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Coastal management and the political-legal geographies of climate change adaptation in Australia

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A B S T R A C T

This paper connects critical legal geography and coastal climate change adaptation. It is particularly interested in the role that complex political ecologies and legal geographies have played in underpinning a decade of idealised integrated coastal management in New South Wales, Australia. In attending to the political-legal nature of coastal management through the lens of legal geography, this paper illustrates the complexities of law's role as both a driver and a barrier to coastal climate change adaptation, through a detailed review and analysis of repeated legislative reform between 2009–2018. This not-yet-documented analysis serves to highlight a shifting legal landscape and the politics of coastal climate change adaptation. It also illustrates how private property rights have been used as both a sword and a shield to advance dominant interests. The paper offers specific examples of ways private property discourses have been used to muddy the waters of adaptation responses, and how private property discourses can pervade, dissuade, and undermine land use management policies even as such policies aim to achieve more harmonious coastal management.

1. Introduction

Globally, coastal communities are facing rapid and destabilising environmental change. One of the highest-risk biophysical systems is that of coastal zones. With coasts a dynamic and often contested landscape, regulatory responses for coastal management are fraught. This is particularly so due to climate change (Taft, 2018; O'Donnell, 2016; McDonald, 2014, 2011). Risks to coastal properties are compounded by the dynamism of coastal ecosystems, overlain by factors including social values held by residents in coastal localities (Graham et al., 2013) and various land uses and overall management (Rogers et al., 2018). Exploring this contestation offers important insights for both theories and application of adaptation policy within a future-focussed coastal management paradigm. This paper illustrates these contestations with particular focus on private property rights discourses, dynamic coastal and legal landscapes, and climate change.

For over a decade, scientists have recognised that the impacts of climate change, particularly in coastal zones, will demand an "adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities" (IPCC4, 2007, p6). Adaptation to these impacts will occur in a way that is different to short-term responses to weather events, requiring a layered attentiveness (Adger and Barnett, 2009; Adger, 2001). Adaptation will not occur in every geographical location equally, nor will it occur evenly as across both temporal and spatial scales (Adger et al., 2009a,b; Barnett et al., 2014). Further, both harms and opportunities will arise as and when adaptation occurs in a variety of ways, and as across a broad spectrum of possible responses (Palutikof et al., 2015). Adaptation is necessary due to the locked-in effect of greenhouse gas emissions and consequential global warming (Steffen et al., 2018). Effective adaptation requires an ongoing focus on scalar interactions. It also requires iterative adaptive capacity (Webb et al., 2013). Ideally, each will be attuned to the complexity of social change (Adger, 2003; Adger et al, 2005, 2009a,b) and to the limits of adaptation (Barnett, 2010).

Legal geography brings to adaptation the necessary linkage between law as a mechanism of the state, and the relationship between law and temporal and spatial scales. Law as a mechanism of the state can play a key role as a lever in enabling adaptation practices (Moser, 2009). A legal geography lens however considers the relationship between space, place, and law by examining where law happens, and how social and cultural systems influence this relationship (Braverman et al., 2014). Legal geography treats law in relation to material things, and examines the co-constituted spatial and temporal effects of law on place and vice versa (Delaney, 2010, 2015). Legal geography can examine temporal and jurisdictional elements of that relationship (Valverde, 2015). Many legal geographers have also been concerned with the relationship between place, nature, and law (Graham, 2011; Bartel et al., 2013; Braverman et al., 2014; Bennett and Layard, 2015; O'Donnell, 2016). Legal geographers pay close attention to the social, cultural and environmental context in which law is enacted (Braverman et al., 2014; Gillespie, 2016), often examining relations between laws, key actors and dynamic landscapes (O'Donnell, 2016; Robinson and Forsyth, 2014; Graham, 2011), and material agents (Faulconbridge, 2007). Further,

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legal geography holds that social experiences of law are 'continually revised in practice' (Delaney, 2013, p239). These explicit linkages between the spatial as material environment and legal-social worlds warrant close (and ongoing) scrutiny (Graham, 2011; Blomley, 2008, 2014). With legal geography providing insights into "systemic spatio-political dynamics" (Pierce and Martin, 2017, p456), and in recognising that "adaptation is as much about actions in time as in space" (Barnett et al., 2014, p1103), unpacking the role of property rights is important, as ideas associated with the notion of property rights have been identified as a barrier to climate change adaptation (Graham et al., 2013).

This paper therefore links legal geography to questions about how power and political influence are performed through notions of property rights, underpinning a decade of coastal management law reform in New South Wales, Australia. An Australian case study is useful for two reasons: first, a significant proportion of the Australian population reside in relative close proximity to the coastline (Gurran et al., 2011); second, the federated governance system in Australia results in a complex and fraught regulatory landscape (Measham et al., 2011). With law and spatiality mutually constructed (Delaney, 2015), legal geographers aim pursue lines of legal-spatial enquiry in a quest for social and environmental justice (Robinson and Graham, 2018). This must include a specific regard to both the political and the place-based considerations of climatic and environmental change (O'Donnell, 2016, 2017). This paper takes as its departure point the call by Andrews and McCarthy (2014) to specifically connect the legal geography field with political ecology (see also Kay, 2016; Salgo and Gillespie, 2018).

