

BRIDGING THE GAP: THE NEXUS OF TRADITION, TOURISM AND COLLABORATIVE  
MARINE MANAGEMENT IN THE REPUBLIC OF PALAU

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**Abstract:**

News stories of climate change and dwindling marine resources are plastered on media outlets globally. While the United States withdraws from the Paris Climate Agreement, one nation is making headlines for its conservation commitments. In 2015, the Republic of Palau declared 80% of its Exclusive Economic Zone a marine sanctuary in an effort to ensure food security for the local population and conserve the nation's marine resources. In collaboration with local elders, government officials have successfully enacted marine legislation that integrates practices of customary marine stewardship with modern technical strategies. The integration of traditional and contemporary techniques in managing marine spaces represents a new frontier in ocean management that honors indigenous values, belief systems, and Palauan ecological knowledge, while employing modern ideas and technologies in preserving marine environments. This sharing of knowledge systems, and collaborative management framework lends for a productive and sustainable resource management plan that has provided the basis for a number of conservation initiatives, laws, policies, tourism frameworks, and educational measures in the Republic of Palau.

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*"As Palauans, we need to look toward our past to give us the wisdom that we can move forward to the future."* Noah Idechong (1995)

*"The future needs to come from a strong traditional beginning."* Fikret Berkes (2018)

## Chapter One: Opening Remarks

*Kid a dimlak dengue tial beluu ra rucheled era irechar, Kede bai meleng er ngii era rengeleked*  
*We do not inherit the earth from our ancestors. We are borrowing it from our children.*  
Palauan Proverb

### *Introduction*

The world's oceans – their biodiversity, currents, chemistry, and temperature – drive global systems that make the earth habitable for humankind. Our climate, drinking water, rainwater, food, and the oxygen we breathe, are all ultimately provided and regulated by the sea. Additionally, oceans have served as vital conduits for trade and transportation for thousands of years. The ocean covers three quarters of the Earth's surface, contain 97% of Earth's water, absorbs roughly 30% of carbon dioxide produced by humans – buffering the impacts of global warming, serves as the largest source of protein with more than 3 billion people, and accounts for a global market value of marine and coastal industries estimated at \$3 trillion per year, or about 5% of the global GDP (Rees et al., 2018). There is no doubt that careful management of this essential global resource is a critical component of a sustainable future.

Within our lifetime, a dangerous concoction of human impacts has threatened livelihoods of people worldwide: over-fishing, extractive industries, sea-level rise and acidification, pollution, climate change, ocean warming, coastal runoff, and other stressors have weakened the resilience of marine ecosystems. These anthropogenic impacts are felt throughout the world, though perhaps nowhere more acutely than in the Pacific Island region. As a result, Pacific Island communities are actively establishing marine protections and conservation initiatives aimed at mitigating these detrimental environmental impacts.



One Pacific island nation in particular has demonstrated the ability and commitment to plot a better course forward – Palau. As an island nation, the Republic of Palau is economically and culturally dependent on the ocean. But where other national governments have failed to establish effective goals, policies and incentives, and have rejected and trivialized indigenous knowledge and communities, Palau has embraced a collaborative model that empowers the role of traditional leaders while promoting progressive and sustainable frameworks for tourism and marine management. Although Palau’s success can be attributed to many factors, this thesis argues that the four most influential elements are those concerning Palauans cultural and historical ties to the environment, the structure of the nation’s government, the respect for traditional leaders and their conservation approaches, and the willingness of Palauan leaders to forgo economic revenue for purposes of protecting the environment. These four factors provide enabling conditions for successful community-driven and traditional-based approaches to marine resource management in the Republic of Palau today.

### *Purpose*

Palau has been widely recognized as a leader in marine conservation by numerous environmental organizations and international experts in the field (Ban 2018; Cros et al. 2017, Christie et al., 2017; Wabnitz et al., 2018). Marine protected areas are crucial to global commitments to protect the oceans, thereby preserving biodiversity, protecting endangered species and populations, ensuring long-term viability, and in certain cases sustaining fisheries production. Importantly, protection of marine resources also has the potential to honor and help sustain indigenous rights (Ross 2016; Jupiter et al., 2017; Aswani et al., 2018, Ban 2018). This thesis will begin with a brief historical background of Palau, Palauan’s symbiotic relationship to their surrounding oceans, and the emergence of marine protected areas in

Oceania. Following this section, I will discuss various systems of governance within Palau and introduce a number of bills, laws, treaties, and executive orders concerning environmental protections. I will then address traditional approaches to marine management frameworks currently utilized in Palau. Next, I will analyze Palauans' approach to sustainable tourism management in regards to marine protections, with particular emphasis on Palau's relations to China and Taiwan. Additionally, I will comment on current and future legal frameworks designed to address impending consequences of climate change throughout Palau. By identifying these features that have coalesced to make Palau a global model, other nations, states, and communities may be able to benefit in integrating their own culture, history, and traditional practices to follow Palauan footsteps to successfully establish and manage marine conservation areas.

### *Statement of Significance*

The ocean serves as the lifeblood for Pacific people and is crucial to climatic and environmental stability world-wide. The ocean supports island economies and societies and is made all the more important with the increased dependency on foreign goods, high transport costs, fossil fuels, urbanization, and a growing health crisis in Pacific communities associated with Non-Communicable Diseases. Ultimately, the well-being of Pacific people relies on the sustainable management of the oceans today and in the future.

Although scholars have published articles regarding Palauan marine conservation commitments, little attention has been given to the cultural and historical factors that have also contributed to the emergence of Palauans as leaders in marine conservation. I argue that progressive Palauan conservation policies is not simply attributed to environmentally-conscious leaders, but rather traditional and historical practices in Palauan society that have coalesced to make Palau an international exemplar of conservation philosophies. Palau has a long-standing conservation and management ethic as evident by their traditional management mechanism bul, that has led to a growing marine protected area network. It is my hope that this piece will contribute to the general discussions of marine conservation policies; however, by identifying and consolidating these cultural factors into a single paper, perhaps other communities who are contemplating similar approaches that Palau has taken to preserve marine resources will feel empowered to incorporate aspects of their own culture and history into their current legal frameworks of marine conservation.

On an academic level, examining Palauan forms of conservation can be useful for both Palauans as well as other individuals outside of the country who are hoping to promote sustainable forms of marine management that respect indigenous persons and provide beneficial

outcomes on a global scale. However, more importantly, by tracing the genealogy of Palauan conservation philosophies, this thesis takes a marginalized viewpoint of the ancestral factors that contribute to the modern mindset of Palauans. Often times local histories, genealogies, languages, traditional social structures, and legends are notoriously overlooked by Western researchers when studying the behaviors or mindsets of Pacific peoples. In my analysis, I identify four major sectors of Palauan society that are engaged with conservation policies: the national and traditional government, education, and community engagement, and the tourism sector.

During the time of Palau's independence movement, a Constitution was adopted that included an article on Traditional Rights that indicated: "Statutes and traditional law shall be equally authoritative" (Article V, Section 2). The language in this section ultimately recognized and protected traditional leaders and their authority within their communities. The recognition and respect awarded to traditional leaders in government has helped to establish a built-in collaborative approach to issues concerning environmental management. Additionally, it honors the local Council Chiefs and Palauan elders who possess unique ecological knowledge of the oceans. Nevertheless, despite the alternative approaches, Palauan communities are fundamentally working towards the same goal - a responsible, sustainable, and respectful approach to marine management. This paper ultimately assesses enabling conditions for community-driven, traditional-based approaches to marine resource management in the Republic of Palau.

### *Positionality*

As a student in Pacific Island Studies, my work is centered on a series of scholarly articles and community stories that are informed by a fairly recent shift in the field of Pacific

Studies that reflect the processes of decolonization and acts of indigenization. Within these processes, there are important discussions regarding current methodologies, indigenous epistemologies, and representations of Pacific identities, cultures, places, and people. This thesis aims to serve these ideologies and appropriately and respectfully address Palauan concerns regarding their maritime sovereignty. This is a qualitative study utilizing formal interviews and literature-based research to provide insight into a nation's progressive stance of marine management. In doing this research, it is my intent to include Palauan interests, beliefs, values, and understandings at the core of my analysis. In this sense, I actively attempted to seek out Palauan and other Pacific scholars; however, I am aware of my shortcomings, most notably my limited language capability. As English is the only language I am fluent in, I was confined to research that was printed in this vernacular, inevitably limiting my research ability. Throughout this work, I also share a brief glimpse of my personal experience in Palau; however, I refrain from immersing my story too much, as my experience in Palau is fleeting and a non-indigenous one. Nevertheless, the stories I relay through these interviews represent a unique perspective of the Palauan experience. In drafting this thesis, my primary objective is to carve out a safe space for Palauan voices to be represented and respected, while highlighting innovative conservation policies and approaches that Palau has adopted.

My own interest in this area stems equally from both my mother and father. Although I have no genealogical ties to the islands of Palau, my father spent much time working as a public defender throughout the Trust Territory of the Pacific Islands. It was ultimately through his stories of the region that I became interested in this area. Additionally, this topic is of particular interest to me given my family ties to *na lawai'a*, fishermen, on my mother's side. As children, my siblings and I would often take fishing trips where we would learn the intricacies associated

with Hawaiian reef fishing from extended family members. Much of this knowledge gained from these experiences proved helpful when researching Palauan fishing methods as I had been exposed to some of the lingo used when describing various fishing techniques. As a practicing Kumu Hula, my mother also largely influenced my attraction to other Pacific cultures and the similarities shared among Pacific people both in language and dance. This notion of connectedness ultimately influenced my decision to focus on marine management and conservation in Palau. The ocean represents an avenue for individual and collective relationships among Pacific people. The vast repository of cultural traditions seen throughout Oceania including, but not limited to: belief systems, crops, dance forms, healing practices, and ecological knowledge were carried and exchanged over thousands of miles across oceans, and continue to define Pacific people today. However, due to numerous anthropogenic pressures, the health of our oceans has been in serious decline and pose a grave threat to the livelihood of Pacific Islanders. The survival of Pacific peoples is largely dependent on the sustainable management of marine spaces and resources, and Palauans have been among the global leaders in maritime governance. Although I am aware of my place as an outsider in the Palauan community, I do hope that my work provides some insight into marine governance in Palau and the distinctive factors that contribute to the global recognition of Palauans as international leaders in marine conservation.

### *Methodology*

The idea for this thesis first arose out of classroom discussions regarding the need to 'decolonize' scholarly research, particularly in the field of Pacific Studies. The histories of Westerners in the Pacific have been riddled with biases, misconceptions and exploitative ventures of Pacific Island people, their environment, and natural resources. Foreigners

conducting research on native people and their land remains an often uncomfortable and unwelcomed experience. In order to rectify this historically exploitative relationship, scholars have been encouraged to conduct research in more appropriate manners by including indigenous epistemologies, voices, and perspectives in their research, as well as a commitment to building the research capacity of Pacific peoples (Gegeo 2001; Thaman 2003; Teaiwa 2013, 2017; Matapo 2016). Within the social sciences discipline, there have been disputes over definitions of methods and what constitutes 'good research' (Thaman 2003). It is my hope that this thesis reflects upon the approaches and techniques that honor, encourage, and showcase indigenous voices that have for too long been quieted by their colonial power.

For purposes of this thesis, I chose to focus on four main sectors of Palauan society that are actively engaged in marine conservation initiatives: the Palauan tourism industry with particular emphasis on the Ministry of Natural Resources, Environment and Tourism; the traditional and Western government systems including cases from the judiciary, current legislation, executive orders, and the government's foreign relation policies; the Palauan school systems, and the nation's commitment to promoting various forms of environmental education including: awareness campaigns, community outreach, and mandated educational focus of local marine ecosystems; and lastly, the importance of traditional ecological knowledge from community members that exemplify Palauans ancestral connections and dedication to their marine environment. In researching each of these sectors I found myself doing largely archival based research with interviews providing a supplementary form of qualitative research. While in Palau I had the opportunity to interview twelve Palauan individuals who were actively involved with coastal or marine matters, and some of their knowledge and expertise is shared throughout this piece. In Chapter Two, I provide a brief summary of Palauan history from the pre-contact era

to the nation's current political affiliation as a presidential republic in free association with the United States. In Chapter Three, I analyzed both historical documents, as well as texts produced by contemporary organizations. Documents utilized included treaties from the United Nations Law of the Sea Convention (I,II and III), proclamations and executive orders issued by the United States, treaties from the League of Nations Hague Codification Conference, and various news sources. Contemporary texts included current maritime legislation, legal statutes, the Constitution of the Republic of Palau, judicial and land court cases, current news stories, Protected Area Network laws, and documents from the Ministry of Natural Resources, Environment and Tourism. Chapter Four focuses on traditional approaches to marine management with a focus on the Ebiil Society, a non-profit organization to educate Palauan students and adults proper management of natural resources through indigenous knowledge. In this chapter, I relied heavily on my interview with Ann Singeo, the Executive Director of the Society. In writing Chapter Five, I focused on how Palau's progressive stance of environmental stewardship has affected its tourism sector. For my research on tourism, I relied heavily on the Palau Responsible Tourism Policy Framework and interviews with members from the National Tourism Coordination Board and the Ministry of Natural Resources, Environment and Tourism. News articles were also especially helpful given the ongoing relations between China and Palau in regards to tourism. Finally, I conclude with pending environmental legislation and the upcoming Oceans 2020 Conference that Palau is hosting.

My research was primarily conducted in Koror, as it is the main commercial center and center of government for Palau. These interviews consisted of oral questions asked by myself and oral responses provided by the research participants that were recorded via an audio recording device. The participants were aware that their interviews were recorded strictly for



research purposes and they were encouraged to vocalize any concern regarding the questions asked; additionally, every interviewee had the option of remaining anonymous. The aim of these interviews was to better understand the implications of maritime legislation on Palauans today and in the future, and perhaps how these initiatives have contributed and will continue to contribute to the Palauan economy. Respondents were asked to describe current maritime legislations including questions pertaining to the selection, enforcement, and management of marine spaces by local, state, and national governance. Above all, my work was meant to create a safe space for Palauans to express their viewpoints in a culturally appropriate and ethical setting.

## Chapter Two: Historical Background

*“Palau’s past present and future are tied to the health of our national environment, particularly our oceans”*

(President Tommy Remengesau Jr., 2014)

### *Introduction*

This chapter begins with the assertion that Palauans spiritual, cultural, historical, and genealogical ties to the environment serve as a primary component for the development of Palau’s ambitious approach to the protection of its marine environment. Such an understanding of historical context provides the possibility of building on and strengthening these practices, structures, and traditions that have enabled Palauans to successfully manage their ocean and landscapes for generations, and in doing so, possibly overcoming current damaging environmental impacts facing the nation today. These historical influences include Palau’s pre-colonial history, colonial history, and their traditional social fabric. Chronologically, this chapter begins with the retelling of a Palauan creation story that illustrates Palauans genealogical connections to the ocean and the cultural ties to their surrounding environment. Following this section, I provide a brief description of traditional governance over marine resources in Palau prior to the arrival of colonialists, and subsequent discussions analyzing the shift from tenurial village and clan units to a centralized governing body, and the reincorporation of customary marine tenure into modern marine management practices. This chapter concludes with an overview of Palau’s political status over the last two hundred years, and the legacies of its four colonial administrations, including the Compact of Free Association it currently holds with the United States government. Indeed, Palauans cultural and spiritual connections to the environment has influenced the nation’s framework for marine protections and propelled this

Pacific island nation to the forefront of marine management and sustainable development on the international stage.

### *Palauan Connections: Creation Story and Pre-Colonial History*

Palauan connections to the sea are perpetuated through local legends that often reflect particular aspects of the environment. In fact, the primary Palauan creation story details that human life originated from the ocean rather than the land. According to one Palauan legend, prior to the creation of man, there were only Palauan gods and the sea. Legend tells of *Uchelianged*, a supreme God of the Heavens, who decided that there should be land and creatures to populate the barren seascape (Johannes 1981). From the ocean emerged a giant clam that in turn gave birth to all marine species including the first humans that eventually learned to inhabit the land. This local legend reinforces Palauans connections to their environment spiritually, culturally, and genealogically. It therefore seems appropriate that many ancestral gods associated with Palauan families and clans manifest in various marine species. Due to the importance of the ocean in several aspects of Palauan culture, it comes as no surprise that the conservation and protection of marine ecosystems has been a priority for Palauan people for generations. As Joyce Beouch, a Conservation Planner for Palau's Protected Area Network, aptly stated "*A Belau a turrekon er kau me nga*" or "The nature and culture of Palau is the foundation and principle that will bring us towards a more successful life." Similar sentiments were expressed by one of Palau's high chiefs whom I also had the opportunity to interview "Palau does not need us! We need her!"

