

The Global Norm of Large Marine Protected Areas

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ABSTRACT

Since 2006, national governments have designated or announced 18 marine protected areas (MPAs) larger than 200,000 km². Before then there was only one: Australia's Great Barrier Reef Marine Park, established in 1975. To explain this marked shift in state governance of marine biodiversity, this article points to the importance of a gradual strengthening over the past decade of a global norm that large MPAs, especially no-take reserves, are valuable for meeting conservation objectives and targets. It argues that, as is true for most global environmental norms, the large MPA norm has emerged primarily out of civil society, especially from groups that have framed large MPAs as an effective way to help stop ocean decline. Adoption of this norm is uneven across states, however, and implementation of large MPAs varies widely as governmental and nongovernmental forces interact—sometimes clashing, sometimes cooperating—with fishing, tourism, and resource industries. For evidence, this article draws on fieldwork and 74 interviews across five large MPA cases: Papahānaumokouākea (2006) and the Pacific Remote Islands in the US (2009); the Coral Sea in Australia (2012); the Palau National Marine Sanctuary (2015); and the UK's Pitcairn reserve (2015). A comparative analysis of these cases demonstrates the influence of nongovernmental groups (especially The Pew Charitable Trusts and the National Geographic Society) on the gradual strengthening of the large MPA norm; the importance of the large MPA norm for the formation of marine policy; and the significance of domestic political economies for shaping norm adoption and state implementation.

Keywords: marine; protected areas; environmental norms; politics; ocean governance

1. Introduction

The creation of 18 marine protected areas (MPAs) larger than 200,000 km² since 2006 represents a major shift in how states are governing oceans. As a result, MPA coverage, which has long lagged behind terrestrial protected areas, has been increasing at an unprecedented rate over the past decade. Large marine protected areas are generally rich in biodiversity, but also remote from commercial activity, making them politically attractive for state leaders. This shift in how states protect marine biodiversity has attracted a lot of criticism from marine scholars (see below). So far, however, there has been little analysis of why states have come to see large MPAs as valuable for conservation; nor has there been any systematic analysis of why the adoption of the large MPA norm and the implementation of MPA policies have varied widely.

Some scholars are arguing that large MPAs risk becoming a new form of top-down ‘fortress conservation,’ denying longstanding resource-users access (De Santo, Jones, and Miller 2011; De Santo 2013; Richmond and Kotowicz 2015). Others are dismissing large MPAs as essentially ‘residual,’ protecting areas facing no real ecological threats from fishing, tourism, or resource extraction (Devillers et al. 2015). In response, some practitioners have defended large MPAs by pointing to their value for achieving international biodiversity targets (Toonen et al. 2013; Wilhelm et al. 2014). Some scientific studies, however, do suggest that large, no-take zones are an effective policy for marine conservation (Edgar et al., 2014; Emslie et al., 2015; Sumaila et al., 2000; Lubchenco et al., 2003), a view governments such as the UK and US have come to embrace. Many academics, meanwhile, have called for further research, noting that states have put in

place large MPAs with little understanding of the social and ecological consequences (Gruby et al. 2015).

This article contributes to this scholarship by examining large MPAs through the lens of the international relations literature on global norms. It makes three broad claims. First, that the idea that large, no-take MPAs are valuable for marine conservation (as well as for meeting international commitments) has emerged as an influential norm within some states, including the UK and US. Second, that nongovernmental organizations (NGOs), notably The Pew Charitable Trusts, the National Geographic Society, and Conservation International, have been the primary forces framing, disseminating, and strengthening the large MPA norm. And third, that the way states are adopting the large MPA norm and implementing MPA policies varies widely, depending on the determination of political leaders, the extent of community support, and the degree of economic influence and organized resistance of industry stakeholders. Although other scholars have analyzed the political processes and implications of specific large MPAs, this article is the first to focus on the consequences of the norm of large MPAs for ocean governance.

2. Methodology

This research is based on 74 field interviews across five cases: Papahānaumokouākea Marine National Monument (2006) and the Pacific Remote Islands Marine National Monument (2009/2014) in the US; the Coral Sea Commonwealth Marine Reserve (2012) in Australia; the Palau National Marine Sanctuary (2015) in Palau; and the Pitcairn Islands Marine Reserve (2015) in the UK. The lead author conducted confidential interviews in Washington, DC in the US; Cairns, Canberra, and Sydney in Australia; and in several states in Palau. In person interviews were

supplemented with phone interviews with stakeholders in other cities in Australia, the UK, and the US. Interviewees included politicians (4), senior civil servants (16), marine scientists (7), senior ENGO members (27), and industry representatives from the commercial fishing (12), recreational fishing (2), and dive tourism (6) industries.

