

Climate Change-Related Sea Level Rise: How South Pacific Island States are Testing Whether the Land Still Dominates the Sea.

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Introduction

One of the consequences of anthropogenic climate change is sea-level rise.¹ Ocean thermal expansion, melting of glaciers, and melting of the Greenland and Antarctic ice sheets are all contributing to rising global sea levels.² The Intergovernmental Panel on Climate Change has predicted that it is *very likely* global sea levels will rise by around 30 – 60 centimetres by 2100 under the best case low emissions scenarios.³ If these predictions are correct, it is estimated that 13% of the Earth's ice-free coastlines will go under water,⁴ and many low-lying island States in the South Pacific are at risk of becoming completely submerged.⁵ The relationship between climate change related sea-level rise and its possible legal effects on maritime zones must therefore be assessed.

The aim of this paper is to examine the potential effects of sea-level rise on the legal status of maritime baselines and maritime zones. In doing so, this paper will question whether the

* The opinions and errors expressed herein are those solely of the author's and do not reflect those of the Australian Defence Force, the Department of Defence, not any other organisation the author is associated with.

¹ Mayer, L, 'Climate Change and the Legal Effects of Sea Level Rise: An introduction to the Science' in Heidar, T (Ed) *New Knowledge and Changing Circumstances in the Law of the Sea*, (Brill, 2020) Chp 17, 1; Guterres, Antonio, 'Red alert for the planet: UN Chief's call to phase out coal by 2030' *The Sydney Morning Herald* 22 April 2021 (online) < [Red alert for the planet: UN chief's call to phase out coal by 2030 \(smh.com.au\)](https://www.smh.com.au/news/red-alert-for-the-planet-un-chief-calls-for-coal-to-be-phased-out-by-2030-20210422-p56z8z.html)> (accessed 28 June 2021).

² H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegria, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer, Intergovernmental Panel on Climate Change, *Special Report on the Ocean and Cryosphere in a Changing Climate* (2019) Summary for Policymakers, 6.

³ H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegria, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer, Intergovernmental Panel on Climate Change, *on the Ocean and Cryosphere in a Changing Climate* (2019), Full Report, 2; Masson-Delmotte, VP, Shai A, Pirani SL, Connor, C, Pean S, Berger N, Caud, Y, Chen L, Goldfarb MI, Gomis, M, Leitzell E, Lonnoy JBR, Matthews TK, Maycock T, Waterfield, O, Yelekci R, Yu and B Zhou (eds) *Intergovernmental Panel on Climate Change, on Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (2021) Summary for Policymakers, 41.

⁴ Valentino, S 'World's beaches disappearing due to climate crisis – study' *The Guardian* 3 March 2020 (online) < [World's beaches disappearing due to climate crisis – study | Coastlines | The Guardian](https://www.theguardian.com/environment/2020/mar/03/worlds-beaches-disappearing-due-to-climate-crisis-study)>

⁵ Mayer, L, n1.

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current international legal regime is sufficient to deal with the anticipated effects of sea-level rise on maritime zones in the coming years.

The United Nations Convention on the Law of the Sea

The United Nations Convention on the Law of the Sea (LOSC)⁶ is referred to as the Constitution of the Oceans. It was adopted as a comprehensive package, at the time referred to as a ‘gentleman’s agreement’.⁷ It deals with the peaceful use of the oceans and the allocation of resources. Of significance to rising sea levels, the LOSC deals with sovereignty and sovereign rights, specifically with respect to the application of maritime zones. When the LOSC was being negotiated, the effects of climate change on the oceans were still emerging. At the time of negotiations it was accepted that coastlines were naturally dynamic and subject to change, however, there was no widespread recognition of the problems associated with sea-level rise, and therefore the effects of sea level rise on maritime boundaries were not considered by the Parties to the treaty.⁸ As a result, the ability of this regime to withstand the effects of climate change is about to be tested.⁹

Maritime zones and the baseline dilemma

Baselines are the ‘legal expression’ of a State’s coast and therefore function as an intermediary to the land territory of a coastal State in the determination of its maritime

⁶ *United Nations Convention on the Law of the Sea*, (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS.

