

Federated States of Micronesia

Legal Analysis for Integrated Coastal, Water, and Marine Management at the national and state levels

Report prepared for:

Department of Environment, Climate Change and Emergency Management

On behalf of the FSM Adaptation Fund Project: *Enhancing the Climate Change Resilience of Vulnerable Island Communities in FSM*

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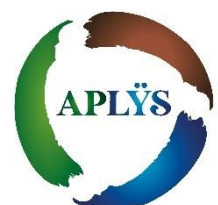


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Acronyms and Abbreviations

CBD	Convention on Biological Diversity
CC	Climate Change
COFA	Compact of Free Association
COM	College of Micronesia
C.R.	Congressional Resolution
DECEM	Department of Environment, Climate change and Emergency Management
DOJ	Department of Justice
DR&D	Department of Resources and Development
DTCI	Department of Transportation, Communications & Infrastructure
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAO	Food and Agriculture Organization
FSM	Federated States of Micronesia
FSMNG	Federated States of Micronesia National Government
INDC	Intended Nationally Determined Contributions
IWA	Important Watershed Areas
KIRMA	Kosrae Island Resource Management Authority
LMMA	Locally Managed Marine Areas
MC	Micronesia Challenge
MCT	Micronesia Conservation Trust
MF	Mangrove Forests
MPA	Marine Protected Areas
NEMS	National Environment Management Strategy
NFC	National Fisheries Corporation
NGO	Non-Governmental Organization
NORMA	National Oceanic Resource Management Authority
OFA	Office of Foreign Affairs
PAN	Protected Areas Network
PL	Public Law
R2R	Ridge-to-Reef
SBSAP	State
SDG	Sustainable Development Goal
SIDS	Small Islands Development States
SLR	Sea level Rise
SPC	The Pacific Community
UN	United Nation
UNFCCC	United Nation Framework Convention on Climate Change
WFS	Watershed Forest Reserve

Authors' Notes

This report surveys the laws, policies, and governmental institutions of the Federated States of Micronesia (FSM) that are relevant to the management of the FSM's land, freshwater, and marine environment. This report will inform discussions for further policy and legal development in the FSM, in support of the "*Enhancing the Climate Change Resilience of Vulnerable Island Communities in FSM*" project. The project's overall goal is to build social, ecological, and economic resilience of the target island communities of FSM.

The source for the survey came from the following:

- Legal Information System of the Federated States of Micronesia
- FSM Code
- The FSM National Environment Management Strategy 2019-2023 (SPREP, 2019¹)
- The FSM State of the Environment Report (SPREP, 2019²)
- FSM Government Website
- ECOLEX – an information service on environmental law, operated jointly by FAO, IUCN, and UNEP
- Legal & Policy Framework Assessment Report, Blue Prosperity Micronesia Program

Every effort was taken to ensure that the information written in this report is accurate. This report is provided for informational and educational purposes only and does not constitute legal advice. It is intended, but not promised or guaranteed, to be current and complete as of the date of its publication. Transmission of this report is not intended to create an attorney/client relationship between any of its authors and any other person or entity. This analysis should not be used as a legal document, and organizations should consult with lawyers to provide legal advice in matters pertaining to the environment.

The contents of this report, including any errors or omissions, are solely the responsibility of the authors. The authors invite corrections and additions.

¹ Federated States of Micronesia National Environmental Management Strategy 2019–2023. Apia, Samoa: SPREP, 2019. Retrieved from: <https://fsm-data.sprep.org/system/files/fsm-nems.pdf>

² Federated States of Micronesia State of the Environment Report. Apia, Samoa: SPREP, 2019. Retrieved from: <https://www.sprep.org/sites/default/files/documents/publications/fsm-soe.pdf>

i. Project Background

In 2017, the government of the Federated States of Micronesia (FSM), through the project, "*Enhancing the Climate Change Resilience of Vulnerable Communities of the FSM*", awarded by the Adaptation Fund, attempts to heighten community resilience by working with communities in the outer islands of Yap, Chuuk and Pohnpei and coastal communities in Kosrae. To increase the adaptive capacity of these low-lying, remote, outer islands, the FSM intends to focus its efforts in improving water security in the outer islands and build coastal resilience in Kosrae.

The project intends to serve as a model for future replication throughout the four states, in areas such as food security and marine resource management, by delivering a suit of targeted and interlinked economic, social, and environmental benefits to the communities. This project seeks to promote innovative climate adaptation actions by working with partner institutions and organization that will help foster better living conditions for the outer island of the FSM and the coastal areas of Kosrae.

The overall goal of the project is to build social, ecological, and economic resilience of the target island communities of the FSM, by reducing their vulnerabilities to extreme drought, sea level rise (SLR), and other climate risks and hazards through water resource management, coastal resource and development planning, while ensuring that all sectors of society (e.g. gender, aged, youth, disabled, health and private sector) are represented, and ensuring livelihood protection by promoting ecologically sound climate actions.

Under Component 1, the project aims to strengthen policy and institutional capacity for integrated coastal, water, and marine management at the national and state levels. The purpose of this Legal Analysis is to review institutional and policy frameworks at the national and state levels for fresh water and coastal-marine management to determine critical gaps in resource management and the potential disconnect in conservation, resource management, adaptive capacity and appropriate legislation and regulations, which create the enabling conditions at all management levels to ensure continuity and sustainability of natural resources management efforts.

ii. Challenges

The Federated States of Micronesia National Government (FSMNG) has had several environmental legislative reviews and analyses conducted over the years. What appears to be a continuous and steady consensus, by all the legal reviews, is that the primary responsibility of environmental management and natural resource protection and conservation rests with the states. In *Section 1 of Article VII of the FSM Constitution*, states "... power of such an indisputably national character as to be beyond the power of the state to control, is a national power." In *Section 2 of Article VIII* states that functions that are not given to the National Government and are not denied the States "...is a state power." Furthermore, *Article IX* which provides Congress its legislative powers does not list or make references to the 'environment' " and on matters of 'natural resources' provides only that the Congress has authority to 'regulate the ownership, exploration, and exploitation of natural resources within the marine space of the Federated States of Micronesia beyond 12 miles from island baselines'" (*Article IX, Section 2 (m)*). As such, the onus of natural resource management and matters pertaining to the environment are vested with the states.

While the Constitution provides Congress with the powers to enter into international treaties (*Constitution Article IX(2)(b)*), it is not clear as to whether or not the National government has the full authority or Constitutional power to implement those treaties at the State level. "Given the numerous international environment treaties ratified by the FSM this is a very important issue that has not... been considered or resolved by any previous report, by judicial determination" (Rose 2009³).

In the *Nationwide Environment Management Strategies* (NEMS, 1993) the issue of "... lack of certainty regarding the appropriate venue for environmental management controls has created both under and over-regulation. In some instances, two sets of very similar regulatory instruments control the same behavior, one at the National and one at the State level. In other instances, no law is created, or no jurisdiction enforces the law" (NEMS,1993 p 11). The NEMS Review "urged the FSM government to clarify their respective environmental jurisdictions, which resulted in National and State attorneys general in considering the environment issue," which resulted in the 'Tentative Joint Opinion on National-State Environmental Responsibilities under the FSM Constitution' in 1992 (Rose 2009). Unfortunately, the document was never finalized.

Though National and State governments never agreed on a final decision, the 1997 Climate Change Communication does state that the FSMNG:

- sets minimum standards, and the states can adopt those standards and create more rigorous standards;
- is responsible for coordinating all State activities related to foreign assistance;

³ Rose (2009). Environmental Law in the Federated States of Micronesia: A Review. Retrieved from: <https://www.sprep.org/att/IRC/eCOPIES/Countries/FSM/62.pdf>

- may insert itself if there are issues pertaining to public health, traditions, foreign or interstate commerce, mining, marine resources beyond the 12 miles, international technical or financial assistance; and,
- both the FSMNG and State governments are responsible for implementing and protecting endangered species and to establish wildlife preserves.

Furthermore, progresses to improve the NEMS effectiveness were made in 2019, although this updated NEMS does not fully resolve the challenges reported by Rose (2009), it does provide a set of procedural arrangements and clarity on the states' management authority of natural resources. The 2019 NEMS⁴ further addresses environmental challenges including waste management, declining fish populations, increasing pressure on natural resources and rising sea levels, which threaten Micronesia's forests, agricultural areas and fresh-water supply. This document establishes a mechanism to monitor the outputs and outcomes of the country's environmental strategies, strengthening the FSM's approach to environmental management.

More recently, APLYS Consulting and Ramp and Mida Law Office, through the "*Enhancing the Climate Change Resilience of Vulnerable Communities of the FSM*" project, conducted an analysis of existing legislation, regulations, and policies focused on climate change and environmental protection, land use management, freshwater, coastal protection, and coastal marine areas. This analysis found several key challenges and gaps:

- many of the laws at the national and state levels are outdated;
- national level policies often lack the force of law, as they do not progress further into legislation;
- many environmental and conservation laws were created during the Trust Territory government and often grant authority to offices, officers, and departments that no longer exist;
- some legislation grants specific authority to the executive branch to promulgate regulations, however, often regulations are never passed or are not updated to reflect new data and/or technology;
- legislation and laws often times have vague standards that need to be tailored and specific in order to ensure enforceability; and,
- several laws have loopholes which renders the law/legislation moot and with no real practical or implementable significance.

Regardless of those challenges, the FSMNG, along with the States, is working diligently to ensure enabling condition are established to support the adaptative capacity and resilience of the people of the FSM. This environment and climate change legal analysis is intended to inform the FSMNG and the States of what legislation, policies, and regulations exist and the existing gaps and challenges with currently laws.

⁴ Federated States of Micronesia National Environment Management Strategy (2019). <https://fsm-data.sprep.org/dataset/national-environment-management-strategy-2019-2023>

iii. Introduction

On 10 May 1979, the *Constitution of the Federated States of Micronesia* (Constitution) came into force and is the principal law of the FSM. The governing structure of the FSM provides each of the four States a high level of autonomy. The national laws provide the legislative framework and structure; however, it is the States that have jurisdiction of over the management of natural resources on land and coastal marine waters up to 12 miles. The National government "... regulates the ownership, exploration, and exploitation of natural resources within the marine space of the FSM beyond the 12 miles from the island baselines" (Legislative [Title 3]). In addition, the Constitution ensures the preservation and protection of customs of the people and recognizes and acknowledges role of the traditional leaders (Art. V).

The *Preamble of the Constitution* states the importance of the environment to its people and its culture: "... we respect the diversity of our cultures. Our differences enrich us. The seas bring us together, they do not separate us. Our islands sustain us, our island nation enlarges us and makes us stronger."

The protection of the environment, cultivation and the protection of lands, ownership of terrestrial and marine lands, and use and/or disposal of toxic material are mentioned in the Constitution in Articles XIII and Sections 2, 4, 5 and 113. State Constitutions make provisions for the environment and sets standards for development to ensure environmental quality.

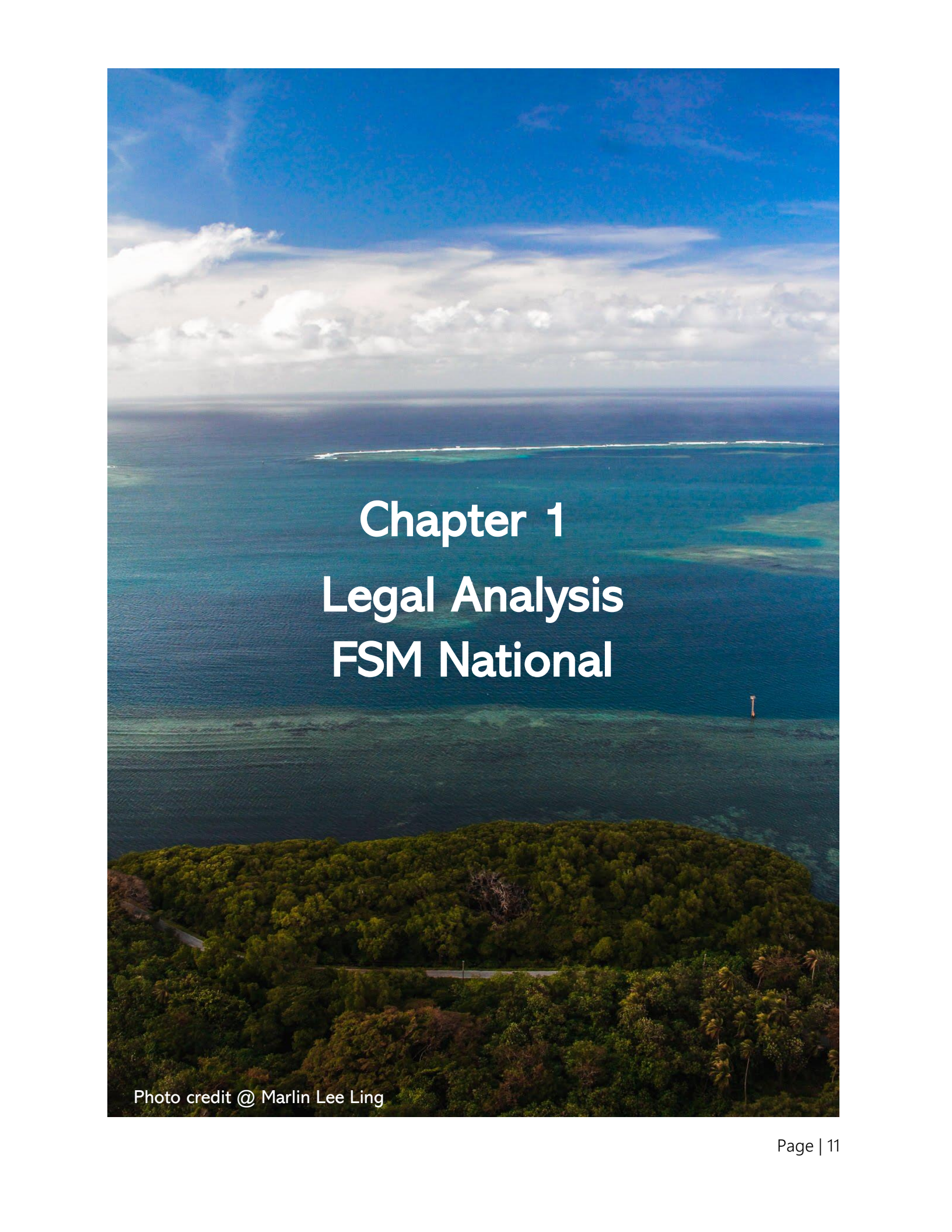
Article XI of the Chuuk Constitution: "*provide by law for the development and enforcement of standards of environmental quality...*"

Article XI of the Kosrae Constitution: "*by law protect the State's environment, ecology, and natural resources from impairment in the public interest.*" It goes on to prohibit nuclear, chemical gas or biological weapons and radioactive material from being brought into the State.

Articles XII and XIII of the Pohnpei Constitution prohibits foreigners from acquiring land and prohibit the introduction, storage, use, test and disposal of "nuclear, chemical, gas, biological weapons, nuclear power plants and related waste material from entering Pohnpei. The Constitution further states that the Governor must administer "comprehensive plans for the conservation of natural resources and the protection of the environment.

The Yap Constitution "*Government may provide for the protection, conservation and sustainable development of agricultural marine, forest, water, land and other natural resources.*" Yap also prohibits the use and stowage of nuclear material and waste.

The Constitution in Article VII "*establishes three levels of government for Micronesia: national, state, and local governments. Each State has its own constitution that creates an executive, a judiciary, and a legislature.*" Articles within each of the State constitutions establishes and prescribes authority to the different parts of state and local government. Customary and traditional laws are also recognized in the FSM Constitution as well as the States'.



Chapter 1

Legal Analysis

FSM National

Photo credit @ Marlin Lee Ling

1.1 Geography of the FSM

The Federated States of Micronesia (FSM) is comprised of 607 islands, widely dispersed across the Northern Pacific Ocean, extending 2,900 km (1,700 mi), approximately 3,218 km (2,000 mi) from east to west and 1,448 km (900 mi) from north to south, across the archipelago of the Caroline Islands, from Kosrae in the east to Yap in the west (Fig. 1). The islands in the FSM contain various geographical features, varying from small islets to atolls, with scarce land resources, and high mountainous volcanic islands with a land area of more than 80 km² (31 sq mi). The four FSM's states, with exception to Kosrae, include numerous atolls. The FSM comprises a total land of about 701 km² (approximately 271 sq mi) and a lagoon area of 7,192 km² (2,777 sq mi). The nation Exclusive Economic Zone (EEZ) covers some 2.9 million km² (1.15 million sq mi) of the North Pacific Ocean.