3. The Emergence and Strengthening of a Large MPA Norm

The large MPA norm has three normative features rare in MPA designations before 2006. First, the area should contain at least one 'large' contiguous area, which in practice has meant larger than 200,000 km². Second, the area should extend coastal MPAs to protect pelagic ecosystems. The pelagic ocean is the least protected ecosystem on the planet (Game et al. 2009), so this is a marked shift from past government priorities. Third, the area (or at least large portions) should be no-take zones, largely prohibiting extraction. Unlike the first two characteristics, this normative feature is more malleable and fluid, and a few large MPAs are mixed-use with minimal regulations.

Since 2006, nine different countries have announced or implemented large MPAs. Table I lists the 19 large MPAs in chronological order, noting their size and the participation of the major environmental groups involved in their creation. These large MPAs represent only 0.001% of the world's 13,600 MPAs; yet, together they cover more ocean area than the small and medium-sized MPAs combined (Marine Conservation Institute 2016). Since the US hosted the inaugural Our Ocean conference in 2014, it has become a platform for announcing new MPAs. The 2016 conference in Washington, DC came on the heels of President Obama's expansion of the Papahānaumokuākea Marine National Monument to over 1.5 million km², making it once again

the world’s largest MPA. As Secretary of State John Kerry (2016) put it, the goal of these conferences is to ‘keep the momentum going so that we can come together and protect our ocean.’ The British government similarly unveiled plans for four large MPAs (two of which were previously announced) in its overseas territories. When proclaiming that nearly 4 million km² would be protected Foreign Office Minister Alan Duncan (2016) said: ‘the value and significance we attach to marine protection is expressed in the scale of our ambition at sea’. With each passing year governments seem to be raising the stakes with their announcements, pursuing increasingly larger and more ambitious MPAs as a way to conserve marine biodiversity.

Table I – Large MPAs and NGO Participation

Year*	Country	MPA Name	Size (km ²)	Pew**	NGS**	CI**
1975	Australia	Great Barrier Reef	345,000			
2006	United States	Papahānaumokuākea Marine National Monument (expanded in 2016)	1,508,870	Yes		
2006	Kiribati	Phoenix Islands Protected Area	408,000			Yes
2009	United States	Marianas Trench National Park	247,000	Yes		
	United States	Pacific Remote Islands Marine National Monument (expanded in 2014)	1,270,000	Yes	Yes	
2010	United Kingdom	Chagos Marine Protected Area	640,000	Yes		
2012	Australia	Coral Sea Commonwealth Marine Reserve	990,000	Yes		

	Australia	South-West Commonwealth Reserve	Corner Marine	272,000			
	United Kingdom	South Georgia & Sandwich Islands Protected Area	South Marine	1,000,700	Yes		
	Cook Islands	Marae Moana		1,100,000			Yes
2014	New Caledonia	Natural Park of the Coral Sea		1,369,000	Yes	Yes	Yes
2015	Palau	Palau National Sanctuary	Marine	500,000	Yes	Yes	
	United Kingdom	Pitcairn Islands Reserve	Marine	834,300	Yes	Yes	
	Chile	Nazca-Desventuradas Park	Marine	297,500		Yes	
	Chile	Easter Island Marine Park		570,000	Yes		
	New Zealand	Kermadec Ocean Sanctuary		620,000	Yes		
2016	United Kingdom	Ascension Island Reserve	Marine	445,390	Yes		
	United Kingdom	St. Helena Marine Reserve		444,916			
	United Kingdom	Tristan da Cunha Reserve	Marine	750,510			

*Year announced or designated

**Pew = The Pew Charitable Trusts; NGS = National Geographic Society; CI = Conservation International

These large, pelagic, and generally no-take MPAs reflect the emergence and gradual strengthening of the large MPA norm. New norms by definition challenge existing standards of what is or is not appropriate (March and Olsen 1998). In this case, the large MPA norm challenged the reliance on networks of small MPAs to meet international protected area targets, the most notable of which is the 10% marine area protection target agreed upon in 1992 in the Convention

on Biological Diversity (CBD) (reaffirmed at the 2010 CBD meeting in Aichi, Japan, while extending the deadline to 2020). Progress towards the 10% CBD target has been historically slow, and many scholars and practitioners have pointed to this poor progress as the main motivation of states setting up large MPAs (De Santo, Jones, and Miller 2011; De Santo 2013; Toonen et al. 2013; Devillers et al. 2015; Wilhelm et al. 2014). Large MPAs offer states a quick and easy way to meet this target, especially when designating remote areas far from the primary sources of ocean degradation (Devillers et al. 2015).