⁷ Arnd Bernaerts, *Bernaerts’ Guide to the 1982 United Nations Convention on the Law of the Sea*, (Fairplay Publications, 1988), 8.

⁸ *Oral, Nilufer*, ‘Ocean Acidification: Falling between the Legal Cracks of UNCLOS and the UNFCCC?’ (2018) 45 *Ecology law quarterly* 9, 391 -414.

⁹ Cinnamon Carlarne, Keven Gray, Richard Tarasofsky, ‘Oxford International Law Climate Change Law: Mapping the Field’ in *Oxford Handbook of International Climate Change Law*, (Oxford University Press, 2018), 2.

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zones.¹⁰ In the *North Sea Continental Shelf* decision, the International Court of Justice expressed the cardinal principle that ‘the land dominates the sea’.¹¹

*“What distinguishes a coastal State with [maritime] rights from a land-locked State which has none, is certainly not the landmass, which both possess, but the existence of a maritime front in one State and its absence in the other. The juridical link between the State’s territorial sovereignty and its rights to certain adjacent maritime expanses is established by means of its coast”.*¹²

Baselines are the ‘zero mark’ for measuring the breadth of the maritime zones described in Article 5 of the LOSC. These include the territorial sea,¹³ contiguous zone,¹⁴ and exclusive economic zone to the maximum distance of 200 nautical miles.¹⁵ Within each zone States have varying degrees of sovereignty.¹⁶ Within the territorial sea, the coastal States exercise full jurisdiction and sovereignty, subject to Innocent Passage for foreign ships.¹⁷ In the exclusive economic zone, the coastal State exercises sovereign rights for the exploration and exploitation of living and non-living natural resources of the water column.¹⁸ On the Continental Shelf sea-bed and subsoil, the State can enjoy sovereign rights for

¹⁰ Lathrop, Coalter G., J. Ashley Roach and Donald R. Rothwell, *Baselines Under the International Law of the Sea: Reports of the International Law Association Committee on Baselines Under the International Law of the Sea* (BRILL, 2019).

¹¹ *North Sea Continental Shelf (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands)* 1969 ICJ Rep 3, 51.

¹² *Continental Shelf (Libyan Arab Jamahiriya/Malta)* 1985 ICJ Rep 13, 41.

¹³ *United Nations Convention on the Law of the Sea*, Article 3.

¹⁴ *United Nations Convention on the Law of the Sea*, Article 33.

¹⁵ *United Nations Convention on the Law of the Sea*, Article 57.

¹⁶ Rayfuse, Rosemary, 'International Law and Disappearing States - Maritime Zones and the Criteria for Statehood' (2011) 41 *Environmental policy and law* 281.

¹⁷ *United Nations Convention on the Law of the Sea*, Article 17.

¹⁸ *United Nations Convention on the Law of the Sea*, Article 62.

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exploration.¹⁹ In areas beyond national jurisdiction and the 200 nautical mile exclusive-economic zone, all States enjoy high-seas freedoms.²⁰

Baselines fall into two main categories: ‘normal’, or ‘straight’. Except where otherwise provided for in the LOSC, the normal baseline is used for measuring the breadth of the territorial sea.²¹ However, because many South Pacific Island States meet the criteria of an archipelago, they are entitled to draw a straight baseline around their outermost islands.²² The waters inside the straight baseline of an archipelagic State are internal ‘archipelagic’ waters, and archipelagic States enjoy full jurisdiction and sovereignty of the waters enclosed by the straight baseline, subject to archipelagic-sea lanes passage for foreign ships.²³

Baselines and Sea-Level Rise

Maritime zone delimitation under the LOSC is premised on the assumption that the coastal geography is relatively stable.²⁴ However, it is anticipated that sea-level rise will cause the landmass of South Pacific Islands States to shrink, which will in turn cause unanticipated changes to the coastal geography.²⁵ These changes may be even more substantial when key features used in drawing the straight baseline of an archipelago are lost.²⁶ As a result of sea-level rise the juridical status of baselines must be assessed.