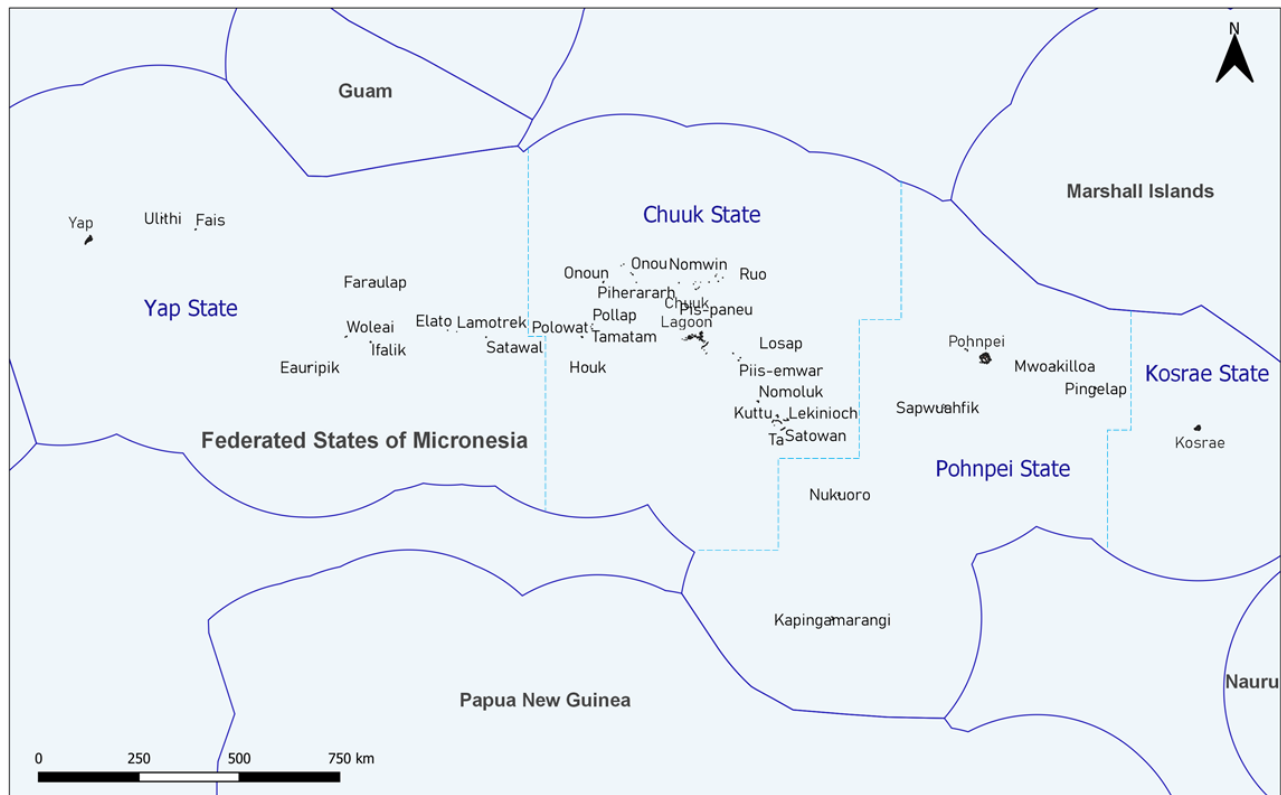


Figure 1. Map of the Federated States of Micronesia and Exclusive Economic Zone boundaries (GIS data source: SPREP)

1.2 Climate Change Overview⁵ for the FSM

In the FSM, climate change and its impacts present an existential challenge. As a developing island nation, the FSM is highly vulnerable to slow- and rapid-onset impacts of climate change

⁵ This section was developed based on data and information available from the Pacific Climate Change Data portal, NOAA National Centers for Environmental Information (NCEI), Australian Bureau of Meteorology and CSIRO-2014, World Bank Climate change knowledge portal and University of Hawaii Sea Level Center.

in the form of environmental, social, and economic losses. The impacts of climate change are currently being felt by way of saltwater intrusion from rising sea levels that inundate taro patches and foul freshwater supplies, as well as through shifting rainfall and storm patterns. The FSM Adaptation Fund project "*Enhancing the Climate Resilience of vulnerable island communities in Federated States of Micronesia*" aims to strengthen water and livelihood security in six out-lying atoll islands as a tangible measure to adapt to the impacts of climate change related to water, health, and sanitation.

This section identifies some relevant climate change impacts and risks for the FSM based on the most recent Intergovernmental Panel on Climate Change -IPCC- 6th report on Impacts, Adaptation and Vulnerability⁶. Specific nationwide and states cases are described in the relative sections of this document.

1.2.1 Current and Future Climate in the FSM⁷

The FSM has a tropical climate characterized by two seasons, a dry season, that occurs from November to April, and a wet season, from May to September. In the FSM's western states of Yap and Chuuk, the West Pacific Monsoon bring storms and typhoons and affects rainfall patterns with additional rainfall during the wet season (FSM SNC, 2015⁸).

The FSM experiences little seasonal variation in mean air temperatures across the year and in general the mean annual temperature averages 27.1°C (80.8°F) over the period 1901–2019, but annual mean air temperatures have increased (~0.5 - 1°C) across the FSM since 1951. Similarly, annual maximum temperatures have increased in the FSM since 1951. The long-term average air temperature over the FSM is projected to rise to 1-2°C by 2050 potentially affecting human health, crops and water resources. The frequency and intensity of extreme hot days (warming days) is also projected to increase, with more hot days that will be hotter.

Rainfall is generally high on the volcanic islands of Pohnpei, Kosrae and Chuuk with mean annual rainfall reaching 466.8cm (183.8 inches) in Pohnpei main island for the latest 30 years (NOAA NCEI, 2021⁹). The states of Yap and Chuuk are also affected from drought spells associated with the warm and cold phases of the El Niño- Southern Oscillation (ENSO); more frequent periods

⁶ IPCC, 2022: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press.

⁷ Climate projection data, obtained from the Australian Bureau of Meteorology and CSIRO report (2014), are derived using the Global Climate Model data from the Coupled Model Intercomparison Project, Phase 5 (CMIP5). Projections provided are for four (4) emission scenarios: RCP2.6 (Representative Concentration Pathway; very low emissions), RCP4.5 (low emissions), RCP6.0 (medium emissions) and RCP8.5 (very high emissions). Sea level projections were obtained from the Australian Bureau of Meteorology and CSIRO report (2011; 2014) as well as Leong et al (2014) and Marra et al. (2018)

⁸ Federated States of Micronesia. (2015). Second National Communication under the UN Framework Convention on Climate Change. Retrieved from: <https://unfccc.int/resource/docs/natc/fsmnc2.pdf> (Accessed: June 2021)

⁹ NOAA National Centers for Environmental Information (NCEI): most recent standard climatological period (1991-2020) for precipitation data was derived from the U.S. Climate Normals Quick Access tool, (<https://www.ncei.noaa.gov/access/us-climate-normals/#dataset=normals-annalseasonal&timeframe=30&location=FM>)

of drought can be experienced by the most western state of Yap (Australian Bureau of Meteorology and CSIRO, 2014).

Average annual rainfall over the last 50 years indicate that the western Micronesia (Yap and Chuuk) is getting wetter while eastern Micronesia (Pohnpei and Kosrae) is trending drier (Marra et al., 2017¹⁰). At Pohnpei, there has been a statistically significant declining trend in rainfall during the wet season since 1950. Rainfall interannual variability is associated with El Niño Southern Oscillation (ENSO) which is typically associated with drought spells of different intensity. For instance, the droughts associated with El Niño years 1982-1983, 1997-1998 and 2015-2016 were especially severe, increasing localized threats to biodiversity and water resources. In these years, agriculture systems were damaged, water sources were adversely impacted, and problems associated with wildfires and invasive species were greatly aggravated. For instance, during the 1997-1998 El Niño, agroforestry systems (i.e., see USDA-NRCS report: Giles 2000, mitigation strategy for taro patches) in some of the outlying islands were severely damaged, with negative implications for food security and the health of these communities. Climate projections indicate that under the high emission scenario (RCP 8.5¹¹), moderate droughts will occur once-twice every 20 years and extreme drought approximately once every 20 years by 2030.

In the FSM sea level varies due to seasonal and longer-term variations in winds, ocean temperature and sea-level pressure. Satellite data indicates that in the FSM, sea level has risen by over 0.39 inches (10mm) per year since 1993. This is above the global average of 0.11–0.14 inches (2.8–3.6 mm) per year. In the western Pacific, sea level rising trends, since the start of satellite records (1993), are double relative to the global rate, although interannual and multidecadal variation in the sea level, caused by phenomena such as the El Niño –Southern Oscillation, can be quite large.

Climate projections indicate, with high confidence¹², that sea level will rise globally. Also in the FSM, sea level is projected to continue to rise of approximately 5 inches (13 cm) by 2030 and 10 inches (25 cm) by 2050. The consequences of this increase will be felt particularly by those communities living in low-lying atoll islands. Here most of the infrastructures and human settlements are barely above high spring tide levels and in close proximity (less than 500 m) to the

¹⁰ Marra J.J., Kruk M.C. (2017). State of Environmental Conditions in Hawaii and the U.S. Affiliated Pacific Islands under a Changing Climate: 2017. NOAA NCEI. Available at: https://coralreefwatch.noaa.gov/satellite/publications/state_of_the_environment_2017_hawaii-usapi_noaa-nesdis-ncei_oct2017.pdf

¹¹Representative Concentration Pathway (RCP) 8.5: very high GHG emissions

¹²The level of confidence, associated with climate change projections, represents the degree of certainty that an event will occur in the future. The level of confidence is determined by the validity of a finding based on best available scientific evidence. For the IPCC, level of confidence is expressed using five qualifiers: “very low,” “low,” “medium,” “high,” and “very high.” Generally, when there are multiple, consistent independent lines of high-quality evidence (robust evidence) the level of confidence is “very high”. In Mastrandrea et al. (2010) confidence is defined as “The robustness of a finding based on the type, amount, quality and consistency of evidence (e.g., mechanistic understanding, theory, data, models, expert judgment) and on the degree of agreement across multiple lines of evidence. In this report, confidence is expressed qualitatively [Mastrandrea, M.D. et al., 2010: Guidance Note for Lead Authors of the IPCC Fifth Assessment Report on Consistent Treatment of Uncertainties. Intergovernmental Panel on Climate Change (IPCC), Geneva, Switzerland, 6 pp.]

coastline. The rise in sea level, combined with natural yearly changes, will exacerbate coastal erosion, accentuating the impact of sea swells, anomalous tides, storms surges and coastal flooding, with adverse consequences for water and food security. A summary of climate change projections and potential impact on FSM’s population, infrastructures and ecosystems is presented in Table 1.

Table 1. Projected climate and potential impacts to the FSM by 2030 and 2050.

Feature	Projections	Impact
Air Temperature	There is a high confidence that air temperature will continue to increase of approximately 0.8°C by 2030 and 1-2°C by 2050.	Impacts on sea surface temperature, storms, and precipitation, also impacting agriculture and water resources, and human health.
Sea Level	Sea level is projected to increase of approximately 5 inches by 2030 and 10 inches by 2050	Increased coastal erosion can result from higher sea levels especially when combined with large waves. Salinity intrusion can damage coastal aquifers and agricultural land. Increasing risks for coastal homes, lands, and infrastructure, contaminated drinking water, and destruction of crops.
Rainfall patterns	More intense rainfall events are expected to occur, but due to ENSO-related variability there will still be wet and dry years and decades.	Heavy rainfall will lead to increasing flooding, damage to crops, run-off/pollutants into coastal waters and vector-borne diseases (e.g., dengue). Drought periods will affect crops, water resources and human health (potential increase of water-borne disease)
Storm patterns	Less, but more intense typhoons will occur. Models show inconsistent results for the region; most suggest a decrease in formation (20-50%), but the confidence for these projections is low.	More severe cyclones when they do occur and combined with sea level rise will result in increased flooding and potentially coastal change resulting in damage and loss of lives, coastal homes, land, and infrastructure.
Sea Surface Temperature (SST)	SST is projected to increase to increase of approximately 0.8°C by 2030 and 1-2°C by 2050.	The increase in SST is likely to cause more severe coral bleaching. Under projected warming global coral reefs will experience annual bleaching beginning in about 2035. This will have adverse consequences on the numerous provisioning (food/livelihoods, medicine) regulating (coastal protection, habitat) and cultural (tourism) services provided by this ecosystem.
Ocean Acidification (OA)	Aragonite saturation state is likely to continue to decrease to 3.5 (marginal conditions to support coral reefs) by 2030 and decrease further to values where coral reefs have not historically been found (< 3.0).	OA is likely to decrease growth and reproduction rates of many marine organisms, particularly reef-building corals. and weaker and more brittle skeletons, prone to increased damage from storms. Corals are critical because they provide habitats for fish, support food/livelihoods, income from tourism, medicines, and coastal protection to islands

Nation-wide, climate change impacts are already detectable affecting both high and atoll islands' natural and human systems. The country is affected by increasing air and water temperatures, storm surges, intense typhoons, changing precipitation patterns, droughts, and sea level rise (SLR).

These impacts translate into the continued degradation of marine and terrestrial ecosystems and are amplified by current human impacts such as deforestation and coastal waters pollution. The likelihood of an increase above 2°C warming will rise the risk of extinction of many marine and terrestrial species, with a significant reduction of biodiversity and decrease of ecosystems and communities' resilience. FSM's communities rely heavily on ecosystem services (food, water, raw materials, medicinal plants) for their wellbeing and the loss or decrease of these services is likely to have a severe impact on livelihoods. Similarly, ecosystems degradation represents a concrete threat to ecosystems regulating services such as coastal protection, water purification, soil fertility, flood control and local climate, which will adversely impact key infrastructures, services and settlements. The likely consequences of the current and projected climate change impacts will be food and water insecurity, migration, economic and cultural losses (Table 1).

Water scarcity has severe implications particularly for low-lying atoll islands communities. The latest IPCC report (IPCC- 6th report on Impacts, Adaptation and Vulnerability, 2022), indicate that even for low greenhouse gas (GHG) emission pathways vulnerability of communities in small islands may exceed adaptation limits before 2100. The impacts of climate change on vulnerable low-lying islands and coastal areas represent a serious threat to the ability of land and freshwater resources to support human life and livelihoods. This is likely to trigger an increase in climate-related migration to the high islands and outside the country.

SUMMARY: CLIMATE CHANGE IMPACTS ON KEY ECOSYSTEM SERVICES

FRESHWATER

Projected changes in rainfall patterns in Micronesia are masked by the regional interannual variability and multi-decadal variability (i.e., ENSO and Pacific Decadal Oscillation), but studies suggest an increase in rainfall alternated to severe drought periods. Sea level is likely to increase of approximately 10 inches by 2050, exacerbating coastal erosion and affecting water resources, particularly in low-lying atoll islands. Impacts to freshwater resources are likely to be severe, particularly for low-lying islands, which already rely on depauperated water lenses.

FOOD

Increasing sea level, air temperature, droughts and storm surges on low-lying coastal areas and atoll islands have contributed to food insecurity by affecting agroforest systems such as taro patches. The risk from these threats is likely to become more acute and estimates suggest that under RCP 2.6 and 8.5 the maximum fish catch can experience >50% decline by 2100 relative to 1980-2000.

SUMMARY: CLIMATE CHANGE IMPACTS ON KEY ECOSYSTEM SERVICES**COASTAL PROTECTION**

There is a high confidence that sea water temperature will increase by 2100 and that under RCP 4.5 and 8.5 some islands will experience severe coral bleaching on annual basis with consequent decline of coral abundance by 2040 (medium confidence). Under warming of 2°C or more, above the pre-industrial period, 99% of reef building corals will be lost. Ocean acidification is projected to increase with decreasing aragonite saturation in ocean waters. This chemical change has consequences on the ability of reef building corals and other marine organisms (i.e., sea urchins, oysters, other seashells) to build their shells/skeleton. Under the highest GHG emission scenario (RCP8.5), by 2100, virtually all coral reefs are projected to experience an ocean acidification level that will severely compromise their ability to grow. Loss of coral reef structure results in a decline in fish abundance and biodiversity, negatively impacting tourism, fisheries, and coastal protection.

**BIODIVERSITY**

Coastal regions, oceans and land are already impacted by loss of biodiversity exacerbated by habitat fragmentation, pollution, wildfires, and land use changes. These impacts are tangible and are threatening communities' livelihoods and food security. Increasing temperature beyond 2°C by 2100 are likely to boost local extinction, particularly of marine organisms (i.e., coral reefs). Marine heatwaves will lead to species extirpation, habitat collapse and potential local extinction. Sea level rise under emission scenarios that do not limit warming to 1.5°C increases the risk of coastal flooding, erosion and habitat and ecosystems loss. Salination of soils and groundwater can compromise coastal ecosystems, including coastal carbon sinks (i.e., mangroves, saltmarshes, seagrass meadows) adversely impacting community livelihoods and endurance. The FSM is an important biodiversity area with numerous endemic species which are at risk of extinction under warming of 2°C or more, above the pre-industrial period.

1.3 FSM Gender Policies

The FSM is currently in an early stage in the development of policy frameworks for gender equity and equality and executing legislation to fully integrate gender across all sectors of government, as well as fully implementing its commitments under the Convention on the Elimination of All forms of Discrimination Against Women (CEDAW)¹³. The FSM does however have Gender Policy and a National Strategic Plan on Gender Development. It also drafted the Elimination of Violence Against Women and Girls policy, an action plan to eliminate gender-based violence. Two states with the FSM have passed State Family Protection Acts, Pohnpei in November 2017 and Kosrae in 2014. Chuuk and Yap have bills pending.

In 2018, the National Gender Policy was endorsed. The policy was designed with several international commitments in mind: CEDAW, Pacific Leaders Gender Equality Declaration, the Sustainable Development Programme, and the UN Sustainable Development Goals (SDG). With the Policy are six (6) goals:

- Goal 1: Increased representation of women in decision-making
- Goal 2: Eliminate gender-based violence
- Goal 3: Equitable education outcomes
- Goal 4: Address barriers facing women in the workforce
- Goal 5: Women obtaining better healthcare and enhanced decision over their fertility
- Goal 6: FSMNG and State Government mainstreaming gender across all sectors

Furthermore, the Policy acknowledges climate change and disaster risk reduction (DRR) as cross-sectoral issues, that have varying degrees of impact on the different genders, observing that gender mainstreaming into all levels of the adaptation process (planning, management, implementation, etc.) can reduce gender disparity and vulnerabilities.

The FSM Strategic Development Plan (2004-2023) features seven (7) gender-based goals to address gender and vulnerable members of society as part of the country's strategic development¹⁴:

- Goal 1: Enhance and promote the cultural, economic, legal, political, and social development of women and children through their life cycles.
- Goal 2: Enhance the leadership capacity and roles of women.

¹³ Pacific Women FSM Country Plan Summary: <https://pacificwomen.org/key-pacific-women-resources/fsm-country-plan-summary>

¹⁴ FSM Strategic Development Plan (2004-2023): <https://fsm-data.sprep.org/dataset/fsm-strategic-development-plan-2004-2023>

- Goal 3: Mainstream gender issues into decision making, policies, and strategic development plans.
- Goal 4: Maximize women’s contribution to and participation in democratic and development processes by creating opportunities for women’s active involvement.
- Goal 5: Strengthen the institutional capacity of women’s programs in the FSM.
- Goal 6: Strengthen the institutional capacity, effectiveness, and impact of youth organizations.
- Goal 7: Strengthen youth development through social, economic, and political participation.

In the context of assuring socioeconomic improvement with a focus on gender and other vulnerable groups, is the National Agriculture Policy¹⁵, a framework to enhance food security in the FSM agriculture sector. The Policy intended to address the varying “needs, constraints, and opportunities of small farm families for subsistence and more commercial oriented farmers and agri-business operators.” Further emphasis was also placed on local food production to enhance food security, increase “food self-sufficiency”, and improving nutritional health.

It is important to note that the FSM Constitution, under Article IV, section 4 ensures equal protection, which guarantees fundamental rights and freedom regardless of gender, sexual orientation, race, ancestry, national origin, religion, language, and social status.

¹⁵ FSM National Agriculture Policy 2012-2016; https://www.preventionweb.net/files/27083_fsmagriculturepolicy.pdf

1.4 FSM Environment & Climate Change Legislation & Policies

1.4.1 Climate Change Legislation/Policies

The FSM was among the first 20 countries in the world to formally ratify the 2015 Paris Agreement. On August 2, 2016, the FSM Congress adopted Congressional Resolution No. CR 19-237, ratifying as a treaty “the Paris Agreement concerning the need for an effective and progressive response to the urgent threat of climate change.”¹⁶

Ratification of the Paris Agreement was the culmination of many years of work, by the FSM, to address climate change as a priority for the country. Previously, the FSM adopted a brief “Nationwide Climate Change Policy 2009,” which laid out a succinct policy statement:

“The focus of this Policy is to mitigate climate change especially at the international level and adaptation at the national, state and community levels to reduce the FSM’s vulnerability to climate change adverse impacts. In this context, FSM reaffirms its social and cultural identity and its people’s rights and desire to continue to live sustainably on their islands¹⁷.”