Of course, even remote sites can cause injustices and deny local people access to traditional resources (De Santo, Jones, and Miller 2011). Such concerns, however, have not stopped the growing belief in the appropriateness of protecting large, pelagic areas as a way to improve ocean governance, at least in terms of increasing the total area protected. This norm does not challenge the practice of designating small MPAs. Some scholars argue that it does detract resources from such efforts (Jones and De Santo 2016); however, multilevel environmental governance tends to offer states more options to achieve conservation (Paavola, Gouldson, and Kluvánková-Oravská 2009). It also offers a new way to achieve pre-existing international conservation targets, so it is broadly consistent with existing international institutions. Largely because of these large MPAs, the world is now on track to meet the 10% area coverage target (Jefte-Bignoli et al. 2014). The nine countries with large MPAs have all formally met the 10% CBD target with their large MPAs alone. Large MPAs are less helpful for meeting CBD targets to preserve ‘ecological representativeness.’ The CBD nonetheless provides the institutional platform—the set of international rules and organizations that all new norms require to thrive (Finnemore and Sikkink

1998; Goldstein and Keohane 1993; Katzenstein 1996)—for the large MPA norm to continue to strengthen.

This large MPA norm arose primarily out of civil society, in a pattern reflective of Finnemore and Sikkink's (1998) three-stage norm lifecycle, where norms emerge, cascade, and are internalized. Scholars have identified similar patterns of norm emergence across international relations issues (Meyer 1979; Finnemore 1993; Price 1998; Sunstein 1999; Kelley 2008). In the norm emergence stage, civil society actors generally play a critical role in framing a new norm and persuading states (or other actors) to adopt it (Price 1998; Risse, Ropp, and Sikkink 1999). This has been true across a range of issues, including human rights, arms control, and global finance (Keck and Sikkink 1998; Khagram, Riker, and Sikkink 2002; McAdam, McCarthy, and Zald 1996; Imig et al. 1999; Price 1998; Tilly and Wood 2009).

Environmental NGOs (ENGOs), especially The Pew Charitable Trusts, the National Geographic Society, and Conservation International, played central roles in the emergence of the large MPA norm. By the mid-2000s, two factors led them to view large MPAs as a necessary policy. The first was the growing understanding of how rapidly the ecological condition of oceans was deteriorating (Pauly, Watson, and Alder 2005; Roessig et al. 2005; Jacques 2006; Donner et al. 2005; Hoegh-Guldberg et al. 2007; Burke et al. 2011). At the time scientists were also documenting the collapse (or pending collapse) of various commercial fish stocks (Pauly et al. 2002; Mullon, Fréon, and Cury 2005). A second factor was the growing understanding that governments were managing the vast majority of the oceans poorly (Kareiva 2006; Burke et al. 2011), often far worse than terrestrial ecosystems. In response, more and more

environmentalists were calling on states to do more to protect marine life (Alpine and Hobday 2007; Worm and Vanderzwaag 2007; Jacques 2015), increasingly portraying oceans as the most threatened ecosystem despite being the largest, and despite competing understandings of them as limitless (Hannigan 2015). In this context campaigns formed to call on state leaders to protect very large marine areas, beginning with Papahānaumokouākea and the Phoenix Islands Protected Area (PIPA) in Kiribati. In 2005, Pew executives Jay Nelson and Josh Riechert identified the Northwestern Hawaiian Islands—the future site of Papahānaumokouākea—as a prime location for a large marine reserve, as it is rich in biodiversity and sits within the US Exclusive Economic Zone (EEZ).¹ Around this time Gregory Stone of Conservation International was persuading Kiribati President Anote Tong of the merits of a large MPA within its EEZ.² These two campaigns culminated in 2006 with the establishment of the first two large MPAs since the Great Barrier Reef in 1975, creating a model and setting the precedent for subsequent large MPA campaigns. In some cases, ENGOs simply proposed scaling up existing proposals, with, for example, Pew initially advocating for no-take status for the entire Coral Sea (990,000 km²) in Australia.³ ENGO efforts to improve protection of the Northwestern Hawaiian Islands was similarly bogged down in the US marine sanctuaries process before Pew, National Geographic, the Marine Conservation Institute, and others, turned instead to lobbying President George W. Bush to use an executive

¹ Former Pew Charitable Trusts executive, interview with the lead author, phone, Juneau, 7 October 2015.

² Conservation International executive, interview with the lead author, in person, Washington, DC, 17 September 2015.