¹⁹ *United Nations Convention on the Law of the Sea*, Article 77.

²⁰ *United Nations Convention on the Law of the Sea*, Article 78.

²¹ *United Nations Convention on the Law of the Sea*, Article 5.

²² *United Nations Convention on the Law of the Sea*, Article 47.

²³ *United Nations Convention on the Law of the Sea*, Article 53.

²⁴ Vidas, Davor, 'Sea-Level Rise and International Law' (2014) 4 *Climate law* 70, 77.

²⁵ Rayfuse, Rosemary, n 16, 281.

²⁶ *Ibid.*

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Ambulatory or fixed baselines?

While the LOSC provides strict limits for maritime zones, it is silent with respect to what happens to baselines following a sea-level rise event.²⁷ The result is two possible interpretations of baselines; ambulatory and fixed. The distinction between the two is significant because it will shape whether State's are able to preserve their maritime entitlements following a sea-level rise event.²⁸

The concept of ambulatory baselines considers that baselines would move landward to reflect the physical reality of the low-water line against a shrinking coastline.²⁹ The fixed baseline concept considers that baselines remain fixed at the same coordinates at which they were marked on the official chart at a certain point in time. Pursuant to the fixed baseline concept, even if the landmass shrinks after a sea-level rise event, there would be no effect on the previously declared baselines and maritime zones of the coastal State.³⁰

To date, there has been no consensus about which interpretation is more appropriate.³¹

While the LOSC is silent with respect to whether maritime zones can move with the low water mark on which they are based, Rayfuse observes that commentators such as

²⁷ Vidas, Davor, 'Sea-Level Rise and International Law' (2014) 4 *Climate law* 70, 77.

²⁸ Caron, David D., 'When Law Makes Climate Change Worse: Rethinking the Law of Baselines in Light of a Rising Sea Level' (1990) 17 *Ecology law quarterly* 621.

²⁹ Oral, Nilufer, 'Ocean Acidification: Falling between the Legal Cracks of UNCLOS and the UNFCCC?' (2018) 45 *Ecology law quarterly* 9.

³⁰ Strauss, Michael J., 'The Future of Baselines as the Sea Level Rises: Guidance from Climate Change Law' (2019) 6 *Journal of territorial and maritime studies* 27, 43.

³¹ *Ibid.*

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Freestone,³² Alexander,³³ Caron³⁴ and Soons³⁵ all prefer the theory that baselines are ambulatory, inferred from a negative implication of the LOSC text.³⁶ This would mean that if the baseline moves, the maritime boundary would move along with it, and the outer limits would become reclassified as the high seas.³⁷

The International Law Association Committee on Baselines conducted a body of work on the subject in 2012 (Sophia Report). The Sophia Report observed that ‘the normal baseline is ambulatory’ and that consequently ‘if the legal baseline changes with human-induced expansion of the actual low-water line to seaward, then it must also change with contractions of the actual low-water line to landward’.³⁸ The Sophia Report found numerous precedents where land reclamation activities had extended the coastline, and as a result these activities had altered the position of the baseline and extended the maritime zones of the State. The Sophia Report found that if human induced extension of the natural coast could move the normal baseline seaward, then the baseline must also change with the contractions of the low-water line to landward.³⁹

³² Freestone, D. ‘International Law and Sea Level Rise’. In: Churchill, R. and Freestone, D. (Eds) *International Law and Global Climate Change*. (London/ Dordrecht/Boston: Graham & Trotman/Martinus Nijhoff 1992)

³³ Alexander, L. ‘Baseline Delimitations and Maritime Boundaries, (1983) 23 *Virginia Journal of International Law* (1983) 535.

³⁴ Caron, David D., ‘When Law Makes Climate Change Worse: Rethinking the Law of Baselines in Light of a Rising Sea Level’ (1990) 17 *Ecology law quarterly* 621.