2. Defining property

The term property is often underpinned with a legal construction: "a category of legal doctrines concerned with allocating rights to material resources" (Alexander and Peñalver, 2012, p6; Underkuffler, 2003; Waldron, 1988). Following Waldron (1988), this paper defines private property as a system of ordering that gives the values, cultural discourses and regulation that are associated with protecting property rights, their legal effectiveness. This paper shows that a fear of legal liability, arising due to land use planning decisions that attempt to manage private property interests in high risk coastal locations, is a direct result of these powerful property rights discourses. This paper illustrates how these discourses have permeated a series of coastal law reforms. This analysis draws on the Australian experience to highlight the importance of investigating how institutions treat private property rights, especially where these treatments draw on the threat of legal effectiveness of 'property rights' to advance dominant interests. How property rights are treated, both institutionally and as cultural discourse, has far ranging consequences for the long-term successes of coastal climate change adaptation. Such analysis also offers a insights into "systemic spatio-political dynamics" (Pierce and Martin, 2017, p456) in action. This includes political underpinnings of coastal management (Gibbs, 2016).

Harman et al. (2013) observe that adaptation to climate change faces dual scalar problems: the need for localised adaptation, and the need for political leadership and robust lawmaking from multiple governance frameworks. In Australia, with its highly developed coastlines, these governance frameworks include local, state and federal governments (Peel and Osofsky, 2015). Leadership in the context of coastal management policy has largely been driven by sub-national governments (Harvey and Clarke, 2019), notwithstanding earlier efforts at the federal level of government with the release of *Climate Change Risks to Australia's Coast: A First Pass National Assessment* (Department of Climate Change, 2009) and a senate enquiry into coastal zone management (Australian Government, 2009).

3. Governance frameworks and approaches to integrated coastal management

Local governments in Australia (hereinafter referred to as 'councils') are often the first responders to adaptation challenges. Councils, with legislative oversight from the state, are also responsible for framing permissible land uses, and ensuring land management. There are numerous difficulties for councils in effectively managing the competing demands of multiple public and private interests (Moser, 2015) nested within multiple, interrelated systems (Barnett and Palutikof, 2015), of which legal considerations are an important component (McDonald, 2011, 2014; O'Donnell and Gates, 2013). There are a range of coastal land management options used by governments to respond to competing coastal interests. Localised management of coastal weather events, each exacerbated by the risks presented by climate change, has traditionally followed three primary strategies: 1) coastal protection 2) coastal management or 3) retreat from the location (Harman et al., 2013). All of these strategies impinge on private property rights, including the right to exclusive occupation, the right of freedom to enjoy, and the right to exclude others.

Coastal protection typically comprises engineering options, such as the construction of permanent sea walls, or softer beach renourishment options, such as sand dune replenishment. The construction of sea walls in dynamic places has been controversial in Australia, especially where they have been seen to prioritise private property protection at public expense (O'Donnell, 2016). Because sea walls are often fixed, negative impacts can occur because beach sand and sediment naturally move. This natural movement changes the shape and contour of the coastline. This natural movement is unable to occur where fixed items are put in the way of these processes (Thom, 2012). Sea walls can also provide a false sense of security about the coastline's stability, encouraging further development in at-risk areas that are home to coastal protection works (Harman et al., 2013).

Coastal management options that seek to influence private property trajectories through the land use planning system have included requiring ground floors to be elevated, requiring increased coastal setbacks for new development, or total retreat from the at-risk location. Coastal setbacks (as a management response) require new development to literally be 'set back' from the coastline at a predetermined distance and prevent new development within a certain distance of predetermined and usually hazardous areas. Coastal retreat requires the relocation of private property away from at-risk locations that are deemed no longer habitable. In such circumstances, all assets and property in such locations are relocated or removed, with the potential for land to be rezoned to constrain further redevelopment. Retreat – even in theory only – has proved most controversial (Abel et al., 2011).

In light of these options, disputes can and do arise about who pays for coastal land management. This is especially so where coastal management is perceived to be primarily about protecting a selected few private properties (O'Donnell, 2016, 2017). Coastal management disputes have plagued the New South Wales coastline, with residents, the public, the state government, local government and insurers struggling to manage competing interests and to then implement possible climate change adaptation responses before substantive losses are sustained and ongoing litigation ensues (Taylor, 2018; Hall, 2016; Hannam, 2016). In some instances, such losses had been anticipated (Lipman and Stokes, 2003, 2011), but the legal responses required to address them not on offer (O'Donnell and Gates, 2013), or not accepted by residents (O'Donnell, 2016).