³ Senior Pew Charitable Trusts member, interview with the lead author, phone, Brisbane, 15 May 2016.

order to protect these islands.⁴ These ENGOs along with luminaries such as marine biologist Sylvia Earle lobbied Bush at a March 2006 White House dinner that led to Bush's commitment to Papahānaumokouākea. He came to believe a large MPA was the appropriate measure to protect the area, partly crediting the 'pretty good lecture about life' that Earle gave him (Revkin 2016). The Pacific Remote Islands (and Marianas Trench) reserves in the US followed on the heels of Bush's Papahānaumokouākea designation, with Bush reportedly pleased with the response to Papahānaumokouākea and wanting to do more.⁵ The same ENGO coalition that led the Papahānaumokouākea campaign lobbied Bush for these two reserves as well. ENGOs have not initiated every large MPAs; for example, Palauan President Tommy Remengesau, Jr. initiated the Palau sanctuary, claiming that it was 'a bold move that the people of Palau recognize as essential to our survival' (Lee 2015). Yet even in this case, one of Remengesau's first acts after deciding to pursue a large MPA was to ask Pew, National Geographic, and The Nature Conservancy, among other transnational ENGOs, for support.⁶

ENGOs constructed what norm scholars call a 'cognitive frame' to help persuade state leaders of the value of large MPAs (Finnemore and Sikkink 1998; Payne 2001). ENGOs worked to position large MPAs as an appropriate policy to slow ocean decline. They did this by appealing to state leaders and other decision makers on both ideational and instrumental grounds. International

⁴ Former Pew Charitable Trusts executive, 7 October 2015.

⁵ Environmental Defense Fund executive, interview with the lead author, phone, Raleigh, 23 September 2015.

⁶ Pew Charitable Trusts consultant, interview with the lead author, in person, Koror, 17 June 2016. Senior Office of the President official, Government of Palau, interview with the lead author, in person, Koror, 29 June 2016.

actors make decisions based on a combination of these grounds, acting according to what IR scholars refer to as a ‘logic of appropriateness’ and a ‘logic of consequences’ (March and Olsen 1998; Fearon and Wendt 2002). Put simply, ENGOs worked to convince states that establishing a large MPA was an effective way to protect marine life, and that doing so would be in their interest.

Ideationally, large MPAs were an ambitious solution to a rather large problem. The scale of the problem, ENGOs argued, required big initiatives, of which largescale protection of pelagic ecosystems was the most expedient. ENGOs had so effectively made this case to the Bush administration that the presidential proclamation for Papahānaumokouākea stated that the 362,000 km² area was the ‘smallest area compatible with the proper care and management of the objects to be protected’ (Bush 2016). Obama’s 2016 proclamation used identical language in later expanding the reserve. ENGOs conducted and funded studies offering evidence that untouched ecosystems thrive relative to ones with even very small commercial activity (DeMartini et al. 2008; Friedlander et al. 2014). This evidence was particularly important for Papahānaumokouākea, the Pacific Remote Islands, and Pitcairn, which were all remote with minimal commercial activity.⁷ In all 5 cases ENGOs (especially National Geographic) also made documentaries of the rich biodiversity of these regions to instill a sense of wonder and stewardship.⁸ A screening of Papahānaumokouākea at the White House was vital for bringing

⁷ Confirmed by multiple interview sources.

⁸ Senior National Geographic Society member, interview with the lead author, in person, Washington, DC, 17 September 2015.

President Bush onboard.⁹ Residents of Pitcairn Island voted unanimously for the Pitcairn reserve after watching a documentary of the Pitcairn Islands.¹⁰

NGOs also worked to convince state leaders of the value of creating a ‘blue legacy’.¹¹ Legislative and political obstacles make it hard for future leaders to retract ocean reserves. In the US, for example, Congressional Democrats and Republicans both acknowledge that the threshold to undo a marine monument in Congress is virtually unattainable (*Oversight Hearing on Marine National Monument Designations* 2015). The idea of a blue legacy reportedly motivated President Bush to designate two more monuments after Papahānaumokouākea.¹² President Obama’s expansion of Papahānaumokouākea and the Pacific Remote Islands also seems motivated by a desire for a blue legacy.

The other half of NGOs’ framing strategy focuses on instrumental factors. As noted above, large MPAs are a fast and relatively straightforward way to meet international protected area targets. That is not to say that all large MPA campaigns have been quick and easy—some took a decade or more—but they are a path of least resistance. NGOs have deliberately targeted remote areas with minimal commercial activity,¹³ emphasizing this when trying to convince

⁹ Former Pew Charitable Trusts executive, 7 October 2015.

¹⁰ Senior Pew Charitable Trusts member, interview with the lead author, phone, Washington, 11 August 2015.

¹¹ Senior National Geographic Society member, 17 September 2015.