³⁵ Soons, Alfred, ‘The Effects of a Rising Sea Level on Maritime Limits and Boundaries’, (1990) 37(2) *Netherlands International Law Review*, 216–218.

³⁶ Rayfuse, Rosemary, n 16 at 282.

³⁷ Caron, David, D n 36; Armstrong, Christopher & Corbett, Jack, Climate change, sea level rise and maritime baselines: responding to the plight of low-lying Atoll states (2021) 21(1) *Global Environmental Politics*, 89-107.

³⁸ International Law Association, ‘Baselines under the International Law of the Sea’ (of the Seventy-Fifth Conference held in Sofia, ILA, August 2012), 422.

³⁹ Lathrop, Coalter G., J. Ashley Roach and Donald R. Rothwell, n17, 52.

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“...Coastal States may protect and preserve territory through physical reinforcement, but not through the legal fiction of a chartered line that is unrepresentative of the actual low-water line.”⁴⁰

This view is supported by Soons, who argues that artificial conservation efforts are fully permitted by international law and a State would not lose its status by virtue of land reclamation, however, this would not alter the fact that baselines are ambulatory.⁴¹

The Sophia Report observed that the ambulatory principle would apply to both normal baselines and straight baselines. This is because the low-water line serves as an ‘anchor’ for straight baselines, and that a straight baseline must still ‘attach or link up with the low-water line at the endpoints, and intermediate turning points’.⁴² Furthermore, the sea-level rise may also result in the disappearance of key geographical features, such as headlands, islands or rocks that are used to draw straight baselines.⁴³

However, the difficulty with applying the ambulatory theory to straight baselines is obvious for South Pacific Islands States who are already losing their coastlines and key geographical features. If straight baselines are indeed ambulatory, then this will result in the archipelagic baselines used to delimit their territories being redefined, and consequently, the maritime zones they use for their blue economies will shrink.⁴⁴

⁴⁰ International Law Association, ‘Baselines under the International Law of the Sea’ (of the Seventy-Fifth Conference held in Sofia, ILA, August 2012), 422.

⁴¹ Soons, Alfred, ‘The Effects of a Rising Sea Level on Maritime Limits and Boundaries’, (1990) 37(2) *Netherlands International Law Review*, 216–218; Rayfuse, Rosemary, n 16, 282.

⁴² International Law Association, ‘Baselines under the International Law of the Sea’ (of the Seventy-Fifth Conference held in Sofia, ILA, August 2012), 2.

⁴³ Schofield C & Freestone D, ‘Options to Protect Coastlines and Secure Maritime Jurisdictional Claims in the Face of Global Sea Level Rise’ in Gerrard, M. B., & Wannier, G. E. (Eds.) *Threatened island nations: Legal implications of rising seas and a changing climate* (Cambridge University Press, 2013), 159.

⁴⁴ Rayfuse, R, n 16, 282; Rayfuse, R, *W(h)ither Tuvulu? International Law and Disappearing States*, University of New South Wales Faculty of Law Research Series, 2009, Paper 9.

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Following the Sophia Report, The International Law Association Committee on Baselines published the Sydney Report in 2018. The Sydney Report concluded that there were only two potential options for low-lying island States like those in the South Pacific to preserve their maritime zones, however, both would be inconsistent with the LOSC.⁴⁵ The first, freezing or fixing baselines, which would allow the maritime zones to continue to exist and provide legal resource entitlements to coastal States.⁴⁶ However, this would be contrary to the Sophia Report's finding that baselines are ambulatory.⁴⁷ The second, would be to freeze the outer limits of the territorial sea or the EEZ. This too would allow the maritime zones to continue to exist, however, the outer edges of the EEZ would be purely lines on a map, and would not correspond to physical features of the ocean.⁴⁸ The Sydney Report, and commentators such as Armstrong and Corbett, have observed that either solution would likely exceed the limits permitted by LOSC.⁴⁹

The issue has become of such importance that the United Nations International Law Commission has included sea-level rise in their program of work.⁵⁰ Submissions received from States including the United States, United Kingdom and the Netherlands, have all supported the International Law Association's Committee on Baselines' ambulatory baseline theory.⁵¹ The South Pacific Island States did not, however, concur with these views.