In 2013, the FSM adopted a policy for nationwide integrated disaster risk management and climate change. That policy called for strong horizontal and vertical coordination between sectors and national, state, and community levels, using an “all-of-government,” “all-of-country” coordinated approach that emphasizes partnerships between the public and private sectors and civil society.

Also, in 2013, the FSM Congress passed the FSM Climate Change Act. The brief Act was intended to further the provisions on climate change of the FSM’s Nationwide Integrated Disaster and Climate Change Policy (CC Policy) by introducing certain legal obligations for departments and agencies of the national government. The Act and the CC Policy were to provide the overarching framework for further detailed legislation on climate change.¹⁸ The Act states that by October 1, 2014, certain departments must prepare plans and policies on climate change; DECEM is responsible for overall implementation; and the President is required to report to Congress annually on the progress of the implementation of the CC Policy and recommend additional legislation where applicable and necessary. Although no subsequent climate change legislation has been recommended for passage by the FSM President, as discussed in Section 2.2.1 of this report, the FSM Congress, since 2015, has operated a Special Committee on Climate Change and Environmental Issues to focus on the subject.

¹⁶ See C. Res. 19-237, 19th FSM Cong. (2016).

¹⁷ FSM Nationwide Climate Change Policy. (2009).

¹⁸ See FSM P.L. No. 18-34.

At the state level, in 2015 each of the four states adopted a Joint State Action Plan (JSAP) for Disaster Risk Management and Climate Change; each JSAP includes an action matrix for subsequent action by each state.

For the FSM, like for many island nations, the impacts of climate change are very real and already are occurring. Thus, adaptation is a high priority. In submitting its First Intended Nationally Determined Contribution (INDC) under the Paris Agreement, the FSM observed as follows:

As for all SIDS, adaptation constitutes a priority for FSM. It is therefore important that the Paris Agreement deals effectively with the adaptation needs in a post 2020 world. FSM does not see this INDC as the vehicle to address its adaptation needs in the post 2020 context, even if these need careful consideration and assessment. Such assessments are being made in the context of the Nation-Wide Integrated Disaster Risk Management and Climate Change Policy 2013 and the FSM Climate Change Act 2014, as well as the joint state action plans for disaster risk management and climate change adaptation. All necessary efforts are being made to engage the country in the formulation and implementation of transformational adaptation investment plans to protect the country against climate change, through various sources of funding including from the UNFCCC [United Nations Framework Convention on Climate Change] financial mechanisms, the Green Climate Fund in particular.¹⁹

1.4.2 FSM Environmental Protection

The FSM Environmental Protection Act's public policy states that the FSM National Government is to use all practicable means to improve and coordinate governmental plans, functions, programs, and resources. Additionally, the Act instructs that the effort to protect and preserve the environment will be carried forward in close consultation with the states.

Of note in this overarching policy statement is the recognition that environmental protection must be considered within the context of other competing national priorities. Also, the policy acknowledges that environmental protection cannot be pursued by the FSMNG alone, but in consultation with the four states as well as by complying with international environmental obligations assumed by the FSM. Finally, the policy includes a strong recognition of a pervasive, individual mandate relating to environmental protection: *"each person has a responsibility to contribute to the preservation and enhancement of the environment."*

Environmental Impact Assessment

The FSM Environmental Protection Act's public policy states that the FSMNG is to use all practicable means to improve and coordinate governmental plans, functions, programs, and

¹⁹ See "Federated States of Micronesia Intended Nationally Determined Contribution" at www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Micronesia%20First/Micronesia%20First%20NDC.pdf.

resources so that FSM inhabitants may (i) fulfill the responsibilities for each generation as trustee of the environment; (ii) enjoy safe, healthful, productive, and aesthetical and culturally pleasing surroundings; (iii) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable or unintended consequences; (iv) preserve important historic, cultural, and natural aspects of Micronesian heritage, and maintain wherever possible, an environment that supports diversity and variety of individual choice; and (v) remain responsible members of the global community by complying with international legal obligations. Additionally, the Act instructs that the effort to protect and preserve the environment will be carried forward in close consultation with the states.²⁰

Of note in this overarching policy statement is the recognition that environmental protection must be considered within the context of other competing national priorities. Also, the policy acknowledges that environmental protection cannot be pursued by the FSMNG alone, but in consultation with the four states as well as by complying with international environmental obligations assumed by the FSM. Finally, the policy includes a strong recognition of a pervasive, individual mandate relating to environmental protection: “each person has a responsibility to contribute to the preservation and enhancement of the environment.”²¹

The FSM Environmental Protection Act establishes the statutory obligations with respect to Environmental Impact Statements (EIS) at the national government level, as follows:

- (1) Any person, prior to taking any action that may significantly affect the quality of the environment within the [EEZ] of the [FSM], or within the boundaries of the National Capital Complex at Palikir, must submit an environmental impact statement to the Director, in accordance with regulations established by the Director.
- (2) The environmental impact statements required by subsection (1) of this section are public documents, and must include a detailed statement on:
 - (a) the environmental impact of the proposed action;
 - (b) any adverse environmental effects which cannot be avoided, should the proposal be implemented;
 - (c) the alternatives to the proposed action;
 - (d) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and

²⁰ 25 FSM Code § 102.

²¹ 25 FSM Code § 102(3). The term “person” as used in the Act means the FSM, a state, municipality, political subdivision, a public or private institution, corporation, partnership, joint venture, association, firm, or company organized or existing under the laws of the FSM or any state or country, lessee, or other occupant of property, or individual, acting singly or as a group. 25 FSM Code § 103(4).

- (e) any irreversible and irretrievable commitments of resources which would be involved in the proposed action, should it be implemented.”²²

The obligation to complete an environmental impact statement (EIS) for the national government is limited in two ways. First, the action must occur within the national government’s physical jurisdiction, which is limited to the above, as described in § 302(1).²³ Second, the action must have the potential to “significantly affect the quality of the environment.” There does not appear to be any statutory definition of the key phrase “significantly affect.”

Although the FSMNG has promulgated detailed “Environmental Impact Assessment Regulations,” these regulations are over 30 years old—having been promulgated in 1989 under a previous version of the FSM Environmental Protection Act. Consequently, these regulations are dated and confusing, as they contain reference to now defunct FSMNG departments and positions (e.g., Secretary of the Department of Human Resources).²⁴

As recognized by the FSM Environmental Protection Act, the four FSM states play an important role in protecting the environment. The environment protection legislation of three of the four states—the exception as Kosrae—begins with a sweeping public policy commitment to the protection of the environment, the language of which is remarkably consistent across the three states.²⁵

1.4.3 Land Ownership, Use, Planning and Management

This section examines land ownership, use, planning and management in the FSM, with an emphasis on where this body of law does, or could, cover marine waters and resources. Unlike many countries, the FSM has no nationwide land use planning legislation.²⁶ Land use planning is generally the province of state and local government.²⁷

²² 25 FSM Code § 302.

²³ The meaning and extent of the EEZ in the FSM is discussed in Section 3.1 of this report.

²⁴ On July 8, 2021, FSMNG issued an emergency regulation requiring contractors of FSMNG to comply with all environmental laws and to obtain all relevant EPA permits. The regulations state that notices to proceed will not be issued without the proper permits.

²⁵ The slightly less soaring language in the opening section of Kosrae’s environmental protection legislation would appear to result from the fact that Kosrae’s statute is a more recently enacted, modern statute, which identifies more specific and concrete goals. For example, Kosrae’s statute specifically mentions climate change, whereas the corresponding public policy language of the other three states does not. [The development permit system and environmental impact assessment (EIA) requirements are provided in Chapter 2 of Title 19 and the Regulations for Development Projects that were promulgated under Chapter 2 and amended in January 2014 to mainstream climate change considerations / These Regulations are promulgated and adopted by Kosrae Island Resource Management Authority (KIRMA) pursuant to Kosrae State Code, Title 19, Section 19.102(18), Title 19, Chapter 2 and State Law No. 10-2. These Regulations amend selected provisions of Regulation No. 67-05.

²⁶ “President Panuelo begins developing an FSM Building Code.” Kaselehlie Press, Vol. 21(3). February 3–16, at 8. Available at www.kpress.info/index.php?option=com_content&view=article&id=1437:president-panuelo-begins-developing-an-fsm-building-code&catid=8&Itemid=103.

²⁷ See 41 Pohnpei Code § 1-101 et seq; 20 Yap State Code § 201 et seq; Draft Chuuk State Code, tit. 24 generally; and Kosrae State Code, tit. 11 generally.

Land Ownership

Table 2. Summary information on land distribution in FSM's states

Categories	Yap	Chuuk	Pohnpei	Kosrae	FSM Total
Population density (sq. miles)	1094	179	244	261	395
Total Land (sq. miles)	49	42	46	132.2	269.2
Dry Land (sq. miles)	38.7	16.7	67.4	42.3	165.1
Public land (sq. miles)	0.9	0.2	24.4	27.2	52.7
Private land (sq. miles)	37.7	16.4	42.8	15	111.9
Commercial land (sq. miles)	0.1	0.1	0.2	0.1	0.5

Source: FSM 2000 Population and Housing Census Report (2002); FSM Division of Statistics

Private lands

The FSM Constitution prohibits foreign ownership of land. Title to land or waters in the FSM may not be acquired by a noncitizen, or by a corporation not wholly owned by citizens.²⁸ Similarly, it is prohibited to enter into a lease agreement providing for the use of land for an indefinite term by a noncitizen, a corporation not wholly owned by citizens, or any government.²⁹

The issue of land tenure (i.e., the system for owning and holding rights in land) is of critical importance in the FSM. National law touching on the subject dates to the Trust Territory era and takes a largely hands-off approach, simply providing that "*[t]he law concerning ownership, use, inheritance, and transfer of land in effect in any part of the Trust Territory on December 1, 1941, shall remain in full force and effect to the extent that it has been or may hereafter be changed by express written enactment made under authority of the Trust Territory.*"³⁰

In practice, land in the FSM may be part of informal family trusts that pass down land use rights from one generation to the next within the extended matrilineal family system. Clans hold many parcels in Yap and Chuuk. This often has resulted in fractional ownership and uncertain boundaries and titles, in turn leading to state efforts to clarify boundaries and title.³¹

Public lands

Each state of the FSM has adopted, by way of its constitution or legislative enactment, various requirements with respect to the ownership, transfer, and use of public lands.

²⁸ FSM Const. art. XIII § 4.

²⁹ FSM Constitution art. XIII § 5.

³⁰ 1 FSM Code § 205 ("Land law not affected").

³¹ See discussion at FSM Infrastructure Development Plan FY2016-FY2025 at 1.

The power of eminent domain may be lawfully exercised by the FSM National Government (NG), as well as by the governments of each of the four states.³²

Land Use Planning and Regulation

Although comprehensive land use planning is not implemented on a nationwide basis, the FSM has addressed certain issues of erosion and sedimentation control, as well as infrastructure development, at a national scale.

Earthmoving activities: All earthmoving activities³³ in the FSM must be conducted to prevent accelerated erosion and accelerated sedimentation. Persons engaging in earthmoving activities must design, implement, and maintain erosion and sedimentation control measures, setting them forth in a plan.³⁴ Engaging in earthmoving activities requires a permit from the applicable State EPA, and the permit application must be accompanied by the erosion and sedimentation control plan.³⁵ Various required control measures and control facilities are detailed in the regulation.³⁶ All earthmoving activities must be planned so as to minimize the area of disturbed land, reef, or lagoon.³⁷ Post-completion restoration of the site is required.³⁸ Violators are subject to imposition of a civil penalty of between US\$100 and US\$10,000 per day, as well as civil damages, and to issuance of an injunction.³⁹ The Secretary also may issue a cease and desist order and direct remedial or preventative action.⁴⁰

Infrastructure planning: Infrastructure planning is coordinated at the national level. National-scale infrastructure projects, including Amended Compact projects, are delivered by the Department of Transportation, Communication & Infrastructure (DTCI), with similar departments

³² 56 FSM Code ch. 1; 43 Pohnpei Const. art. 12 § 6; Pohnpei Code ch. 2 & ch. 1; Kosrae Const. art. XI § 5; Kosrae State Code tit. 6 ch. 36 & § 11.103; Chuuk Const. art. XI § 2; 24 Draft Chuuk State Code § 1506 & ch. 11 subch. B; Yap Const. art. II § 11; 9 Yap State Code ch.1. During the Trust Territory era, the power of eminent domain lay exclusively with the central government. See, e.g., 24 Draft Chuuk State Code § 1507(1).

Relatedly, in Chuuk, pursuant to the Public Projects Act, the owner of a tree destroyed by a public project is entitled to compensation under a special scheme designed for this purpose. 24 Draft Chuuk State Code ch. 9 & § 1404.

³³ Earthmoving means any construction or other activity that disturbs or alters the surface of the land, a coral reef, or the bottom of a lagoon including, but not limited to, excavations, dredging, embankments, land reclamation in a lagoon, land development, subdivision development, mineral extraction, ocean disposal, and the moving, depositing, or storing of soil, rock, coral, or earth. Earth Moving Reg. 1.3(f).

³⁴ Earth Moving Reg. 2.1. Requirements of an erosion and sedimentation control plan are set forth in Reg. 2.2. Among other factors to be considered are the types, depth, slope, and area of the soils, coral, and/or reef; the original state of the area as to plant and animal life; and whether any coral reef which may be affected by the earthmoving is alive or dead. If the project involves an earthmoving activity in a lagoon, reef, or body of water, the plan should show existing marine life populations as well as minimum and maximum turbidities. *Id.* at Reg. 2.2(b)-(c).

³⁵ Earth Moving Regs. 3.1 & 3.2(b).

³⁶ Earth Moving Reg. 2.3(a)-(c).

³⁷ Earth Moving Reg. 2.3(b)(1).

³⁸ Earth Moving Reg. 2.4.

³⁹ Earth Moving Regs. 5.1 & 5.2.

⁴⁰ Earth Moving Reg. 5.4.

delivering infrastructure at the state level.⁴¹ According to the FSMNG, the absence of an FSM Building Code hampers infrastructure development at all levels.⁴²

An overview of land use planning provisions at the state level is provided in the state chapters.

1.4.4 Freshwater resources and legislations

In the FSM natural vegetative cover is dense on all islands and has not generally been disrupted for intensive agriculture use. Whether planned or fortuitous, this has protected the watersheds of the high islands, helping to reduce rapid runoff, and maintaining a reasonable recharge opportunity for the aquifers that are important to each State for a portion of its water supply. The direct runoff from these intense rainfalls, even on these relatively small surface catchments, also provides one important source of water for all four islands; however, in each case, drought periods also arise when supplementation from ground water sources is important, and even critical.

About 60% of water resources exist as surface water in the form of small, intermittent streams that drain catchments areas of limited aerial extent. The streams are dry for about 20% of the year. The development of surface water is therefore inherently expensive since it requires the construction of dams to impound the surface runoff for use during dry periods. The topography in the stream basins is not conducive to the construction of economical dams. Furthermore, surface water requires extensive and costly treatment, largely to reduce high turbidity, undesirable taste, and odors, and to remove all micro-organisms. The remaining 40% of the

⁴¹ The FSM follows an Infrastructure Development Plan (IDP) prepared by the DTCL in consultation with the states. The current IDP covers infrastructure in 10 sectors: electric power, water/wastewater systems, solid waste management, road and pedestrian facilities, maritime transportation, air transportation, telecommunications, education, health, and government administrative buildings (FSM Infrastructure Development Plan FY2016-FY2025). States have autonomy in planning and implementing their programs under the IDP. *Id.* at 32.

With respect to maritime transportation, the FSM's goal is to provide infrastructure that (i) enables market opportunities to be realized for all areas of the country, including labor market opportunities, and to enhance the level of integration of state economies and the national economy; (ii) provides improved dock facilities to meet both fisheries and commercial shipping needs; (iii) facilitates modern, safe, and efficient interstate and inter-island passenger and cargo vessels; and (iv) coordinates and facilitates the improvement of aids to navigation. *Id.* at 17.

⁴² Efforts to develop an FSM Building Code are underway. See the following:

- "President Panuelo Begins Developing an FSM Building Code" at www.kpress.info/index.php?option=com_content&view=article&id=1437:president-panuelo-begins-developing-an-fsm-building-code&catid=8&Itemid=103;
- "State Governments Requested to Nominate Representatives to Form Working Group By January 29th, 2021," FSM Press Release, January 22, 2021, at <https://gov.fm/index.php/fsm-publicinfo/announcements/35-pio-articles/news-and-updates/417-president-panuelo-begins-developing-an-fsm-building-code-state-governments-requested-to-nominate-representatives-to-form-working-group-by-january-29th-2021>

Currently, projects are designed in accordance with international codes, standards, and guidelines, with only limited account taken of the FSM's specific circumstances. (IDP at 49.)

Legislation at the state level provides for the design and implementation of state building codes or adopts foreign codes by reference. See 31 Pohnpei Code ch. 6; Kosrae State Code tit. 11 ch. 21; CSL 191-11 (Chuuk) (adopting Council of American Building Officials Code); Yap State Code tit. 20 ch. 4.

islands' water resources exist as groundwater in small, dispersed zones of sedimentary deposits, weathered volcanics and weathered schist. These formations are not conducive to the development of high yielding wells, but only for low to medium yielding wells. Drilling through this formation involved costlier investment also. The quality of the ground water is mostly excellent⁴³. Inland activities such as constructions, development of new roads and any other activity that require earthmoving, which can impact waterways, are regulated by states (see section [Land Use Planning and Regulations](#)).

In 2011 the FSM promulgated a resolution for the states and national waters (Resolution No 01-2011) during the National and State Water Summit. The resolution recognize that safe and clean water is generally scarce in the country, limiting the economic growth and improvement to public health in the four Nation's states. The Resolution was entered into by the President of the National Government of the FSM and the State Governors of Yap, Chuuk, Pohnpei and Kosrae. Importantly the resolution (i) reaffirmed the role played by Traditional Leaders in ensuring safe access to safe drinking water and sanitation, (ii) recognized the different land tenure systems used across the FSM as well as, (iii) the key role played by landowners, traditional leaders, non-governmental organizations, Church, women groups, and local, state and national governments in the management of water resources ("*water is everyone's business*"). The purpose of this resolution was to strengthen the coordination of government service delivery for water and sanitation throughout the FSM and co-operation among parties to develop a National comprehensive water and sanitation Policy, including water sector investment plans.