¹² Environmental Defense Fund executive, 23 September 2015.

¹³ Senior Pew Charitable Trusts member, 11 August 2015; Senior National Geographic Society member, 17 September 2015.

decision makers of the biological value of a proposed large MPA. For example, Pew, National Geographic, and the Pitcairn Island Council produced separate reports for the Foreign and Commonwealth Office (FCO) about: the marine environment around Pitcairn; its commercial fishing prospects; its ecotourism potential; the potential for marine research; and the feasibility of monitoring and enforcement. These reports were crucial in convincing the FCO that the reserve was both desirable and feasible.¹⁴ Similar reports exist for our other four large MPA cases. In some cases, as with Pitcairn and Palau, ENGOs also commit resources to assist with monitoring. Pew and the Bertarelli Foundation, for instance, agreed to fund five years of monitoring of the Pitcairn reserve—a commitment crucial to getting the FCO on board.¹⁵ In the case of Palau, the Nippon Foundation contributed two vessels, as well as staff and fuel for 10 years, doubling Palau’s monitoring and enforcement capacity.¹⁶

ENGOs have further worked to convince decision makers of the commercial logic of large MPAs. ENGO reporting on the Pacific Remote Islands included a fisheries economics analysis, highlighting the minimal industry dependence on the proposed area (Sala et al. 2014). The Palauan government tasked transnational and local ENGOs to draft economic plans for the sanctuary, including how to develop a domestic commercial fishing capacity while simultaneously

¹⁴ Foreign and Commonwealth Office official, UK Government, interview with the lead author, phone, London, 30 October 2015.

¹⁵ Foreign and Commonwealth Office official, 30 October 2015.

¹⁶ Senior Bureau of Marine Law official, Government of Palau, interview with the lead author, in person, Malakal, 7 July 2016.

boosting ecotourism.¹⁷ ENGOs have tended to look for ways to minimize the cost of large MPAs for domestic industry to minimize industry counter-lobbying (Devillers et al. 2015; Jones and De Santo 2016). At the same time, however, ENGOs have made the case that the benefits of designating a large MPA outweigh the (usually minimal) backlash from a few stakeholders.

This dual strategy of persuading state decision makers that large MPAs are both the right thing to do, as well as highly expedient, has contributed to a rapid uptake of large MPAs over the past ten years. Although the role of organizations such as Pew and National Geographic does vary in each case, they have employed this dual strategy for most of the large MPAs listed in Table I. These ENGOs have acted as the primary ‘norm entrepreneurs’ of the large MPA norm (Finnemore and Sikkink 1998), with dedicated programs to strengthen this norm through Pew’s *Global Ocean Legacy* and National Geographic’s *Pristine Seas*. International norms tend to be more influential when decision makers and the public can easily understand and relate to their core message (Chayes and Chayes 1993). By positioning large MPAs as an ambitious but achievable way to reduce ocean decline, these ENGOs have done just that, acting, in the language of international relations scholarship, as ‘transnational moral entrepreneurs’ (Nadelmann 1990; Clark 2010).

Of the 74 interviewees, no one disputed that ENGOs were, for better or worse, highly influential in large MPA processes. Pew in particular has been a magnet for the praise or the ire of various stakeholders. Local ENGOs frequently refer to the importance of Pew’s resources,

¹⁷ Senior The Nature Conservancy member, interview with the lead author, in person, Koror, 29 June 2016; Senior Palau Conservation Society member, interview with the lead author, in person, Koror, 6 July 2016; Senior Ebiil Society member, interview with the lead author, in person, Koror, 7 July 2016.

especially financing.¹⁸ One US government official referred to Pew as the ‘heavy hitter’ on large MPAs.¹⁹ During one session of the Australian Parliament, opponents of the Coral Sea reserve referred to Pew as ‘cancerous,’ ‘putrid,’ and ‘gangrenous.’ Another lamented that they ‘keep hearing about the Pew foundation and them being everywhere.’ Industry interviewees, meanwhile, complain of their inability to compete with Pew’s resources and political influence.²⁰ Some commercial fishers affected by large MPAs blame Pew for threatening their livelihoods.²¹ Across the 5 large MPAs analyzed for this article, Pew attracted the most criticism because of the extensive resources it committed to these campaigns, because outside of the US many stakeholders view it as a foreign power, and because of its success in advocating for large MPAs. In every MPA case, however, coalitions of ENGOs were highly influential, although the degree and nature of this influence does vary somewhat.

4. Variation Across Large MPAs

Space limits do not allow for a detailed analysis of each case; instead, we present our findings thematically, drawing from each case where appropriate. The aim is to tease out variation in the political processes leading to the establishment of large MPAs. In doing so we hope to improve

¹⁸ Senior Marine Conservation Society member, interview with the lead author, phone, Brisbane, 17 May 2016.