In pre-colonial Palau, near-shore marine spaces were governed by traditional leaders and kin groups (Ueki & Clayton, 1999). In each of Palau's sixteen states, a traditional leader was elected by the female elders of the state to establish marine tenure systems. Traditional leaders in

Palau preserved marine resources by restricting fishing in vulnerable areas of the reef to ensure food security for the local population, a conservation practice commonly known as *bul* in Palauan. These marine spaces were often determined by the traditional leader in collaboration with local fishermen who possessed the ecological knowledge of the reef and marine species to ensure the effectiveness of the moratorium. Today, the concept of *bul* serves as the foundation for a network of established marine protected areas throughout Palau, and the role of chiefs remains an integral aspect of Palauan society.

While visiting Palau, I had the opportunity to accompany a local chief, Clarence “Obak” Kitalong on a number of fishing trips around the Rock Islands. Obak has been fishing in Palau for over fifty years and as a result is highly respected for his knowledge of the reef and marine life. Although he only shares his fishing secrets with his most trusted friends, he serves as a primary consultant to various government resource management agencies. These agencies often work alongside fishermen to determine most appropriate areas for seasonal closures, moratoriums, or other forms of protected areas.

Obak explains that the transition from torches to flashlights, canoes to engines, and fish finders instead of local knowledge have all led to the rapid depletion of fish in his favorite fishing spots. These factors along with increased tourism have not only put a strain on fishermen but have decreased the fish catch rate nearly 10-fold since he started fishing. Although protected areas by way of legislation and regulations are becoming more prominent throughout Palau, Obak asserts that their traditional counterparts ‘buls’ are often more respected and successful due to the pertinent knowledge of marine resources that chiefs are expected to possess, rather than legislators or executive level staff that may not relate to the marine ecosystem with the same level of understanding. During my stay in Palau, it was evident that chiefs in each of Palau’s

sixteen states still retain a high level of authority when it comes to management of marine resources. Palauans strong respect for their chiefs ultimately led to the current framework of the Palau Protected Area Network Laws, a series of successful environmental initiatives in which conservation areas are established in conjunction with chiefs and local representatives from each state rather than solely at a national level. Additionally, the Palauan national government has incentivized the creation of protected areas in each state by providing monetary contribution to the traditional leaders who in conjunction with community members create terrestrial or marine protected areas.

Historically, Palauan villages were divided primarily into two ownership groups: *chutem buai* (public properties) and *chetemel a bebliil* (clan properties) (Quimby 1988). These areas were under the control of the family or village chiefs and were inclusive of both land and seascapes. Each village was represented by a council of ten ruling chiefs and ten female chiefs, (*klobak l'dil*) (Quimby 1988). As a result, village chiefs were the enforcers of *bul* and other regulations concerning environmental resources. In more recent history, the four most powerful villages that emerged were that of Koror, Melekeok, Imeyong (Ngeremlemgui), and Aimeliik. The highest-ranking chiefs came from these villages and ultimately controlled the largest natural resources (Quimby 1988). Although clan leaders were primarily men, women were occasionally chosen due to their powerful social position in the distribution of land, ownership of traditional Belauan money, and the bestowal of high-ranking and traditional titles awarded through the matrilineal line (Quimby 1988).

Today, there still exists a Council of Chiefs that serves as an advisory board to the president regarding customary laws, as well as traditional leaders in each of Palau's sixteen states. There are several examples of traditional leaders successfully exerting their authority over

marine resources. Chiefs in the state of Ngarchelong and Kayangel recently negotiated an agreement to share fishing grounds and together imposed closures over various reef channels that were known spawning aggregations of reef fishes. During the course of my interviews, there was a similar sentiment shared regarding local leaders and elected officials, as many interviewees expressed a more favorable opinion of their local chiefs than of their local representatives, perhaps indicative of Palauans trust in traditional leadership.

### *Colonial History of Palau*

In the last three centuries, Palauan culture has experienced a rapid transformation in response to European, Japanese, and American rule. The Republic of Palau has been under four colonial regimes beginning with the Spanish Empire, Imperial Germany, the Japanese, and finally the United States government in 1945 (Nero 1987). The introduction of technology and foreign governance created a dramatic shift in resource management, particularly with regards to marine areas and tenure (Matsumoto 2002).

The Spanish Empire controlled the islands from 1885 until the collapse of the colonial empire in 1899 during the Spanish-American War, at which point Germany assumed power over the islands until its defeat in World War I (Quimby 1988). The Japanese government then seized Palau from 1919 until the end of WWII under a League of Nations mandate where the government used Palau as a military outpost and headquarters of their Micronesian entities (Quimby 1988). And finally, the United States government reached a compromise in 1945 and drafted a trusteeship agreement in conjunction with the Pentagon guidelines, which came into effect in 1947, establishing Palau as a member of the Trust Territory of the Pacific Islands (Quimby 1988).

Towards the end of the 19<sup>th</sup> century, Britain, Spain and Imperial Germany claimed possession of the Palauan archipelago. In 1885, a decision was granted by Pope Leo XIII recognizing Spanish claim to the islands; however, the Pope also granted economic concessions to both Britain and Germany (Coker 1982). Palau then became under the Spanish East Indies along with the Caroline Islands, the Mariana Islands, and the Marshall Islands that were administered from the Philippines (Coker 1982). Nevertheless, although Palau experienced its first form of foreign influence under Spanish control, Spain was arguably the least potent of the four colonial powers. The Spanish had their aim at the “salvation of souls rather than the development of trade” and as such had limited economic affairs in the region (Force 1960, 70). However, the introduction of Catholicism led to a shift in traditional practices as many native Palauans welcomed Catholicism despite being ardent followers of their traditional faith. Religious syncretism inspired the creation of *Modekngei*, an integration of Christianity and traditional Palauan religion; however, today over half of the population self-recognizes as Roman Catholic or Protestant (Tromf 2018). One could argue that religious syncretism in Palau is among the first instances of traditional Palauan knowledge and culture being integrated with Western philosophy, a phenomena Palau prides itself on today in regards to its environmental management frameworks. Despite the Spanish Capuchin missionaries and the introduction of Catholicism, along with a few Spanish words integrated into the Palau lexicon, there is very little influence from the Spanish occupation that exists today. I found virtually no research that chronicled any changes in marine tenure during this time period; however I do wonder whether the roles of traditional chiefs and their rights over land and marine spaces deteriorated as a result of missionary influence at this time. Following Spain’s defeat during the Spanish-American War,

the Spanish government then sold the Palauan archipelago to Imperial Germany under the 1899 German-Spanish Treaty.

Under German control, major changes in Palauan society occurred. Many traditional practices were banned including tattooing and various ceremonial rituals. Unlike the Spanish era, the Germans had a major presence in the local traditional government (Smith 2012). A resident governor position was established to exert external political control and fine those who had violated administrative regulations (Force 1960). Additionally, many Palauans were conscripted for constabulary services (Force 1960). Building of roads and the establishment of coconut plantations and phosphate mining sites demonstrated the German goal of developing economic trade in the region.

Following Germany's defeat in WWI, Japan assumed control of the islands via the South Pacific Mandate issued by the League of Nations. Under Japanese rule, Palau experienced a rapid development of its fishing, agriculture, and mining industry; however, devastation as a result of battles fought during WWII plagued Palauans for many years. Many of the older Palauans that I spoke with recalled the daily bombings and air raids, along with the lack of available food and subsequent suffering many of them endured. The U.S. invaded Palau in 1944, as the heavily fortified Japanese islands provided a potentially threatening position for General Douglas MacArthur's planned invasion of Leyte in the Philippines (Quimby 1988). The Battle of Peliliu, also known as Operation Stalemate II by the U.S. military was fought between September and November of 1944. Both the Japanese and Americans sustained heavy losses on the island of Peliliu; the U.S. lost 1,656 men, and the Japanese lost an estimated 11,000 men with many more wounded (Quimby 1988).



Following this battle, the United States felt as if it had liberated the Palauans and sought to destroy any semblance of Japanese presence on the islands. As a result, the U.S. military began eradicating Japanese buildings, shrines, roads, and houses, and repatriated all Japanese and Korean civilians and soldiers, including those married to Palauans (Quimby 1988). Understandably, this was an incredibly traumatic time for Palauans as the population was plunged back into their traditional subsistence livelihoods after nearly twenty-five years of Japanese rule, coupled with the utter devastation of all infrastructure and businesses.



Figure 1: A bombed out Japanese Communication Center in Airai, Palau  
(Photo by Alana Pollack)

After a brief period of administration by the U.S. Navy, the Truman administration was faced with the decision of whether to annex the islands as spoils of war or assume a United Nations Trusteeship that met U.S. security interests in the region. Ultimately, the latter option was chosen

in 1947 and the United Nations Trust Territory of the Pacific Islands was formed and included the Marshall Islands, the Northern Mariana Islands, the Federated States of Micronesia and Palau. Palau's journey from a member of the Trust Territory of the Pacific Islands to a Republic has been fraught with political agendas, referendums, and numerous plebiscites. Unlike its colonial predecessors, the United States administration conducted its affairs with Palau differently than past colonizers due to the international circumstances at the time and the division within the United States government over its foreign policy and strategy for the islands (Quimby 1988). Under this newfound status, Palauans adopted a constitution in 1981, followed by the signing of a Compact of Free Association with the United States in 1982 that required the U.S. to provide financial assistance as well as security defense for the islands (Schuster 1994).

## Chapter Three: Governance, Politics and Legislative Measures

*"Palauan policy-makers have enjoyed support for conservation policy-making due to a long tradition of using a bottom-up approach that usually begins with traditional edicts then moves to local government then the national government"*

(Noah Idechong, 2015)

### *Introduction*

The Constitution and the structure of the nation's government has played a strong role in enabling Palau to enact strong environmental laws, issue proclamations and executive orders, and participate in regional conservation efforts including treaties, all of which contribute to Palau being a prominent leader in marine governance. As in much of Oceania, prior to the arrival of European colonizers, Palauans had a highly-developed system of tenure and management that extended to fish and other lagoon and coral reef resources. Classified by family and clan backgrounds as well as individual achievements and merits, Palauan chiefs were responsible for the preservation of their ocean resources (Quimby 1988). However, with the influx of colonial administrators, a syncretic approach emerged that incorporated aspects of traditional Palauan authority within a Western democracy.

In this chapter, I analyze this nexus of tradition and modern governance in Palau and utilize the nation's Constitution as a foundational document for establishing Palau as a leader in marine protections and ocean governance. Following this discussion, I define and classify various types of marine protected areas with an emphasis on community-based management approaches. I then take a step back to discuss international maritime law, regional and international treaties, and conservation initiatives Palau is involved in. In conclusion, I illustrate by way of example, a number of bills, executive orders, and presidential proclamations pertaining to environmental initiatives in Palau.



Figure 2: The judiciary building in the Republic of Palau with a *Bai*, a traditional meeting house, in the foreground  
(Photo by Alana Pollack)

The Capital grounds in Palau are quite an impressive and frankly, rather odd choice of architectural design. With a prevailing form of Western democracy governing the nation, the legislature, judicial and executive buildings are built in a classical historical government design that provides an uncomfortable reminder of US presence in Palau. Nevertheless, the cultural motifs that are painted along the pediment, base, and interior of the building prove to be a semi-redeeming quality. However, perhaps the most distinct structure on the grounds is the *bai*, a traditional meeting house where decisions regarding clan and village matters are discussed, pictured above. Today *bai*'s are found in almost every village in Palau, and many traditional matters are still decided in these spaces. Although unapparent in this photo, the bai is perfectly situated between the Courts, Capitol, and the Executive Building lending to a distinct juxtaposition of a bai located at the center of the capital grounds. The purposeful decision to erect a bai on the grounds of the capital complex indicates a profound respect for traditional authority and the relevancy of Palauan culture in the current national government. The

architectural design of the capital grounds complex reflects the nexus between traditional and modern elements that has enabled Palau to produce among the most progressive environmental initiatives globally.

### *Customs, Constitution, and Conflicts*

There is no doubt that Palau's colonial history has largely influenced its politics today. The establishment of the *Olbiil Era Kelulau*, Palau's National Congress, was largely modeled off of the American legislative system, as is the nation's judiciary and executive branches. However, the integration of traditional authority alongside American governance has created a distinct advantage in Palau when it comes to advocating for environmental rights. Palau's National Constitution, although based on United States democratic ideals, seeks to promote customs *and* traditional leadership by granting equal authority to traditional rights: "Statutes and traditional law shall be equally authoritative" (Article V, Section 2). However, one particularly difficult challenge faced by the writers of Palau's constitution was the condition between the national and state governments, an issue closely related to that of state versus custom, and equally relevant in regards to marine resources. A significant change brought by Palau's colonial administrators was the shift towards political centralization from the tenurial unit of the village to establishment of "states" as political units and the competing authorities.

In the nation's Constitution, Article I, Section II, grants Palauan "states" with "exclusive ownership of all living and non-living resources...from the land to twelve (12) nautical miles seaward from the traditional baselines; provided, however, that traditional fishing rights and practices shall not be impaired." In other words, each of Palau's sixteen states has legal rights to their territorial waters as defined by the 1982 United Nations Convention on the Law of the Sea.

Additionally, each of Palau's sixteen states incorporates traditional leadership in their governments to varying degrees (Graham & Idechong, 1998). However, inconsistencies between customary and Western governance including traditional and elected leaders, and state and national governments, often result in power struggles that extend to cases of marine spaces and resources. As stated previously, the Palau National Constitution delegates to states "exclusive ownership of all living and non-living resources...from traditional baselines." However, most states have not strictly mapped their boundary or baselines (Matthews 2007). Because *traditional baselines* represent ownership, and these baselines are determined via oral histories, there are often disputes regarding precise boundary lines. While I was in Palau, I met with Ebil Matsutaro, a Palauan attorney, who was planning to travel to the Pacific Collection archive at Hamilton Library at the University of Hawai'i at Mānoa in hopes of finding documentation or microfilm that defined a particular state's boundary line as a result of a current legal land dispute. I have not since heard from her to determine if she was successful or not in mapping the boundary lines.

Land ownership in Palau is legally restricted to Palauans. However, according to Craig Rosillo, Legal Counsel for the state of Koror, "Palauans are the most litigious people in the world, and land fights are the national past-time" with more than 30,000 cases amongst 21,000 Palauans (Rasley 2009). Some Palauans assert that this litigious personality stems from the Land Registration Act of 1987, enacted by the Palauan Congress to create a system of land ownership on a tract-by-tract basis for all of Palau. Instead, the Act ultimately created an opportunity for Palauans to engage in the complexities of real estate litigation (Rasley 2009). Despite current land disputes, Palauans have a history of fighting for the health and beauty of their lands and oceans. In the late 1970s and early 1980s Palauans created the first nuclear-free Constitution in

the Pacific outlawing nuclear power, nuclear weaponry, and foreign power's exercise of eminent domain in Palau.

In a move to decolonize the islands, Palau drafted a highly controversial nuclear-free constitution in 1979. Palauans were aware of the atrocities committed in the Marshall Islands and the devastating legacy of atomic testing (Firth 1989). Palau's newly adopted constitution provided that within Palauan jurisdiction, the use, storage, or disposal of nuclear-powered or nuclear-armed vessels and aircraft was prohibited. An excerpt from Article XIII, General Provisions, Section Six reads as follows:

Harmful substances such as nuclear, chemical, gas or biological weapons intended for use in warfare, nuclear power plants, and waste materials therefrom, shall not be used, tested, stored, or disposed of within the territorial jurisdiction of Palau without the express approval of not less than three-fourths (3/4) of the votes cast in a referendum submitted on this specific question (Article XIII, Section VI).

The anti-nuclear movement in Palau was led by women elders who formed a coalition, *Otil a Beluad* (the Anchor of Our Land), to promote a nuclear free constitution, and with the help of other anti-nuclear activists succeeded in keeping Palau nuclear-free for twelve years (Hinck, 1990). However, the coalition ultimately failed to maintain a nuclear-free constitution against the United States government and the Compact of Free Association. The U.S. government wanted access to and control of Palauan land and harbors for military purposes, which included the storage of nuclear weapons. The U.S. promised \$228 million dollars in exchange for approval of the Compact, however, the *Otil a Beluad* challenged the environmental shortcomings of the Compact in an attempt to defend Palau's environmental heritage (Quimby 1988). The leader of *Otil a Beluad*, Gabriela Ngirmang, was later nominated for the Nobel Peace Prize in 2005 for her courageous actions. Ironically, that year the Nobel Peace Prize was jointly awarded to the International Atomic Energy Agency and Mohamed ElBaradei for their "efforts to prevent

nuclear energy from being used for military purposes..." (The Nobel Foundation). Although the *Otil a Beluad* failed in its efforts to maintain a nuclear-free constitution, Palau's firm stance against nuclear weapons confirmed its commitment to the environment and wellbeing of its people for years to come.