A framework for water and sanitation policy for the FSM was proposed for development in 2011, recognizing the need for an overarching policy guiding water and wastewater management. Although since the 2011 Resolution steps have been taken by states with regards to access to safe drinking water and sanitation, in 2022, the FSM still lacking a national water and sanitation policy guiding framework.

⁴³ SPREP Proceedings of the Pacific Regional Consultation on Water in Small Island Countries – Country Briefing Papers

1.4.5 Marine legislations: conservation & protection of marine resources

This section considers the extent to which FSM law provides for marine conservation, with a dual focus on area-based protection and protection afforded to particular species.

The FSM Constitution contains no express conservation provisions. The state constitutions are more explicit in this regard. The Pohnpei Constitution provides that the governor will establish and faithfully execute comprehensive plans for the conservation of natural resources and the protection of the environment.⁴⁴ The Chuuk Constitution charges the Legislature with providing, by law, for the development and enforcement of standards of environmental quality. The Kosrae Constitution recognizes a right to a healthful, clean, and stable environment, and the state, by law, must protect its environment, ecology, and natural resources from impairment in the public interest.⁴⁵ Finally, the Yap Constitution allows that the state may provide for the protection, conservation, and sustainable development of agricultural, marine, mineral, forest, water, land, and other natural resources.⁴⁶

While legal protections for conservation exist at all levels of government, the FSM has traditionally emphasized the primacy of the states over the national government in adopting safeguards for biodiversity.⁴⁷ There has been increased activity at the national level in recent years, including through the issuance of national policy commitments.

In 2002, the FSM released a National Biodiversity Strategy and Action Plan (NBSAP), which continues to provide the foundation for FSM conservation policy.⁴⁸ Pursuant to that document, the nation's four guiding principles for biodiversity conservation are:

- sovereign rights (the people of the FSM hold the sovereign rights over their biological diversity);

⁴⁴ Pohnpei const. art. VII § 1.

⁴⁵ Kosrae const. art. XI § 1. The waters, land, and other natural resources within the marine space of the state are public property, the use of which the state government is required to regulate by law in the public interest. *Id.* § 4.

⁴⁶ Yap const. art. XIII § 1.

⁴⁷ It is "a prerogative of each State to enact [its] own legislation in line with [its] powers as mentioned in the FSM Constitution to address all issues relating to the conservation of biodiversity." FSM, National Biodiversity Strategy and Action Plan (NBSAP) 9, March 2002. Still, the line between national and state protections has not always been clear, leading to gaps and overlap. "The responsibility for environmental issues is shared between the FSM National Government and the individual FSM State governments. This sharing of responsibility has at times resulted in legislation that appears duplicated at the State and National levels. It has also resulted in gaps in legislation and areas in which the location of responsibility between the State and National Governments has been less than clear. The States take the lead role in ensuring that development is avoided in vulnerable areas and ensuring that critical natural systems are protected. Each State has made efforts to control development and manage natural resources through the creation of land use plans, coastal zone plans, legislation, and regulations. The National Government provides guidance and technical assistance to the States when needed and requested on matters related to planning, economic development, natural resources, fisheries, and the environment []." NBSAP at 9.

⁴⁸ The NBSAP was intended to be the FSM's primary step in satisfying its obligations under the Convention on Biological Diversity (CBD). *Id.* at 10-11.

- a community-based approach (the community is the basic management unit for biodiversity in the FSM, and communities have the right and responsibility to manage and sustainably develop their biodiversity resources for their benefit and that of future generations);
- traditional heritage (the people of the FSM will build upon and utilize the rich traditional knowledge and experience of their ancestors to devise and implement strategies for the sustainable stewardship of the FSM's rich natural resources); and
- ecological integrity (the people of the FSM will strive to maintain and improve the diversity and quality of their ecosystems, conserving biodiversity *in-situ* while enhancing ecosystems' capacity to adapt to change).⁴⁹

The national plan goes on to articulate two key strategic goals with respect to ecosystem management: ensuring that a full representation of the FSM's marine, freshwater, and terrestrial ecosystems are protected, conserved, and sustainably managed, including selected areas designated for total protection;⁵⁰ and ensuring that the FSM's native, endemic, threatened, and traditionally important species are protected and used sustainably for the benefit of the people of the FSM and the global community.⁵¹

Additionally, the FSM has committed to achieving UN SDG Goal 14 (conserve and sustainably use the oceans, seas, and marine resources),⁵² and, pursuant to the MC—a regional initiative launched in 2006 by the governments of the FSM, Palau, and the RMI—to effectively conserve 30 percent of nearshore marine resources and 20 percent of terrestrial resources across Micronesia.⁵³ The FSM also is a party to the Convention on Biological Diversity (CBD).

Finally, each of the four FSM states has developed its own State Biodiversity Strategy & Action Plans (SBSAP) which, together with the NBSAP, are intended to provide the framework for

⁴⁹ NBSAP at 19.

⁵⁰ NBSAP at 21-23.

⁵¹ NBSAP at 24-26. Similarly, the FSM's current Strategic Development Plan includes among its strategic goals for improving the environment: to manage and protect natural resources/protect, conserve, and sustainably manage a full and functional representation of the FSM's marine, freshwater, and terrestrial ecosystems (Strategic Goal 5); and to improve environmental awareness and education and increase involvement of citizenry of the FSM in conserving their country's natural resources (Strategic Goal 6). FSM, Strategic Development Plan: 2004-2023, at 305-14. For further information, see <https://fsm-data.sprep.org/dataset/fsm-strategic-development-plan-2004-2023>.

⁵² Specifically, the FSM has prioritized SDG Target 14.5 (conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information); SDG Target 14.6 (prohibit certain forms of fisheries subsidies that contribute to overfishing, and eliminate subsidies that contribute to IUU [illegal, unreported and unregulated] fishing); SDG Target 14.b (provide access for small-scale artisanal fishers to marine resources and markets); and SDG Target 14.c (enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS). FSM. 2020. *First Voluntary National Review on the 2030 Agenda for Sustainable Development*. p 103. Palikir, Pohnpei: SDG Working Group, Department of Resource & Development, Government of FSM.

⁵³ See UN Sustainable Development Goals, "Micronesia Challenge," at <https://sustainabledevelopment.un.org/partnership/?p=2502>.

biodiversity conservation, resource, waste, pollution, and energy management in each respective state: Pohnpei,⁵⁴ Chuuk,⁵⁵ Kosrae,⁵⁶ and Yap.⁵⁷

Protected Areas

The FSM has no protected area legislation at the national level. Instead, the FSM presently relies on a recently adopted nationwide policy guiding framework for protected areas which, in turn, aggregates and supports state and local protected area mechanisms.

i. National Protected Areas Network (PAN) Policy Framework

In 2018, Congress passed a resolution “approving and adopting” the 2015 Protected Areas Network (PAN) National Guiding Policy Framework (“the PAN Policy Framework”).⁵⁸ The framework is intended to establish a transparent, fair, and efficient system to govern a nationwide protected areas network.⁵⁹ The authority for the policy derives from executive order⁶⁰ and from a number of the FSM’s international commitments.⁶¹

The PAN Policy Framework reflects national and state collaboration. The PAN is the aggregate of protected areas, reserves, and refuges that have been designated by the DR&D as such, in accordance with the PAN Policy Framework.⁶² A “protected area” under the framework is an area “*designated by a state* in accordance with its procedures and/or legislation to be protected.”⁶³ The authority of state governments over the territorial sea is reaffirmed,⁶⁴ and the

⁵⁴ See *Pohnpei State: Strategic Action Plan*. (2004) at www.cbd.int/doc/nbsap/sbsap/fm-sbsap-pohnpei-en.pdf.

⁵⁵ See “Chuuk State Biodiversity Strategy and Action Plan” (2004) at www.cbd.int/doc/nbsap/sbsap/fm-sbsap-chuuk-en.pdf.

⁵⁶ See “Kosrae State Biodiversity Strategy and Action Plan” (2004) at www.cbd.int/doc/nbsap/sbsap/fm-sbsap-kosrae-en.pdf.

⁵⁷ See *Yap State Biodiversity Strategy and Action Plan* (2004) at www.cbd.int/doc/nbsap/sbsap/fm-sbsap-yap-en.pdf.

⁵⁸ C.R. 20-87 (2018).

⁵⁹ Before the Policy Framework can take effect, the DR&D and any state in which the Policy Framework is to be applied must indicate their consent. Similarly, any amendments are subject to consent before they are effective. PAN Policy Framework at 26-27.

⁶⁰ E.O. 1 (establishing roles and responsibility of the FSM DR&D).

⁶¹ These include the FSM’s commitments under the CBD, UNFCCC, and UN Convention to Combat Desertification (UNCCD), as well as pursuant the MC Initiative. See PAN Policy Framework § 1. According to a contemporaneous legislative committee report, the FSM is further committed to achieving three main targets: (1) to establish a system of protected area networks; (2) to effectively conserve at least 30 percent of nearshore marine resources and 20 percent of terrestrial resources across Micronesia by 2020; and (3) to raise US\$29 million for the FSM’s MC Endowment Fund to sustain these efforts in perpetuity. Standing Comm. Rpt. 20-85, re C.R. 20-87/Comm. on Resources and Dev’t, Sept. 26, 2018. Subsequently, during the 24th Micronesia Island Forum in 2019, leaders endorsed new MC goals of effectively managing 50 percent of marine resources, including the EEZ, and 30 percent of terrestrial resources by 2030. For further information, see <http://themicronesiachallenge.blogspot.com/p/about.html>.

⁶² PAN Policy Framework § 3.

⁶³ PAN Policy Framework § 3 (emphasis added).

⁶⁴ “As the governors of all living and non-living resources from land to twelve nautical miles seaward from the traditional baseline, state governments bear the principal responsibility for the management, protection, and development of all resources within their respective boundaries. States, therefore, must be encouraged and supported by the national government in their efforts to protect biodiversity in the FSM through the creation of protected areas. This process must also involve non-governmental organizations (NGOs), municipalities, traditional leaders, communities, and individual resource owners in order to be successful.” *Id.* § 2.2.

framework envisions the FSMNG assisting state and local government in area-based protection efforts:

State, municipal and/or community designated terrestrial, freshwater, and marine areas that support unique communities of natural plants, animals, and other types of organisms, areas of high biodiversity, significant geological sites, as well as other important habitats suitable for preservation must be encouraged, recognized, and supported by the national government. A nationwide Protected Areas Network will allow the national government to assist states and communities in the protection of significant areas of biodiversity, key habitats, and other valuable resources that are important to the future stability and health of the FSM. It will also assist the national government, states, and other partners to leverage and secure technical and funding partnerships from regional and international entities.⁶⁵

The PAN Policy Framework is to be administered by the Department of Resources & Development, in conjunction with state focal points, the Micronesia Conservation Trust (MCT), and the Technical Committee.⁶⁶ R&D administers and implements the PAN at the national level.⁶⁷ The Secretary of the department is the head official for the PAN;⁶⁸ in addition, there is a national PAN coordinator.⁶⁹

States, in turn, are “encouraged” to participate in the PAN. Participating states select a state focal point, one who operates in accordance with all applicable state legislation, regulations, and policies regarding protected areas set within the state.⁷⁰

A Management Unit is the group of people responsible for developing and implementing the management plan for a particular protected area. Management units, depending on the resource tenure of the site, may include state government representatives, NGOs, community members, municipal officials, and private resource owners.⁷¹

A Technical Committee, whose members are nominated by the states and are confirmed by the secretary, evaluates applications for Network membership as well as requests for funding.⁷²

In the event of disputes among key PAN participants, a mediation-based dispute resolution process is provided by the PAN Policy Framework.⁷³

⁶⁵ PAN Policy Framework § 2.2.

⁶⁶ PAN Policy Framework § 4.

⁶⁷ PAN Policy Framework § 4.1.

⁶⁸ PAN Policy Framework § 4.1.a.

⁶⁹ PAN Policy Framework § 4.1.b.

⁷⁰ PAN Policy Framework § 4.2.

⁷¹ PAN Policy Framework §§ 3 & 4.3. Any type of site, regardless of ownership status, may apply to join the PAN. *Id.* § 4.3.

⁷² PAN Policy Framework § 4.4.

⁷³ PAN Policy Framework § 9.4.

A site may become part of the Network in one of two ways: by automatic inclusion or through an application process, as follows:

- When a site has been recognized legally by a state as a refuge, protected area, or preserve, and it has a management plan that complies with the PAN Policy Framework, the site automatically acquires PAN site status upon the request of the governor of that state to the secretary.⁷⁴
- In all other instances, a state, NGO, municipality, community, or combination thereof may apply to the national PAN coordinator to have an area included in the Network.⁷⁵ The PAN Policy Framework establishes an application process.⁷⁶ Among the information to be provided by an applicant is a statement as to why the site should be included in the PAN, including supporting documentation that the site is recognized as a protected area, either by the state in which it is located through a municipal ordinance, by community declaration, or through traditional practice.⁷⁷ The Technical Committee reviews applications and makes recommendations to the secretary, who is charged with granting or denying the application by written order, to include findings of fact.⁷⁸ Applications are evaluated based on a detailed set of criteria: key sites (i.e., features of the site); comprehensiveness (i.e., fit with the PAN and with national and state policies); balance; adequacy; representativeness; resiliency; efficiency; feasibility; sustainability; and socioeconomic criteria.⁷⁹

Each PAN site remains part of the Network in perpetuity unless a withdrawal procedure is undertaken by either the Secretary or the Management Unit.⁸⁰

Pursuant to the PAN Policy Framework, management purposes and use categories are to be used for classifying protected areas in the Network. A management unit must identify in its management plan for a PAN site the appropriate management and use categories, relying on the lists and explanations contained in Appendix 1 of the Policy Framework.⁸¹ Management units are to use, at a minimum, standard regional monitoring guidelines and protocols developed through the MC.⁸²

⁷⁴ PAN Policy Framework § 5.

⁷⁵ PAN Policy Framework §§ 3 & 5.1

⁷⁶ PAN Policy Framework §§ 5.1 to 5.6.

⁷⁷ PAN Policy Framework § 5.1.

⁷⁸ PAN Policy Framework §§ 5.3 & 5.4. An applicant may seek reconsideration by the secretary of an order of denial. *Id.* § 5.5.

⁷⁹ PAN Policy Framework § 5.6.

⁸⁰ PAN Policy Framework §§ 9.1 to 9.3.

⁸¹ PAN Policy Framework § 6.1. The use categories listed in Appendix 1 are intended to reflect the traditional, local, and state uses of a protected area, and are grouped as follows: restricted non-extractive uses, non-extractive uses, and sustainable uses. *Id.* at Appendix 1 § 1.1. The management categories listed in the Appendix track the International Union for Conservation of Nature's (IUCN) management categories for protected areas (I – VI). *Id.* at Appendix 1 § 1.2

⁸² PAN Policy Framework § 6.2.

Management units must develop or revise management plans for each protected area incorporated into the PAN within 12 months after designation; the PAN Policy Framework provides a set of minimum criteria for a management plan. Management units must submit initial and revised management plans to the state focal point for review and approval.⁸³

The Policy Framework envisions that funding for the PAN could come from a wide range of potential sources (governmental and nongovernmental, domestic, and foreign). The key source of funding, however, is the FSM's MC Endowment Fund, which is administered by MCT.⁸⁴

Membership in the PAN affords Management Units with the opportunity to submit annual requests for funding site operations.⁸⁵ Additionally, the Technical Committee may make available a competitive grant pool for projects that support the wider Network.⁸⁶

The DR&D collects information and is responsible for recordkeeping requirements,⁸⁷ reporting requirements,⁸⁸ and monitoring and evaluation requirements⁸⁹ that relate to the performance of the PAN.

ii. Locally managed marine areas

A locally managed marine area (LMMA) is an area of nearshore waters and its associated coastal and marine resources that are managed at the local level by communities, land-owning groups, partner organizations, or collaborative governments that reside or are based in the immediate area.⁹⁰ A locally managed area can vary widely in purpose and design, but two aspects remain

⁸³ PAN Policy Framework § 6.3.

⁸⁴ PAN Policy Framework § 7.1. Other potential funds sourced for the PAN may be deposited directly into the FSM's existing MC Endowment Fund, or those other funds could be deposited into an FSM PAN Fund that includes funding streams in addition to the FSM's MC Endowment Fund. *Id.*

MCT, as the administrator of the FSM's MC Endowment Fund, is responsible for issuing and managing agreements, grants, or contracts, as applicable, to all organizations that receive Endowment funds. *Id.* § 7.9.

⁸⁵ PAN Policy Framework § 7. The funding request process, from the application to the evaluation stage, is described in the Policy Framework. The Technical Committee seeks consensus-based decisions and makes final recommendations to the secretary. *Id.* § 7.2. The secretary must issue orders to include findings of fact that reflect the Technical Committee's funding decisions. *Id.* § 7.7. Orders may be contested. *Id.* § 7.8.

⁸⁶ PAN Policy Framework § 7. Any such projects must support the growth, consolidation, and effectiveness of the PAN as a whole. *Id.* § 7.3. The PAN Policy Framework establishes an overall process to govern competitive solicitation, applications, and awards. *Id.* §§ 7.3 to 7.6. The Technical Committee seeks consensus-based decisions and makes final recommendations to the secretary. *Id.* § 7.4. The secretary must issue orders to include findings of fact that reflect the Technical Committee's funding decisions. *Id.* § 7.7. Orders may be contested. *Id.* § 7.8.

⁸⁷ PAN Policy Framework §§ 8, 8.1. The DR&D maintains national-level records relating to the PAN. Each management unit is responsible for recordkeeping concerning its designated site and must, at least annually, provide a copy of these records to the state focal point. *Id.* § 8.1.

⁸⁸ The DR&D is charged with issuing an annual summary report on PAN implementation. *Id.* § 8.4.

⁸⁹ PAN Policy Framework §§ 8, 8.2. The secretary or a designee keeps records of and monitors the finances of the PAN. MCT, as the administrator of the FSM MC Endowment Fund, undergoes annual audits, as described in the FSM Country Program Strategy. *Id.* § 8.2.

All entities receiving PAN funding must satisfy monitoring and evaluation requirements. *Id.* § 8.3.