¹⁹ Congressional staffer, US Senate, interview with the lead author, phone, Washington, 22 September 2015.

²⁰ Senior Western Pacific Regional Fishery Management Council representative, interview with the lead author, phone, Honolulu, 1 October 2015; Senior commercial fishing industry association representative, interview with the lead author, phone, Hendra, 30 May 2016.

²¹ Commercial fishing business owner, interview with the lead author, phone, Cairns, 30 May 2016.

the understanding of why and how states adopt the large MPA norm, and the degree of difficulty they might face in doing so.

Our five cases share significant commonalities. All are Pew *Global Ocean Legacy* projects; National Geographic was involved in four of them (all but the Coral Sea). In every case Pew has wielded influence by lobbying decision makers, generating public support, collaborating with and/or supporting local environmental groups, producing scientific and socioeconomic studies, and committing funding to monitoring and enforcement of the MPA. In four of these five cases, Pew proposed the idea of a large no-take MPA, with the Palau National Marine Sanctuary the only exception. National Geographic also lobbied decision makers, but additionally conducted expeditions and produced documentaries for both Palau and Pitcairn, highlighting the wealth of biodiversity in both locations. National Geographic has also produced other promotional materials for these large MPAs, including a book of photographs, *Archipelago* (Liittschwager and Middleton 2005), which was part of the lobbying efforts for Papahānaumokouākea. Domestic ENGOs were not as important as international ones for spreading the large MPA norm globally, although they do play an important role in local campaigns. Groups such as the Australian Marine Conservation Society (AMCS), the Marine Reserve Coalition in the UK, and Ebiil Society in Palau deserve mention, contributing time and resources. They also provided local knowledge that transnational groups such as Pew and National Geographic lacked. Significantly, civil society groups were integral to the creation of all five large MPAs.

Despite these commonalities, there is a high degree of variance across these five cases in the difficulty of early advocacy efforts, as well as in the establishment and implementation of the

eventual MPAs. Some large MPAs went from conception to establishment in just a year or two; others went through a much longer and tougher bargaining process. Industry support and opposition for a given large MPA also varied depending on the type and extent of industry dependence on the area. The extent of extractive industry interests (e.g., commercial fishing) compared to non-extractive interests (e.g., dive tourism) had a significant impact on how politically difficult a large MPA was to create. Table II lists the five case studies, their respective industry supporters and detractors, the time it took from the initial proposal of the large MPA to its establishment, as well as whether a management plan is in place.

Table II – Five Large MPA Case Studies

Large MPA Name	Year	Industry Supporters	Industry Detractors	Campaign Duration*	Management Plan
Papahānaumokuākea Marine National Monument	2006		Comm. Fishing	1 year	Yes
Coral Sea Commonwealth Marine Reserve	2012	Dive Tourism	Comm. Fishing Rec. Fishing	5 years	No
Pacific Remote Islands Marine National Monument**	2014		Comm. Fishing	1 year	Yes
Palau National Marine Sanctuary	2015	Dive Tourism Rec. Fishing	Comm. Fishing	2 years	No (2020)
Pitcairn Islands Marine Reserve	2015			8 years	Yes

*'Campaign Duration' refers to the efforts to create a large MPA. Efforts to protect marine ecosystems have been ongoing for many years, and in some cases decades, in each location.

**This case study refers to President Obama's 2014 expansion of the reserve, not President Bush's 2009 initial designation.

Remote versus Non-Remote Large MPAs

As noted, ENGOs strategically targeted remote areas with little commercial activity, as we see in the cases of Papahānaumokouākea, the Pacific Remote Islands, and the Pitcairn Reserve.²² Of these three areas, the Pacific Remote Islands had the largest commercial implications because of the potential loss of tuna fishing zones for the US Western Pacific fleet. But the area that Obama protected in the 2014 expansion covered at most US\$4.6 million worth of landings, which amounts to less than 0.1% of the US's total commercial fishing revenue from landings (Sala et al. 2014). The actual loss of revenue is probably far lower than US\$4.6 million, as in the end the Obama administration did not expand into the two most productive fishing zones that this estimate was including. The Bush administration similarly limited the impact of Papahānaumokouākea on pelagic fisheries by only extending it to 50 nautical miles from shore rather than to the 200 nautical mile EEZ boundary. The Pitcairn Reserve, meanwhile, has had almost no negative commercial impact on the less than 50 people who live on Pitcairn Island, which has no commercial fishery (Pew Charitable Trusts, National Geographic Society, and Pitcairn Island Council 2013). This minimal impact of these MPAs on industry in part explains why these large MPAs are no-take, with the exceptions of subsistence fishing in Papahānaumokouākea and Pitcairn (the Pacific Remote Islands have no local inhabitants).