### *Classification of Marine Protected Areas*

The anthropogenic pressures on the global environment have resulted in a variety of proposed strategies to mitigate or reverse the increasingly apparent environmental degradation. Ironically, one strategy that has been receiving considerable endorsement is among the most ancient. Indigenous peoples and local communities have played a critical role in caretaking their land and oceans for millennia. Many community members possess important cultural and ecological knowledge of their surrounding environments. Some recognition has been afforded to the term "Indigenous and Community Conserved Areas" (ICCAs). ICCAs have been recognized for their successful contribution to global conservation targets. The accepted definition of ICCAs is as follows:

...natural and/or modified ecosystems containing significant biodiversity, ecological and cultural values, voluntarily conserved by indigenous, mobile and local communities through customary laws or other effective means. They can include ecosystems with minimum to substantial human influence, as well as cases of continuation, revival or modification of traditional practices or new initiatives taken up by communities in the face of new threats or opportunities (Borrini et al., 2004).

MPAs vary significantly in the level and type of legal protections afforded to the site. Within the US, any MPA can be characterized by one of six levels of protections, which directly influence the effect on the environment and human use of the site. These protections include: Uniform Multiple-Use that have a consistent level of protection with certain allowable activities; Zoned Multiple-Use, that permit some extractive activities but use marine zoning in order to



reduce user conflicts and unnecessary impacts; Zoned Multiple-Use with No-Take Areas, that contain at least one legally established management zone where all resource extraction is prohibited; No-Take zones which allow limited human access, but completely prohibit extraction of natural and cultural resources; No Impact zones that prohibit all harmful activities with limited human access; and No Access zones that restrict all human access to the area. Additionally, not all MPAs are permanently protected as many sites differ in how long their designated protections remain in effect: Conditional, Temporary, Year-Round, Seasonal, and Rotating protections. Figure Two below outlines these protections in greater detail.



Figure 3. Definition & Classification System for U.S. Marine Protected Areas,  
[https://nmsmarineprotectedareas.blob.core.windows.net/marineprotectedareas-prod/media/archive/pdf/helpful-resources/factsheets/mpa\\_classification\\_may2011.pdf](https://nmsmarineprotectedareas.blob.core.windows.net/marineprotectedareas-prod/media/archive/pdf/helpful-resources/factsheets/mpa_classification_may2011.pdf)

### *Emergence of Marine Protected Areas in Oceania*

In the last twenty years, the Pacific region has experienced an incredible proliferation of marine protected areas: over 500 communities from fifteen territories and independent nations have established marine conservations zones, representing a distinct global achievement of 5,000 km<sup>2</sup> of protected marine areas (Govan 2009). Since 2009, the establishment of Papahānaumokuākea, the Palau National Marine Sanctuary, and the Pitcairn Island Marine Reserve have added over 2 million km<sup>2</sup> of protected marine areas to this initial figure.



Figure 4: Global Map of Established Large-Scale Marine Protected Areas  
[https://www.researchgate.net/figure/Global-map-of-established-large-scale-marine-protected-areas-Source-Big-Ocean\\_fig1\\_319478599](https://www.researchgate.net/figure/Global-map-of-established-large-scale-marine-protected-areas-Source-Big-Ocean_fig1_319478599)

The approaches being developed at a national level are built on distinct features of the region, systems of customary tenure, and in many cases, rely on existing traditional knowledge and governance found in communities (Govan 2009). It is well documented that communities often created marine protected areas due to a perceived threat to current and future food security, depletion of resources, or a necessary boost to local economic revenue. In the Pacific, conservation and the sustainable use of marine resources are often seen as inseparable in traditional concepts of environmental stewardship (Govan 2009). The shift towards community based resource management in the Pacific is unprecedented on a global scale and there is an increasing body of research confirming the positive impacts of marine protected spaces including: conservation of biodiversity and ecosystems, increased fish populations, opportunities for cultural and environmental education and training, and potential for broadening local economic options and revenue via marine tourism (Jupiter et al. 2014; Bambridge 2012; Rohe et al. 2017; McMillen et al. 2014; Singh 2018).

Marine ecologists and conservationists are increasingly advocating for large scale marine governance through smaller marine protected areas that help to apportion costs of conservation across resource owners (Gruby & Basurto 2013). This notion traces its origins to Common Pool Resource theory (“CPR”) which emerged from local, small-scale settings (Gardner, Ostrom & Walker 1990). CPRs are resources for which "...the exclusion of users is difficult" and the use of such a resource decreases benefits for other uses, examples include: fisheries, forests and irrigation systems (Heikkila et al. 2011). A recent study published by Dr. Yimnang Golbuu, the country's leading oceanographer and CEO of the Palau International Coral Reef Center, indicated that no-take MPAs had, on average, double the biomass of resource fishes, which refer to species that are important commercially, culturally or for subsistence, as compared to

unprotected areas (Golbuu et al., 2017). Additionally, perhaps the most startling statistic in this study between no-take MPAs and unprotected areas “was the five-fold greater biomass of piscivorous fishes” in the MPAs compared to fished areas (Golbuu et al., 2017, 7). The table below lists commercially important fish species in Palau that possess some level of marine protections.

<b>Common Name</b>	<b>Palauan Name</b>
Bluefin Trevally	Erobk
Giant Trevally	Oruidel
Bicolor Parrotfish	Beadle/Ngesngis
Parrotfish Species	Melemau
Yellowcheek Tuskfish	Budech
Indian Ocean Long Nose Parr	Berkism
Pacific Longnose Parrotfish	Ngeaoch
Rudderfish	Komud, Teboteb
Orange Stripe Emperor	Udech
Long Face Emperor	Melangmud
Red Gill Emperor	Udech
Squaretail Mullet	Uluu
River Snapper	Kedesau'liengel
Red Snapper	Kedesau'liengel
Humpback Snapper	Keremlal
Orangespine Unicornfish	Cherangel
Bluespine Unicornfish	Chum
Giant Sweetlips	Melimralm/Koson/ Bil
Yellowstripe Sweetlips	Merar
Forketail Rabbitfish	Benut

Table 1: Commercially Important Fish Species in Palau  
(Created by Alana Pollack)

The success of these community-based management approaches is happening at the same time that the Pacific region is facing enormous challenges due to rising sea levels, ocean acidification, threats to biodiversity, and other climate change related factors. Additionally, the population in the Pacific is set to double in the next thirty years likely resulting in growing inequalities of livelihood opportunities resulting in conflict, poverty, and increased pressure on

natural resources (Govan 2009). Dependence on commercial fisheries represents a unique vulnerability for Pacific economies in the face of climate change, as many, if not all Pacific Island nations are heavily reliant on fish for their dietary protein as well as potential economic revenue (Allison et al., 2009).

The ocean continues to play a central role in the economic and social life in the Republic of Palau. Marine resources account for subsistence as well as tourism activities that largely contribute to Palau's GDP and employment (Wabnitz, Cisneros-Montemayor, Hanich et al, 2018). Additionally, since 1992, Palau has drafted environmental legislation and promoted marketing campaigns that feature numerous conservation commitments, including the establishment of Palau's Marine Sanctuary that represents just one example of a new global phenomenon of nation's exercising maritime sovereignty within their EEZs. Although important questions remain regarding how Palau will effectively and appropriately monitor this large marine space, there is no doubt that Palauans have already established themselves as leaders in marine conservation.

### *Revival of Customary Marine Tenure*

Early visitors to the Pacific region recorded widespread conservation practices of marine resources including closed seasons and areas, restricted entry, and seasonal access areas, among others (Somerville 1897; Malinowski 1922,1935). Today, there is an increasing interest among researchers, conservationists, scientists and communities to incorporate customary practices associated with marine tenure alongside contemporary resource management approaches (Hviding 1989; Cinner 2005; Lasrus 2012; Bambridge 2013; Jupiter et al, 2014; Kittenger 2014; Ban 2018; Wabnitz, Cisneros-Montemayor, Hanich et al, 2018).

Palauans have an impressive heritage of conservation that is based on traditional Palauan values of marine management and the responsibilities associated with being active caretakers of the sea. Palauan conservation has evolved from seasonal moratoriums known as *bul* to more Western styles of marine governance commonly labelled as Marine Protected Areas (MPAs) while still retaining elements of customary management and tenure (Golbuu 2017). Many Palauans continue to depend on the ocean for their livelihood and possess traditional ecological knowledge of the reefs and marine life that rival even the most advanced technology today. In 1997, following a devastating El Niño event that killed much of Palau's coral reefs and destroyed large areas of the marine ecosystem, many islanders reflected on their customary systems of marine management to craft measures that successfully and efficiently integrated native Palauan conservation practices with modern technological advances to help protect and save their oceans.

There has been much dialogue in the last few decades surrounding the re-incorporation of customary marine tenure into contemporary community-based marine management throughout the Pacific (Aswani et al., 2015; Bambridge, 2013; Cinner, 2005; Foale, 2011; Johannes, 1981; Jupiter et al., 2017; Hviding, 1998; Lazrus 2012). Traditionally, the right to fish in a particular area is controlled by the adjacent village and their chiefs, and no outsider is allowed to fish unless granted permission (Johannes 1981). The consequence for over-fishing in a particular area is simply reduced yields in the future, so it is ultimately self-interest that dictates conservation in Palau. In contrast, many Western countries define oceans as public land (as is the case in Hawai'i) and therefore it is in the best interest of the fisherman to catch all he/she can because should he/she refrain from fishing, the fish will most likely be caught by someone else (Johannes 1981). As a result, self-interest leads to over-fishing and a dwindling fish population in many Western societies.



Palauans have been acutely aware of their conservation responsibilities towards their oceans and marine life for thousands of years. However, it is important to note that aspects of these maritime responsibilities may have arisen from cultural traditions and religious practices rather than explicit conservation attempts. Other marine practices recorded in traditional Palauan society include: quotas, the concept of taking only what you need; sharing, emphasizing community over individuality; restrictions of certain species perhaps due to religious beliefs; and location restrictions due to the possible protection of fish habitats, among many others (Brugh 2007). Although there is uncertainty regarding the origins of these local conservation practices, it is possible that because these practices involve complex knowledge systems, religious beliefs, and spirituality that perhaps Palauans had other motivating factors besides conservation in executing these regulations (Foale 2010). Conceivably, these measures provided spiritual balance or social functions when initially implemented (Foale 2010). Additionally, due to the lack of knowledge surrounding the factors that influenced many of these traditional marine conservation practices and an absence of any recorded evidence that Palau ever experienced a food shortage, it would be wrong to assume that reef conservation was the only contributing factor to these customary practices.

Moreover, the late tropical marine ecologist, Robert Johannes stated “The Palau archipelago possesses an unusually high proportion of sheltered, productive reefs to land... In addition, chronic warfare seems to have helped keep the population below the reefs’ carrying capacity.” Ultimately, this would imply that a shortage of food for a relatively stable population would seem highly unlikely (Johannes 1981, 64). Due to the archipelago’s location where the Pacific plate is subducting beneath the Philippine plate, the Republic of Palau’s marine area boasts extensive shallow reefs as well as some of the deepest waters on earth, and a phenomenal

biodiversity with pristine ocean ecosystems and thriving reefs. Due to three ocean currents converging in Palau's waters, the coastal marine ecosystems are dominated by coral reefs with an outer reef of 265 square kilometers, and an inner reef of 187 square kilometers (Friedlander et al., 2014). Palau also has the highest diversity of reef fish in Micronesia. Additionally, the archipelago is home to seven of the nine species of giant clams, the only hawksbill turtle breeding site in Micronesia, the endemic nautilus, over 500 sponge species, and nearly 200 species of opisthobranchs (Friedlander et al., 2014). Palau is also home to over 1,350 species of shallow water fish and 700 species of coral. Ecosystems here range from reef to mangrove, seagrass to abyss, and marine lakes to reef crests. The Republic of Palau is located at the Western end of Micronesia, roughly 800 kilometers east of the Philippines and 800 kilometers north of Papua New Guinea (Friedlander et al., 2014). The 586 islands of the Palauan archipelago stretch over 800 kilometers and consist of only twelve continuously inhabited islands (Friedlander et al., 2014). However, this pristine paradise comes with increased responsibility. Nevertheless, Palauans affinity to their oceans is apparent and there is a high level of moral culpability associated with the destruction of marine environments. Palauans consider themselves protectors of their oceans as it is the ocean that has protected and sustained them throughout their history. Today, many of these marine protections are now implemented at the national government level via legislation, executive orders, and judicial cases.

### *Government Structure in Palau*

Before considering particular cases and legislation regarding conservation, it is important to explain the current government structure in Palau. The Republic of Palau's National Congress is known as Olbiil Era Kelulau (OEK) which translates to "House of Whispers." The Congress consists of the House of Delegates which has sixteen members, one from each state, and the



Senate, which has thirteen members that are voted on in a nationwide election. Interestingly, the voting process of Palau's House and Senate is essentially converse to the American system.

Palau's house delegates are chosen by the local population in each of the sixteen states, whereas senators are elected through a nationwide vote. However, both senators and delegates can sit for four-year terms.

The Executive Branch of the government of Palau includes the President, the Vice President and the Council of Chiefs. The president and vice president run on separate tickets. Additionally, the cabinet ministers and their supporting staff assist the president. There are eight primary ministries, including: The Ministry of State, Ministry of Justice, Ministry of Resources and Development, Ministry of Commerce and Trade, Ministry of Finance, Ministry of Health, Ministry of Education, and the Ministry of Community and Cultural Affairs. Included below is a chart that further outlines the Bureaus associated with each Ministry Cabinet.

The Council of Chiefs includes sixteen traditional chiefs that are chosen from each of Palau's sixteen states. The Council of Chiefs also assists the President on matters pertaining to traditional laws and customs. The Council has advisory authority at the national level and is highly respected within the community. There is also a complex traditional hierarchy among the sixteen chiefs that remains an important function during the process of decision-making. According to Palau's government website, the Council of Chiefs "ensures the preservation of traditional ways and the continued success of the democratic government."

The Judiciary consists of the Supreme Court, which is constitutionally vested with final judicial power, and the Court of Common Pleas, which is similar to the United States District Court, as well as Land Court. There are three judges who sit on the Supreme Court, one Senior Judge for the Court of Common Pleas, and four Land Court judges.

Similar to the American model, Palau is divided into sixteen states which exercise a great deal of autonomy. Each state has its own governor, executive branch, state legislature, traditional leaders, and state treasury. However, at the state level, it is common for traditional leaders and chiefs to retain more power than elected officials. During my visit to Palau, there seemed to be a running joke that Palau is over-governed for a nation with only 21,000 people (Veenendaal 2013). The state of Hatothobei is an extreme example of this, in which the state maintains a population of only forty individuals but has a nine-member legislature, a governor, a lieutenant-governor, a treasurer, and ten traditional leaders (Veenendaal 2013).

#### *Absence of Political Parties in Palau*

It is also interesting to note that Palau has successfully maintained a functioning democracy without the establishment of political parties. Although there are no laws that prohibit the formation of a party system, such a system is not mentioned in the Palauan constitution or current statutes (Veenendaal 2013). Currently, all Palauan politicians run and serve as independents and, according to one article the “political environment is primarily determined by clan membership” (Veenendaal 2013, 22). Arguably, because political alliances are primarily based on kinship and clan membership, these bonds may be even stronger than party loyalties. Under the Trust Territory of the Pacific Islands, the United States government attempted to create political parties, though these parties were never fully formulated as the clan system was more widely accepted and retained a greater degree of authority. In many ways, the clan system has rendered political parties obsolete given the smallness and personal connectedness of a population of only 21,000. Today, given Palau’s small population, it is often the size of a clan or family that determines election outcomes. To emphasize the smallness and closeness of the

Palauan community, in the most recent presidential election, current President Tommy Remengesau Jr., ran against his brother-in-law Surangel Whipps Jr.!

### *International Maritime Law through the 20<sup>th</sup> Century and Palauan Implications*

To digress slightly, it is important to take a step back and examine international maritime law in the 20<sup>th</sup> century to put into context the progressive maritime protections that the Republic of Palau has established since the nation's inception. The history of the Law of the Sea in the 20<sup>th</sup> century involves both the codification of existing rules and the negotiation and addition of new rules. The League of Nations Hague Codification Conference in 1930 was the first international conference regarding maritime rights (Rosenne 1975). Although no treaty was adopted, the majority of delegates supported the idea of sovereignty over territorial sea, despite no consensus on the precise geographical distance of territorial jurisdiction. At that time, the width of the territorial sea was determined by the "Cannon Shot Rule" in which the state had territorial jurisdiction up to three miles out at sea, or roughly by the distance that a cannon could be fired (Kent 1954). This Rule reflected the 17<sup>th</sup> century principle *terrae dominum finitur, ubi finitur armorium vis* (the dominion of the land ends where the range of weapons ends) (Kent 1954). However, by the turn of the 20<sup>th</sup> century, it was clear that this rule was outdated and required immediate adaption.