Land management policies and statutory instruments work best when underpinned by Integrated Coastal Management (ICM) or Integrated Coastal Zone Management (ICZM) (Frohlich et al., 2018; Warnken and Mosadeghi, 2018), with an underlying systems approach to manage the "direct and indirect" drivers and consequences of adaptive actions (Smith et al., 2007). ICM is the process that manages coastal issues as a system. ICM is defined by Clark and Johnston (2016,

np) as a "framework integrated across biota and habitats, time and space, and levels of government", with the "overarching aim of sustainability" and cooperation among stakeholders. In reality, councils often struggle with the demands that ICM requires (Rosendo et al., 2018), not least because of competing social values and the challenges of localised responses (Graham et al., 2013; Barnett et al., 2014). The intricacies of such demands are potentially representative of underlying commitments and practices (consider, for example, Fraser, 2017). It has been argued that integrated coastal management would benefit from consistent regulatory frameworks, particularly where these underpin land use management, policies and associated statutory instruments and ensure consideration of climate change impacts and the competing interests in the coast (Agrawal, 2010; Clarke et al., 2013; Barnett et al., 2014; Nursey-Bray et al., 2014; Frohlich et al., 2018; Harvey and Smithers, 2018). Achieving this has proved difficult in practice. As demonstrated throughout this paper, this is largely because of how private property rights confound and complicate planning law's attempts to regulate land use. This has implications for developed coastlines globally.

The dynamic nature of coastlines, the tensions between public and private property interests, and coastal climate change impacts with longer term environmental change together create uncertainty in decision-making for coastal climate change adaptation (Graham et al., 2013), for which legal responses must continually evolve (Kundis-Craig, 2010; Craig, 2018). Because councils derive their powers from the state and therefore are not autonomous, there is a clear role for robust lawmaking from higher governance scales (McDonald, 2011; Macintosh et al., 2013; O'Donnell and Gates, 2013; Peel and Osofsky, 2015), one that properly takes account of the "complex, multidimensional character of climate change regulation" (Peel and Osofsky, 2015, pp34-5, citing Hsu, 2008) and is supportive of local councils. Legal evolution in response to climate change has, however, not been without its challenges. This is particularly so in light of fears of legal liability, with climate litigation a phenomenon that has historically been concerned with incursions of land use planning to manage private land (McDonald, 2007; England, 2013; Bell-James et al., 2017; O'Donnell, 2016, 2017) but has, in more recent times, expanded in scope.

4. The role of law in driving climate change policy responses

Considerable scholarly thought has been afforded to the role of law in driving adaptation to climate change. This has often been concerned with the specifics of relevant law. These categories of law include, for example: land use planning in coastal locations (McDonald, 2010, 2011, 2014; O'Donnell and Gates, 2013; Bell, 2014) sustainable development law more generally (Durrant, 2010), climate change litigation and energy regulation (Peel and Osofsky, 2015), international instruments and mitigation (Zahar et al., 2013), disaster law (Lyster, 2015), and the beginnings of potential public and private climate law liability in numerous jurisdictions (Lord et al., 2012). A common focus of these works is with public law mechanisms at various spatial and temporal scales. In addition, underpinning most of these developments have been fundamental concerns with who is responsible for damage or loss to private property and/or associated right(s). More recently, Australian legal scholars have engaged with the messiness in how property rights confound and complicate the attempts of land management and planning law to manage private land (consider Babie, 2012, 2010a, b; and Galloway, 2018), a conundrum further complicated by coastal environmental change and associated impacts including sea level rise.

Western systems of property rights have traditionally prioritised human interest and benefit in property (Graham, 2011), and the legal system upholds individual property rights such as rights of access, enjoyment and exclusion through various legal instruments including statute and common law. The notion of property as a concept at law is at the heart of libertarianism, a theory that explains the trading of property rights as a commodity. Libertarianism holds that property, which acts as a regulatory institution supported by law, assigns freedoms and values to property and, by extension, assigns rights to the owner of that property (Waldron, 1988; Alexander and Peñalver, 2012). These rights are created by law and are linked both to the economy of property and to the abstract rights attached to property (Alexander and Peñalver, 2012). Regulation is to be significantly reliant on private market mechanisms that in turn influence property relations. Babie (2010a,b, 2012) and Galloway (2018) have scrutinised how government may rely on 'the market' rather than regulate through policy in the context of private property discourses in relation to the need to for climate change policy and legislative change. Galloway presents an important argument: property rights at law cannot be readily conflated with land use planning. She recognises that property law and land use planning ought to be more cognisant of each other, especially if the aim is to advance climate change responsiveness (including, it would seem, climate adaptation).

While these and other legal analyses are important institutional drivers of climate change adaptation, there is a clear relevance for a legal geography lens to illustrate how enactments of property are mediated by state and local government policy and by the (real or perceived) threat of legal liability. This is because government policy, along with perceptions of legal liability, occur in the context of material spaces: in this case, dynamic coastlines. McDonald (2007, p406) argues that legal responses are critical for adaptation because:

> "like the tail effect of greenhouse gas emissions, legal claims may be slow to gestate. But the law has a long memory, so courts of the future will reflect on the state of knowledge currently at hand to determine whether decision-makers of today did enough to avoid or minimise the worst exposures of climate change".