⁹⁰ See The Locally-Managed Marine Area (LMMA) Network: "What is an LLMA?" at <https://lmanetwork.org/what-we-do/why-use-an-lmma>.

consistent among them: a well-defined or designated area, and involvement of communities and/or local governments in decision-making and implementation. An LMMA differs from a conventional marine protected area in that LMMAs are characterized by local ownership, use and/or control and, in some areas, follow the traditional tenure and management practices of the region.⁹¹

The individual states of the FSM have explored and implemented LMMAs to varying degrees.⁹² Pohnpei is a member of the LMMA Network,⁹³ which provides information and resources on LMMAs and community-based adaptive management (CBAM), as well as training in project design, monitoring, data management and analysis, fundraising, communications, and more.⁹⁴ Additionally, all four states and the FSMNG participate in the Pacific Islands Managed & Protected Area Community (PIMPAC), which aims to provide continuous opportunities for the sharing of information, expertise, practice, and experience to develop and strengthen site-based and ecosystem-based management capacity throughout the Pacific Islands region.⁹⁵

Marine species and other wildlife

Legislation from the Trust Territory era provides national level protection, much of it qualified, for various marine species.⁹⁶ States also provide a range of local protections within their respective jurisdictions. Sharks receive more robust protection in the FSM than most species.

Subject to narrow exception,⁹⁷ it is prohibited in the waters of FSM to knowingly catch fish or any other marine life by means of explosives, poisons, chemicals, or other substances that kill fish or marine life; to knowingly possess or sell fish or marine life so caught; or to knowingly place such articles or substances.⁹⁸ A violator of these prohibitions is subject to, upon conviction, a fine of between US\$100 and US\$2,000, and imprisonment of between six months and two years.⁹⁹

Various marine species receive targeted protections under FSM law (see [appendix 1](#)).

⁹¹ See Reef Resilient Network: "LMMAs" at <https://reefresilience.org/management-strategies/marine-protected-areas/lmmas>.

⁹² See "The State of Coral Reef Ecosystems of the Federated States of Micronesia" at www.sprep.org/att/IRC/eCOPIES/Countries/FSM/53.pdf.

⁹³ See The Locally-Managed Marine Area (LMMA) Network: "LMMA Pohnpei" at <https://lmmannetwork.org/who-we-are/country-networks/pohnpei>.

⁹⁴ See The Locally-Managed Marine Area (LMMA) Network: "What We Do" at <https://lmmannetwork.org/what-we-do/the-lmma-approach>.

⁹⁵ See Pacific Islands Managed & Protected Area Community: "PIMPAC Scope" at www.pimpac.org/aboutus.php.

⁹⁶ See, generally, FSM Code tit. 23 ch. 1. Title 23 is the Code's resource conservation title.

⁹⁷ The district administrator may grant written permission to use an otherwise prohibited means of fishing, where the purpose is to avoid waste or loss and where consumption or sale of the fish or other marine life is not harmful or hazardous to health and human life. 23 FSM Code § 102.

⁹⁸ 23 FSM Code § 101(1), (2). The legislation gives a broad, open-ended definition to "poisons," "chemicals," and "substances." *Id.* § 101(3). The prohibition is inapplicable, however, to the use of local roots, nuts, or plants that have the effect of stupefying—but not killing—fish or other marine life. *Id.* § 103.

⁹⁹ 23 FSM Code § 104.

Laws at the state level also provide various protections for a range of flora and fauna. Below are reported the most relevant to this review. Specific laws for the protection of targeted species are reported in [Appendix 1](#) of this document.

Small-Scale Fishing

The legal regime in the FSM does not employ the term small-scale fishing.¹⁰⁰ However, the legal regime often does use the term subsistence fishing to capture a similar idea and, as previously discussed, traditional fishing rights of FSM citizens are constitutionally recognized at the state level. The legal regime also often implicitly recognizes the existence of small-scale fishing within the FSM in the ways in which statutes seek to define commercial fishing or domestic fishing. The definitions at times use length of vessel and nationality of ownership of vessels to distinguish between foreign fishing and domestic fishing.

At the national level, subsistence fishing is defined and recognized, but the primary focus at the national level is regulating commercial fishing, and even then, with a focus primarily on foreign fishing. The FSM Code defines “subsistence fishing” and fishing by a citizen or resident substantially for personal consumption and does not include any fishing resulting or intended for sale.¹⁰¹ In contrast, the Code defines “commercial fishing” as any fishing resulting or intending to result in the sale or trade of fish, with the presumption that use of a vessel measuring 27 feet or more in length or use of more than one vessel for fishing constitutes “commercial fishing.”¹⁰²

Implied within the inclusion of the 27-foot-vessel minimum is the recognition that commercial small-scale fishing, indeed, does take place in the FSM within the EEZ. The national government statute then distinguishes in this area between domestic fishing and foreign fishing, both of which are discussed in greater detail in Section 5.2.2 of this report. The FSM Code further defines “domestic fishing” as any fishing by a local fishing vessel longer than 27 feet in overall length, but not including commercial pilot fishing.¹⁰³ A “local fishing vessel” means any fishing vessel wholly owned and controlled by the FSMNG or any state government; one or more FSM citizens; or any group of people incorporated or established under the laws of the FSMNG or of any state, and which is wholly owned and controlled by an FSM citizen or company.¹⁰⁴ The type of fishing involved—as specified by these statutory definitions—matters primarily in determining whether a permit or license will be required.¹⁰⁵

¹⁰⁰ According to the glossary of the FAO, artisanal (or small-scale fisheries) are traditional fisheries involving fishing households (as opposed to commercial companies), using relatively small amount of capital and energy, relatively small fishing vessels (if any), making short fishing trips close to shore, and mainly for local consumption. They can be subsistence or commercial fisheries. See FAO's " Family Farming Knowledge Platform: Artisanal Fisheries" at www.fao.org/family-farming/detail/en/c/335263.

¹⁰¹ 24 FSM Code § 102(60).

¹⁰² 24 FSM Code § 102(15).

¹⁰³ 24 FSM Code § 102(18).

¹⁰⁴ 24 FSM Code § 102(43).

¹⁰⁵ See 24 FSM Code § 103.

Finally, NORMA—the agency charged with regulating fishing at the national level—is explicitly required to take into account the interests of artisanal and subsistence fishers within the FSM.¹⁰⁶

Given its greater likelihood to occur near shore, small-scale fishing is protected more explicitly by the states level, which have authority near shore and in their internal waters.

Fisheries

Fishing is a major focus for each of the five governments in the FSM. This is due to the fact that fishing is a key part of the everyday lives of FSM citizens, whether for subsistence, recreation, or employment. As discussed above, customs and traditions relating to fishing rights in certain areas—mostly nearshore, around submerged reefs and tidelands—are deeply rooted in Micronesian culture and explicitly recognized in the FSM and state constitutions. Annual fishing fees constitute an increasingly large share of annual local revenues for the FSMNG, which heightens its focus on this area and has led, in the past, to conflicts with the state governments over distribution of the substantial revenues.

As with most policy areas in the FSM, governance of fishing within the FSM is split between the national government—primarily focused on regulating fishing in the EEZ—and the four state governments—primarily focused on the area within 12 nm of baselines. The FSMNG primarily regulates commercial fishing, while the state governments seek to safeguard subsistence fishing, although there is overlap in these areas. This arrangement also reflects the geographic and spatial realities that most commercial fishing occurs within the EEZ, while most subsistence fishing (as well as small-scale fishing) occurs within the 12 nm of state marine jurisdiction and internal waters. In 2017, FSM Congress established a closed area for commercial fishing which extends 12 miles seaward of the territorial sea. Fishing and exploitation of natural resources in this area are prohibited.

Commercial Fishing

The regulation of commercial fishing—especially by “foreign fishing vessels”—in FSM's EEZ is an area of intense focus and ongoing legal activity, given the significant portion of annual domestic revenues derived from fishing access fees imposed and collected by the FSMNG. More information on legislation commercial fishing in the FSM are included in [Appendix 2](#).

Recreational Fishing

Recreational fishing in the FSM—under national and state statutes—is typically envisioned as a tightly proscribed activity, at least with respect to foreigners. More information on recreational fishing is provided in [Appendix 3](#) of this document.

¹⁰⁶ 24 FSM Code § 502(4)(f).

Aquaculture

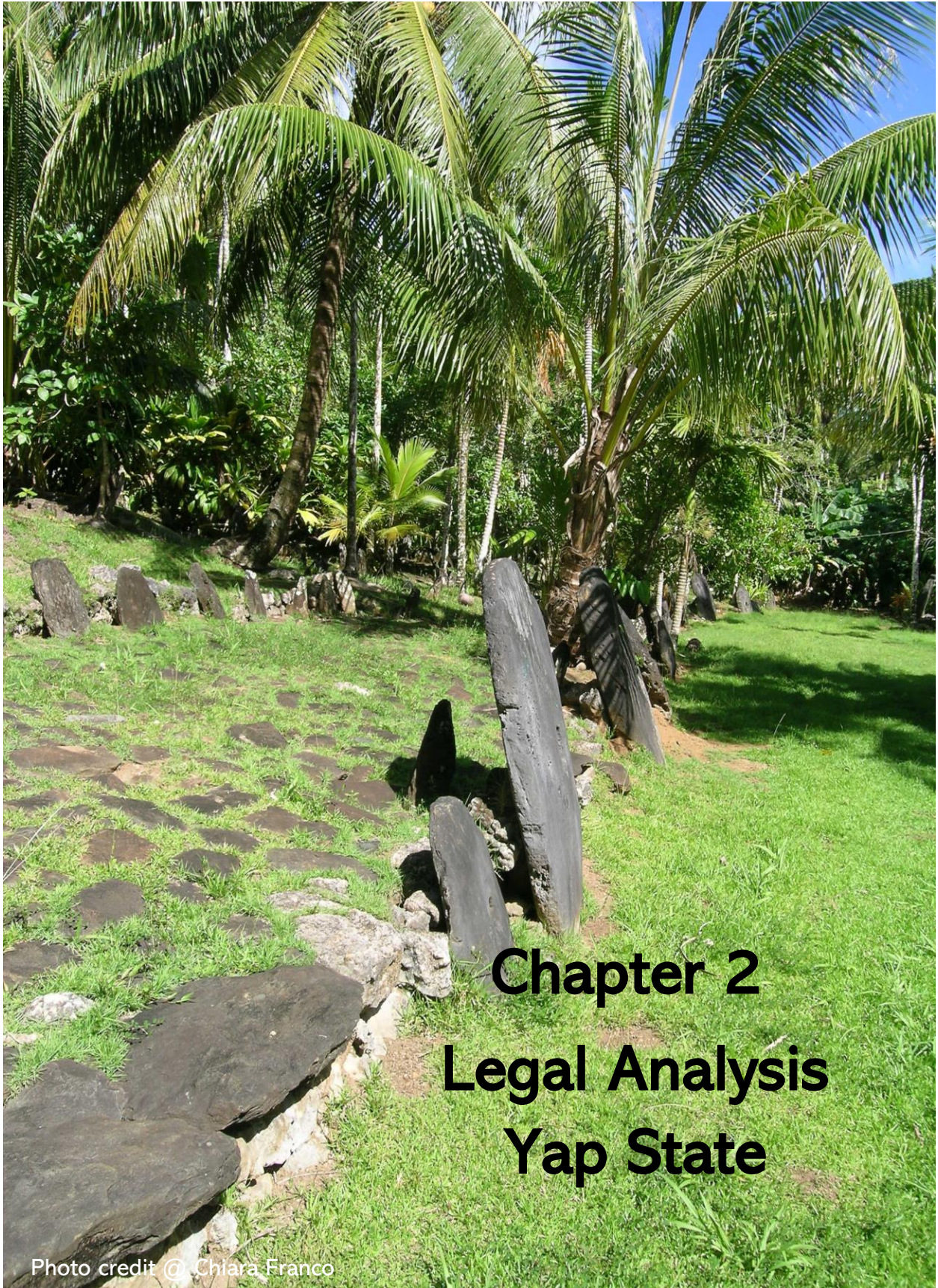
The FSM SDP 2023 Action Plan articulates two action items specifically relating to aquaculture: establishing a national overarching aquaculture development framework and promoting small-scale community managed aquaculture projects.

In 2019, with the assistance of the SPC, the FSM published the *Federated States of Micronesia Aquaculture Management and Development Plan*.¹⁰⁷ The detailed report was developed with collaboration among the FSMNG, the four state governments, and stakeholders representing fisheries governance, the private sector, NGOs, and civil society. For each of the five governments—the FSM and the four states—the report employs a similar structure for laying out a government-specific “aquaculture development plan.” The report identifies key government agencies involved in aquaculture development and regulation; individually discusses each “priority commodity;” and analyzes challenges as well as strategies for success.¹⁰⁸

¹⁰⁷ For details, see

www.spc.int/DigitalLibrary/Doc/FAME/Manuals/Federated_States_of_Micronesia_Aquaculture_Management_and_Development_Plan.pdf.

¹⁰⁸ The challenges are captioned as follows: capacity building and technical skills; governance and policy; economic viability; markets and trade; environment and climate change; and infrastructure.



Chapter 2

Legal Analysis

Yap State

Photo credit @ Chiara Franco

2.1 Geography

Yap State is the westernmost in the FSM, lying midway between Guam and Palau, with a population of approximately 11,000. Yap is comprised of four relatively large main islands (Gagil, Rumung, Tomil, and Yap) connected by a coral reef and have geology of volcanic origin characterized by gentle topography with an elevation of 175 m (574 ft) above sea level, and substantial swampy lowlands. The state’s landmass is a total of 102.9 km² (39.7 sq mi). Yap state is comprised of outlying coral islands and atolls, nineteen (19) of which are inhabited¹⁰⁹ with a total land area of about 45 square miles. Yap has a deep cultural tradition and is perhaps best known for its “stone money,” which consists of huge disks of stone. In ancient times, the stone was quarried in Palau’s Rock Islands at great risk due to the dangerous sea voyage. The stone money can measure up to two meters in diameter and weigh up to four tons, making it the world’s largest currency.

2.2 Yap Climate Change Overview

Table 3. Overview of climate trends in Yap State

Climate feature	Climate trends
Air Temperature	In Yap, annual mean air temperatures have increased at a rate of +0.3°F (0.17°C) per decade since 1951. Annual maximum air temperatures have increased at a rate of +0.22°F (0.12°C) per decade since 1951, showing a further increase increasing at a rate of +0.32°F (0.18°C) per decade during the dry seasons.
Rainfall	Yap is affected by the West Pacific Monsoon climatic pattern bringing storms and typhoons with additional rain during the wet season. Average annual rainfall in Yap is of 122 inches (3098 mm) and it shows a small declining trend of -0.03 inches (0.87mm) per decade since 1950. The number of consecutive dry days ¹¹⁰ in Yap has decreased (-0.37) since 1952, suggesting that the area is potentially getting wetter. In a typical El Niño, dryness and drought are common.
Sea Level	Coastal flooding is recurrent particularly during storms and typhoons.
Storm patterns	The Micronesia Region is the most active tropical cyclone basin in the world, with tropical storms and typhoons that can occur annually and affect especially Chuuk and Yap State. Only in the years between 2013 and 2019 Yap state was hit from 5 Typhoons. Yap out-lying islands are particularly affected by typhoons, in 2013 Typhoon Hagupit caused extensive damages to Ngulu, Eauripik, Woleai, Ifalik. Most recently, in 2019, Wutip contaminated water and damaged crops in Satawal, Lamotrek, Elato, Faraulep and Piig.

¹⁰⁹ Government of the Federated States of Micronesia (2016). Yap Joint State Action Plan for Disaster Risk Management and Climate Change. SPC’s Suva Regional Office, Fiji.

¹¹⁰ Consecutive Dry Days: Maximum number of consecutive days in a year with rainfall less than 1mm (0.039 inches)

Climate feature	Climate trends
Sea Surface Temperature	Natural variability (i.e., year-to-year) still play a large role in determining the sea-surface temperature also in Yap. Historical changes are consistent with the broad-scale sea-surface temperature trends for the wider Pacific region, indicating increased SST warming.
Ocean Acidification	Ocean acidification is projected to continue, with consistent decline in aragonite saturation.

Sources: Pacific Climate change data portal, Data portal, NOAA National Centers for Environmental Information (NCEI), Australian Bureau of Meteorology and CSIRO-2014

2.3 Yap Gender Legislation & Policies

Yap State has passed Law No. 9-63, which addresses the need for accessibility that affects people with disabilities. Through this law, accessibility considerations are incorporated into Yap State’s building codes (10).¹¹¹

Yap does not currently have policies that address the issues of domestic violence, family protection, or an increased age of consent. The age of consent is still only 13.¹¹² Within this state, culture and tradition still primarily dictate the social expectations for women, men, girls, and boys.

2.4 Government Composition

Yap State has its own constitutional government. Unlike the FSM Constitution, however, Yap’s Constitution has created a body of traditional leaders, “a Council of Pilung and Council of Tamol which shall perform functions which concern tradition and custom.” The Yap State Legislature is a unicameral body comprised of ten members, elected to four-year terms from the election districts described in Article XI of the Yap Constitution. The Legislature’s power extends to all rightful subjects of legislation not inconsistent with the Yap Constitution. Unique among the four States, the Yap Constitution enshrines a specific legislative role for its body of traditional leaders with respect to custom and tradition. Each bill passed by the Legislature is to be presented to the Council of Pilung and the Council of Tamol for consideration. The Councils have the power to disapprove a bill that adversely affects tradition and custom or the role or function of a traditional leader, as recognized by tradition and custom. A disapproved bill may be amended to meet the Councils’ objections and, if amended and passed, it is then presented again to the Councils.

¹¹¹ National report submitted in accordance with paragraph 5 of the annex to Human Rights Council resolution 16/21* Federated States of Micronesia - Human Rights Council, Working Group on the Universal Periodic Review (January 2021) (p.10) <https://undocs.org/pdf?symbol=en/A/HRC/WG.6/37/FSM/1>

¹¹² Micronesia 2018 Human Rights Report (p.8) <https://www.state.gov/wp-content/uploads/2019/03/MICRONESIA-2018.pdf>

Yap's Executive Branch is led by the governor and lieutenant governor, who are elected jointly by garnering at least 45 percent of the votes cast. Each joint ticket must include one person who is a resident of Yap Islands Proper and one who is a resident of the Outer Islands. Of particular relevance to ocean management, the Yap Department of Resources and Development (DR&D) promotes economic development and the conservation and development of agriculture, minerals, forests, water, land, and other natural resources. The department is composed of the divisions of Agriculture and Forestry, Marine Resource Management, Commerce and Industries, Workforce Enrichment, and Land Resources. The Division of Land Resources, in turn, consists of the subdivisions of Public Land and Property, Land Registration, and Survey and Mapping. The Governor may provide for the operation of the Executive Branch by executive order, administrative regulation and directive consistent with this chapter.

The judicial branch in Yap State consists of the State Court and other courts as may be created by law. Yap's Constitution contains a judicial guidance clause providing that court decisions must be consistent with the State Constitution, state traditions and customs, and the social and geographical configuration of the State.