⁴⁵ International Law Association, n 43.

⁴⁶ Armstrong, Christopher & Corbett, Jack, n 45.

⁴⁷ International Law Association, 'International law and sea level rise' (Sea-level rise committee, Sydney, ILA, 8 June 2018), 13-14.

⁴⁸ Armstrong, Christopher & Corbett, Jack, n 45.

⁴⁹ Ibid.

⁵⁰ International Law Commission, 'Report of the ILC' (71st session of the ILC, Geneva, 08 July – 09 August 2019) 263-73.

⁵¹ United States, Submission to the International Law Commission, *Sea-level rise in relation to international law working group*, 14 February 2020, 11 -2.

https://legal.un.org/docs/?path=../ilc/sessions/72/pdfs/english/slr_us.pdf&lang=E (accessed 22 September

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South Pacific Island States and the Preservation of Maritime Zones

In 2020, Pacific Island Forum members drafted a joint submission to the United Nations International Law Commission, which asserted their mandate to developing international law via a ‘collective effort’, the aim of which is to ensure that once maritime zones are delineated in accordance with the LOSC, that State’s maritime zones cannot be challenged or reduced as a result of sea-level rise.⁵² This ‘collective effort’ is part of the Pacific Maritime Boundaries Project which requires Forum members revise and update their maritime zone legislation, define their baselines, delineate the outer limits of their maritime zone and delimit maritime boundaries between one another.⁵³

The Federated States of Micronesia (Micronesia), while a member of the Pacific Island Forum, also filed an independent submission to the United Nations International Law Commission. Micronesia echoed the views of the Pacific Island Forum and submitted that their baselines are reflected on the official charts which have been submitted to the United

2020); United Kingdom, Submission to the International Law Commission, *Sea-level rise in relation to international law working group*, 10 January 2020, 2, <https://legal.un.org/docs/?path=../ilc/sessions/72/pdfs/english/slr_uk.pdf&lang=E> (accessed 22 September 2020); Kingdom of the Netherlands, Submission to the International Law Commission, *Sea-level rise in relation to international law working group*, 27 December 2019, 2, <https://legal.un.org/docs/?path=../ilc/sessions/72/pdfs/english/slr_netherlands.pdf&lang=E> (accessed 22 September 2020).

⁵²Pacific Island Forum Members, Submission to the International Law Commission, *Sea-level rise in relation to international law working group*, 30 December 2019 https://legal.un.org/ilc/sessions/72/pdfs/english/slr_pif.pdf (accessed 22 September 2020); Fiftieth Pacific Islands Forum Communique, 13 – 16 August 2019, Funafuti, Tuvalu, Pacific Island Forum Leaders Ocean Statement 2021, [Pacific Islands Forum Issues Strongest-ever Statement on Climate, Cites Security Threat | News | SDG Knowledge Hub | IISD](#) (accessed 28 October 2021)

⁵³ Schofield C & Freestone, D ‘Islands awash amidst rising seas: Sea level rise and insular status under the law of the sea’, (2019) 391, *International Journal of marine and Coastal Law*, 405.

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Nations, and that they are not required to further review their baseline co-ordinates, as they are permanent fixtures.⁵⁴

In 2021, the Pacific Island Forum members issued a Declaration on Preserving Maritime Zones in the Face of Climate Change-Related Sea-Level Rise.⁵⁵ Through this, Forum members have declared that they do not intend to review or update their baselines or outer limits of their maritime zones as a consequence of sea-level rise. Once maritime zones are established in accordance with the LOSC and notified to the Secretary-General of the United Nations pursuant to the relevant provisions of the LOSC, the Pacific Island Forum members assert their rights and entitlements are maintained and continue to apply without reduction notwithstanding any physical changes connected to the climate change related sea-level rise.⁵⁶ In effect, the declaration seeks to fix the outer limits of maritime zones in the Pacific.