Following WWII, control over Pacific maritime resources and strategic maritime locations became crucial initiatives for the United States government. It is no surprise that the field of Pacific Studies in America emerged as a result of U.S. strategic interests in the Pacific region (Wesley-Smith 1995). The beginnings of the field of Pacific Studies are discussed at length in Dr. Terence Wesley-Smith's article, *Rethinking Pacific Island Studies* (1995). Roughly two weeks following the end of the war, President Truman issued Proclamation 2667 through an

Executive Order on September 28, 1945 declaring that the “Government of the United States regards the natural resources of the subsoil and sea bed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control” as well as Proclamation 2668 that additionally “establish[es] explicitly bounded conservation zones in which fishing activities shall be subject to regulation and control of the United States.” Between 1949 and 1956, the International Law Commission produced Articles concerning the Law of the Sea that eventually formed the basis for negotiations in Geneva in 1958. However, one of the first mentions of exclusive jurisdiction beyond traditional territorial seas was initiated by the United States under the Truman Proclamation of September 28, 1945, and the first areas to claim maritime zones of 200 nautical miles were Chile and Peru in 1947 under the Presidential Declaration Concerning Continental Shelf. Nevertheless, the 200 nautical mile zone was not fully adopted until 1982 with the Third United Nations Convention on the Law of Sea (UNCLOS III).

The United Nations held its first Conference on the Law of the Sea in 1958, in which four conventions were established: The Convention on the Territorial Sea and Contiguous Zone, the Convention on Fishing and Conservation of Living Resources of the High Seas, the Convention of the High Seas, and the Convention on the Continental Shelf (Brisman 2011). Unfortunately, none of these conventions came into force, as the environmental protections proved inadequate and unsuccessful in establishing a comprehensive duty to protect marine ecosystems or address marine pollution (Brisman 2011). Nevertheless, the establishment of the contiguous zone as not exceeding twelve nautical miles proved successful; however, the width of the territorial jurisdiction out at sea remained unsolved.

The Second United Nations Convention on the Law of Sea (UNCLOS II) was held from March 17 to April 26, 1960 and failed once again to establish any international agreement or consensus on fisheries management. A proposal for a six-mile territorial sea plus a six-mile contiguous zone failed by only one vote. However, by the Third Conference, feelings of solidarity began to emerge. In a speech to the United Nations General Assembly in 1967, diplomat Arvid Padro, who was the Maltese Ambassador to the United States at the time, proposed a need for a new and comprehensive Law of the Sea Convention that addressed issues regarding seabed mining beyond the confines of national jurisdiction (Rothwell & Stephens 2016).

The Third Conference on the Law of the Sea (UNCLOS III) convened once again in 1973 and concluded in 1982 (Rothwell & Stephens 2016). These long and difficult negotiations and extensive treaty processes proved enormously valuable. At the time of implementation the treaty known as the “Constitution for Oceans” included 320 articles, nine annexes, and two implementing agreements (Rothwell & Stephens 2016). It covered rules for coastal states including: territorial sea and innocent passage, foreign commercial shipping, exclusive economic zones, continental shelf, status of archipelagoes, navigation, marine pollution, fishing conservations, marine scientific research, and dispute resolutions. Marine pollution was an especially hot topic given the recent Tory Canyon Oil spill in 1967 off the coast of England, followed by the Santa Barbara oil spill in 1969 in which an estimated 100,000 barrels of crude oil spilled into the ocean. One key feature of UNCLOS III was that the negotiations were initially determined by consensus, where the parties and nations involved did not vote on individual articles; rather, the entire treaty was negotiated as a packaged deal (Rothwell &

Stephens 2016). As a result, each party was required to accept all aspects of the treaty or none of it, without reservations.

However, the adoption of the final text was not determined by consensus, as the United States forced a vote along with other industrialized nations voicing their concerns of seabed mining beyond national jurisdiction. Most nations agreed that seabed mining beyond national jurisdiction would require the supervision of an International Seabed Authority (ISA); however, developing states wanted a strong ISA to promote production controls, internationally controlled mining, and technology transfer requirements. On the other hand, highly industrialized nations that had corporations invested in deep-sea mining wanted a weak ISA to protect their private companies' investments, technology and commercial mining systems (Rothwell & Stephens 2016). As a result, the ISA established under the Convention was unacceptable to developed nations and it was decided that an implementation agreement of 1994 would create an ISA in which developed states would have greater control of seabed mining, and mining corporations would pay much lower royalties on their activities outside their national jurisdiction (Rothwell & Stephens 2016). This had a strange impact on the UNCLOS III as the deep-sea mining regime was amended before the treaty even came into force (Rothwell & Stephens 2016). Today, despite the amendment being designed to appease U.S. objections, the U.S. has still not ratified UNCLOS; though it does recognize some of the articles as customary international law.

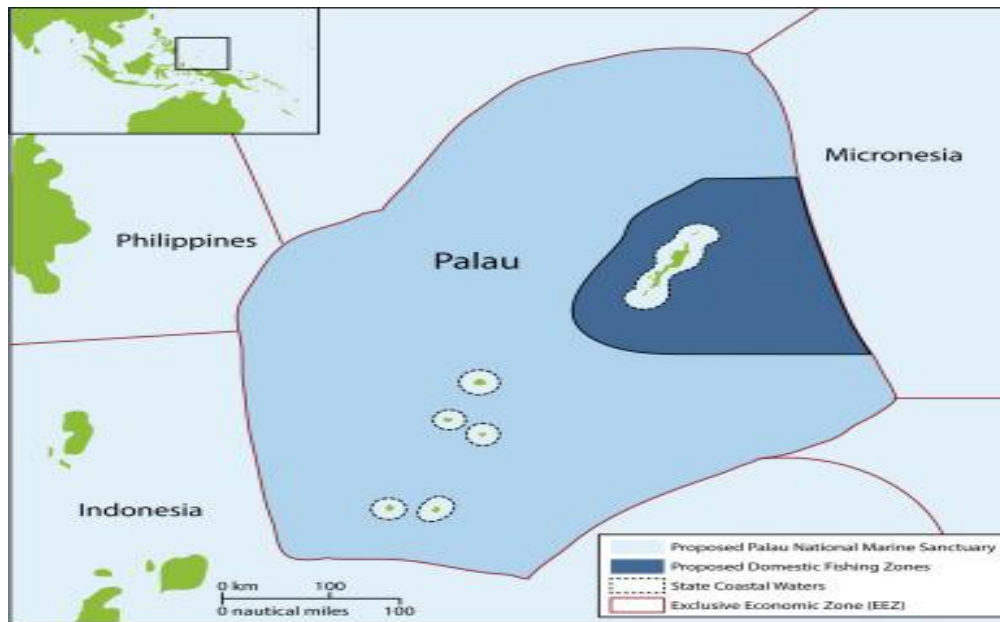


Figure 5: The Palau National Marine Sanctuary (500,000 km<sup>2</sup>, 80% of Palau's Exclusive Economic Zone), in which no extractive activities will be permitted by 2020, and the proposed domestic fishing zone.  
<https://www.sciencedirect.com/science/article/pii/S0308597X17302063#bbib6>

The Republic of Palau received its independence two months after the Law of the Sea and the Implementation Agreement of 1994 was enacted. Within twenty-five years, the Republic of Palau has declared 80% of its exclusive economic zone a marine reserve in which no fishing or mining can take place. To provide some context, the island nation of Palau is roughly the geographical size of New York City, and the marine sanctuary that is being protected is slightly larger than the state of California. The Exclusive Economic Zone is a sea zone established by UNCLOS III that states that a nation's marine jurisdiction stretches out 200 nautical miles from its coastal baseline.

#### *Protected Areas Network Act and Micronesia Challenge*

The Republic of Palau has enacted numerous progressive laws pertaining to the governing of marine spaces, including but not limited to: the Palau Shark Sanctuary, the Micronesia Challenge, various renewable energy projects, the Manta Ray Conservation Act, the

Palau National Marine Sanctuary, the Protected Area Network Laws and the Eco-Pledge. Additionally, proposed laws pertaining to environmental conservation have successfully passed in the National Congress. Many of these conservation milestones are listed in the table below, and represent Palau's incredible commitment to environmental protections of their ocean and landscapes since independence. In this table, I've selected a number of conservation initiatives that I felt showcased Palauans strong commitment to marine protections and demonstrated a form of marine sovereignty since the nation's independence in 1994. Although Palau is a relatively small island nation, its environmental policies demonstrate that the nation is exercising its sovereignty to exclude other nations, business ventures, or international fisheries from depleting their marine resources throughout their exclusive economic zone (Mawyer & Jacka 2018).

Name	Date	Summary
Marine Protection Act	1994	An Act to regulate the taking of certain species of marine and terrestrial organisms, and to prohibit or limit certain fishing methods. Three additional amendments have been made since inception (RPPL No. 4-35; RPPL No. 9-28; RPPL No. 9-50).
Palau International Coral Reef Center Act	January 12, 1998	An Act to create the Palau International Coral Reef Center as a self-sustaining, non-profit coral reef center that will provide a forum for coral reef studies, research and education.
Protected Area Network	2003	The PAN Act establishes a nationwide framework aimed at achieving its commitment to the Micronesia Challenge by conserving 30% of its near-shore and 20% of its terrestrial resources by 2020.
Micronesia Challenge	2006	A regional commitment to conserve 30% of near-shore and 20% of its terrestrial resources by 2020.
Palau bans bottom trawling	March 9, 2006	An Act to ban the practice of bottom trawling in the territorial waters and exclusive economic zone of the Republic of Palau.
Shark Sanctuary	2009	An Act banning all commercial shark fishing in its waters.
Marine Mammal Sanctuary	October 25, 2010	An Act declaring all the waters within Palau's EEZ a marine mammal sanctuary to provide a safe haven for whales, sharks, and dolphins.
Dugong Protection Act	2013	An Act to increase the penalties for killing or causing injury to a dugong or possessing or selling any dugong parts or products, and for other related purposes.
Palau National Marine Sanctuary Act (RPPL 9-49)	October 28, 2015	An Act to designate 80% of Palau's EEZ as a no-take zone and 20% as a domestic fishing zone
Manta Ray Conservation Act	July 14, 2015	An Act to establish a no-boat zone in the German channel, a popular tourist destination, for the protection of manta rays.
Ecological Oath "Palau Pledge"	April 2017	An Act to issue visas to tourists who sign an eco-pledge, promising to act in an environmentally responsible way.

Table 2: Conservation Milestones in Palau Since Independence (1994-2018)  
(Created by Alana Pollack)



The balance of power between states and the national government is slowly evolving and frameworks are being developed that encourage the cooperation of both entities (Ridep-Morris 2004). According to Palau's Constitution, states have "exclusive rights" over inshore resources up to twelve nautical miles. Therefore, states maintain the authority to manage marine resources. With authority vested in each of Palau's sixteen states, the Protected Area Network Act strengthens customary management of resources and traditional knowledge.

In 2003, the Palau Protected Areas Network (PAN) came into force and created a framework for marine protected areas on a national level. Private individuals, communities, and states were allowed to apply for membership that would make them eligible for national funding, and access to various technical resources. As of 2017, there are more than forty conservation areas throughout the sixteen states of Palau. On January 31, 2017, the Micronesia Conservation Trust (MCT) Board approved a resolution to disburse \$435,362.00 to the PAN Fund. The first site under PAN was Lake Ngardok, which supplied a large percentage of drinking water to the nation's capital and holds the title of the largest natural lake in all of Micronesia.

These efforts are directly aligned with the Micronesian Challenge, a conservation commitment whose members include three countries and two territories: the Republic of Palau, the Republic of the Marshall Islands, the Federated States of Micronesia, the Territory of Guam, and the Commonwealth of the Northern Mariana Islands, brought forth by the *Olbiil Era Kelulau*, the Republic of Palau's National Congress, under the House Joint Resolution No 7-60-10 (Kleiber 2014). The Micronesian Challenge, launched in 2006 is an ambitious commitment aimed to conserve 30% of near-shore marine resources and 20% of terrestrial resources across Micronesia by 2020 (Kleiber 2014). This region-wide initiative represents nearly 5% of the Pacific Ocean, roughly 6.7 million square kilometers and 61% of the world's coral species

(Kostka 2018). The Challenge is inclusive of over 2,000 islands, five political jurisdictions, 650,000 people speaking twelve languages, over 150 protected areas, 480 coral species, 1,300 reef fish species, 85 bird species and 1,400 plant species (Kostka 2018). Additionally, the Micronesia Challenge largely influenced the surrounding region to also protect near shore marine and terrestrial resources including the Hawai'i based Green Route Initiative, the Western Indian Ocean Initiative, and the Coral Triangle Initiative (Kostka 2018). However, there are also a number of progressive laws, proclamations, and executive orders promoting conservation and marine protections throughout Palau.

#### *Legislation Pertaining to Palauan Conservation Initiatives*

Although I will discuss a number of presidential proclamations, executive orders, and legislative bills, I chose to also create a table that highlighted environmental legislation that was especially noteworthy in Palau from 2017 to 2018. In 2020, the Republic of Palau will host the “Our Oceans” Conference, an event that brings together scientists, community leaders, government officials and others, to commit to positive changes in marine protections. The Our Oceans event recently held in 2017 in Malta resulted in “433 tangible and measurable commitments including more than 100 commitments from the corporate sector, plus EUR 7.2 billion in financial pledges and 2.5 million sq. km. of additional marine protected areas” (Sala et al., 2018). With increased international attention turning towards Palau, there has been a major push for progressive environmental legislation and initiatives by community members, government agencies and officials, and local activists. The table below is organized by date and includes a brief summary of each initiative. The acronym RPPL stands for Republic of Palau Public Law, as these bills have already passed through the OEK, the Palauan legislature.

Type	Title	Date	Summary
Executive Order 395	Reorganization of Administrative Committee for the Palau National Marine Sanctuary (PNMS)	March 29, 2017	Restructuring the Palau National Marine Sanctuary Office and the Palau National Marine Sanctuary Executive Committee to improve the administrative and management structure of the PNMS.
RPPL No. 10-02	Pristine Paradise Environmental Fee	March 29, 2017	Mandates that every visitor entering Palau will be assessed a \$100 environmental fee (\$10 to Fisheries Protection Trust Fund; \$12.50 to state governments; \$25 to the security, operation, maintenance, and improvement of the Palau International Airport; \$30 earmarked for Protected Areas Network; and \$22.50 to revert to the National Treasury).
Executive Order 401	Water Use and Conservation Policies	June 28, 2017	All National Government ministries, agencies and offices shall immediately conduct independent water audits
Executive Order 402	National Community Clean-Up Days	June 29, 2017	Declares July 7 <sup>th</sup> and 8 <sup>th</sup> National Community Clean-Up Days as a result of dengue outbreak
Executive Order 403	Establishing Palau National Energy Committee	August 10, 2017	Establishes Palau National Energy Committee to monitor and guide all national renewable energy efforts.
RPPL No. 10-14	Plastic Bag Reduction Act	November 8, 2017	Banning retail distribution of plastic bags
RPPL No. 10-20	Pristine Paradise Act	March 29, 2018	Establishes high-value, low-impact tourism development which incentives foreign investment in high-end facilities, with measures offering tax credits up to 40% to wealthy foreign investors interested in establishing high-end accommodations.
RPPL No. 10-24	Ten-year Moratorium on Hawksbill Turtles	April 17, 2018	Moratorium on, and increasing penalty for, the harvesting, taking, selling, purchasing, trading, or killing of hawksbill turtles for ten years.
Executive Order 417	Establish Zero Disposable Plastic Policy	August 8, 2018	Establish Zero Disposable Plastic Policy in all executive branch offices and agencies
Presidential Proclamation No 18-241	Declaring September 2018 as National Preparedness Month	August 15, 2018	Preparation for natural and man-made disasters
RPPL No. 10-30	Responsible Tourism Education Act	October 28, 2018	Requires all businesses to educate visitors on the environmental protections in Palau, and provide alternative environmentally-friendly options to their customers

Table 3: Environmental Legislation in the Republic of Palau (2017-2018)  
(Created by Alana Pollack)

### Executive Order No. 401

In 2017, the Republic of Palau was expected to face a major drought due to El Nino that would likely devastate much of its vegetation and require water rations throughout the community. Given that fresh water is a precious and limited resource and water conservation is integral in the sustainable management of water resources and environmental preservation in Palau, President Remengesau ordered that "All National Government ministries, agencies and offices shall immediately conduct water audit(s)..." to better regulate current water usage in order to develop water conservation practices and reduce water consumption. Additionally, all

National Government ministers or designated staff must "...develop and adopt water conservation plans" including, but not limited to: annual training of employees regarding water conservation requirements, retrofitting of old water systems, creation of water usage signage to educate and remind staff, water conservation targets and audits, bi-annual water conservation efforts and recommendations for improvement and development of incentives to ensure effectiveness (Presidential Directive No. 17-25).