Law is also heavily involved in social ordering (Forsyth, 2017). For the coast, attempts to regulate coastal climate change adaptation have often struggled to balance regulation of public access to coastlines against the protection of private property (McDonald, 2010, 2011; 2014; Hinkel et al., 2015). The potential legal and political consequences that failure to protect private property might entail has, in some instances, resulted in litigation (O'Donnell, 2016). The use of law and/or regulatory frameworks as an effective lever (Moser and Ekstrom, 2010) for enabling climate adaptation often assumes the objectivity of law to appropriately regulate between public and private interests. However, the idea of an 'objectivity of law' can quickly neglect that law is never far removed from its social and political hubris. Legal geographer Nicholas Blomley argues that law is a system that attempts to maintain objectivity using a process that he terms 'bracketing'. Bracketing, in Blomley's definition, is a normative process in which law abstracts a 'set of relations, specifically legally consequential' relations (Blomley, 2014, p137; and consider the application of 'bracketing' to aggregate mining by Van Wagner, 2018). Bracketing aims to position law as objective or somehow removed from societal influence, which Blomley argues is reductionist. Further, the scholarship of legal geographers such as Braverman et al. (2014) and Bartel et al. (2013) reminds us that law cannot be removed from its social and material surrounds, nor can we fail to take account of the ever-present law-space-place nexus (Bennett and Layard, 2015; Delaney, 2015; Pue, 1990).

5. The spatialities of a decade of coastal law reform

Ten years ago, the principal statutory framework for the New South Wales coast was the Coastal Protection Act (1979) (NSW), which operates specifically for the purpose of coastal management (Measham et al., 2011). Working alongside the *Coastal Protection Act* was the Environmental Planning and Assessment Act (1979) (NSW) (EPA Act). The EPA Act remains the principal statutory instrument that governs strategic planning and development assessment in New South Wales.

The EPA Act contains a number of provisions which have successfully enabled considerations of climate change into judicial reasoning.[1] Prior to the commencement of the new Coastal Management Act (2016) (NSW), additional ways in which climate change considerations could be incorporated into the decision-making process were via the provisions of Environmental Planning Instruments (EPIs), any 'proposed instrument', or any Coastal Zone Management Plan (CZMP). EPIs, including State Environment Planning Policies (SEPPS) and Local Environmental Plans (LEPs), can specify additional considerations in the development assessment process. All of these policies were given effect under the then Coastal Protection Act (1979) (NSW). Key features are discussed below to illustrate how the regulatory framework of coastal management law and policy existed at the time of IPCC4, and how it has since evolved.

State Environmental Planning Policy 71—Coastal Protection 2002 (SEPP 71) regulated development in 'sensitive coastal locations'. Sensitive coastal locations were locations within 100 m from the Mean High-Water Mark of the sea, a bay, or an estuary, and development in these locations required the consent authority to give notice of the development application to the Minister for Planning and Infrastructure (clauses 11; 19). Development assessment was also required to take into account the matters outlined in clause 8, including the likely impact of coastal hazards and coastal processes on development, and the likely impact of development on coastal processes and hazards. In addition, coastal councils were required to prepare their CZMPs in accordance with the Guidelines for Preparing Coastal Zone Management Plans. These Guidelines were released in 2010, and updated again in 2013. CZMPs were required as part of the decision-making process with respect to development assessment under the EPA Act. Consent authorities were also to consider the provisions of the New South Wales Coastal Policy (1997) in approving development in the coastal zone. The *Coastal Policy* referred to the impacts on natural coastal processes and hazards that development may have; its primary role was to assist in balancing the competing private development interests and the natural and eco-system interests on the coast.

In tandem with these statutory changes the New South Wales Sea Level Rise Policy Statement (2009) ('*Statement*') had also been developed as a key coastal management response. Coming into force in 2010, this policy required councils to adjust land use planning strategies by requiring a decision-making authority to factor in a sea level rise of 40 cm by 2050 and 90 cm by 2100, for new development in high risk coastal areas. This meant that new developments were required to have raised floor levels of up to 1 m to manage the increased risk of coastal flooding.

The *Statement* acknowledged that "increased sea levels will have significant medium-to -long-term social, economic and environmental impacts" and identified itself as an "integral part of the State's response to climate change" (p3). A core aim of the *Statement* was to provide relevant policy guidance to councils, to help councils adopt an "adaptive, risk-based approach to managing the impacts of sea level rise" (p3). Page 5 stated:

> Sea level rise will also affect coastal hazards such as beach erosion during storms and coastal flooding. As the sea level rises, severe erosion of beaches during storms will affect areas further inland, while the depth of the floodwaters and the areas affected by flooding will increase due to a reduced ability to effectively drain low lying coastal areas. Climate change will also affect the frequency and intensity of storms, further exacerbating the effects of sea level rise …

The *Statement* was supported by the New South Wales Coastal Planning Guideline (2010). Principles 3 and 4 of the *Guideline* stipulated that "avoiding intensifying land use in coastal risk areas through appropriate strategic and land use planning" and "considering options to reduce land use intensity for coastal risk areas where feasible" are key requirements in local government decision-making for at risk coastal locations. The *Guideline* also stated, page 8: "where feasible, soft engineering options are preferred to hard engineering works if protection of both assets and coastal habitats are to be achieved," in order to better align with dynamic coastal landscapes and avoid protection works diverting coastal erosion elsewhere. The legislative authority supporting the *Statement*, *Guideline*, and SEPP 71– the Coastal Protection Act (1979) – also required the creation of the New South Wales Coastal Panel, who were tasked with providing independent advice to the state on coastal management issues, including erosion protection options and assessments of coastal works.