The Coral Sea and Palau large MPAs are not as remote. Unlike France, the UK, and the US, Australia does not have distant territories to allow the government to create politically expedient large MPAs. The site of the Coral Sea MPA is the farthest, and among the least commercially

²² Former Pew Charitable Trusts executive, 7 October 2015.

exploited zones, in Australia's EEZ; but for a large MPA it is relatively close to the mainland. The Palau National Marine Sanctuary, on the other hand, is not remote. It encompasses 80% of Palau's EEZ, although native Palauans do not rely on Palau's pelagic waters for their livelihoods, instead depending on coastal resources. These two cases show that 'remoteness' is actually a matter of degree. While many large MPAs are extremely remote, others are much closer to the initiating government's commercial activity. The remoteness of the MPA site would seem to configure political interests and the degree of industry resistance. The willingness of states to adopt the large MPA norm and implement a large MPA policy, however, would seem to connect even more closely to the configuration of industry interests in the proposed MPA site.

Industry Interests and Contestation

Generally, where extractive industries have strong interests, large MPA campaigns tend to take longer and compromises around mixed use are more likely. The reverse tends to be true when non-extractive industries have a greater stake. Among our five cases, the one notable anomaly to this is the Pitcairn Islands Marine Reserve, which required an eight-year campaign despite no industry interests. The Foreign and Commonwealth Office was reportedly the main obstacle, wanting reassurance that the reserve was economically sensible and credibly enforceable.²³ The Pitcairn campaign, launched in 2007, was also a learning process for ENGOs; at the same time, the large MPA norm was still gaining hold within governments.

²³ British Member of Parliament, Conservative Party, interview with the lead author, email, London, 20 July 2015; Foreign and Commonwealth Office official, 30 October 2015; Senior Marine Reserves Coalition member, interview with the lead author, phone, 28 August 2015.

The configuration of industry interests nonetheless affects large MPA politics in a number of ways, like how contested a given campaign is and how long it takes (Pitcairn aside), whether a large MPA is no-take or mixed-use, and whether the government acts primarily as a proponent or a mediator of a large MPA. The fishing industry is typically the most outspoken opponent of new large MPAs, often rejecting the scientific basis of large no-take areas (Stöhr and Chabay 2010). The Coral Sea is an example of how even minor industry interests (from a national perspective) can derail an advocacy campaign. Pew's initial strategy for the Coral Sea was to designate the entire area as a 990,000 km² no-take reserve.²⁴ The backlash from commercial and recreational fishers was strong. Although the area is not heavily fished (and recreational fishing is minimal), there are a handful of businesses that rely on it. Consulting with these groups was essential for the long-term legitimacy of the reserve (Suškevičs 2012). The recreational fishing lobby in Canberra has also opposed the Coral Sea reserve, worrying it might set a precedent for future closures of popular recreational fishing zones.²⁵ ENGOs have since had to settle for a mixed-use MPA for which zoning is still undecided, four years and counting since the government of then Prime Minister Julia Gillard designated it in 2012. With the campaign for a large no-take MPA in the Coral Sea beginning in 2007, as of October 2016 there were still no regulations in effect on the water. The government of Malcolm Turnbull may announce a management plan by the end of 2016 or in 2017. Still, the Coral Sea demonstrates the influence that industry opposition can have on a large MPA campaign: it reduced the proposal from a fully no-take to a

²⁴ Senior Pew Charitable Trusts member, 15 May 2016.

²⁵ Senior recreational fishing industry representative, interview with the lead author, in person, Sydney, 29 April 2016.

mixed-use MPA, and has led to an exhaustive stakeholder consultation process in which zoning has been negotiated (and renegotiated).

The fishing industry also opposed the Pacific Remote Islands reserve. This opposition did not have quite as big an effect, although industry did make notable gains. The Western Pacific Regional Fishery Management Council (Wespac) has opposed both the Bush designation and Obama expansion of the reserve. But unlike the Coral Sea, the area was not integral to a single operator, with local fleets relying on the region for at most 4% of their annual catch (Sala et al. 2014). Wespac's opposition to the reserve did not gain much traction in Washington. Wespac did manage to exclude, however, the most commercially viable fishing zones from the expansion proposal, showing that even minimal industry interests in highly remote regions can influence government decision makers.