When I arrived in Palau in March of 2018, a mandatory water rationing was imposed in Koror and Airai between 9:00 pm and 5:00 am. On March 24th, it was declared that Palau was under a Water Shortage Alert Level 2, The National Emergency Committee reported that the supply of water coming from the water reservoirs in Ngerimel and Nerikill, Airai had dropped drastically in recent weeks. Ngerimel Dam's usual water level of twenty-three feet had dropped to thirteen feet. A few local Palauans I spoke with, including Ebil Matsutaro, a former Center for Pacific Islands Studies Graduate, stated that a few months prior, water rationing had been limited to one hour per day. The recognition of fresh water as a limited and valuable resource that requires immediate policy review represents Palauans acute awareness of not only their surrounding oceans, but their freshwater resources as well. By rationing their supply of fresh water, Palau is delaying or ultimately avoiding the need for importing fresh water, which could lead to other serious environmental and economic impacts that other Pacific nations are actively facing.

#### **Executive Order No. 402**

In 2017, Palau's increasing marine debris led to an outbreak of dengue that prompted Executive Order No. 402 declaring July 7 and 8, 2017 "National Community Clean-Up" days. Participation was encouraged by all Palauan citizens to "clean up [their] homes and

communities." Furthermore, the Executive Order called on the National Government Ministries to "lead by example" and commit the entire day of July 7th to participate in the National Clean-Up. On Friday, July 8, all government offices were closed and government employees helped with the clean-up efforts ("Palau Celebrates 37th Constitution Day" *Island Times* (Koror, Palau) July 10, 2017)). President Remengesau Jr., announced a second national clean up activity on July 29, 2017 as reports from the Minister of Health, Dr. Emais Roberts, determined that Palau was not yet out of dengue outbreak status. Thirty-five cases of dengue had been reported in the month of July; however, to be downgraded from an outbreak status, the number of cases identified each month must be at ten or fewer (N.L. Reklai, "2nd National Clean Up Slated for 29th," *Island Times*, Koror, Palau, July 19, 2017).

Palau's recognition of the connection between marine debris and harmful effects on not just the environment but people's wellbeing represents an understanding of the relationship between a healthy environment and a healthy population. However, perhaps more impressive is that the Palauan government had the support and commitment to fully act in the best interest of the people. It seems unlikely that a similar order would have the same impact in Hawaii, and the local population would instead expect the government or health department to take charge on the issue. The support by the Palauan community confirms that Palauans are highly concerned with the wellbeing of their environment and each other.

#### **Republic of Palau Public Law No. 10-24**

On April 17, 2018, President Remengesau Jr. signed into law a moratorium on, and an increasing penalty for, the harvesting of hawksbill sea turtles. The bill explicitly forbids the harvesting, taking, purchasing, trading, selling, or killing of hawksbill turtles. This moratorium is especially noteworthy given the turtle's significance and status in Palauan history and culture.

Turtle shell trays, known as *toluk*, are frequently referred to as “women’s money” as Palauan women exchange these valuables during important occasions such as births, marriages, or deaths. Possessing *toluk* is a symbol of status for females and form part of the family’s wealth. Fortunately, the bill allows for existing *toluk* to continue to be exchanged without punishment. By implementing a ten-year ban, Palauans are “...helping the species to rebuild its populations off the shores of our nation” (RPPL No. 10-24). Increasing penalties are also a deterrent, as multiple citations may now lead to fines as high as \$20,000 and jail time. The banning of *toluk* stirs up controversy amongst the local population, as some individuals feel that “the *toluk* represents our history, culture, genealogy, and respect for the turtle – it is not an environmental concern, it’s cultural” while others feel that “the state of our oceans today require reflection and perhaps reconsideration of our own habits.” While both interviewees preferred to remain anonymous as current legislation was still pending regarding these issues, and family members were involved in the disputes, the general population seems relatively divided on these new regulations.

#### **Republic of Palau Public Law No. 10-20**

On March 29, 2018, President Remengesau Jr., introduced the Pristine Paradise Act which promoted "high-value, low-impact tourism development" that "...encourage[d] and incentivize[d] foreign investment in high-end facilities, including facilities which would likely qualify for the highest possible ranking (e.g., "5 stars") under reputable and independent accommodation rating systems." In other words, Palau is choosing to rebrand itself as a luxurious destination and welcoming only high-end established hotels in hopes of attracting wealthier tourists that pose less of an impact on cultural and environmental resources. This bill likely comes as a result of the influx of Chinese visitors and fears of mass tourism and its

potential devastating impacts on the environment. By providing high-end accommodations, the total number of tourists would likely decline, while still maintaining a healthy economy of wealthy visitors. However, current relations with China have resulted in unexpected consequences in regards to tourism, which will be discussed in further detail in Chapter Four.

### **Renewable Energy Projects**

On November 17, 2017, Palau signed the instrument of accession to become the latest member of the Pacific Islands Development Forum at the COP23 climate conference in Bonn, Germany (Gopal 2017). On the same day, Umi Sengebau, the Minister of Environment of Palau subscribed to the Solar Head of State program that offers heads of state a solar photovoltaic system on their residences to demonstrate the benefits of clean energy and a commitment to renewable energy (Narayan 2017). Since the 2008 Energy Efficiency Action Plan, Palauans have enacted a wide range of energy efficient activities. On Babeldaob, the main and largest island in the Republic of Palau, solar streetlights have been installed, compact fluorescent lamps have replaced incandescent light bulbs, and two-stroke oil engines on boats are actively being phased out (Energy Transition Initiative 2015). Additionally, Palau's renewable energy goals include 20% of electricity from renewable sources by 2020, and a 30% reduction in energy consumption by 2020 (Energy Transition Initiative 2015).

### **Palauan Historical Preservation Office**

Place names embody rich histories of an area and are significant in passing down oral histories, events, and cultural lessons to people and children. Place names, chiefly titles, legends, and alliances between villages provide a bridge linking the ancestors of Palau to the Palauan people of today. Like other traditional knowledge systems, learned place names are passed down from parent to child. Typically, transmission takes place in the home, and is later reinforced into

the community. Often traditional villages retain their importance as ancestral homelands for relocated communities as it establishes a lineage for members of their clans and villages (Snyder 1997). In doing so, people can claim their ancestral lands and continue to gather, grow, harvest, and cultivate their plots on their ancestral grounds (Snyder 1997). Arguably, place names are so important in Palauan culture, that they are indirectly part of every Palauans' birth certificate. Simply by stating where a child was born and who his/her mother is, encompasses not only parental rights, but a lineage of members of their clans and villages to which they belong.

Recent efforts are being made to preserve and promote traditional Palauan place names. The Palau Bureau of Arts and Culture and the Palauan Historical Preservation Office are now required by law to record all properties of the Republic of Palau, and as of last year, the Oral History and Ethnography section of the Bureau of Arts and Culture is completing a project on traditional Palauan place names that will eventually be distributed for educational purposes. The Ministry of Education is often the primary recipient of the reports published by the Bureau of Arts and Culture that are then used by educators to teach Palauan values and cultural practices in schools (Snyder 1997). From grades one to twelve, the Ministry of Education has developed a Palauan studies curriculum designed specifically to promote Palauan value systems and language (Snyder 1997). Due to Palau's colonial history, there was a clear contact-induced language shift. Most older Palauans speak Japanese and Palauan; however, since 1945, the English language has begun to replace Japanese in Palau and most other parts of Micronesia (Matsumoto 2009). The re-emergence of traditional Palauan place names ultimately reinforces the importance of maintaining cultural and ecological knowledge for future generations.



### **Ecological Oath “Palau Pledge”**

As of December 8, 2017, the Republic of Palau created the world’s first ecological oath known as the “Palau Pledge.” This Pledge is now stamped into the passports of all visitors entering the country, with the aim of building awareness of the environmental effects of tourism (McEleny 2017). Each visitor will be required to sign the pledge before entering the country, and those found breaking the conditions of the pledge may be fined. This pledge is the first of its kind, and no other nation in the world has altered their immigration laws for purposes of environmental protections. The Pledge reads:

Children of Palau, I take this pledge as your guest,  
to preserve and protect your beautiful and unique island home.  
I vow to tread lightly, act kindly and explore mindfully.  
I shall not take what is not given.  
I shall not harm what does not harm me.  
The only footprints I shall leave are those that will wash away.

Additionally, a short in-flight video will be played on all incoming flights into the country that highlight the concepts of this pledge through the story of a giant who learns about the damage he can do to a delicate ecosystem (McEleny 2017). The video is narrated in Palauan by Palauan children who explain to the giant the destruction he is causing to the environment. No other nation has ever required their visitors to sign an environmental pledge upon entrance into the country; however, this pledge has since been backed by numerous world leaders and conservationists including the Queen of Jordan, John Kerry, and renowned marine biologist, Sylvia Earle. Ultimately, it is imperative that we begin to understand that big ideas can come from small nations, especially vulnerable countries like Palau. However, it is up to us whether we choose to follow their example.

## **The Responsible Tourism Education Act**

The Responsible Tourism Education Act of 2018 which was passed on October 28<sup>th</sup>, requires all businesses to educate visitors on the environmental protections in Palau, encourages businesses to provide alternative environmentally-friendly options to their customers, and serves to improve coordination between public and private sectors in regards to environmental education and awareness. This bill has five main points. First, Section 1009 in 10 PNC 13 amends Palau's official passport stamp to include "an area for visitors to acknowledge the cultural and environmental protection policies of the Republic" for all incoming vessels and aircraft into Palau. The Eco-Pledge has successfully implemented this exact policy in which all visitors must sign the pledge upon arrival at the airport.

Secondly, a new section was added to Chapter 10 of Title 13 of the Palau National Code which further ensures that all visitors on incoming vessels or aircrafts must be notified of Palau's "...environmental protection[s], cultural preservation, or other policies." This amendment does not provide concrete requirements, but rather lists a series of suggestions for notifying passengers either through distribution of literature, a film, or otherwise, of Palau's environmental protections and other policies. This amendment provides communities with the ability to interpret best practices for educating incoming visitors and allows each state to act accordingly.

Thirdly, two new sections have been added to Chapter 16 of Title 11 of Palau's National Code which will require all tour operators to provide their customers with reusable alternatives to plastic or styrofoam cups, plates, bottles, straws, and other food containers. A similar bill was also recently passed in regards to all Executive Branch Offices in Palau offering reusable alternatives to their employees and visitors (Executive Order 417). By providing customers with alternative eco-friendly options, tour operators are encouraging visitors to think about their

ecological footprint and the damaging impacts plastic can have on the environment. Perhaps, this may even encourage returning visitors to pack more mindfully on their next boating or hiking excursion.

Fourthly, an entire new subchapter was added which defined and limited the use of “reef-toxic” sunscreens. The law states that no reef-toxic sunscreen shall be sold, manufactured or imported in the Republic of Palau beginning on January 1<sup>st</sup>, 2020. The penalties will include a fine up to \$1,000 US dollars per violation to ensure that this law be followed by retailers. This Bill is especially timely given the reopening of Palau’s world-famous Jellyfish Lake. In 2017, a report by the Coral Reef Research Foundation found an abnormally high level of sunscreen products in the Lake. This provision found huge support by community members as well as the Palau International Coral Reef Center which had conducted similar reports on the harmful impacts of sunscreen in the past. On July 3<sup>rd</sup>, 2018, Hawai’i also banned sunscreen that was proven harmful to coral, though Hawai’i’s ban does not take place until January 1<sup>st</sup>, 2021. The banning of sunscreen in Palau is much more specific than Hawai’i’s current legislation as it lists a number of harmful chemicals that are prohibited, including but not limited to: oxybenzone, octocrylene, triclosan and other parabens. The Bill also states that the Bureau of Tourism, Palau Visitor and other visitor-focused businesses, will be responsible for developing guidance to retailers in identifying reef-toxic sunscreens.

The final section of the Responsible Tourism Education Act establishes an accreditation or rating system for tourism related businesses based on their commitments and protections of the local environment and Palauan culture. The Palau Visitor Authority was listed as the responsible entity for carrying out the appropriate measures to develop, publicize, and administer the accreditation system that must also be consistent with the Palau Responsible Tourism Policy

Framework. Ultimately, this Act will have significant and positive changes for the tourism industry and will generate public awareness regarding the importance of marine protections and human pollutants.

## Chapter Four: Traditional Approaches

*“Our local chiefs, they understood that the people’s health and prosperity rose and fell with the tide”*

(President Tommy Remengesau Jr., 2014)

### *Introduction*

Traditional practices play a major role in the protection of marine resources in Palau. These practices include long-standing fishing methods that showcase Palauans extensive knowledge systems of their marine environments, customary systems of marine tenure that ensure food security for the local population, and community-based education that emphasizes traditional ecological knowledge as an effective tool for conservation; all of which remain foundational steps towards sustainable management of Palau’s marine areas today. In this chapter, I discuss various sustainable fishing methods as historically practiced by Palauans and discuss their adaption into modern marine management efforts today. I begin with reflections of my time in Palau alongside Ann Singeo, the Executive Director of the Ebiil Society that promotes environmental awareness through traditional Palauan ecological knowledge teachings. I also utilized the late Dr. Johannes’ book *Words of the Lagoon* as a key reference for discussing fishing and marine practices in Palau. The ocean plays a key role in Palau as a focus of cultural and social relations; additionally, it provides a context for interactions and practice, and is the cornerstone of Palauan identity, history and sustenance. The incorporation of traditional Palauan ecological knowledge, and the respectful inclusion of traditional authority at the center of Palauan governance represents a key element that has placed this nation of 21,000 people on an international stage for its progressive marine protections.

### *The Ebiil Society*

One woman who is championing the notion of traditional knowledge as a vital component in modern marine management issues is Ann Singeo of the Ebiil Society. The Ebiil Society first started in 2001 following the establishment of the Ebiil Channel Marine Conservation Area. In 2000, this marine area was placed under a *bul*, or moratorium, by the traditional chiefs of Ngarchelong. Later that year, the Ngarchelong State Government ratified the Ebiil Conservation Area Act of 2000 that established the Ebiil Channel and the surrounding reef as a protected area, which restricted entry and harvesting of marine resources including all forms of fishing. This marine space, roughly 19 square kilometers, is the most important grouper aggregation and spawning site in Palau. Today, the Ebiil Natural Science Training Center is located in the state of Ngarchelong in the northernmost village of Ollei on the island of Babeldaob. The Center which was established in early 2017 has been utilized by students, teachers, researchers, visitors, activists, and community leaders with the purpose of conducting community-based education programs and training for both men and women of all ages.

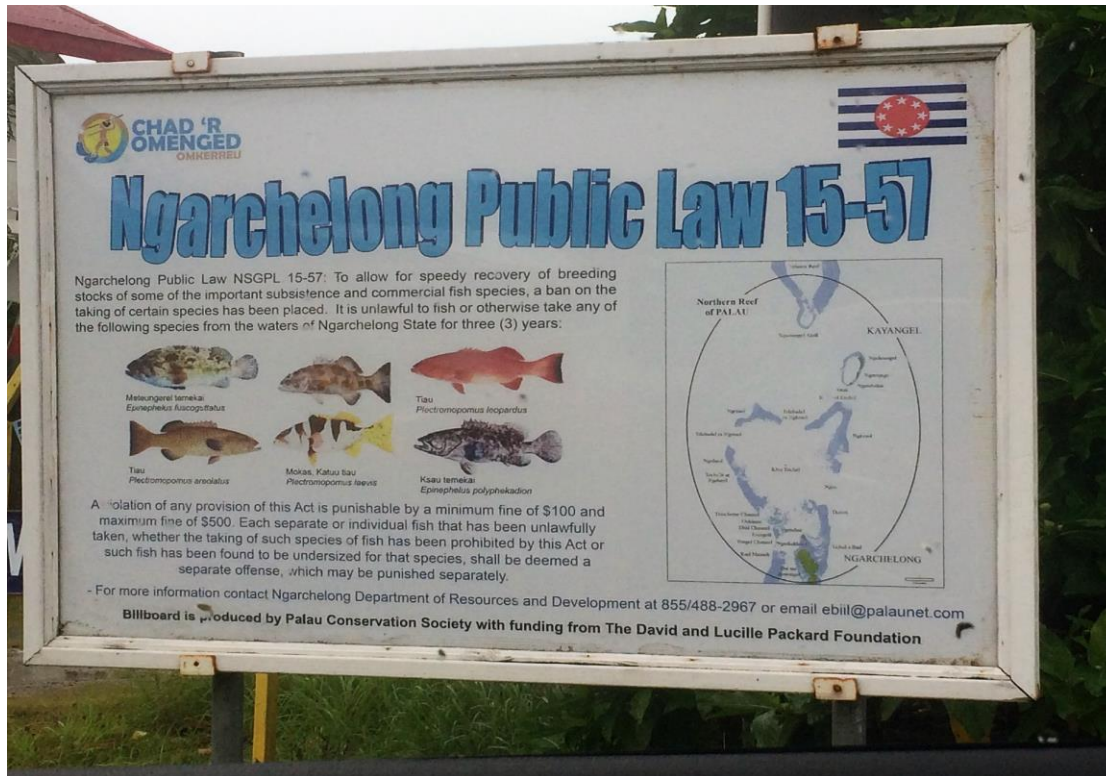


Figure 6: Conservation sign posted outside of the Ebiil Training Center reminding fishermen of the ban of certain species of fish for the next three years  
(Photo by Alana Pollack)

The society encourages environmental awareness through traditional knowledge teachings exercised in the Palauan language via experiential learning including field visits to taro farms, boat trips to monitor dugongs, summer camps, visits with local elders, fishing derbys, and many other environmentally focused activities. While I was visiting Palau, I had the opportunity to not only interview Ann, but also accompany her on a boat trip around Northern Babeldaob in search of dugongs, a marine mammal that resembles a manatee. She and her staff hired a drone photographer, Jon, who was also on the boat with us to record footage of dugongs feeding in the area.