In response to the impacts of coastal storms and erosion events occurring during 2009–2010, by January 2011 new legislation in the form of the *Coastal Protection and Other Legislation Amendment Act 2010* (NSW) came into force. This legislation amended the Coastal Protection Act (1979) by allowing for the construction of Emergency Protection Works (EPWs) by a coastal landowner without development approval or immediate oversight by the Coastal Panel, provided that the landowner obtained a certificate authorising the placement of EPWs from the local authority (council), and that they met the strict and specified circumstances outlined in sections 55O, and 55Q-S of the then new Act. This effectively permitted a private landowner to protect property by erecting compliant EPWs in circumstances where beach erosion was occurring, was imminent, or was reasonably foreseeable.

Property owners were critical of the requirement under the EPWs process to obtain a certificate during a storm event, where time would likely not permit obtaining the certificate and then placing protection works ahead of a destructive coastal event (Ghanem and Ruddock, 2011; Lipman and Stokes, 2003). To safeguard other interests in the coast, there were also limitations on EPWs: they could only be installed once on any given parcel of land, were to be of a specified material (usually sandbags), and were to be removed within 12 months unless a development application for longer-term coastal protection works was lodged. There were inconsistencies in allowing the construction of EPWs where sea level rise policies and guidelines indicated a preference for 'soft' coastal climate change adaptation and management responses. EPWs were also problematic for ecosystems in that they would encourage the movement of the coastline elsewhere, and simultaneously viewed as problematic by property owners who did not see them providing the necessary or enough private property protections sought (O'Donnell and Gates, 2013). Reactive and hard form coastal protection structures also brought with them a serious risk of coastal maladaptation (Macintosh, 2013).

During this period of law reform, the New South Wales Government had made it clear that the intent was not to "sterilise" private property development, even in high-risk areas (New South Wales Sea Level Rise Policy Statement, 2009, p5). In some localities, pressures were brought to bear by residents who threatened to litigate against councils who adopted sea level rise policies including planning benchmarks (Cubby, 2012). Parliamentary debates revealed concerns that attempts made by councils to follow the *Statement* "faced vociferous resistance" (Cronshaw, 2012, p1; Piper, 2012) within their communities due to perceived incursions on private property values (largely categorised as financial), while councils who were not redrafting their CZMPs at all were seen as acting unilaterally rather than in concert with the State (Piper, 2012; Stokes, 2012).

The further round of coastal law reforms during 2011–2012 had aimed at relaxing these so-called "onerous sea level rise planning benchmarks" and give "more freedom to landowners to protect their properties from erosion" (Hartcher, 2012, p1). By 8 September 2012, the responsibility for managing sea level rise in New South Wales was formally returned to councils when the then state government

[1] Specifically Section79C, a detailed discussion of which is found in O'Donnell and Gates (2013), together with pertinent case law. Consider also the recent decision of Gloucester Resources Limited v Minister for Planning (2019) NSWLEC 7.

announced the repeal of the *Statement*.[2] Although there were many draft CZMPs by New South Wales councils between 2009 and 2012, actual adoption of CZMPs (as required under the Local Environment Plans) was much more sporadic.

Repealing the *Statement* resulted in renewed concerns as to the lack of guidance and support from the state (Lyster, 2015, p204). The practical result was that councils had little legal or policy justification for any sea level rise benchmarks they might adopt in order to help protect their communities. Councils continued to face growing coastal risks, combined with pressures from private property owners to allow for even more coastal development in high risk locations and ongoing criticisms of the EPW process. These risks were exacerbated by varying sea level rise policies of other Australian states, exacerbated by a reluctance from the Federal Government to set a national framework addressing sea level rise (Thom, 2012; Productivity Commission, 2012; O'Donnell and Gates, 2013; Harvey and Clarke, 2019).

Ghanem at el (2008) argue that the most efficient method of achieving effective adaptation to coastal climate change is for the New South Wales Government to initiate appropriate legislative reform that would provide local authorities with appropriate frameworks for consistent decision-making – in other words, providing them with legislative and policy certainty. Evidently, such reform was not without controversy. Notwithstanding this, protection from potential legal liability that may arise due to decision-making that in turn results in damage or loss – i.e., tortious claims of negligence – remains under s733 of the *Local Government Act 1993* (NSW). This statutory protection for potential legal liability is, however, slightly more than a simple tortious defence, in that this protection exists for the specific benefit of councils. It will protect councils against liability claims, where a council can evidence that decisions made are *bona fide* (in good faith). This includes where a council exercises their statutory authority 'reasonably' (Graham Barclay Oysters v Ryan (2002) 211 CLR 540). The repeal of the *Statement* left a gap in this legislative protection (O'Donnell and Gates, 2013; Peel and Osofsky, 2015). This was because section 733(3)(f6) *Local Government Act 1993* provided an exemption with respect to the negligent placement or maintenance of 'coastal protection works' by a landowner. Section 733 (5)(b) requires evidence that the authority (a council) considered the CZMP *Guidelines*. Because the *Guidelines* required the uplift of the *Statement* land use planning benchmarks for sea level rise, the repeal of the Statement created at that time a legal void. No other jurisdiction in Australia contains such a provision for specific benefit to local council.