In Palau, the non-extractive industry was central to the government's decision to create an MPA that covers 80% of its EEZ. Palau's is a world-renowned dive destination, with tourism accounting for 54% of Palau's GDP in 2015 (Asian Development Bank 2016). Rather than contesting the large MPA, industry interests were largely supportive, which is partly why the process from initial conception to designation took only two years, with its management plan legislated to be in effect by 2020. Palau reserved 20% of its EEZ for the development of a domestic fishing industry to serve the local market (the MPA legislation includes a ban on fish exports). Foreign firms dominated commercial fishing in Palau prior to the sanctuary, with Palau only receiving modest revenue from licensing and taxes. The dive tourism industry's support coupled

with minimal domestic interests in commercial fishing was a configuration of industry interests that allowed for Palau's relatively quick and easy adoption of the large MPA norm.

No-Take versus Mixed-Use

Whether a large MPA is no-take or mixed-use relates closely as well to the configuration of industry interests. The three no-take large MPAs—Papahānaumokouākea, the Pacific Remote Islands, and Pitcairn—all faced minimal industry opposition. What opposition they did face was too minor to influence policy makers once they had decided on the boundaries of these reserves. Palau's large MPA covers 80% of its EEZ, the highest percentage of any country. That Palau's sanctuary is not the entire EEZ is not much of a concession to the commercial fishing industry given that the MPA legislation also eliminates foreign licensing, and prohibits fish exports by designating the remaining 20% as a domestic fishing zone. This domestic fishing zone—despite falling outside of the MPA's official boundaries—is best considered as an important equity component of the sanctuary, a criterion of the Aichi targets that some scholars note states have neglected (De Santo, Jones, and Miller 2011; De Santo 2013). The Coral Sea, facing heavy commercial and recreational fishing resistance, has the most complex zoning of any of the large MPAs (only the Great Barrier Reef compares in its complexity). These case studies suggest that where extractive industry interests are particularly salient, large MPAs are more likely to be mixed-use.

ENGO- versus State-Driven

The primary way the large MPA norm has spread has been through ENGO persuasion. Finnemore and Sikkink (1998) identify persuasion as the main way a norm spreads during the

norm emergence stage. Under their model, as a norm begins to cascade, persuasion gives way to ‘socialization,’ ‘institutionalization,’ and ‘demonstration.’ As this occurs, states, rather than ENGOs, tend to become the primary to drivers of the process, as many other scholars have noted when analyzing the lifecycle of a new international norm (Katzenstein 1996; Risse, Ropp, and Sikkink 1999). We should therefore expect that over time states will take a more active role in adopting the large MPA norm without the same degree of ENGO advocacy. They are likely to do so as states naturally seek legitimacy and respect in the international order (Barnett 1997; Barnett and Finnemore 1999; Hyde 2011).

The case of Palau provides evidence that such a shift is underway. Palauan President Tommy Remengesau Jr. and his staff came up with the idea of the Palau National Marine Sanctuary in a preparatory meeting for the visit of Prince Albert of Monaco, a known philanthropist and conservationist.²⁶ After this meeting, Remengesau Jr. approached a number of transnational ENGOs to seek support, eventually securing the help of Pew (and others). The sanctuary became a *Global Ocean Legacy* project only after Pew secured additional funding for the unexpected project. The sanctuary is also a cornerstone of Remengesau Jr.’s 2016 re-election campaign (the election is in November). His opponents, sensing opportunity, have attacked the sanctuary as prioritizing marine life over immediate needs of Palauans, such as infrastructure investment. That Palau has proactively created a large MPA and sought out ENGO assistance indicates the increasing influence of the MPA norm within states.

²⁶ Pew Charitable Trusts consultant, 17 June 2016.

5. Conclusion

Three arguments frame this article. First, the article makes the case that a large MPA norm has emerged globally. Second, it proposes that, like most international norms, it has emerged primarily out of civil society. And third, it points to the nature of domestic political economies as the most significant reason for the variation in state adoption of this norm and implementation of a large MPA policy. We set aside some issues, due to space limits, including social justice concerns regarding MPAs. We have also not addressed the competing claims that large MPAs either detract from or raise momentum for small MPA initiatives. This is a complicated matter to adjudicate, and one that would require in depth analysis. We have also set aside criticisms that large MPAs are inevitably ‘paper parks’ because of the difficulty of monitoring and enforcing them. Without doubt, large MPAs help national governments meet protected area coverage targets; but, meeting these targets will not contribute meaningfully to marine conservation unless states govern them effectively and equitably (Claudet 2011; Jones 2014; Gruby et al. 2015). Despite these outstanding questions, a large MPA norm—for better or worse—has clearly been gaining strength since the mid-2000s and will continue to shape global marine policy for decades to come.

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