Figure 7: Monitoring dugongs near the Ebiil Channel. Ann Singeo is pictured standing on the far left.  
(Photo by Alana Pollack)

This boat excursion marked the fifth outing in the last month organized by Ann to document dugong behavior. The recording of dugongs, Palau's most endangered species, in this area is a direct result of a recent proposition to dredge the area for purposes of expanding Palau's International Airport. By providing drone imagery of the dugongs, the Ebiil Society hopes to promote public awareness that this particular channel should be a designated conservation area to protect dugongs. Dugongs represent an important and prestigious place in Palauan history. According to Ebiil Matsutaro, a Palauan attorney pictured at the stern of the boat adorned in a red cap, dugongs, or *mesekiu*, were harvested for its meat and neck bones that were used as valuable bracelets known as *olecholl* as a sign of prestige and power. Additionally, the spotting of a pod of dugongs were thought to bring good fortune to one's family. However, today, the image of a dugong has become synonymous with conservation efforts throughout Palau, as they are among Palau's most endangered species.





Figure 8: Ebiil, Richard, Jon and Ann reviewing drone footage at the Ebiil Natural Science Training Center, of our recent boat trip where we spotted six dugongs, including two babies feeding  
(Photo by Alana Pollack)

The studies at the Ebiil Natural Science Training Center involve learning practices and knowledge associated with certain traditional industries. Female students are taught traditional planting, harvesting, and cooking techniques associated with local crops by women elders in the area. Whereas male students learn from the village fishermen the importance of sustaining a productive and healthy reef, and appropriate fishing practices. In 2005, Ann Singeo launched the first ever Camp Ebiil, a one-week summer camp for Palauan elementary and middle school students that focused on indigenous knowledge, practices, and processes that embrace environmental protections and Palauan conservation values and principles. Today, Ann offers two summer camps a year – one in early June, and another in July. This past summer saw a total of 11 camp counselors and 38 campers in the first week one, and another set of 11 counselors and 37 new campers in week two. According to Ann, the popularity of these camps is becoming

so widespread that her and her staff are considering adding three or four more camp sessions next summer to accommodate the number of interested students.

The Ebiil Society also partners with a number of public and private schools in Palau – thirteen this year as of April, and runs training programs for their students ages six to sixteen. When I arrived at the Ebiil Training Center to first meet Ann, a group of fifteen sixth graders from a school in Ngarchelong were gathered outside the Center to embark on a boating expedition around the Ebiil Channel to learn about certain fish species in the area from a local fisherman. According to Ann “The biggest effort in this campaign has been creating that sense of inclusivity of the fishermen in the complete process of designing effective fishery management policies.” The fishermen serve as the tour guides on all boat excursions with the children. Fishermen are the major economic drivers of the economic market in Palau, and by including them at the center of this learning, it ultimately increases the recognition and benefit of an economy driven by Palauans. The fishermen are eager to pass on their traditional knowledge to the next generation, as well as share important regulatory practices of catch and release based on size limits to the children.

In the last five years, the Ebiil Society has also opened its doors to international students and staff to come together and learn about Palau’s natural environment and encourage the sustainable management of resources globally. Although the curriculum for international students is different, much of the value are the same, and the emphasis is always on supporting Palau's local ecology. Students and staff from Japan and Taiwan have taken advantage of this incredible camp and both countries have provided tremendous financial support to the Ebiil Society over the years.

As I continued speaking with Ann, I was amazed at her passion for perpetuating not only Palauan ecological knowledge, but the Palauan language, itself. Her and her staff pride themselves on only conducting their trainings (with Palauan students) in Palauan. From an early age, Palauan students are required to learn English and eventually the school instruction is conducted entirely in English. When students and their teachers visit the Ebiil Training Center she encourages only Palauan to be spoken. She cites Nelson Mandela's famous quote "If you talk to a man in a language he understands it goes to his head. If you talk to him in his language, that goes to his heart." She further explains that the environment is encoded into much of the Palauan language from everyday colloquial talk to proverbs and expressions, and to pass on ecological knowledge in any other vernacular would limit the child's full comprehension of the incredible cultural understanding of these important lessons. I have provided a few examples below of environmental encodings within the Palauan language.

### *Environmental Encoding in Palauan Language*

Rather than celebrating diversity within the region, Westerners have equated diversity with divisiveness and independence with instability, further propagating a negative view of Pacific Islanders (Kabutaulaka 2015). The linguistic diversity of the Pacific encountered by early European colonialists and missionaries was seen as an obstacle in colonial expansion. However, to Pacific Islanders linguistic diversity represented a channel through which they could express their identity within a place, village, clan, or larger community. Language provided the ability to be with others in the world, and each conversation had the power to create, destroy or maintain social relationships. Language is the principal means by which conduct our social lives; so, it is of no surprise that the Palauan language is marked with intense intricacies that relate to the environment.

The environment has been encoded into several Palauan language domains, including popular sayings that often relate to marine animals and their seascapes. *A rekung el daob a mla otitech a rekung el beluu* is a popular Palauan proverb that roughly translates to “Sea crabs have pushed out land crabs” (McKnight 1968). This adage refers to outsiders taking over land or titles from local people and represents a unique marine analogy of an actual environmental phenomenon. Land crabs have always been a plentiful resource in Palau; however recently there has been a sharp decline due to exploitation (Matthews 2002). This proverb compares the capitalization of land crabs with the exploitation of Palauan land titles into the hands of foreigners. Additionally, another proverb, *A redil a desemelel a sechal*, translates to “the woman is the outrigger for the male” (McKnight 1968). In other words, a woman helps to stabilize a man in the sense that an outrigger stabilizes a canoe; additionally, this quote could also be interpreted as a nod to Palau’s matrilineal heritage and the important roles women play in society. Another Palauan proverb explains the expected role of a strong leader who is capable of dispelling issues facing his people, *A ungil el merreder a ua chull el melemedem er a daob*. Roughly translated, this proverb states: “a good leader, like rain, stills the ocean” analogizing the ocean as a representation of the Palauan people further highlighting Palauans inseparable connection with their marine space (McKnight 1968). Furthermore, in the Palauan National Anthem there is also an ode to Palauan lands, which I would argue is inclusive of marine spaces as well, the line reads “Our life is anchored in Palau, our land -- We with our might through life and death defend – In spirit let’s join hands, united, one – Care for our homeland...from forefathers on.” In this instance, there is an emphasis on protecting Palauan lands which most likely is directed at the colonial powers that have exploited Palau’s natural resources, with particular attention to the United States and the nuclear free struggle Palauans endured for over a decade. The nation’s

motto also encapsulates the natural beauty of the island, as it is often referred to as “Rainbow’s End” due to their numerous rainbows, and possibly lending itself to the folkloric notion of a treasure that only few are lucky enough to witness. Aside from popular sayings, Palauan ecological knowledge is also exemplified in the minds and actions of local residents, perhaps none more so than by Palauan fishermen.

### *Traditional Ecological Knowledge*

Traditional Ecological Knowledge (TEK) refers to the knowledge acquired by indigenous peoples over hundreds or thousands of years through direct interaction with their surrounding environment. TEK is an accumulated body of knowledge that has been passed down for generations through cultural transmissions and encompasses the complex relationship between humans and their environment. This knowledge is often subject to a particular location and can be linked to landscapes, seascapes, animals, plants, natural phenomena and even timing of events that would be necessary to ensure survival (i.e. hunting, fishing, and agriculture) (Rinkevich 2011). In addition, linguistics can also impart invaluable insight into a culture and how they interact with their immediate environment. For example, Palauan fishermen were so in tune with their surroundings that the Palauan language specifies fish names depending on the lifecycle stage of the fish. (Johannes 1989). Additionally, the Palauans developed certain tools for fishing depending on the time of day, month or year, and weather conditions. For example, if winds were strong, according to Palauan fisherman, it was more effective to use fish traps than hooks (Johannes 1989).

An increasing number of indigenous people and scientists believe that TEK and Western science are complementary; however, an integration of both knowledge systems can be difficult when attempting to manage, preserve, and protect the environment and its wildlife. Nevertheless,

Palauan's have successfully incorporated elements of their traditional conservation systems into a Western legal framework in establishing MPAs throughout Palau. Having been an independent nation for a mere thirty years, it is remarkable that a nation with a geographical size roughly equivalent to that of New York City has successfully protected 80% of its ocean, through an incorporation of traditional and modern techniques.

### *Palauan Fishing Methods*

The sea has played an extraordinary role in the lives of Pacific Islanders throughout history and has influenced Islanders perceptions of the sea as a result of their ecological knowledge as fishermen and voyagers (D'arcy 2006). Rather than a barrier, the sea was viewed as a bridge for island communities and provided a passageway to connect to their friends and families. Additionally, marine animals were viewed as much more than just a source of food but an embodiment of ancestors, spiritual beings or gods. Fishing methods also represented a great deal of skill and understanding of the environment. In Palau, many fishermen possess a vocabulary inclusive of more than 300 species of fish and are capable of detecting even the smallest differences between species (Johannes 1981). Their extensive knowledge of their marine ecosystems was vital not just as a source of livelihood, but also proved invaluable with the establishment of marine protected areas. With thousands of years of experience and interactions with their environment, Palauans are regarded among the most expert fishermen in Micronesia. During my stay in Palau, I had the opportunity to go on several fishing trips with a village chief in which he imparted a trove of Palauan ecological knowledge in relation to fishing techniques and marine life on me. However, for purposes of this section, I chose to rely on Dr. Johannes' book *Words of the Lagoon* to highlight a number of traditional Palauan fishing methods that exemplify Palauans close interaction with their surrounding oceans. Personally, I

felt as though the knowledge being relayed to me was not meant to be circulated or published, whereas Dr. Johannes' book was widely accepted by a number of Palauan and international scholars. The following sections include information on fishing techniques, habits of various marine species, traps, and visual cues to look for when fishing that represent Palauans intimate connections with their environment.

### **Fishing Spears**

Traditionally Palauan fishermen used throwing spears, *klibiskang*, to hunt *uluu*, small mullet fish on the reef flat, typically in six to eight inches of water. When a school of fish were spotted, the fisherman would whistle to draw the attention of others and each man would pick a fish and chase it into shallower waters (Johannes 1981). If rabbitfish were sighted, the fishermen would work together to get between the school and the deep water and drive the fish back to shallow waters for an easy catch (Johannes 1981). *Klibiskangs* are still used for subduing larger fish today. Once caught, the fisherman would thrust the *klibiskang* into the brain of the fish as a means to subdue it prior to being boated (Johannes 1981). In Palau fishing was often a communal endeavor among men that promoted a sharing of resources. The fisherman's catch was expected to be divided among family and clan members and shared with others in the community. Although, the sharing of fish may be prevalent in certain parts of Palau today, for the most part the commercialization of fish has prompted Palauans to sell rather than share their fish stock with other villages and communities.

### **Using Marine Animals to Catch Marine Animals**

Due to Palauans' extensive knowledge of their environment, it is no surprise that the inclusion of marine animals in catching other marine animals was a tactic among local fishermen. For instance, when a sea cucumbers' skin is rubbed, it emits a red toxin that was used

by fishermen to kill fish in shallow areas during low tide. This toxin was also used when hunting octopi as the toxic liquid would force the animal out from its lair and into the open where fishermen were able to spear it. This toxin was also used to temporarily paralyze large, poisonous sea anemones so that the anemone would not retract into its hole as the fishermen dug it out from the reef (Johannes 1981). Additionally, fishhooks were made from the shell of hawksbill turtles, while throwing spears were tipped with spines of stingrays (Johannes 1981).

Because Palau is surrounded by extensive reefs and lagoons, fishermen rarely ventured beyond the outer reef; however, one type of offshore fishing, *oungeuaol*, was practiced by a few fishing specialists (Idechong 2018). Oungeuaol was a method of open-ocean fishing for certain species of sharks (Johannes 1981). Sometimes these ventures took fishermen up to ten miles offshore, primarily off the east coast of Babeldaob where sharks tended to congregate due to the ample driftwood. Flying fish were used to lure the sharks to the canoe, and a noose made of hibiscus fiber was used to catch the shark (Johannes 1981). Although sharks used to be a highly esteemed food in Palau, today the delicacy is not as popular. Interestingly, sharks were not deemed a prestigious food due to their taste, but instead to their method of capture (Johannes 1981). In speaking with Noah Idechong, an internationally renowned Palauan environmental activist, he recalled similar sentiments "Palauans never really did much there [deep ocean] and so the only thing that we did was a kind of fishing ritual...shark noosing, .it was a very prestigious duty." The Oungeuaol fisherman had a special tattoo on his wrist that proved he was an expert shark catcher. While holding out a flying fish to attract the shark, the fisherman was not supposed to let go of the flying fish until the shark's snout touched his tattoo (Johannes 14). It is unique for a specialty food item to be revered for its catch rather than its actual taste; however, Palauans understood the difficulty of hunting sharks, so one could argue that the prestige



associated with consuming shark was far more representative of the fisherman who caught it, than the shark meat itself.

### **Fish traps**

It is believed at one point Palauans used at least thirteen different types of wooden fish traps, although, only one is commonly used today (Kramer 1929). This trap typically is three to four feet high and six to seven feet long (Kramer 1929). The trap is often placed in shallow water; however, unlike most fish traps in which the traps are pulled to the surface, the Palauan fishermen dove down to the trap, opened the door, and speared the trapped fish one by one using a hand-held spear (Johannes 1981). The reason Palauans chose to dive for their fish trap is because the trap was camouflaged with rock piling, so lifting the trap to the surface would prove time-consuming and would require significant effort to replace the trap after it was reset (Johannes 1981). Interestingly, these traps were not baited, as there was no real consensus among Palauan fishermen whether bait actually helped to catch fish when using traps. Rather, many asserted that certain species of fish attract other species into traps. The language surrounding fish traps exemplifies the knowledge Palauan fishermen possessed regarding various species of fish. The method of capture greatly depended on the type of fish being hunted, the season, time of day, and even the gender of the fish.

### **Log Fishing**

For unknown reasons, many pelagic fish tend to congregate around floating logs including: *mahimahi*, jacks, triggerfish, and skipjack (Johannes 1981). When a drifting log is spotted near shore, excitement spreads quickly through the village, and local fisherman rush out on their canoes to fish. According to local customs and laws, anyone may fish around the log; however, the first man to reach it generally has the right to the log (Johannes 1981). On an island

with very little wood, a log, plus the rock and soil carried along with it can prove invaluable, especially in the building of a canoe when the demand for wood was greater than the island's supply of suitable trees (Johannes 1981). The lack of nutrient-rich soil prevented Palauans from planting certain crops and led to a greater reliance on the ocean, as such Palauans extensive knowledge of their marine space was vital for their survival. Today, it is hard for us to imagine mapping the ocean through the geographic method we are accustomed to in mapping land areas. However, it is likely that Palauan ancestors possessed a form of navigating marine spaces that enabled other generations to sustain themselves. Maps can capture only a fraction of a person's or community's knowledge base (Harrison 2007). Location and place names both on land and in the ocean proved an invaluable source of knowledge that aided in the prospering of the Palauan people, and continue to play an important role in society today, particularly in conservation initiatives. However, the balance of traditional fishing methods with increasing fishing pressures, increasing demand by the booming marine-based tourism sector, and anthropogenic pressures of resource degradation will continue to create a difficult path forward in creating sustainable frameworks that honor both traditional and modern conservation techniques.