5.1. The influence of fears of legal liability

At the time it came into force (2010), the significance of the *Statement* was twofold. First, it recognised that councils were at the forefront of managing coastal climate change risk such as sea level rise. Second, it explicitly specified that the state government did not accept any legal liability that might arise from the implementation of the *Statement*. This was despite the challenges presented by climate change impacts and growing coastal populations, for coastal management and policy (Gurran et al., 2011; Simington, 2011; Ansell, 2013). In specifying the planning benchmarks be articulated in CZMPs, the *Statement* specified (2009: 5–6):

> "Coastal hazards and flooding are natural processes and the [NSW State] Government considers that the risks to properties from these processes appropriately rest with the property owners, whether they be public or private. This will continue where these risks are increased by sea level rise. Under both statute and common law, the Government does not have nor, does it accept specific future obligations to reduce the impacts of coastal hazards and flooding caused by sea level rise on private property."

Under Australian law, a policy framework in and of itself will not usually give rise to a duty of care at law; however, councils are obliged to ensure that their decisions are not negligent (*Armidale City Council v Alec Finlayson Pty Ltd* [1994] FCA 330), nor so unreasonable that no decision-maker would make them. It follows that decisions that do not factor in potential climate change impacts could arguably be considered unreasonable (England, 2008; O'Donnell and Gates, 2013). As outlined in O'Donnell and Gates (2013), the legal liability arising now or in the future in the context of coastal development includes judicial review of council decision-making, or claims in negligence (see also Bell, 2014). As Bell (2014) argues, one way to reduce the risk of an adverse finding is for councils to ensure coastal hazard risk mapping for land use planning decisions. This however does not reduce the potential of legal action, with tortious claims in negligence being more fraught, and perhaps more compelling (see Burkett, 2013; Craig, 2018).

5.2. Evidence of liability fears and property protectionism in the Productivity Commission inquiry

Fears of legal liability gained further traction when the Australian Federal Government announced a national inquiry into the *Barriers to Effective Climate Change Adaptation*. This inquiry ran between 2011 and 2012 and was undertaken by the Productivity Commission (Australian Government Productivity Commission, 2012). The Commission received 79 initial submissions and 89 post-draft report submissions in this inquiry. The Commission's final report detailed important policy signals regarding government intervention in climate adaptation, including recommendations that the federal government review "emergency management arrangements … to better prepare for natural disasters and limit resultant losses", as well as examine tax and other insurance-related impediments to coastal adaptation where these private market mechanisms failed to adequately protect private property (Australian Government Productivity Commission, 2012, p323). One of the report's main recommendations was for policy reforms to include "clarifying the roles, responsibilities and legal liability of local governments" (2012, p323).

Legal responses frame how, when and where the regulatory institution of private property is enacted by key actors (i.e., the state, the private sector and property developers), and thus frame how the cultural discourse of property evolves over time, and is influenced by climate change and political ecology. The concerns around legal liability stem from key actors' protectionist approaches to both the institution and discourses of private property. This is evidenced in some submissions the Commission received. For example, the Coastal Residents' Association of New South Wales stated in their submission to the Inquiry that: "defence of property has been supported but often this is not as a result of a perceived need to support affected property owners but rather out of concern for future litigation or damage to areas that would result in political damage" (Coastal Residents Association, 2012, p5).

Emeritus Professor and President of the Australian Coastal Society Bruce Thom put to the Productivity Commission both in person and in written submissions that Australia needed a national standard of coastal regulation with an integrated approach to coastal risk by and across all levels of government (Productivity Commission Transcript of Proceedings, 2012). In particular, Thom argued that new building codes were needed to better address coastal risk, noting legacy issues and problems facing build design standards and guidelines for historical development on the coast. In essence, relatively cheap houses have been built in harm's way by today's and future standards. By today's standards (though not necessarily by future standards) many of those houses hold a high net worth. This higher value can evoke both private

[2] A decision attributed by the state to the regional variation of sea level rise as outlined NSW Chief Scientist and Engineer Mary O'Kane, 'Assessment of the Science Behind the NSW Government's Sea Level Rise Planning Benchmarks' (New South Wales Government, April 2012).

property protectionism and political responsiveness when that worth is threatened (Piper, 2012; Cronshaw, 2012).

Local councils' written submissions to the inquiry noted that the burden for planning for climate change adaptation falls largely with local government, and that may councils were concerned about legal liability. Lake Macquarie City Council, a New South Wales coastal council with several thousand private residential properties at risk of inundation due to sea level rise of 1 m, expressed concern with relying on market forces to impact private property and thereby encouraging adaptation:

There is a significant danger that by the time the 'market signal' is strong enough to affect the behaviour of individual owners, there will be pressure to transfer the cost to the community or government … the government becomes the insurer of last resort. Where it is desirable for all or some of the costs to be borne privately, it may be necessary to use regulatory or other measures to facilitate early action (Lake Macquarie City Council, 2012, p3).

Calls for clarity about legal liability and for councils to be protected from legal liability for past and future land use planning and development decisions were echoed across the country (Productivity Commission Report, 2012). Cairns Regional Council in Queensland submitted that "fear of litigation is one of the main barriers" to climate change adaptation and that "state governments needed to clarify" the legal position with respect to land use planning and development decisions undertaken by councils (Cairns Regional Council, 2012, p2). Further, Yarra Ranges Shire Council in Victoria submitted: "We know from conversations in local government circles that there is a reluctance to take adaptation action forward because of a perceived risk of legal challenges. Increasing clarity around legal liability will help address this" (Yarra Ranges Shire Council, 2012, p10). In Tasmania, the City of West Torrens stated: "uncertainty means that the 'insurance industry' becomes a principal driver of determining liability and whether action of any sort can or should be implemented. Clearly, it is an unsatisfactory outcome for government and community responses to these issues being determined by a fear of legal liability" (City of West Torrens, 2012, p3).

