its projection to the sea. Likewise, it cannot be argued, in my view, that a State's rights over it simply disappear because part or all of the territory is under water.

D. DIPLOMATIC PROTECTION AND CONSULAR SERVICES

Finally, with regard to the provision of diplomatic protection and consular services, planning for a changing future is vital. States must take preventive measures to ensure the continuity of the exercise of these functions. For example, new technologies, such as passport machines in third States, can ensure adequate consular assistance. In addition, bilateral or regional partnerships allow States to share consular responsibilities and extend services to nationals of other States. Partnerships such as those among the countries of the Association of Southeast Asian Nations can be a solution when a State is unable to maintain a large consular network now or in the future.

VI. CONCLUDING REMARKS

The international community must not wait for a State's territory to be completely submerged before addressing the challenges posed by sea-level rise. This paper has highlighted the significance of sea-level rise in relation to international law, focusing on the analysis conducted by the Study Group appointed by the ILC. It is evident that the work of the ILC is crucial to protect those who are most vulnerable to human-induced sea-level rise and have contributed the least to the problem. By acknowledging the implications of sea-level rise, we can take proactive measures to mitigate its effects and protect the interests

^{234.} Int'l Law Comm'n, Submission by the Principality of Liechtenstein to the International Law Commission on the Topic "Sea-Level Rise in Relation to International Law" (Oct. 12, 2021) (recognizing the fundamental, inalienable role of the right to self-determination as grounded in Common Article 1 of the ICESCR and ICCPR).

of affected communities.

Although UNCLOS does not explicitly mention sea-level rise, it still provides a framework to address the issue. The UN Convention on the Law of the Sea, being a "living instrument," allows for interpretation and adaptation to contemporary challenges. The discussions within the ILC and interactions with States affirm the value of UNCLOS and the importance of fixed baselines, which have implications for sovereignty and economic opportunities for coastal territories. It is essential to consider alternatives, such as associations with states, to cope with rising sea levels consequences effectively.

The impact of sea-level rise extends beyond territorial claims, affecting various aspects of international law. Fixed baselines, in addition to their implications on statehood, have far-reaching consequences on the rights of persons, diplomatic protection, and the principle of non-refoulement. Stressing the significance of fixed lines can prompt further examination of their effects and lead to constructive solutions to safeguard the rights of affected populations. Further, the global community must consider the impact that not confronting this issue will have on international security. For example, if baselines were not fixed, it would open up tremendous competition for access to the resources that currently belong to a sovereign state, which would have serious consequences for international stability. Additionally, an influx of climate refugees could also have tremendous impacts on international security and stability. These security concerns necessitate further studies to better understand the various global implications created by sea level rise.

The adaptability of UNCLOS makes it a valuable tool in addressing sea-level rise and related challenges. Its flexibility allows for ongoing discussions and adjustments to confront emerging issues effectively. As the global community faces the reality of rising sea levels, it is crucial to utilize UNCLOS as a mechanism to protect the rights and interests of vulnerable communities and promote international cooperation in mitigating the impacts of sea-level rise.

The potential costs associated with the impacts of rising sea levels raise valid questions that will affect the global community as a whole. This necessitates considering the potential financial burden and accountability regarding sea-level rise, urging States to act responsibly and collaboratively to find sustainable solutions. The Co-Chairs took an important step in this direction in the Second Additional Paper by highlighting the necessity of international cooperation for the protection of persons affected by sea-level rise.²³⁵ Solidarity and cooperation are key principles that must be considered as the international community looks to address the issue of sea level rise.

Despite the absence of explicit references to responsibility in sealevel rise discussions, it is not precluded that the issue may arise in the future. Needless to say, the topic of responsibility and causality are not easy topics to address legally and politically. However, in my view, ignoring these topics is not the proper approach to take in the context of this important global issue. It is crucial that these issues are considered further, allowing the international community to move responsibly and realistically to address the serious challenges created by sea level rise.

^{235.} Teles & Santolaria, *Additional Paper to the Second Issues Paper, supra* note 204, ¶ 304.

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