The Yap Constitution recognizes the right of citizens to organize and operate local governments. Pursuant to implementing legislation, the 28 extant municipalities of Yap State are identified, and it is noted that their respective geographical boundaries are "according to custom." These municipalities are: Asor, Dalipebinaw, Eaurapik, Elato, Fais, Falalap (Ulithi Atoll), Falalus, Fanif, Faraulep, Fassarai, Gagil, Gilman, Ifalik, Kanifay, Lamotrek, Lothou, Map, Mogmog, Ngulu, Rull, Rumung, Satawal, Sileap, Sorol, Tomil, Weloy, Woleai Islands (Falalop, Mariyang, Paliau, Tahoilap), and Woteggai. State law further bestows on certain "chartered municipalities" a variety of powers and responsibilities, including the powers to: "promote and enhance the municipality's natural beauty, objects and places of historic and cultural interest, sightlines and physical good order;" "promote the public welfare of the inhabitants of the municipality;" and "promote and preserve traditions and customs in a manner consistent with the State Constitution and state laws."

Nothing contained in Yap municipal government law, however, takes away a role or function of a traditional leader, as recognized by custom or tradition, nor does it prevent a traditional leader from being recognized, honored, and given formal or functional roles in a municipality.

As already noted above, traditional considerations are deeply interwoven in Yap State law. Additionally, the State Constitution provides that "due recognition" must be given to the Dalip pi Nguchol, as well as to traditions and customs in providing a system of law. Nothing in the State Constitution may be construed to limit or invalidate any recognized tradition or custom. Overall, Yap's Constitution contains the most extensive recognition of customs and traditions among the States of the FSM. Yap State has enacted two statutes specifically relating to customs and traditions. The first creates the position of "culture teachers," whose function in elementary schools in the Yap Proper Islands is to instruct students in various aspects of Yapese heritage and culture. The second relates to operationalizing the function of the two Councils of Traditional

Leaders, specifically recognized in the Yap Constitution. This statute lays out additional functions for the councils concerning customs and traditions: advising and making recommendations to state government; resolving problems concerning municipalities and islands; and promoting and preserving Yapese customs and traditions.

The Yap Constitution allows that the state may provide for the protection, conservation, and sustainable development of agricultural, marine, mineral, forest, water, land, and other natural resources.¹¹³

2.5 Environment & Climate Change Legislation & Policies

2.5.1 Climate Change Legislation & Policies

Yap has not developed a Climate Change Policy for the state yet. However, a Joint State Action Plan (JSAP) for Disaster Risk Management and Climate Change was endorsed in 2016. The JSAP included a range of stakeholder views concerning risk management, vulnerability, and actions to enhance Yap's resilience to disaster and climate risk. The timeline for the implementation of climate change adaptation activities for key sectors (i.e., water, marine resources, health, energy, education, waste, etc.) was over five (5) years, which requires now to be updated for the next 5 years.

2.5.2 Land Ownership, Use, Planning and Management

Private Lands

Title to land in Yap may be acquired only in a manner consistent with traditions and customs.¹¹⁴¹¹⁵ An agreement for the use of land where a party is not a citizen of the FSM, or a corporation not wholly owned by such citizens may not exceed a term of 100 years. The Legislature may prescribe a lesser term.¹¹⁶ The Legislature has enacted a statute which limits such term to 50 years.¹¹⁷

When the Subdivision of Land Registration (of the Department of Resources & Development) identifies a land dispute, that dispute is remanded to the appropriate municipal court for resolution. Decisions of the municipal courts are appealable to the Yap State Court Trial Division on a trial de-novo basis.¹¹⁸

¹¹³ Yap const. art. XIII § 1.

¹¹⁴ Yap Const. art. XIII § 3.

¹¹⁵ Traditions of the people of the FSM may be protected by statute. If challenged as violating other expressly identified constitutional rights, protection of Micronesian tradition is considered to be a compelling social purpose that warrants governmental action. The Constitution neither may be interpreted to take away a role or function of a traditional leader—recognized by custom and tradition—nor may it prevent a traditional leader from being recognized, honored, and given formal or functional roles at any level of government, as may be prescribed by the Constitution or by statute.

¹¹⁶ Yap Const. art. XIII § 2.

¹¹⁷ Yap State Law No. 9-64.

¹¹⁸ 3 Yap State Code § 125 (Executive Branch Reorganization Act).

The State recognizes traditional rights and ownership of natural resources and areas within the marine space of the state from the high water mark up to and beyond 12 nm from island baselines. No action may be taken to impair these traditional rights and ownership, except insofar as the state government may provide for the conservation and sustainable development of natural resources within this marine space.¹¹⁹

Public lands

The State of Yap holds title to public lands (Table 1) in trust for the people and is authorized to administer, manage, and regulate the use of such lands.¹²⁰ Any sale, grant, exchange, or lease of public lands, the terms of which exceed five years in total, requires the consent of the Legislature.¹²¹ Any lease agreement for public lands entered into by the governor and a prospective lessee must contain a certification by the governor that the lease is consistent with the state's official plans. Agreements for the conveyance of public lands are signed by the governor and the other party to the lease prior to their submission to the Legislature.¹²² An agreement for the conveyance of vacant public land for development must be accompanied by an environmental impact assessment study, conducted by an independent entity prior to the submission of the lease agreement to the Legislature.¹²³

Land Use Planning and Regulation

State law established the Yap Islands Planning Commission for the purpose of preparing, reviewing, and implementing a Master Plan and land use requirements for the Yap Islands Proper.¹²⁴ The Outer Islands Planning Commission was similarly established to perform these functions with respect to the atolls and islands of the Outer Islands of Yap State.¹²⁵

Most excavation or filling for structures, as well as the carrying out of structural work, within the Yap Islands Proper Master Plan Area requires a building permit from the Yap Islands Planning Commission.¹²⁶

Yap, by legislation, has established a system of plane coordinates for designating positions within the state.¹²⁷

¹¹⁹ Yap Const. art. XIII § 5.

¹²⁰ 9 Yap State Code §§ 101 & 102(a), (b).

¹²¹ 9 Yap State Code § 103(a).

¹²² 9 Yap State Code § 103(b).

¹²³ 9 Yap State Code § 103(c).

¹²⁴ 20 Yap State Code § 101.

¹²⁵ 20 Yap State Code § 121.

¹²⁶ Yap State Code tit. 20 ch. 3.

¹²⁷ Yap State Code tit. 20 ch. 5.

The specified land use control requirements identified in Yap’s legislation are minimal and not reflective of a systematized approach that is likely to inform marine spatial planning.¹²⁸

Earthmoving activities: In Yap earthmoving regulations¹²⁹ shall apply to all earthmoving¹³⁰ activities, defined in the regulations as ongoing activities of a continuous nature such as dredging, quarrying, etc. and construction activities and operations. All earthmoving activities within Yap State shall be notified to Yap Environmental Protection Agency (EPA)¹³¹ and conducted in accordance with the regulations and in such a way as to prevent accelerated erosion and acceleration of sedimentation. The types of erosion and sedimentation control facilities that are incorporated into all earthmoving activities shall be relating to control measures such as minimize the area of exposed land, limit the velocity of flow in the facilities to a speed that will not cause significant erosion, stabilize slopes, channels, ditches or any disturbed land area, utilization of sedimentation retention booms¹³² used to restrict accelerated sedimentation around earthmoving or earth-disturbing activities, utilization of diversion terraces, development of interceptor channels that convey sediments to sedimentation basins or to vegetated areas. These erosion and sedimentation control measures shall be set forth in a plan for erosion and sedimentation control. If the project involves an earthmoving activity in a lagoon or on a reef or any body of water, the plan shall give an account of marine life populations in the area and adjacent to the area of earthmoving activity as well as existing water quality. The baseline study shall be made prior to any earthmoving activity by a person trained and experienced in aquatic biology. Violators of the Earth Moving Regulations provisions are liable for civil penalties as provided in the Environmental Quality Protection Act.

For example, Yap State articulates its public policy section as follows:

“The Yap State Government, recognizing the profound impact of man’s activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth and redistribution, cultural change, resource exploitation, and technological advances, and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the State of Yap, in cooperation with the [FSMNG], municipal governments,

¹²⁸ See Yap State Code tit. 20 ch. 2.

¹²⁹ See Yap State Code tit. X ch. 1.

¹³⁰ Yap State Code tit. X ch. 1. "Earthmoving Activity" means any construction or other activity which disturbs or alters the surface of the land, a coral reef, or bottom of a lagoon, including but not limited to excavations, dredging, embankments, land reclamation in a lagoon, land development, subdivision development, mineral extraction, ocean disposal, and the moving, depositing or storing of soil, rock, coral, or earth.

¹³¹ See Yap State Code tit. X ch. 1. § 6.2.: Any person who issues building permits or loans for the purposes of building shall notify EPA or its Executive Officer immediately upon receipt of an application for a loan or building permit involving an earthmoving activity by forwarding to EPA office a copy of the application.

¹³² Sedimentation Retention Boom means an impermeable membrane suspended from floats and weighted to the bottom of water bodies and arranged in a linear manner such that all sediments are confined to the local area of marine earthmoving activity.

and other concerned public and private organizations, to use all practical means and measures, including financial and technical assistance, to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of the State of Yap.”¹³³

Environmental Impact Assessment

Yap state statute also contains a section more specifically focused on EIAs, although the precise terminology varies from state to state.

The statute in Yap State requires that an EIA study be conducted and that an Environmental Impact Statement (EIS) be submitted. The statute requires certain specific information be included in the EIS, including an environmental impact assessment study in accordance with the provisions of this chapter and the regulations established by the Agency.¹³⁴

2.5.3 Freshwater

Yap has not developed a Freshwater Policy for the state. Nevertheless, regulations for the monitoring of freshwater quality do exist and are enforced by the state’s EPA.

2.5.4 Marine Conservation & Protected Areas

Protected Areas Network

Yap state did not establish a Protected Areas Network legislation, instead the government has chosen to promulgate the Yap State Protected Areas Network (PAN) Regulations. These regulations were proposed at the recommendation of the Yap State Department of Resources and Development. The purpose of the regulations is to implement assistance to PAN pursuant to the conservation of traditional rights and ownership of natural resources and areas by establishing a PAN in Yap in support of traditionally owned natural resources and areas, establishing the roles and responsibilities of the Department of Resources and Development,

¹³³ 18 Yap State Code § 1502(a); see also 27 Pohnpei Code § 1-102 and 22 Draft Chuuk State Code § 1002. Yap and Pohnpei public policy sections, alike, articulate additional goals for their citizens. For example, Yap’s statute references fulfilling “the responsibilities of each generation as trustee of the environment for succeeding generations;” assuring “safe, healthful, productive and aesthetically and culturally pleasing surroundings;” attaining “the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable or unintended consequences;” and preserving “important historic, cultural, and natural aspects of Yapese heritage, and maintain[ing], wherever possible, an environment which supports diversity and variety of individual choice.” 18 Yap State Code § 1502(b). Pohnpei’s statute requires “taking into account considerations of economic development, budgetary limitations, and traditional cultural relations” in pursuit of objectives similar to those of Yap as well as preventing “injury to plant and animal life.” 27 Pohnpei Code § 1-102(2). Pohnpei’s statute also goes further to impose an individual mandate on each Pohnpeian: “The state of Pohnpei recognizes that each person has a responsibility to contribute to the preservation and enhancement of the environment.” 27 Pohnpei Code § 1-102(4).

¹³⁴ 18 Yap State Code § 1509.

Councils of Pilung and Tamol, and their designated Management Units, establishing the process and procedures for the application for PAN status for traditionally owned natural resources and areas, designating the criteria for PAN Management Plans, establishing the process for procedures for Department technical assistance available to the Councils of Pilung, Tamol, and their designated Management Units, establishing the process and procedures for the management of PAN information and documentation, and establishing the Provision of State funds for PAN sites.

The Council of Pilung or Tamol shall submit a letter of request to the Department when seeking to designate a resource or area as a protected area within the PAN. The letter must identify the Management Unit responsible for the protected area. Management units must keep a budget and submit requests for funding to the Department. Management Units must also keep and submit Management Plans that conform to the criteria in the National PAN Policy. The Management Units that receive funding through the Annual Budgeting Cycles are required to submit an annual report to the Department each year.

The regulations establish a state focal point and state PAN coordinator, which are responsible for the administration of the PAN program. The regulations also require that the Department ensures that any Management Plan for the protected area seeking entry into the PAN meets the criteria identified in the National PAN Policy. The Department is tasked with assisting the Management Unit in the enforcement of the protected area, including through coordination with other enforcement agencies.

Marine Species & Other Wildlife

State law prohibits, through provisions that track the language contained in national law, the catching of fish or any other marine life by means of explosives, poisons, chemicals, or other substances.¹³⁵

The Yap Fishing Authority is charged with adopting regulations for the conservation, management, and exploitation of all living resources in the state fishery zone and internal waters.¹³⁶

The governor may, on convincing evidence that the population of a species, subspecies, or class of marine life is in imminent danger of dropping below a minimum desirable maintenance level, declare a temporary moratorium prohibiting its taking or harvesting. The Declaration of Moratorium must state any and all restrictions imposed, including size limitations and areas affected. Public notice must be given. No person may violate the Declaration of Moratorium.¹³⁷

¹³⁵ See 18 Yap State Code § 1008.

¹³⁶ 18 Yap State Code § 208.

¹³⁷ 18 Yap State Code § 1011.

It is prohibited to knowingly take or harvest any species seeded or planted by the State of Yap, except where the governor has given express written permission authorizing the taking or harvesting.¹³⁸

Various marine species receive targeted protections under Yap State Law (i.e., sea turtles), for more information see [Appendix 1](#).

Fisheries

In Yap, small-scale fishing is governed by the State Fishery Zone Act of 1980.¹³⁹ Although the Act does not define subsistence fishing, it does contain explicit recognition of small-scale fishing rights of Yapese within Yap: traditionally recognized fishing rights, wherever located within the State Fishery Zone and internal waters, are “preserved and respected.”¹⁴⁰ This statutory provision codifies the constitutional protection given to the broader range of “traditional rights and ownership of natural resources and areas within the marine space” of Yap contained in the Yap Constitution.¹⁴¹ Additionally, the Yap Constitution provides that a foreign fishing, research, or exploration vessel cannot take natural resources from any area within the marine space of the state, except as may be permitted by the appropriate persons who exercise traditional rights and ownership and by statute.¹⁴²

The Act regulates foreign fishing¹⁴³ in the State Fishery Zone, mostly through a permit system— but explicitly prohibits any foreign fishing in Yap’s internal waters.¹⁴⁴ The Act provides further protection for small-scale fishing in Yap’s waters by reserving a certain portion of each fishery for the Yapese: “[t]he total allowable level of foreign fishing, with respect to any fishery subject to the provisions of this chapter, shall be that portion of the maximum sustainable yield of such fishery which will not be harvested by vessels of Yap.”¹⁴⁵

- State law prohibits, through provisions that track the language contained in national law, the catching of fish or any other marine life by means of explosives, poisons, chemicals, or other substances.¹⁴⁶

¹³⁸ 18 Yap State Code § 1010. Unless the law otherwise provides, a violator of any of Yap’s wildlife conservation provisions is guilty of a misdemeanor and, upon conviction, subject to a fine of US\$500 and 60 days of imprisonment. 18 Yap State Code § 1007.

¹³⁹ 18 Yap State Code § 201 et seq.

¹⁴⁰ 18 Yap State Code § 207.

¹⁴¹ See Yap Const. art. XIII § 5.

¹⁴² Yap Const. art. XIII § 6.

¹⁴³ “Foreign fishing” is defined to mean fishing by vessels that are (i) not registered in Yap; (ii) not wholly owned by citizens of Micronesia; (iii) not wholly controlled by citizens of Micronesia; or (iv) of foreign registry chartered by citizens of Micronesia. 18 Yap State Code § 203(h).

¹⁴⁴ 18 Yap State Code § 209.

¹⁴⁵ 18 Yap State Code § 210(c).

¹⁴⁶ See 18 Yap State Code § 1008.

- The Yap Fishing Authority is charged with adopting regulations for the conservation, management, and exploitation of all living resources in the state fishery zone and internal waters.¹⁴⁷
- The governor may, on convincing evidence that the population of a species, subspecies, or class of marine life is in imminent danger of dropping below a minimum desirable maintenance level, declare a temporary moratorium prohibiting its taking or harvesting. The Declaration of Moratorium must state any and all restrictions imposed, including size limitations and areas affected. Public notice must be given. No person may violate the Declaration of Moratorium.¹⁴⁸
- It is prohibited to knowingly take or harvest any species seeded or planted by the State of Yap, except where the governor has given express written permission authorizing the taking or harvesting.¹⁴⁹

Yap State approach to recreational fishing is described in [Appendix 3](#).