These submissions clearly demonstrate a primary focus for many coastal councils on the protection of private property insofar as avoiding potential legal liability. Many decision-makers want legislative protection against any legal liability that may arise due to the (perceived or real) restriction of private property rights by climate change adaptation efforts, particularly where these efforts attempt to utilise land use management to do so. However, this 'want' is problematic for the following reasons. First, it prioritises property development, and in the context of ICM, it unfairly prioritises private property over other interests in the coastline. By doing so, this protectionism enables the continuation of a discourse of property rights that does little to challenge the unlimited use and consumption of natural resources. Second, such discourses do little to address property rights as a barrier to climate change adaptation (consider Graham et al., 2013). Rather, they highlight the political-legal geographies underlying any form of legislative coastal management insofar as the law is exploited by politically damaging concerns held by coastal private property owners, whose primary concern is protecting the financial value of their property (Piper, 2012; Andrews and McCarthy, 2014). As argued by Kay (2016), such manifestations of private property blur the lines between 'private' property and legislative/policy regimes designed to regulate public spaces. In the context of coastal climate change, these contestations are more profound as the relationship between property rights and the "disembedding of [these] values from their ecological context" (Kay, 2016, p512) becomes increasingly blurred, explicitly grounded in legal geography and "shaped by conflicting views about the role of the state and who takes/accepts responsibility" (Salgo and Gillespie, 2018, p2).

6. The "Stage II" reforms

On 13 November 2014, the then New South Wales Minister for Planning announced "modern, coherent" Stage 2 coastal management law reforms (Stokes, 2014). This round of coastal law reform followed a prolonged history of planning law reform around the country (England, 2016). The Stage II reform package had three main foci. First, it replaced the framework described above with a less complex framework, modifying substantially the EPWs and providing a legislative framework that explicitly integrates multiple and varied statutory obligations into one statute – the Coastal Management Act (2016) (NSW) (CM Act). Second, the CM Act would outline specific processes to better support council decision-making, with particular reliance on the new coastal management manual and improved 'technical' advice including geospatial coastal mapping. Third, the CM Act would outline a clear system and process for the funding and financial arrangements of local councils for the required coastal management responses. The CM Act was assented on 7 June 2016, though it took nearly two years for it to be proclaimed, coming into force in April 2018. The entire framework is comprised of the Act (CM Act), a new State Environment Planning Policy (Coastal Management SEPP) and a new Coastal Management Manual. The burden for understanding and implementing this new framework still largely falls to councils, evident in the oversight requirements to be placed on councils in overseeing implementation of the CM Act. This includes the requirement that councils effectively monitor for coastal hazards, and that councils undertake coastal management programs that detail such hazards. Coastal Management Programs (CMPs) replace the previous CZMPs and work in concert with the Coastal Manual. The Manual details the mandatory requirements and other elements of the preparation of the CMPs and includes a toolkit that will provide information about sea level rise projections. The Coastal Manual is the relevant manual for the purposes of the liability protection offered under section 733 of the *Local Government Act 1993* (NSW) (Schedule 4 [4.5] [6], CM Act). Generally, councils may not increase the intensification of land use in the defined coastal zone, or change the zoning to permit such intensification (Ministerial Direction 2.2, 2018).

6.1. Compliance measures and the integration of coastal interests

In attempting to streamline the complexity of land management in coastal localities where private property rights discourses are strong, law or policy reform is not without complexity. Therefore, an important aspect of this latest coastal law reform package is the Integrated Planning and Reporting framework. This framework is intended to result in a uniform application of coastal law and policy across the state. The reforms also ensure that councils do not have an extended period with draft coastal management plans, because the CMPs are directly linked to reporting requirements (section 26, CM Act). The Act also integrates obligations arising under and across the *Local Government Act 1993* (NSW) and the Environment and Planning Assessment Act (1979) (NSW). A new Coastal Council (replacing the Coastal Panel) performs its previous functions but can undertake 'performance audits' of councils if requested by the Minister. A performance audit, under section 26 of the Act, is an assessment by the Coastal Council of a local councils progress on the implementation of their coastal plan. The progress is reviewed by the Coastal Council and opportunities for local council capacity building are identified. The Coastal Council continues to hold statutory independence in advising the Minister (Mitchell, 2016). These CMPs will require regular updating and reliance on up-to-date spatial mapping when assessing risk, which may add additional financial pressure for coastal councils.

This latest suite of legislative reform for coastal New South Wales attempts to reduce the abstraction of laws insofar as they apply to dynamic coastal landscapes. Not only does the process of achieving such reform illustrate the political-legal complexity as to how these laws are

developed and how the legal landscape has shifted over time, it evidences the centrality of cultural discourses of private property. Perceived incursions on property rights via land use management, even where in the best interests of coastal protection, has given rise to fears of liability. The response has been a reversion to private property protectionism. Given the new Act only came into force in April 2018, it remains to be seen whether the legislative landscape for the New South Wales coastline will be, for a time at least, relatively stable.