## Chapter Five: Sustainable Tourism Frameworks

*“We must meet our duty, at every opportunity, to educate international visitors about how Palau has lasted in this uniquely untouched natural state for so long, and about how we can keep it this way.”*

President Tommy Remengesau Jr. (2018)

### *Introduction*

Palau has managed its tourism industry consistent with its environmental policies to protect its marine areas even at the expense of not maximizing revenue from tourism-related industries. In this chapter, I analyze the reasons behind the fluctuation of visitors entering Palau, and provide a brief historical background of Palauan interactions with tourists. I then discuss Palau’s Responsible Tourism Policy Framework that provides tourism trajectories to ensure a sustainable and resilient tourism market for decades to come. Next, I examine Palau’s political relationship with China, and the impacts Palau’s tourism industry has faced as a result of the nation’s diplomatic alliance with Taiwan. Lastly, I discuss how Palau has managed its tourism sector by placing environmental protections above economic revenue.

### *Tourism: Background and Key Concepts*

Coastal and marine tourism are widely regarded as the fastest growing areas of contemporary tourism (Hall 2001; Wabnitz et al., 2018). Although the exact number of marine tourists remains unknown, it is thought that eco-tourists represent at least 50%, and as much as 94%, of the total number of visitors to Palau, most of whom are divers and snorkelers (Wabnitz et al., 2018). The increasing popularity of marine tourism has placed enormous pressures on coastal and ocean environments worldwide (Miyakuni et al., 2018). An estimated 20% of global mangroves have been destroyed, 19% of coral reefs have disappeared, and nearly 30% of all

seagrass habitats have vanished, primarily due to anthropogenic causes (Spalding et al., 2016). The remainders of these habitats are under severe threat. Small Island Developing States (SIDS) are especially vulnerable to these impacts. Their unique geographical location, climate, and natural and cultural richness makes for an appealing tourist destination, but at the same time, confronts them with a number of distinct challenges and vulnerabilities. As "large ocean states" a label coined by Pacifica writer, Epeli Hau'ofa, the coastal management and safeguarding of marine spaces are major challenges for these ocean nations. Ultimately, investing in sustainable tourism policies is the only way to ensure that the sector continues to advance socio-economic welfare while protecting Palau's fragile ecosystems.

In Palau, tourism is one of the major drivers of the nation's economy today. Since 2007, the number of tourists has increased fourfold from approximately 37,000 in 2007 to 122,000 in 2017, and peaking in 2015 at nearly 164,000 (Wabnitz et al., 2018). As of 2017, tourism continues to contribute to more than half of Palau's economy providing 51% of the nation's GDP (Palau Responsible Tourism Policy Framework [hereafter PRTPF]) and 40% of total employment (Wabnitz et al., 2018).



Figure 9: Total Number of Tourists to Palau (2007-2017)

[http://picrc.org/picrcpage/wp-content/uploads/2018/06/Kaoruko\\_Miyakuni\\_TechRep\\_FINAL06132018.pdf](http://picrc.org/picrcpage/wp-content/uploads/2018/06/Kaoruko_Miyakuni_TechRep_FINAL06132018.pdf)

The recent surge in visitors in the last few years has prompted a nationwide effort to promote sustainable tourism, as growing the tourism industry responsibly is necessary for Palau's economic vitality. However, with the influx of visitors in the last two years, Palau has reexamined its tourism policies and frameworks to ensure that the nation's growth is managed in such a way that it addresses both environmental and social objectives. To this end, Palau's Ministry of Natural Resources, Environment and Tourism developed the Responsible Tourism Policy Framework ("PRTPF") that promotes high-value versus high-volume tourism and has been carefully designed to ensure that Palau is both profitable and sustainable in the future.

#### *Palau Responsible Tourism Policy Framework*

Prior to 2014, Palau's tourism industry primarily serviced higher-spending consumers and largely catered to visitors in the diving market (PRTPF 2017). However, in 2014 and 2015, a spike in packaged deals from the People's Republic of China shifted Palau's tourism industry for the first time into mass-market tourism. Many of these Chinese visitors were traveling via pre-paid packaged tours, resulting in lower in-country spending that ultimately depressed Palau's economy. Additionally, the influx of tourists led to inexperienced tour operators that were unfamiliar with the conservation initiatives, laws, and regulations, and their presence left damaging effects to Palau's marine environment. Government officials, community activists, members, and environmental leaders in Palau began drafting legislation and policies to combat the negative impacts that were occurring as a result of increased tourism. Among the most influential was the PRTFP and Action Plan set forth by the Ministry of Natural Resources,

Environment and Tourism in 2016 with the help of a number of contributors and coordinators.<sup>1</sup> This framework proposed a two-fold approach; first, the policy sought to identify and support areas that could incorporate sustainable initiatives in existing policies, and second, this framework hoped to "halt, mitigate, and where possible, reverse negative impacts..." that arise due to current management and governance of particular tourism sectors (PRTPF 2017, 12).

According to Palau's Responsible Tourism Framework, there are six key objectives for achieving sustainable and responsible tourism practices in Palau. First, there is an imminent need to prioritize, organize and develop responsible tourism awareness across both national and local governments, which includes the establishment of a National Tourism Coordination Board represented by key ministries and other NGOs (PRTPF 2017).

Second, there is a push for managed access of fragile sites to reduce tourism impacts on Palau's environment. One of the most recent examples is the closing of Jelly Fish Lake and other at-risk marine areas. Additionally, strengthened visitor communication regarding respectful and appropriate behavior practices was deemed necessary. The creation of the Eco-Pledge and required viewing at the airport of a Palauan film narrated by children reminding visitors of their responsibilities to the environment are two attempts at strengthened visitor communication. Another major objective of this target was the close monitoring of airline access to Palau. This includes transparency from the airline industries to tourism authorities regarding operation procedures, routes, schedules and salaries.

Third, an effort to prioritize accommodations, services, and experiences that attract high-value visitors and target niche markets was deployed. In furtherance of this objective, President

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<sup>1</sup> Contributors included the Belau Tourism Association, Koror State Government, Palau Chamber of Commerce, Bureau of Agriculture, Palau International Coral Reef Centre, Bureau of Revenue and Taxation, Ministry of Justice and Bureau of Cultural and Historical Preservation among others.

Remengesau Jr. recently introduced House Bill No. 10-15-1,HD2,SD2,PD1 which encouraged and incentivized "high-value, low-impact tourism development" that "promulgate rules and regulations to encourage and incentivize foreign investment in high-end facilities, including facilities which would likely qualify for the highest possible ranking (e.g., "5 stars") under reputable and independent accommodation rating systems."

Additionally, President Remengesau Jr., on April 2<sup>nd</sup>, 2018 signed into law a measure offering tax credits up to 40% to wealthy foreign investors interested in establishing high-end accommodations with the stipulation that these foreign investors be required to maintain a personally designed water-treatment system, power backups, and renewable energy sources so not to put too heavy a strain on the environment. According to President Remengesau Jr., "This will help send a clear message to high-end investors and developers that Palau welcomes their business" (Carreon 2018). Interestingly, this will only apply to foreign investors and the penalty for violating this statute is a mere \$25,000.00, a minimal sum for most corporate investors (Carreon 2018). It is worrisome that investors may simply risk the fine, as the alternative would require a much higher upfront cost (Carreon 2018).

Fourth, there has been a push for enforcing and incentivizing sustainability, authenticity, health and safety for all tourism-sector products and services. In this sense, possible impact measures include exit surveys for visitors that include pedestrian experience, satisfaction with services, and other points of critique. Also, it is important for the visitor's experience to reflect the Pristine Paradise Palau brand, which encourages and advertises pristine, unspoiled beauty and culture on an international level. Palau has branded itself as an environmental destination endowed with some of the highest levels of biodiversity in the world. It is imperative that

visitors understand the responsibility associated with vacationing to an archipelago with a marine ecosystem as fragile as Palau's.

The fifth goal of Palau's Responsible Tourism Framework includes optimal retention of revenue in the local economy. It is important that sustainable tourism practices continue to yield improved benefits for local Palauans. Currently there is a push for "Made in Palau" labels on a number of items to encourage the sale of locally made products. Additionally, there is a mandatory access fee at each designated cultural, natural or historical site that must be paid in cash, including a \$50 fee to visit the Rock Islands, a \$20 fee to visit the *bai*, or cultural meeting houses, a \$5 fee to visit the stone monoliths, and a \$25 fee to visit the bombed out Japanese Communications Center. The Republic of Palau also collects a \$100 Pristine Paradise Environmental Fee which every international airline is required to include in the price of the airplane ticket with the exception of Palauan nationals, pilots, diplomats, and transit passengers (PRTPF). This fee is allocated as such: \$10 to Fisheries Protection Trust Fund; \$12.50 to state governments; \$25 to airport maintenance; \$30 for the Protected Area Network; and \$22.50 to the National Treasury (Pacific Note, Kesolei 2018).

The final goal involves communities being actively engaged in responsible tourism planning at all stages. This includes the establishment of a Tourism Council in each of Palau's sixteen states to encourage responsible community-driven tourism development, and calls for a collaboration of various national industry partners to "educate and inform local media and communities about Palau tourism success stories and positive impacts" (PRTPF 17).

To fully implement the Responsible Tourism Policy Framework and Action Plan the first step involves the establishment of the National Tourism Coordination Board (NTCB) tasked with providing leadership, guidance, and assistance to various government ministries. This Action



Plan is designed not to be prescriptive or exclusive, but rather to present core activities that will be undertaken, along with many other steps to be fully achieved by 2021. These targets, goals, objectives and outcome measures are crucial for the sustainable growth of Palau's tourism industry. Despite a steady flow of revenue generated from this industry, Palauans understand that without proactive steps to combat the negative impacts associated with tourism, Palau will suffer environmental and social ramifications. Therefore, Palauans must take an innovative and sustainable approach to managing tourism to ensure Palau continues to be a pristine paradise for generations to come.

### *Crackdown on Chinese Market*

In 2015, Palau had an overwhelming 88,476 visitors from China alone (Wabnitz et al., 2018). However, due to the current political climate between Palau and China, the number of Chinese visitors has dropped drastically. As of 2017, Palau received 122,566 tourists, 57,866 of which were from China, a roughly 16% decrease from the previous years (Wabnitz, et al., 2018). The number of Chinese visitors entering Palau, and their perceived disrespect for the environment has caused serious tension between the two nations. Many Palauans have claimed a blatant disregard by Chinese tourists of their environment and marine spaces, and as a result the current president issued a proclamation cutting the number of flights from Macau, Hong Kong and Beijing to Palau in hopes of limiting the number of Chinese tourists. This was an extremely controversial move for a nation that relies on their tourism industry for over 50% of their GDP. In the last decade, the People's Republic of China has become the most important country of origin for tourists across the Asia and Pacific region (Coca 2018). Due to the nation's distinct ability to control its outbound tourists, the PRC is beginning to use tourism as a political tool in several different areas throughout the world. For example, in regards to Palau, because of its

longstanding alliance with Taiwan, China is using coercive techniques to isolate and minimize Taiwan's stature in the world to strike back at PRC and punishing those countries that share diplomatic ties with Taiwan. Due to Palau's diplomatic recognition of Taiwan, the PRC has instituted a travel ban on Chinese tourists to Palau by removing it from the Approved Destination Status (ADS) list, which allows state-run Chinese tour agents to operate group package tours to designated countries (Beldi, 2018). Unfortunately, this tourism embargo has led to many empty hotels, the indefinite suspension of Palau's Pacific Airways, the national airlines of Palau, and left tour companies reeling. A report by the South Pacific Tourism Organization (STPO) found Chinese visitors to Palau dropped nearly 23% between the third and fourth quarters of 2017 - a huge blow to the economy considering 50% of Palau's tourists come from mainland China, and about 50% of Palau's GDP comes from tourism (Cheer et al., 2018). However, Palau's President Tommy Remengesau Jr. has shown no sign of switching diplomatic allegiances away from Taiwan - in fact his response has been surprisingly optimistic. According to the President, Palau has been grappling with the impacts of mass tourism and its harmful effects on the environment even prior to the travel crackdown. However, the nation has instead been focusing on restructuring its tourism market away from Chinese package groups towards "high yield, low impact" visitors that target higher-spending, and more environmentally conscious travelers (Beldi 2018).

Nevertheless, during my stay in Palau, there seemed to be a common sentiment shared by many locals regarding Chinese tourists as particularly disrespectful; additionally, many were happy with the decline in packaged tours from China. One local resident, who prefers to remain anonymous stated "The Chinese have no respect for our conservation initiatives...we ban fish, they request it in restaurants, we tell them not to step on our coral, they stomp on it, they do

whatever they want because they have money to do it." Residents have accused Chinese of stepping on corals, polluting the oceans, disturbing the wildlife, blatantly disregarding banned foods, and offending the locals. A recent example that sparked major outrage in Palau was a Chinese tour operator named "Yellow Skin Tour" that distributed pamphlets with pictures of grinning Chinese tourists holding sea turtles by their flippers that they had removed from the water. Although temporarily damaging for the local economy, Palau's crackdown on Chinese visitors is a radical and progressive move that has demonstrated the nation's commitment to its environmental policies above potential economic revenue.

### *Foreign Relations with Taiwan*

Global challenges demand global solutions, and Palau is now at the center of a geopolitical bunfight. Palau is just one of seventeen countries that refuses to give up diplomatic ties with Taiwan and switch allegiance to China (Lyons 2018). Taiwan has funded many of Palau's conservation facilities including providing a US \$4 million dollar loan for aquaculture and agriculture businesses in Palau. Additionally, in 2017, Taiwan delivered almost 2,000 rabbitfish fries that were expected to mature to market value in 8-10 months, a popular fish among local consumers, as part of the Aquaculture Project (AP), one of the Taiwan-Palau bilateral cooperation projects designed to improve Palau's food security and self-sustainability. Taiwanese experts have also established the Animal Production Project that focuses on livestock farming, as well as the Taiwan Technical Mission (TTM) which partners with the Ministry of Education in Palau to hold cooking activities that promote alternative healthy lunch recipes for students, establish school gardens, promote compost production techniques and organize farmers markets. Furthermore, Taiwan and Palau have jointly issued a souvenir sheet of stamps featuring endangered marine species (*China Post*, June 26, 2018). Both Taiwan and Palau rely heavily on

their surrounding oceans for development and economic opportunity, and the partnership on the marine-themed stamps reaffirms both nation's commitment to protect the environment. This also represents Palau's continued strong diplomatic ties with Taiwan that now extends to postal services. Moreover, the Taiwanese ambassador to Palau recently signed the Palau Pledge, a promise to act in an environmentally responsible way upon entrance into the country, and provided a monetary contribution to these efforts. Despite Palauans pressure from China to break all political ties with Taiwan, Palau has remained steadfast to continue its relationship with Taiwan even at the expense of losing revenue from Chinese tourists.

## **Conclusion**

For generations, Palau's traditional leaders have preserved their marine resources by limiting fishing access to vulnerable reef areas. This traditional conservation method, *bul*, has helped to preserve the livelihood and maintain food security for the Palauan people for thousands of years, and remains a foundational step towards sustainable management of Palau's marine areas today. However, Palau is facing new and unprecedented changes. As climate changes, even protected areas like Palau are not immune to ocean acidification, rising sea levels, destructive storms, and other anthropogenic pressures. There is no doubt that Palau's growth is strongly tied to its conservation legacies, as stewardship of its ocean and surrounding environment has always been an integral part of Palauan history. There are many aspects of Palauan history that have contributed to the nation's progressive approaches of its marine environment, including cultural, historical, and spiritual connections. These connections have enabled Palauans to successfully manage their ocean and landscapes for generations, and in doing so, prepared them for future risks. Today the integration of traditional systems of customary marine tenure and government

policies have together helped to establish a successful framework to marine protections beyond the confines of either sector.

The establishment of sustainable tourism policies that encourage environmental protections above economic gains represents a profound commitment that is rarely seen today. Palau has proven itself to be a nation that will stand up to its political neighbors and willingly risk short-term losses for long-term gains. Palau has recognized that simply reducing the number of visitors entering the country is not enough to preserve its pristine environment. Rather a combination of sound political alliances and strong leadership that provides guidance and assistance in implementing sustainable tourism policies is necessary for the continued preservation of Palau now and for generations to come.

For centuries, traditional island communities have developed effective means to maintain and replenish ocean health by establishing protected areas, and finally, these conservation methods are being recognized and implemented into modern marine management initiatives. Palau has successfully integrated traditional approaches with modern best practices for conservation and will likely continue to do so in the future. However, the protection of the world's ocean is not only a priority for our future, but also poses one of the largest challenges and opportunities for sustainable development. The ocean is part of our humanity and we are risking the very ecosystem on which our survival depends if we choose to remain uneducated and misinformed about beneficial conservation practices. In order to understand the conditions under which marine areas exist, we must ultimately understand the history of beliefs, practices and traditions attributed to those environments, by groups who have occupied those areas for generations.