Instead of relying on specific provisions in the LOSC to support their position on fixing the outer limits of maritime zones, the Pacific Island Forum members argue that their position is underpinned by two sets of general international legal principles, and it is these overarching principles which underpin and legitimise the LOSC. The first set of principles are those of legal stability, security, certainty and predictability. In arguing for these

⁵⁴ Federated States of Micronesia, Submission to the International Law Commission, *Sea-level rise in relation to international law working group*, 27 December 2019, <https://legal.un.org/docs/?path=../ilc/sessions/72/pdfs/english/slr_micronesia.pdf&lang=E> (accessed 22 September); Radio New Zealand, 'Pacific states push for permanent EEZ recognition', *Dateline Pacific*, 05 December 2019, (Dominic Godfrey).

<<https://www.rnz.co.nz/international/programmes/datelinepacific/audio/2018725442/pacific-states-push-for-permanent-eez-recognition>> (accessed 22 September 2020); Matthew Moorhead, 'Legal Implications of rising sea level', *Commonwealth Law Bulletin* (United Kingdom), 44:4, 707-708.

⁵⁵ Fifty-first Pacific Islands Forum, 6 August 2021, Suva, Fiji, Declaration on Preserving Maritime Zones in the Face of Climate Change-Related Sea Level Rise, [Declaration on Preserving Maritime Zones in the Face of Climate Change-related Sea-Level Rise > Forum Sec](#) (access 28 October 2021).

⁵⁶ *Ibid.*

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principles, the Pacific Island Forum submission refers to the Permanent Court of Arbitration's finding in the Bay of Bengal Maritime Boundary Arbitration case which observed that:

*"...maritime boundary delimitations, like land boundaries, must be stable and definitive to ensure a peaceful relationship between the States concerned in the long term. The same consideration applied to maritime boundaries. In the view of the Tribunal, neither the prospect of climate change nor its possible effects can jeopardise the large number of settled maritime boundaries throughout the world".*⁵⁷

The second principles are those of equity, fairness and justice. In arguing for these principles, the Pacific Island Forum declaration observes that the 'principles of fairness and justice can be found in the preamble of the LOSC' and that 'equity is an important thread running through the LOSC'.⁵⁸

While the principles of stability, certainty, equity and fairness are noble goals, it remains unclear how fixed baselines or fixed maritime zones are consistent with the *North Sea Continental Shelf* decision and the long held maxim that the land dominates the sea.

The Future of the LOSC

In fixing the outer limits of their maritime zones, it has been observed that the Pacific Island Forum member States are attempting to exploit Article 62(1) of the Vienna Convention on the Law of Treaties, which States a fundamental change of circumstances would have no

⁵⁷ The Bay of Bengal Maritime Boundary Arbitration (Bangladesh v India) PCA case 2010 -16, Award of 7 July 2014 at 216 – 217.

⁵⁸ Fifty-first Pacific Islands Forum, 6 August 2021, Suva, Fiji, Declaration on Preserving Maritime Zones in the Face of Climate Change-Related Sea Level Rise, Aide Memoire to the [Declaration on Preserving Maritime Zones in the Face of Climate Change-related Sea-Level Rise > Forum Sec](#) (access 28 October 2021).