7. Legal liability and private property rights

Liability, as a consequence of statute or case law, has been relied upon by many as a way to justify action and inaction on climate change in coastal localities. Liability accruing to local councils in the context of land use planning decisions in light of coastal impacts has been a live issue since at least 2007 (see, for example, Measham et al., 2011; O'Donnell and Gates, 2013; McDonald, 2007, 2010; 2011, 2014; Bell, 2014; O'Donnell, 2016). Consider McDonald's argument that law has a central role in facilitating climate adaptation (2010, p20):

> "Legal responses will be needed to strike a balance between achieving essential adaptation outcomes, respecting private property rights where they exist, and avoiding the creation of compensable rights under future regulatory regimes."

McDonald's observation reinforces a hierarchy of private property rights in arguing that climate adaptation will occur, that private property rights must be 'respected' in the process, and giving credence to Blomley's argument (2014) that law continually attempts to bracket itself by emphasising objectivity in the protection of rights (consider also Blomley, 2005, 2008). Pragmatically, the process of integrating climate change adaptation into many coastal localities land use planning and other ICM approaches does warrant the approach outlined by McDonald. However, the scale and rate of change in coastal localities may not survive this careful balancing exercise. Rush's poignant account (2018) of numerous localities in the United States where the options are to retreat or perish, in places that are already seeing the impacts of coastal climate change, is a stark reminder of what is at stake.

In Australia, the prioritisation of private property rights protection has not only been supported but even enabled by governments for whom reliance on 'the market' offers a way out of the complexity of justice considerations in rapidly changing coastal localities. Divestment of this risk from government to the private sector and in particular to the insurance sector sees the continuance of this prioritisation. One reason for this is that risks to the material object called 'property' are also risks to the systems that support property. As Waldron explains, "the concept of a property system is the concept of a system of rules governing access to and control of material resources" and people "are going to disagree about who is to make which use of what" (1988: 31-2). Thus, social systems, including systems of law, provide rules designed to solve problems of access to and control of material resources that can be categorised as 'property'. Property theory provides a normative justification for the allocation of those rights in a particular way, with property regimes simultaneously providing 'regulatory mechanisms' that are deeply entrenched in human society, because they govern the distributions of real and abstract property (e.g., land title deeds or property in the form of intellectual property, see Graham, 2017, 2011). Indeed, a 'system of property' promotes and protects these interests and therefore remains focussed on individualism. There are however signals from the Judiciary that in some circumstances this individualistic focus is waning. For example, the recent decision of *Ralph Lauren Pty Ltd v New South Wales Transitional Coastal Panel; Stewartville Pty Ltd v New South Wales Transitional Coastal Panel; Robert Watson v New South Wales Transitional Coastal Panel* [2008] NSWLEC 207 21 December 2018 illustrates relevant public interest considerations in vulnerable coastal localities. The public interest is an important social justice consideration for climate change adaptation.The concept of the 'public interest' is also an important legal tool (O'Donnell and Gates, 2013).

8. Conclusion

This paper shows that the relationship between private property rights discourses, dynamic coastal landscapes and climate change is well navigated through a legal geography lens informed by political ecology. The detailed analysis of a decade of coastal law reform offers an important view not only of the shifting legal landscape, but also of the underlying politics of managing environmental change in coastal localities.

The ideals, values and cultures that are central to the institution of private property (following Waldron, 1988; see also Underkuffler, 2003) are often bundled together as property 'rights', protected by the institution of private property, and reinforced by cultural discourses of property. Property rights are used, interchangeably, as a sword and as a shield. A fear of liability is both borne from and reinforces these dominant societal paradigms of private property, ensuring property's protection when external threats such as climate change rise to the fore. By illustrating cultural discourses of property in relation to coastal climate change adaptation, this paper highlights private property rights as a central issue in addressing current and future environmental and climatic change. How we think about and treat private property rights will – eventually – have serious social justice implications as the concomitant requirement to shift away from individual rights focussed ideas, and more towards collective relationships with dynamic landscapes, will increasingly be forced by climate change.

The conflicting approaches to coastal management and responsibility evidenced throughout the process of law reform illustrate conflicting views about the role of the state where it creates laws that may intrude on private property rights. To avoid a public backlash, the state employs property discourses to dissuade such incursions (for example, 'the market'). This reconfiguration of property illustrates a *nomos* of property (Delaney, 2010) that is co-constituting law and space even as a dynamic landscape is rapidly changing. Andrews and McCarthy (2014, p9) explicitly recognise the need for "more attention to the formal political and policy arena and specifically legal geographies" in examining human-environment contestation, and to do so not only by linking political ecology traditions with those of legal geography, but also by tracing the "how, where, and by whom power is used". This paper responds to that call. It seeks to build on the more recent contribution of Salgo and Gillespie and the prominent tradition of "distinctive legal geography scholarship" cited therein (2018, p4). What is shown in this paper is that the political processes of law's creation and enactment uncover the underbelly of private property rights as a crutch, tool, and potential weapon in the face of essential coastal climate change adaptation.

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