## Works Cited

- Aswani, S., & Hamilton, R.J. (2004). Integrating indigenous ecological knowledge and customary sea tenure with marine and social science for conservation of bumphead parrotfish (*Bolbometopon muricatum*) in the Roviana Lagoon, Solomon Islands. *Environmental Conservation*, 31,
- Aswani, S. (2005). Customary sea tenure in Oceania as a case of rights-based fishery management: Does it work? *Reviews in Fish Biology and Fisheries*, 15, 285-307.
- Aswani, Shankar, Xavier Basurto, Sebastian Ferse, Marion Glaser, Lisa Campbell, Joshua E. Cinner, Tracey Dalton et al. "Marine resource management and conservation in the Anthropocene." *Environmental Conservation* (2017): 1-11.
- Bauman, Richard. "Verbal art as performance." *American anthropologist* 77, no. 2 (1975): 290-311.
- Bambridge, Tamatoa. "Land and marine tenure in French Polynesia: case study of Teahupoo." *Land Tenure Journal* 2 (2013).
- Ban, Natalie C., and Alejandro Frid. "Indigenous peoples' rights and marine protected areas." *Marine Policy* 87 (2018): 180-185.
- Beldi, Lauren "China's 'tourist ban' leaves Palau Struggling to Fill Hotels and an Airline in Limbo," *American Broadcasting Company*, August 27, 2018
- Berkes, F., Colding J., & Folke C. (2000). Rediscovery of traditional ecological knowledge as adaptive management. *Ecological Applications*, 10, 1251-1262.
- Bos, Melissa, Robert L. Pressey, and Natalie Stoeckl. "Marine conservation finance: The need for and scope of an emerging field." *Ocean & Coastal Management* 114 (2015): 116-128.
- Brugh, Theresa A. "Belilou, Beluu el Omechelel a Tekoi (Peleliu, the Place Where Things Begin): Possibilities for the Re/use of Traditional Marine Conservation Practices in the Republic of Palau." (2007).
- Caillaud, A., Boengkih, S., Evans-Illidge, E., Genolagani, J., Havemann, P., Henao, D., Kwa, E., Llewellyn, D., Ridep-Morris, A., Rose, J. and Nari, R., 2004 "Tabus or not taboos." *How to use traditional environmental knowledge to support sustainable development of marine resources in Melanesia. SPC Traditional Marine Resource Management and Knowledge Information Bulletin* 17 (2004): 16-18.
- Christie, Patrick, Nathan J. Bennett, Noella J. Gray, T'Aulani Wilhelm, Nai'A. Lewis, John Parks, Natalie C. Ban et al. "Why people matter in ocean governance: Incorporating human dimensions into large-scale marine protected areas." *Marine Policy* 84 (2017): 273-284.

- Cheer, Joseph M., Stephen Pratt, Denis Tolkach, Anthony Bailey, Semisi Taumoepeau, and Apisalomé Movono. "Tourism in Pacific Island Countries: A Status Quo Round-up." *Asia & the Pacific Policy Studies* 5, no. 3 (2018): 442-461.
- Cinner, Joshua. (2005). Socioeconomic factors influencing customary marine tenure in the Indo-Pacific. *Ecology and Society*, 10, 36-50.
- Coca Nithin, "Chinese Tourists are Beijing's Newest Economic Weapon," *Foreign Policy*, September 26, 2018
- Cros, Annick, Robert J. Toonen, Megan J. Donahue, and Stephen A. Karl. "Connecting Palau's marine protected areas: a population genetic approach to conservation." *Coral Reefs* 36, no. 3 (2017): 735-748.
- Foale, Simon, Philippa Cohen, Stephanie Januchowski-Hartley, Amelia Wenger, and Martha Macintyre. "Tenure and taboos: origins and implications for fisheries in the Pacific." *Fish and Fisheries* 12, no. 4 (2011): 357-369.
- Friedlander, A. M., Y. Golbuu, J. E. Caselle, E. Ballesteros, T. B. Letessier, J. J. Meeuwig, M. Gouezo, D. Olsudong, A. Turchik, and E. Sala. "Marine biodiversity and protected areas in Palau: scientific report to the Government of the Republic of Palau." *National Geographic Pristine Seas and Palau International Coral Reef Center, Koror* 45 (2014).
- Gegeo, David Welchman. "(Re) visioning Knowledge Transformation in the Pacific: A Response to Subramani's" *The Oceanic Imaginary*." *The Contemporary Pacific* 13, no. 1 (2001): 178-183.
- Golbuu, Yimnang, Friedlander, Alan M., Enric Ballesteros, Jennifer E. Caselle, Marine Gouezo, Dawnette Olsudong, and Enric Sala. "Size, age, and habitat determine effectiveness of Palau's Marine Protected Areas." *PloS one* 12, no. 3 (2017): e0174787.
- Gouezo, Marine, Shirley Koshiba, Evelyn I. Otto, Dawnette Olsudong, Geory Mereb, and Jonathan Randa. *Ecological conditions of coral-reef and seagrass marine protected areas in Palau*. Palau International Coral Reef Center, 2016.
- Govan, Hugh, Alifereti Tawake, K. Tabunakawai, A. Jenkins, A. Lasgorceix, A. M. Schwarz, B. Aalbersberg et al. "Status and Potential of Locally-managed Marine Areas in the South Pacific: Meeting Nature Conservation and Sustainable Livelihood Targets Through Wide-spread Implementation of LMMAs: Study Report." (2009): 95.
- Graham, T. & Idechong, N. (1998). Reconciling customary and constitutional law managing marine resources in Palau, Micronesia. *Ocean and Coastal Management*, 40,
- Grip, Kjell. "International marine environmental governance: A review." *Ambio* (2017): 1-15.

- Gruby, Rebecca L., and Xavier Basurto. "Multi-level governance for large marine commons: politics and polycentricity in Palau's protected area network." *Environmental Science & Policy* 33 (2013): 260-272.
- Gruby, Rebecca L., Luke Fairbanks, Leslie Acton, Evan Artis, Lisa M. Campbell, Noella J. Gray, Lillian Mitchell, Sarah Bess Jones Zigler, and Katie Wilson. "Conceptualizing Social Outcomes of Large Marine Protected Areas." *Coastal Management* (2017): 1-20.
- Hall, C. Michael. "Trends in ocean and coastal tourism: the end of the last frontier?." *Ocean & coastal management* 44, no. 9-10 (2001): 601-618.
- Harrison, K. David. *When languages die: The extinction of the world's languages and the erosion of human knowledge*. Oxford University Press, 2008.
- Hau'ofa, Epeli. "Our Sea of Islands." *The Contemporary Pacific* (1994): 158-159.
- Hirth, Harold F. "Marine Turtles." In *Nearshore Marine Resources of the South Pacific*, Inst. Pacific Studies (Fiji), Forum Fisheries Agency (Honiara). International Center for Ocean Development, Canada pp. 329-370. 1993.
- Hviding, E. (1998). Contextual flexibility: Present status and future of customary marine tenure in Solomon Islands. *Ocean and Coastal Management*, 40, 253-69.
- Johannes, R.E. (1981). *Words of the Lagoon: Fishing and marine lore in the Palau District of Micronesia*. Berkeley: University of California Press.
- Johannes, R.E. (Ed.). (1989). *Traditional ecological knowledge: A collection of essays*. IUCN, The World Conservation Union.
- Johannes, R.E. (2002). The Renaissance of community-based marine resource management in Oceania. *Annual Review of Ecological Systems*,
- Jupiter, Stacy D., Philippa J. Cohen, Rebecca Weeks, Alifereti Tawake, and Hugh Govan. "Locally-managed marine areas: multiple objectives and diverse strategies." *Pacific Conservation Biology* 20, no. 2 (2014): 165-179.
- Kabutaulaka, Tarcisius. "Re-Presenting Melanesian Ignoble Savages and Melanesian Alter-Natives." *The Contemporary Pacific* 27, no. 2 (2014): 165-179.
- Kittinger, John N., Joshua E. Cinner, Shankar Aswani, and Alan T. White. "Integrating Customary Practices and Institutions into Co-management of Small-scale Fisheries." *Marine Historical Ecology in Conservation: Applying the Past to Manage for the Future* (2014).
- Kleiber, Danika, and Shirley Koshiba. "Micronesia Challenge Socio-economic Pilot Study, Palau." (2014).



- Lam, Michelle. "Consideration of customary marine tenure system in the establishment of marine protected areas in the South Pacific." *Ocean & Coastal Management* 39, no. 1 (1998): 97-104.
- Lazrus, Heather. "Sea change: island communities and climate change." *Annual Review of Anthropology* 41 (2012).
- Loh, Jonathan, and David Harmon. "Biocultural diversity: threatened species, endangered languages." *WWF Netherlands, Zeist, The Netherlands* 1 (2014).
- Long, Daniel, and Keisuke Imamura. "The Japanese Language in Palau." *Tokyo: National Institute for Japanese Language and Linguistics* (2013).
- Lubchenco, Jane, Elizabeth B. Cerny-Chipman, Jessica N. Reimer, and Simon A. Levin. "The right incentives enable ocean sustainability successes and provide hope for the future." *Proceedings of the National Academy of Sciences* 113, no. 51 (2016): 14507-14514
- Lyons, Kate. "Palau Against China: The Tiny Island Standing Up to a Giant." *The Guardian*, September 7, 2018. Accessed October 10, 2017. <https://www.theguardian.com/global-development/2018/sep/08/palau-against-china-the-tiny-island-defying-the-worlds-biggest-country>
- Lyons, Timothy W., Christopher T. Reinhard, and Noah J. Planavsky. "The rise of oxygen in Earth's early ocean and atmosphere." *Nature* 506, no. 7488 (2014): 307.
- Matapo, J. J. "Becoming Posthuman: Navigating pacific epistemology in Pasifika research." In *PESA Conference 2016 Knowledge Ecologies*, pp. 169-180. Routledge & Springer, 2016.
- Mateata-Allain, Kareva. *Bridging Our Sea of Islands: French Polynesian literature within an Oceanic context*. "The Source: An Interview with Henri Hiro (Rai a Mai)" VDM Publishing, 2008
- Matsumoto, Kazuko. "Language contact and change in Micronesia: Evidence from the multilingual Republic of Palau." (2002): 0168-0168.
- Matsumoto, Kazuko, and David J. Britain. "The role of social networks in understanding language maintenance and shift in post-colonial multilingual communities—The case of the Republic of Palau in the Western Pacific." (2009).
- Matthews, Elizabeth. "Learning about land crabs in Palau." *Learning* 15 (2002).
- Mawyer, A. and Jerry K. Jacka. "Sovereignty, Conservation and Island Ecological Features." *Environmental Conservation* 45, no. 3 (2018):238-251.

- Migdal, Joel S. "Strong societies and weak states: state-society relations and state capabilities in the Third World." Princeton University Press, 1988.
- Miyakuni, Kaoruko, Yoko Fujita, Lincy Marino, and Geraldine Rengiil. "Developing Carrying Capacity for Marine Tourism: The Case of the Republic of Palau." (2018).
- Nero, Karen Louise. *A cherechar a lokelii: Beads of history of Koror, Palau, 1783-1983*. Vol. 1. University of California, Berkeley, Dec, 1987.
- Nunn, Patrick D., William Aalbersberg, Shalini Lata, and Marion Gwilliam. "Beyond the core: community governance for climate-change adaptation in peripheral parts of Pacific Island Countries." *Regional Environmental Change* 14, no. 1 (2014): 221-235.
- Ochs, Elinor, and Bambi Schieffelin. "Language acquisition and socialization: Three developmental stories and their implications." *Linguistic anthropology: A reader* 2001 (2001): 263-301.
- Quimby, Frank. "The Yin and Yang of Belau: A nuclear free movement struggles with the quest for economic development." *Micronesian politics* (1988): 109-144.
- Rasley, Jeff. "The Most Litigious People in the World." *The Phi Beta Kappa Key Reporter*, (2009).
- Rees, Siân E., Nicola L. Foster, Olivia Langmead, Simon Pittman, and David E. Johnson. "Defining the qualitative elements of Aichi Biodiversity Target 11 with regard to the marine and coastal environment in order to strengthen global efforts for marine biodiversity conservation outlined in the United Nations Sustainable Development Goal 14." *Marine Policy* 93 (2018): 241-250.
- Richmond, Laurie, and Dawn Kotowicz. "Equity and access in marine protected areas: The history and future of 'traditional indigenous fishing' in the Marianas Trench Marine National Monument." *Applied Geography* 59 (2015): 117-124.
- Rinkevich, Sarah, Kim Greenwood, and Crystal Leonetti. "Traditional ecological knowledge for application by Service scientists." (2011).
- Roff, Sue Rabbitt, *Overreaching in Paradise: United States Policy in Palau since 1945*. Denali Press, 1991.
- Ruddle, K., Hviding, E., & Johannes, R.E. (1992). Marine resources management in the context of customary tenure. *Marine Resource Economics*,
- Sachs, Andrea. "Want to visit this tiny Pacific island nation? First, sign the pledge" *The Washington Post*. Dec 19, 2017.

- Sala, Enric, Jane Lubchenco, Kirsten Grorud-Colvert, Catherine Novelli, Callum Roberts, and U. Rashid Sumaila. "Assessing real progress towards effective ocean protection." *Marine Policy* 91, no. 1 (2018): 11-13.
- Sciacca, Frédéric, Kim van Arkel, Clément Levasseur, Florian Faure, and Luiz Felipe De Alencastro. *Race For Water Odyssey: Quantitative and Qualitative Assessment of Marine Plastic Debris Collected on Shorelines*. No. EPFL-REPORT-225645. Race for Water Foundation, 2016.
- Snyder, David, and Brian M. Butler. *Palau archaeology: Archaeology and historic preservation in Palau*. Vol. 2. US National Park Service, 1997.
- Sulu, Reuben J., Hampus Eriksson, Anne-Maree Schwarz, Neil L. Andrew, Grace Orirana, Meshach Sukulu, Janet Oeta et al. "Livelihoods and fisheries governance in a contemporary Pacific Island setting." *PloS one* 10, no. 11 (2015): e0143516.
- Smith, Linda Tuhiwai. *Decolonizing methodologies: Research and indigenous peoples*. Zed Books Ltd., 2013.
- Spalding, M. D., R. D. Brumbaugh, and Emily Landis. "Atlas of ocean wealth." *The Nature Conservancy* (2016).
- Teaiwa, Teresia K. "Native thoughts: A Pacific Studies take on cultural studies and diaspora." In *Indigenous diasporas and dislocations*, pp. 15-36. Routledge, 2017.
- Teaiwa, Teresia K. "Charting Pacific (Studies) Waters: Evidence of Teaching and Learning." *The Contemporary Pacific* 29, no. 2 (2017): 265-282.
- Thaman, Konai Helu. "Decolonizing Pacific studies: Indigenous perspectives, knowledge, and wisdom in higher education." *The Contemporary Pacific* 15, no. 1 (2003): 1-17.
- Trompf, Garry W. "Islands, the Humanities and environmental conservation." *Environmental Conservation* 45, no. 2 (2018): 101-110.
- Veenendaal, Wouter P. "How democracy functions without parties: The Republic of Palau." *Party Politics* 22, no. 1 (2016): 27-36.
- Vince, Joanna, Elizabeth Brierley, Simone Stevenson, and Piers Dunstan. "Ocean governance in the South Pacific region: Progress and plans for action." *Marine Policy* 79 (2017): 40-45.
- Wabnitz, Colette CC, Andres M. Cisneros-Montemayor, Quentin Hanich, and Yoshitaka Ota. "Ecotourism, climate change and reef fish consumption in Palau: Benefits, trade-offs and adaption strategies." *Marine Policy* (2017).
- "Taiwan, Palau Issue Marine Life-themed Stamps," *China Post*, June 26, 2018, Accessed October 11, 2018

## **List of Interviewees**

Ebil Matsutaro (Attorney), Personal Interview, Koror, Palau., March 2018.

Obak Kitalong (Local Chief), Personal Interview, Koror, Palau., March 2018

Chris Kitalong (Ethnologist), Personal Interview, Koror, Palau., March 2018

Ann Kitalong (Marine Biologist), Personal Interview, Koror, Palau., March 2018

Noah Idechong (Environmental Activist), Personal Interview, Koror, Palau., March 2018

Ann Singeo (Executive Director of Ebiil Society), Personal Interview, Ollei, Palau., March 2018

Arthur Ngiraklsong (Chief Justice), Personal Interview, Koror, Palau., March 2018

Oldais Ngirakelau (Judge), Personal Interview, Koror, Palau., March 2018

Ernestine Rengiil (Attorney General), Koror, Palau., October 2018