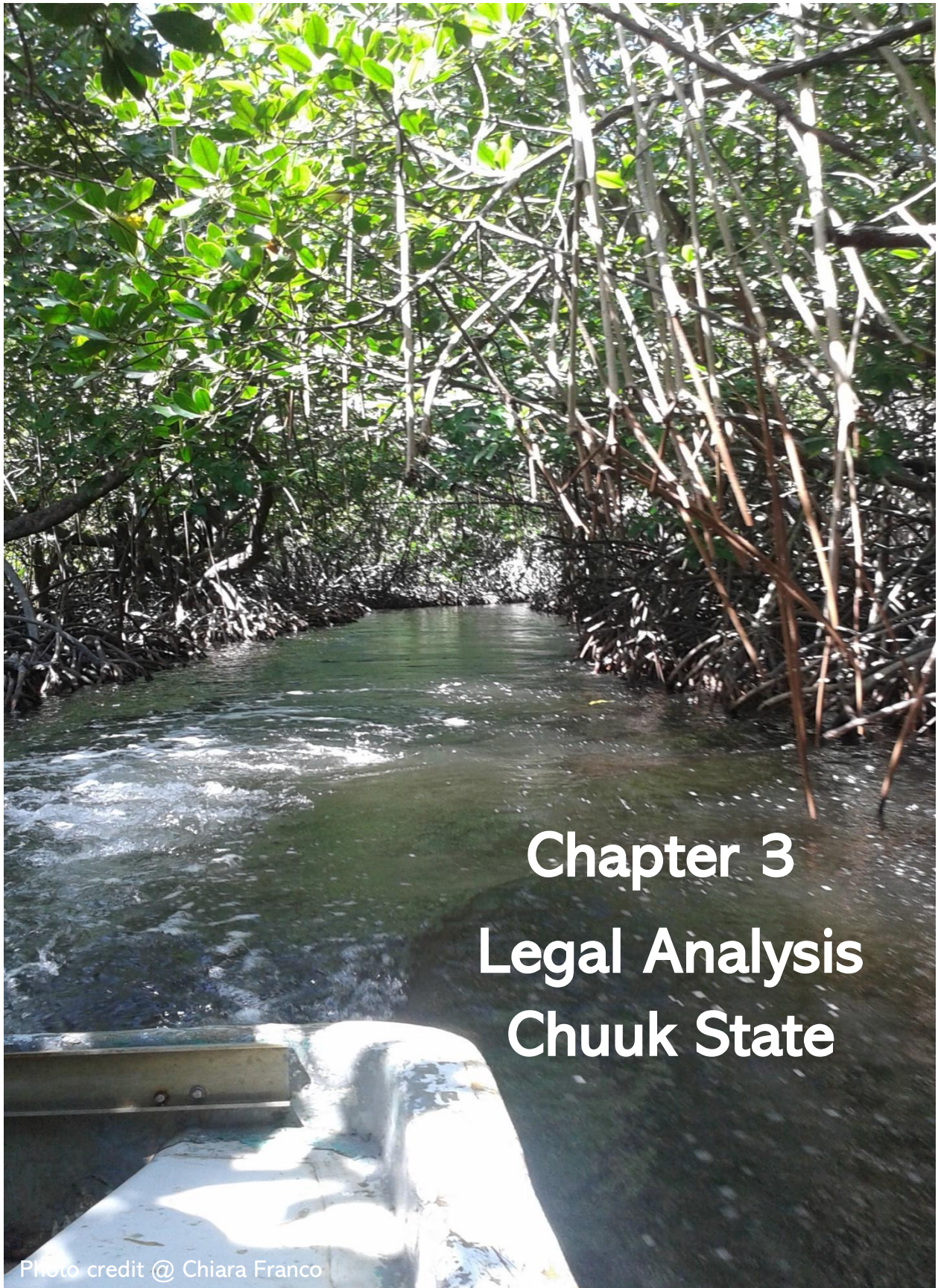
Aquaculture

Yap does not have aquaculture laws or regulations in place.

¹⁴⁷ 18 Yap State Code § 208.

¹⁴⁸ 18 Yap State Code § 1011.

¹⁴⁹ 18 Yap State Code § 1010. Unless the law otherwise provides, a violator of any of Yap's wildlife conservation provisions is guilty of a misdemeanor and, upon conviction, subject to a fine of US\$500 and 60 days of imprisonment. 18 Yap State Code § 1007.



Chapter 3

Legal Analysis

Chuuk State

Photo credit @ Chiara Franco

3.1 Geography

Chuuk State has a total landmass of approximately 127 km² (49 sq. mi), with unique geographical feature (Fig. 1). The state includes seven major volcanic island groups within a large 93 km² (36 sq mi) lagoon enclosed by a string of islets on the barrier reef, and a group of 14 inhabited outlying atolls and low islands located outside Chuuk Lagoon. Geographically the state of Chuuk is divided into 5 regions: Northern Namoneas, Southern Namoneas, Faichuk, Mortlocks and Northwest islands. The highest elevation in Chuuk is Mt. Uinipot on Tol Island at 443 m (1,453 ft)¹⁵⁰.

3.2 Climate Change Overview

Table 4. Overview of climate trends in Chuuk State

Climate feature	Climate trends
Air Temperature	In Chuuk annual mean air temperatures have increased at a rate of +0.23°F (0.13°C) per decade since 1951.
Rainfall	Chuuk is affected by the West Pacific Monsoon climatic pattern bringing storms and typhoons with additional rain during the wet season. Interannual rainfall variability, associated with ENSO events, is observed for Chuuk since 1950. Annual rainfall shows a declining trend of -0.7 inches (17.4mm) per decade since 1950. In a typical El Niño, dryness and drought are common.
Sea Level	Chuuk experiences highest monthly mean sea levels around March and its lowest around November and December. Extreme sea levels in Chuuk occur when extreme tides are associated with changes in water levels due to El Niño Southern-Oscillation. These events are typically observed during la Niña, and records from tide gauges (from 1963 to 1999) indicate that of the 10 highest water levels recorded at Chuuk seven occurred during La Niña conditions. Coastal flooding is already affecting the state, the most recent event (December 2021) occurred due to strong winds and extreme tides that in combination with raised sea levels flooded houses and infrastructures in Chuuk state.
Storm patterns	The Micronesia Region is the most active tropical cyclone basin in the world, with tropical storms and typhoons that can occur annually and affect especially Chuuk and Yap State. The most recent damaging typhoons that hit Chuuk State were typhoon Maysak (2015) and Wutip (2019) causing fatalities and millions of dollars in damage. Chuuk out-lying islands (Lukunor, Mortlocks Region and Northwest Region, Houk and Pollowat) were particularly affected by Typhoon Wutip, with residents facing water and food shortages.

¹⁵⁰ Government of the Federated States of Micronesia (2016). Chuuk Joint State Action Plan for Disaster Risk Management and Climate Change. SPC’s Suva Regional Office, Fiji.

Climate feature	Climate trends
Sea Surface Temperature	Natural variability (i.e. year-to-year) still play a large role in determining the sea-surface temperature also in Chuuk. Historical changes are consistent with the broad-scale sea-surface temperature trends for the wider Pacific region, indicating increased SST warming.
Ocean Acidification	Ocean acidification is projected to continue, with consistent decline in aragonite saturation.

Sources: Pacific Climate change data portal, Data portal, NOAA National Centers for Environmental Information (NCEI), Australian Bureau of Meteorology and CSIRO-2014

3.3 Chuuk Gender Legislation & Policies

In 2019, Chuuk State passed the Chuuk Age of Consent Law (C.S.L No. 6-66), which raised the age of consent from the previous age of 13 to the age of 18 (12).¹⁵¹

Chuuk does not currently possess legislation concerning domestic violence, family protection, or disability rights. Even though disability rights have not been put into law, the state of Chuuk is working with NGOs such as Chuuk-Kich-Able, seeking to advance consideration for people with disabilities (10).¹⁵²

3.4 Government Composition

The Chuuk State Legislature consists of two houses, the Senate (ten members led by the body’s president) and the House of Representatives (28 members led by the body’s Speaker). The Legislature’s power “extends to all rightful subjects of legislation not inconsistent with” the constitutions of Chuuk or the FSM. Chuuk’s Executive Branch is led by the governor and lieutenant governor, who are jointly elected for a four-year term on a single ticket. Chuuk’s Executive Branch Organization Act of 1990 sets forth the structure of the two departments most relevant to ocean management: the Department of Marine Resources (DMR), which consists of three divisions (Fisheries Research & Development, Conservation and Management, and Operation and Technical Support), and the Department of Agriculture (DOA), which also consists of three divisions (Plant Industry and Marketing, Forestry and Soil Conservation, and Livestock Industry). The Chuuk Constitution provides that the executive departments of Health, Education, Transportation, Marine Resources, and Agriculture may not be divided, combined, or eliminated.

¹⁵¹ National report submitted in accordance with paragraph 5 of the annex to Human Rights Council resolution 16/21* Federated States of Micronesia - Human Rights Council, Working Group on the Universal Periodic Review (January 2021) (p.12) <https://undocs.org/pdf?symbol=en/A/HRC/WG.6/37/FSM/1>

¹⁵² National report submitted in accordance with paragraph 5 of the annex to Human Rights Council resolution 16/21* Federated States of Micronesia - Human Rights Council, Working Group on the Universal Periodic Review (January 2021) (p.12) <https://undocs.org/pdf?symbol=en/A/HRC/WG.6/37/FSM/1>

The judicial branch in Chuuk State consists of the State Supreme Court, inferior state courts established by statute, and municipal courts.

The State Supreme Court has concurrent original jurisdiction over land cases and disputes over waters in the State of Chuuk. Chuuk's Constitution contains a judicial guidance clause providing that court decisions must be consistent with State Constitution, local traditions and customs, and the social and geographical configuration of Chuuk.

The Chuuk Constitution recognizes the existence and importance of the 39 municipalities in Chuuk State: Eot, Ettal, Fananu, Fanapanges, Fefen, Fono, Houk, Kuttu, Losap, Lukunoch, Makur, Moch, Murilo, Namoluk, Nema, Nomwin, Oneop, Onou, Onoun, Paata, Parem, Piherarh, Piis-emmwar, Pollap, Polle, Polowat, Ramanum, Ruo, Satowan, Siis, Ta, Tamatam, Tol, Tonoas, Udot, Uman, Unanu, Weno, and Wonei. Each municipality is required to adopt its own democratic constitution within limits prescribed by the State Constitution and by general law, and the municipal constitution may be traditional. The powers and functions of a municipality with respect to its local affairs and government are superior to statutory law.

The Chuuk Constitution provides that existing Chuukese custom and tradition must be respected, and that the Legislature may prescribe, by statute, for their protection. If challenged as violative of other constitutional rights, the protection of Chuukese custom and tradition must be considered a compelling social purpose warranting such governmental action. Nothing contained in the State Constitution may be interpreted as taking away the role or function of a traditional leader as recognized by Chuukese custom and tradition, or as preventing a traditional leader from being recognized, honored, and given formal or functional roles in government. Particularly relevant to ocean management is that traditional rights over all reefs, tidelands, and other submerged lands, including their water columns and successors' rights thereto, are recognized. A factor unique to the governance landscape of Chuuk is the existence of the Chuuk secession movement. Although the precise goals of the movement are hotly debated, since 2015 a series of referenda asking the citizens of Chuuk whether they wished to secede have been planned and then postponed. The Chuuk State Political Status Commission (CSPSC), created by state statute in 2012, has commissioned a lengthy, detailed legal opinion addressing the constitutionality of secession under the FSM Constitution and international law.

The Chuuk Constitution charges the Legislature with providing, by law, for the development and enforcement of standards of environmental quality.

3.5 Environment & Climate Change Legislation & Policies

Chuuk State Passed the Chuuk State Clean Environment Act of 2018, which establishes a framework to set environment standards, regulate or ban certain items, man-made structures, activities, or behaviors that has the tendency to obscure, degrade or adversely impact the natural quality of the air, land, and marine environment of the State of Chuuk. The Act divides the State into three zones for the purpose of application and enforcement of the Act: Weno Municipality,

Municipalities in the Chuuk Lagoon, and Municipalities of the outer islands of the State of Chuuk. This law prohibits the erection of metal sheet or tin roof within the right of way easement of the main public road and secondary roads. All existing tin roof and metal sheet fences in Weno Municipality are required to be removed by January 1, 2020. It is the responsibility of the Chuuk EPA and the Office of the Attorney General to enforce the Act's provision in coordination with the Department of Public Safety and Department of Transportation.

The Act also prohibits the abandonment of inoperative vehicles within the easement of a public road or secondary road for more than 90 days. After 90 days, Chuuk EPA shall declare the vehicle as abandoned and confiscate and disposed of by Department of Transportation.

The Act also phases out the use of single-use plastic shopping bags and Styrofoam and prohibits the disposal of empty motor oil containers into the environment, including on land, into streams, drainages, or the sea. The Act further prohibits persons from conducting recycling operations without a permit from Chuuk EPA. The Act also designates every Thursday as Clean Up Chuuk Day to inspire and encourage public entities, businesses, municipal governments, and people throughout Chuuk State to clean up their premises and localities.

3.5.1 Climate Change Legislation & Policies

Chuuk has not developed a Climate Change Policy for the state. However, the state of Chuuk has a Joint State Action Plan (JSAP) for Disaster Risk Management and Climate Change¹⁵³, which provides an overarching framework to address disaster and climate change risks within the state. The JSAP "provides the people of Chuuk with strategic, prioritized actions for the coming years to address risk across all sectors and segments of the community". Through a participatory, consultative approach "chuukese stakeholders developed actions across 6 Priority Areas (i.e., infrastructure, agriculture and forestry, private sector, environment, health and education) representing the main elements of their livelihoods they wished to sustain and strengthen in years to come".

3.5.2 Land Ownership, Use, Planning and Management

Private Lands

The Chuuk Constitution recognizes traditional rights over all reefs, tidelands, and other submerged lands, including their water columns. The Legislature may, however, regulate their reasonable use.¹⁵⁴

¹⁵³ Government of the Federated States of Micronesia (2016). Chuuk Joint State Action Plan for Disaster Risk Management and Climate Change. SPC's Suva Regional Office, Fiji.

¹⁵⁴ Chuuk Const. art. IV § 4.

Public lands

The governor in Chuuk has exclusive capacity to represent the state with respect to all public lands, except that the governor may not dispose of any public land without the advice and consent of the Legislature.¹⁵⁵ The governor holds title to public lands (Table 1) in trust for the people, and is authorized to administer, manage, and regulate the use of such lands.¹⁵⁶ A Claims Board is authorized to adjudicate and resolve claims and disputes as to title and rights in land transferred to the state and eminent domain proceedings.¹⁵⁷

Land Use Planning and Regulation

In 2017, Chuuk State passed the Chuuk Sustainable Land Management Act of 2017, which applies to all land except "*downtown and commercial areas*." The Act provides for a board composed of five members appointed by the Governor and approved by the Legislature. The board is to: exercise general supervision over land resources and to plan for and implement its sustainable use; create public interest and awareness for the conservation and improvement of land; identify and make recommendations to the Governor regarding relevant areas to be designated as land conservation areas; facilitate coordination and cooperation between the land use planning activities of government agencies, communities and industry groups; initiate the development of land use plans through coordination with all relevant stakeholders; endorse the implementation of land use plans developed specifically for particular land conservation areas; monitor and report on the development, implementation and achievements of the land use plan around and within the state; appoint sub-committees as necessary to undertake land use planning and to provide technical advice.

The Board may invite any person as necessary to participate in one or more of the board's meetings so long as they are an expert or have special knowledge or experience to provide expert advice to the board on any matter relating to land sustainable management and conservation. The board must appoint officers as land conservation officers, who have the right to enter upon land for the purpose of ascertaining whether the owner has complied with land use plans.

The Chuuk State Planning Commission is charged with the following responsibilities and powers: to recommend to the Legislature zoning, building, and construction codes which, when enacted, "shall have the effect of law;" to adopt, amend, supplement, change, or repeal plans and other planning matters; and to conduct hearings on code disputes and zoning variances.¹⁵⁸ The

¹⁵⁵ 24 Draft Chuuk State Code § 1502.

¹⁵⁶ 24 Draft Chuuk State Code § 1503(1)-(2).

¹⁵⁷ 24 Draft Chuuk State Code § 1503(4).

¹⁵⁸ 10 Draft Chuuk State Code § 1206. The functions of the Commission are carried out under the general supervision of the governor. *Id.* § 1208.

planning director is authorized to perform a range of duties, including preparing and recommending to the State Planning Commission plans and codes.¹⁵⁹

Chuuk, by legislation, has established a system of plane coordinates for designating positions within the Chuuk and Neoch Lagoons.¹⁶⁰

Earthmoving activities: State law governs the procedure by which persons may fill, borrow, and excavate tidelands.¹⁶¹ Tideland is land below the ordinary high-water mark.¹⁶² Applications are made to the magistrate of the municipality in which the tideland is located. The magistrate must consult with the chief who has traditionally administered the tideland's use. The magistrate submits the applicant's request, with a sketch map of the area concerned, accompanied by the traditional chief's and his own recommendation, to the Chuuk State Chief of the Division of Land Management and Historic Preservation. Upon reviewing the composite application and being satisfied that the applicant has title to the land adjacent to where the filling, borrowing, or excavating of the tideland is to take place, the Chief of the Division must consult with the State Director of Public Works. The Chief of the Division then makes a recommendation to the Governor, who renders a decision.¹⁶³ No such tideland activity is permitted where there is a question concerning the title to the adjacent land, or where the activity would be done to the detriment of navigable waters.¹⁶⁴

Environmental Impact Assessment

The statute in State of Chuuk recognizes environmental impact assessments are necessary, while leaving the details to regulations; that is, a person shall submit an EIS to the Chuuk State Environment Protection Agency, in accordance with regulations established by the Agency, prior to taking "any major action which may substantially affect the quality of the environment."¹⁶⁵

3.5.3 Freshwater

Chuuk State does not have a water policy in place that specifically addresses currently and future access to safe drinking water, and community water access rights. Nevertheless, regulations for

¹⁵⁹ 10 Draft Chuuk State Code § 1207. These duties include preparing and maintaining comprehensive district conservation plans. *Id.* § 1207(1). The director also must make recommendations on all administrative actions that in any manner affect the Comprehensive State Conservation Plan. *Id.* § 1207(7)(b).

¹⁶⁰ Draft Chuuk State Code tit. 24 ch. 3.

¹⁶¹ 24 Draft Chuuk State Code § 1001.

¹⁶² *Nena v. Walter*, 6 FSM Intrm. 233, 236 (Chk. S. Ct. Tr. 1993). Tidelands traditionally are those lands from the dry land to the deep water at the edge of the reef; they must be shallow enough for Chuukese women to engage in traditional methods of fishing. *Sellem v. Maras*, 7 FSM Intrm. 1, 4 (Chk. S. Ct. Tr. 1995).

¹⁶³ 24 Draft Chuuk State Code § 1002.

¹⁶⁴ 24 Draft Chuuk State Code § 1004.

¹⁶⁵ 22 Draft Chuuk State Code § 1006. Chuuk's statute seems to be unique in its use of the term "substantially" as opposed to "significantly" when it comes to describing the type of activity that triggers the environmental assessment requirement. The statutes for the FSM and the three other states all use the term "significantly."

the monitoring of freshwater quality do exist and are enforced by the state's Environmental Protection Agency.