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effect on existing delimitation treaties.⁵⁹ Pursuant to Article 62(2)(a) of the Vienna Convention on the Law of Treaties, a fundamental change of circumstances may not be invoked for terminating or withdrawing from a treaty if the treaty establishes a boundary. South Pacific Island States are now strategically entering into maritime delimitation agreements with their neighbouring Island States.⁶⁰ The aim, that by invoking Article 62(2)(a) of the Vienna Convention on the Law of Treaties in the event of a sea-level rise event, a States' maritime entitlements remain extant and protected by the *pacta sunt servanda* principle.⁶¹

This position is supported by Judge Jesus of the International Tribunal for the Law of the Sea, who agrees that once baselines have been established, they should be seen as permanent regardless of changes to the sea-level.⁶²

With so much international law uncertain, it is hoped the United Nations International Law Commission's final report will bring some certainty to the effect of sea-level rise on the LOSC. Notwithstanding whether the recommendations support the Pacific Island Forum members legal arguments, it will provide much needed *opinio juris* on this important topic.⁶³

⁵⁹ *Vienna Convention on the Law of Treaties* (United Nations [UN]) 1155 UNTS 331, UN Reg No I-18232

⁶⁰ The Commonwealth, 'Historic Pacific Maritime Boundaries Agreements Concluded with Commonwealth Assistance' (29 August 2012) < <https://thecommonwealth.org/media/news/historic-pacific-maritime-boundary-agreements-concluded-commonwealth-assistance>> (accessed 22 September 2020).

⁶¹ Hioureas, C & Torres Camprubi A, 'Legal and Political Considerations in the Disappearance of States due to sea level rise' in Heidar, T (Ed) *New Knowledge and Changing Circumstances in the Law of the Sea*, (Brill, 2020) Chp 20, 415-416.

⁶² José Luis Jesus, *Rocks, New-Born Islands, Sea Level Rise and Maritime Space*, in Verhandelin Fur Den Freiden, Negotiating for Peace Springer-Verlag Berlin and Heidelberg GmbH & Co. Kg, (2013) 602, quoted in Rayfuse, Rosemary, 'Sea Level Rise and Maritime Zones: Preserving the Maritime Entitlements of "Disappearing" States' in Gerrard, M. B., & Wannier, G. E. (Eds.) *Threatened island nations: Legal implications of rising seas and a changing climate* (Cambridge University Press, 2013), 187.

⁶³ Soons, Alfred, n 35, 381.

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Statehood

Potential submergence of low-lying island states triggers the question of Statehood. While States have ceased to exist in the past, this has exclusively related to a change in the conditions of government and State succession, not a material change to the population or territory of the country.⁶⁴ International law has always assumed that territory will exist, yet there is now a clear danger that complete loss of territory may result.⁶⁵

While there is no internationally agreed upon definition of Statehood, the 1933 Montevideo Convention on the Rights and Duties of States is the most widely accepted criteria.⁶⁶ According to Article 1, a State should possess the following qualifications: (a) a permanent population; (b) a defined territory; (c) government; (d) capacity to enter into relations with other States. Sea-level rise may result in low-lying island states failing to meet the first and second criteria.⁶⁷

Judge Crawford notes that a State is not necessarily extinguished by substantial changes in territory, population or government.⁶⁸ Notwithstanding it appears that the prevailing view of the international community is that total and permanent submergence of a State means that it ceases to exist.⁶⁹ The United Nations High Commissioner for Refugees has noted if the 'entire territory of a State [is] permanently submerged, inevitably there could be no

⁶⁴ Ker-Lindsay, James, 'Climate Change and State Death' (2016) 58 *Survival* (London) 73, 75; Rayfuse, Rosemary, 'International Law and Disappearing States - Maritime Zones and the Criteria for Statehood' (2011) 41 *Environmental policy and law* 281.

⁶⁵ *Ibid.*

⁶⁶ Montevideo Convention on the Rights and Duties of States, Dec. 26, 1933, 165 L.N.T.S. 19; Gagain, M, n29.

⁶⁷ *Ibid.*

⁶⁸ Crawford, James, *The Creation of States in International Law* (Clarendon Press, 2nd;2; ed, 2006;2007;)

⁶⁹ Gagain, Michael, 'Climate Change, Sea Level Rise, and Artificial Islands: Saving the Maldives' Statehood and Maritime Claims through the 'Constitution of the Oceans' (2012) 23 *Colorado journal of international environmental law and policy* 77, 88.

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permanent population attached to it or a government in control of it.’⁷⁰ The United Nations General Assembly has expressed similar concerns, as have the affected States themselves.

However, even before territorial submergence occurs, a State may experience widespread migration and undergo partial or complete depopulation. This in turn could result in the population not being sufficiently large enough to meet the threshold for Statehood, even if the land territory remains.

Therefore, even if the fixed baseline (or fixed maritime zone) concept is accepted by the international community, it remains unclear whether this right could be maintained if such States fail to meet the criteria for Statehood, and their claim to Statehood is extinguished. It has been observed that it is not enough that baselines are ‘prospectively frozen’ because it does not resolve the issue of the maintenance of Statehood in the event of complete land loss by low-lying island states.⁷¹ Commentators such as Soons,⁷² Caron⁷³ and Rayfuse⁷⁴ have all proposed potential solutions including that the disappearing State acquire new territory from a second State by treaty;⁷⁵ or that the disappearing State ‘merge’ with another State.⁷⁶

If this were to occur, it would mean the State’s maritime entitlements would be held by people who no longer reside in the territory, a ‘relatively novel’ solution which would require a high degree of cooperation from third party States.⁷⁷

⁷⁰ United Nations High Commissioner for Refugees, ‘Climate Change and the Risk of Statelessness’, (May 2011) <https://www.unhcr.org/4df9cb0c9.pdf> (accessed 24 September 2020).

⁷¹ Gagain, Michael, n 69, 88.

⁷² Soons, Alfred, n 35, 230.

⁷³ Caron, David, n 34, 650.

⁷⁴ Rayfuse, Rosemary, n 16, 286.

⁷⁵ Soons, Alfred, n 35, 230; Rayfuse, Rosemary, n 16, 284.

⁷⁶ Caron, David, n 34, 650; Rayfuse, Rosemary, n 16, 285.

⁷⁷ Armstrong, Christopher & Corbett, Jack, n 45.

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Conclusion

The law of the sea is founded on the premise that the land dominates the sea. However, the anticipated submergence of South Pacific Island States as a result of sea-level rise will challenge this long held legal maxim.

To date, the only mechanisms which South Pacific Island States have to preserve their maritime entitlements appear to be either contrary to accepted interpretations of LOSC, or in the case of artificial islands, seemingly unprotected by it. While one scholar has suggested there is reason to hope that LOSC will not need revision or redefinition to cope with the eventuality of sea-level rise⁷⁸, this paper reveals that there is a growing need for departure from the norm of ambulatory baselines, either through the development of customary international law, or a more expansive interpretation of maritime zone delimitation under the LOSC.⁷⁹ The alternative, for climate change to remove from South Pacific Island States their ability to subsist and develop, would represent a considerable global injustice.⁸⁰

It is hoped the United Nations International Law Commission's final report will provide clarity and develop much needed *opinio juris* on the issues discussed in this paper. Until then, legal uncertainty remains. What is clear is that South Pacific Island States face an existential threat from sea-level rise. Their survival depends on both artificial islands as an adaptation strategy and the preservation of their current maritime entitlements to maintain

⁷⁸ Kaye, Stuart, 'Sea Level Rise after the South China Sea Arbitration' (2017), 93, *International Law Studies US Naval War College*, 445.

⁷⁹ Schofield C & Freestone D, n 51, 30.

⁸⁰ Armstrong, Christopher & Corbett, Jack, n 45.

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their blue economies and sovereign rights. However, whether this is enough to maintain their Statehood, or just a strategy to delay the inevitable, remains to be seen.

The United Nations Secretary-General recently warned the world is on the ‘verge of abyss’ and that ‘many small island nations will simply cease to exist if we don’t step up the response’⁸¹

As sea-level rise events become more common, now is the time to question whether the land still dominates the sea, because as the Intergovernmental Panel on Climate Change predicts with high confidence, it is the warming ocean temperatures, rising global sea levels and extreme weather events that will dominate our future in the South Pacific.

⁸¹ Guterres, Antonio, n1.