3.5.4 Marine Conservation & Protected Areas

Chuuk passed the Chuuk Protected Areas Network Act of 2017. The Legislature found that conservation of natural resources and preservation of the marine environment have been part of the traditional values for the people of Chuuk and that better management of the natural resources and heritage of Chuuk is essential to ensure a sustainable livelihood for future generations.¹⁶⁶ The Legislature specifically recognized and supported the efforts of the Micronesia Challenge.¹⁶⁷

Although the PAN is to be managed by the State, the Legislature's intent is to encourage traditional conservation practices of *mechen* and *pwaaw*, recognize continued traditional ownership and use rights for clans, lineages, and individuals, and to ensure the greatest possible level of community input and support.¹⁶⁸ The PAN itself consists of areas in Chuuk that have been previously designated as protected areas and areas that have been or may be designated as PAN sites.¹⁶⁹

The Act states that the ownership of the resources and their contents shall not be affected by the inclusion of the resources within the PAN, but use of those resources are regulated in the manner provided for in the Act.¹⁷⁰ The Director of the Department of Marine Resources is tasked with designating areas under a set of uniform categories that encompass a range of management purposes and uses for the purpose of an area's designation within the PAN.¹⁷¹ In determining the basis for such categories, the Director must consider Chuuk laws and policies, FSM National Protected Areas Network Policy Framework, traditional Chuukese cultural practices, and generally accepted scientific factors.¹⁷²

The Act specifies the process for the designation and cancellation of areas, which includes: proposal by the local community to the Director; technical assistance by Director in ensuring that the proposals conform with requirements of the Act and the FSM Protected Areas Network Policy Framework, Chuuk laws; and provide appropriate feedback and assistance to ensure consistency between State and National policies.¹⁷³ Following community education and awareness and preparation of the complete proposal, the traditional owners and the Mayor of the municipality are to submit the completed proposal to the Director, who then provides a copy with an opportunity to comment within 30 days to the Chuuk State Attorney General, Director

¹⁶⁶ CSL No. 14-17-05, Sec. 1

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*, Sec. 4

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.*, Sec. 6

of Department of Public Safety, Executive Director of the Chuuk Environmental Protection Agency, Executive Director of the Chuuk Visitors Bureau, FSM National PAN Coordinator, and relevant community and NGOs.¹⁷⁴

After 30 days, the Director must collect comments and transmit the record to the Governor with a recommendation for appropriate action. The Governor then has 30 days to complete his review, and if approved, will then transmit the record to the Legislature, including his request for the area to be designated as a protected area. The Legislature may then be approved by Act the area. Following designation by the Legislature, the Director must then transmit the record to the FSM National PAN Coordinator.

A protected area may only be revoked by law following consultation and negotiation by the Director with the National PAN Coordinator, the traditional owners and leaders and local government where the protected area is located, and the land or property owners. The Director is to seek alternative options when considering revocation, such as changing the boundaries or the type of protected area. Within 60 days after the designation of an area within the PAN, the Director must prepare an inventory of each area's scenic, natural, and cultural features, including but not limited to, ecological, archaeological, traditional, historical and geological features.

The Director is responsible for administering the PAN, and is authorized to: delegate any or all powers of administration with respect to a protected area to the Local Management Unit responsible for the area; enter into contracts with any person for the provision of services for the management of the area; enter into contracts with any stakeholder or researcher for the access to and removal of marine life or their materials; to accept donations of funds and to use such funds to acquire or manage lands, waters or interests to be added to or used in connection with the PAN.

The Act spells out the powers, duties and responsibilities of the Department of Marine Resources and Department of Agriculture with respect to the administration of protected areas, including: the power to enforce rules; promulgate rules and regulations; to serve as the Chuuk State focal point for purposes for the FSM National Protected Area Network Policy Framework; approve guidelines outlining criteria and standards that apply to areas that are eligible to be included in the protected areas network and management plans; to apply for financial aid and donor support; issue permits for research and technical works; conduct consultation and education; and collect information and establish recordkeeping, monitoring and reporting requirements.

The Act also specifies the powers, duties and responsibilities of Local Management Units, which includes: regulating traditional conservations practices of *mechen* and *pwaaw* and traditional ownership and use rights for clans, lineages and individuals by adopting permit requirements; administering the protected area; developing and approving the protected area site management; determining conditions for any licenses or permits required under the

¹⁷⁴ *Id.*

management plan; working with traditional owners in their grant of prior informed consent to the access and use of resources and traditional knowledge benefit sharing agreements; making sure that the responsibilities of the community under the plan are properly detailed and completed in a timely manner; establishing criteria for traditional ownership and use rights; reporting to the community and the municipal government; requesting funding from National PAN Coordinator; managing grants received; and collecting data and information to provide to the Director.

The Act prohibits harvesting of any natural resources of the PAN, possessing, or taking of animals from the PAN; fishing or hunting in the PAN; dredging or removal of minerals, sand, rock, and coral from the PAN; and entering into the PAN for the purpose of engaging in prohibited activities.

The Director is authorized to permit the use of areas within the PAN for purposes consistent with traditional ownership and use rights as established by Local Management Units. The Director has the ability to institute civil actions in the Chuuk State Supreme Court for injunctive and other relief to prevent any violation of the Act and may require a violator to perform corrective or restorative action. Any person who violates the Act or any term or condition of a permit or authorization may be fined up to \$10,000 for each offense. Any person who violates the Act with intent to engage in commercial exploitation may be fined up to \$250,000 for each offense. Violators are also subject to potential criminal charges, with penalties of \$1,000 or imprisonment for up to 6 months.

The State of Chuuk submitted the Mangrove Regulation Act of 2018, which aims to protect and preserve mangrove resources considered valuable to the State's environment and economy from unregulated removal, defoliation, cutting and destruction. The Act requires that all local government in the state shall regulate the use and preservation of mangroves, and to encourage people to restore destroyed mangroves. The bill has yet to be passed.

Shark Protection

Chuuk State Shark Law (2014)¹⁷⁵: "prohibiting the taking, possession, collecting, selling, offer to sell, buy, transport, export, import, distribute, trading of shark fins, regardless of where captured, bought, transported from, bartered for, traded, or obtain and for other purposes. However, the law does recognize that the "taking of sharks for subsistence purposes is a longstanding tradition."

¹⁷⁵ Chuuk State Shark Law (2014); http://fsmlaw.org/chuuk/pdf/csl_b/CSL%2012-14-11%20EV.pdf

Fisheries

The State Fishery Zone Act of 1983 is substantially similar in structure and content to that of Yap.¹⁷⁶ The primary relevant difference between the two statutes is that the Chuuk statute more narrowly defines traditional fishing rights: “[t]raditionally recognized fishing rights over submerged reef wherever located within the State Fishery Zone and internal waters shall be preserved and respected.”¹⁷⁷ Inclusion of the language “over submerged reef” places a tighter geographic limit on traditional fishing rights in Chuuk. Interestingly, this statutory language is much narrower than the rights recognized by the Chuuk Constitution, which provides that “[t]raditional rights over all reefs, tidelands, and other submerged lands, including their water columns, and successors rights thereto, are recognized,” and the Legislature may regulate their reasonable use.¹⁷⁸

Chuuk has another statute dating from the Trust Territory days, the Inshore-Nearshore Fishing Program. Ostensibly designed to support small-scale fishing in Chuuk State, the law includes assisting Chuuk residents with procuring fishing vessels from the Truk Boat Building Program, instructing on the proper use of the vessels for inshore and nearshore fishing, and assisting with lease-purchase agreements of vessels for successful graduates of the instruction course.¹⁷⁹

The Chuuk Maritime Authority is charged with adopting regulations for the conservation, management, and exploitation of all living resources in the state fishery zone and internal waters.¹⁸⁰

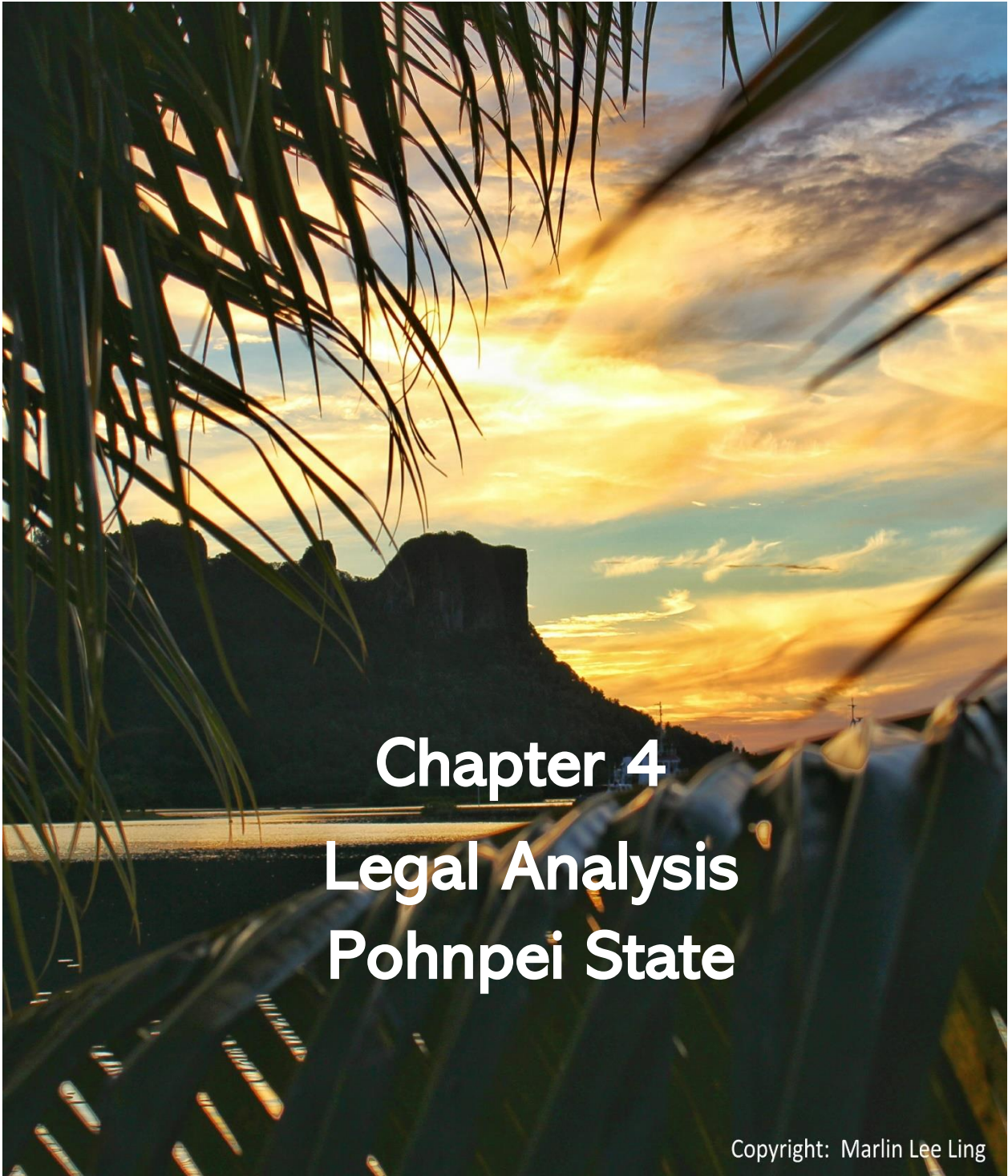
¹⁷⁶ See 25 Draft Chuuk State Code § 1001 et seq.

¹⁷⁷ 25 Draft Chuuk State Code § 1007.

¹⁷⁸ Chuuk Const. art. IV § 4.

¹⁷⁹ 25 Draft Chuuk State Code § 1501.

¹⁸⁰ 25 Draft Chuuk State Code § 1008(1).



Chapter 4

Legal Analysis

Pohnpei State

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4.1 Geography of Pohnpei

Pohnpei. Formerly named Ponape, Pohnpei consists of a main island—the biggest island in the FSM— encircled by a reef as well as the outlying island groups of Pingelap, Mokil, Nukuoro, and Kapingamarangi. The land area of Pohnpei consists of approximately 133.4 square miles, and Pohnpei is the second most populous State, with approximately 40,000 people. The main island – Pohnpei – is made up of one large volcanic island and six (6) inhabited coral atolls (Mwoakilloa, Pingelap, Kapingamarangi, Nukuoro, Sapwuafik and Oroluk). Pohnpei’s high volcanic island is the largest in the FSM (345 km²) and has the highest peak elevation, Nahnlaud, at 734m (2,408 ft) above sea level¹⁸¹ (Fig. 1).

Pohnpei is home to the FSM National Government (FSMNG), situated in Palikir, and hosts the foreign embassies of four countries: Australia, China, Japan, and the United States. Pohnpei’s abundant rainfall— reputedly some of the most plentiful on earth—accounts for its lush tropical forests and beautiful waterfalls and rivers. Pohnpei also is home to the ancient ruins of Nan Madol, the first UNESCO World Heritage site in the FSM.

4.2 Pohnpei Climate Change Overview

Table 5. Overview of climate trends in Pohnpei State

Climate feature	Climate trends
Air Temperature	In Pohnpei annual mean air temperatures have increased at a rate of +0.34°F (0.19 °C) per decade since 1951. Extreme temperatures in Pohnpei have increased at a rate of +0.22°F (0.12°C) per decade. The number of warming days and nights have also significantly increased over the period 1952-2011.
Rainfall	Interannual rainfall variability, associated with ENSO events, is observed for Pohnpei since 1950. There is a significant declining trend in May–October rainfall with annual rainfall showing a declining trend of 1.8 inches (45.5mm) per decade since 1950.
Sea Level	Pohnpei experiences highest monthly mean sea levels around March and its lowest around November and December. Extreme sea levels in Pohnpei occur when extreme tides are associated with changes in water levels due to El Niño Southern-Oscillation. These events in Pohnpei are typically observed during la Niña, and records from tide gauges (from 1969 to 2011) indicate that of the 10 highest water levels recorded at Pohnpei seven occurred during La Niña conditions. Records on sea level over the period 2001-2021 indicated that mean sea level in Pohnpei was 2.53 feet (0.77m), with a minimum of -0.29ft (-0.091m) on 11 January 2016, in conjunction with El Niño conditions, and a maximum of 5.87ft (1.79m) on 6 November 2017 during la Niña.

¹⁸¹ Government of the Federated States of Micronesia (2016). Pohnpei Joint State Action Plan for Disaster Risk Management and Climate Change. SPC’s Suva Regional Office, Fiji.

Climate feature	Climate trends
Storm patterns	Most of the tropical cyclones that originate from the western edge of the Micronesia Region basin tend to increase in intensity after passing over Pohnpei State. However, the intense rainfall associated with these events can still cause damages to infrastructures, people and natural systems. In 2019, Typhoon Wutip passed over the states of Pohnpei with intense rainfall that caused landslides with a fatality and damages to homes, infrastructures, and crops.
Sea Surface Temperature	Historically warming was relatively weak from the 1950s to the late 1980s, followed by a period of more rapid warming (approximately 0.11°C per decade and approximately 0.08°C per decade for 1970–present, in the FSM eastern and western regions respectively). Natural variability (i.e., year-to-year) still play a large role in determining the sea-surface temperature.
Ocean Acidification	Ocean acidification is projected to continue, with consistent decline in aragonite saturation.

Sources: Pacific Climate change data portal, Data portal, NOAA National Centers for Environmental Information (NCEI), Australian Bureau of Meteorology and CSIRO-2014.

4.3 Pohnpei Gender Legislation & Policies

Pohnpei currently has the most existing legislation regarding gender related issues of the four states in the FSM. The state passed the Pohnpei Domestic Violence act of 2017 (S.L. No. 9L-56-17), which seeks to support victims, witnesses, and perpetrators of domestic violence through counseling programs (15)¹⁸². It also includes awareness programs about the prevalence of gender-based violence, specifically training for the Pohnpei Police to better outline their responsibilities in these situations (15).¹⁸³

4.4 Government Composition

The Pohnpei Legislature is a unicameral body comprised of 23 senators who are elected by the voters of the electoral districts of Kapingamarangi, Kitti, Kolonia Town, Madolenihmw, Mwokil, Nett, Ngetik, Nukuoro, Pingelap, Sokehs, and Uh. The Legislature’s power “extends to all rightful subjects of legislation not inconsistent with” the Pohnpei Constitution. Pohnpei’s Executive Branch is led by the governor and lieutenant governor. Unlike in other States, the governor and lieutenant governor in Pohnpei are elected separately by majority vote, although both serve four-year terms. Pohnpei’s Department of Resources & Development (DR&D), which is the most relevant department for matters of ocean management, is composed of four divisions: Agriculture, Natural Resources Management, Tourism, and Commerce and Industries. There also

¹⁸² National report submitted in accordance with paragraph 5 of the annex to Human Rights Council resolution 16/21* Federated States of Micronesia - Human Rights Council, Working Group on the Universal Periodic Review (January 2021) (p.15) <https://undocs.org/pdf?symbol=en/A/HRC/WG.6/37/FSM/1>

¹⁸³ *ibid*

is an Office of Fisheries and Aquaculture (OFA), which is responsible for the oversight and development of fisheries and aquaculture, including the function of marine development. The judicial branch in Pohnpei State consists of the Pohnpei Supreme Court and such inferior courts as may be established by law. Similar to the FSM Constitution, Pohnpei's Constitution contains a judicial guidance clause, although its language is distinctive to Pohnpei: "The decisions of all courts and adjudicatory bodies shall be consistent with this Constitution and the concepts of justice of the people of Pohnpei." The Pohnpei Supreme Court has exclusive appellate jurisdiction over any matter relating to the Constitution, Pohnpei law, and customs and traditions.

Pohnpei's Constitution recognizes the existence in Pohnpei State of local governments—colloquially referred to as municipalities—and identifies the limits of their authority and their boundaries. The local governments comprising the Pohnpei Government are Kapingamarangi, Kitti, Kolonia Town, Madolenihmw, Mwokil, Nett, Ngetik, Nukuoro, Pingelap, Sokehs, and Uh. Each local government may establish its own constitution, which must not be inconsistent with the Pohnpei Constitution or law. The local governments may exercise all authority not prohibited under the state Constitution or Pohnpei law.

The six municipalities located on the main island of Pohnpei have adopted their own constitutions. Many of the municipal constitutions, as well as the ordinances potentially relevant to ocean management, are available only in the Pohnpeian language. The constitutions of Kolonia Town and Sokehs, however, are available in English. A review of those two constitutions reveals the following:

- Both constitutions contain articles providing lengthy, detailed descriptions of the territory of the municipality, including references to specific survey data.
- Neither constitution explicitly references a role for the municipality in marine governance.
- Both constitutions contain sections devoted to discussions of land, with the Sokehs Constitution giving the municipal government the power of eminent domain for public purposes.
- The Sokehs Constitution recognizes the concept of "Reserved Public Land (Pahm)," stating "[a]ll reserved public lands (Pahm) shall be under the supervision of Nanmwarki, Chief Magistrate and the Village Chief where the land (Pahm) is located."
- The Kolonia Town Constitution states that, among other responsibilities, it has the responsibility "to promote the well-being of the people educationally, economically, socially, and politically."
- The Sokehs Constitution "recognizes the traditional board and culture of Sokehs" and requires all judicial and adjudicators' decisions to "recognize the culture that would hold respect, peace, and harmony to the people of Sokehs." Through direct contact with officials from the six municipalities on the main island of Pohnpei, a small sample of ordinances—potentially relevant to ocean management—have been identified. A

number of the ordinances relate to littering or garbage collection; however, in 2016, Sokehs enacted a marine sanctuary act. In 2004, Nett enacted a “marine and wildlife sanctuary” ordinance and a “natural conservation and resource management” ordinance.

Pohnpei State has enacted several statutes designed to support the work of the municipalities. For example, a local government aid fund exists to provide funds to assist in local government operations, facilities, and projects, or for other public purposes. In addition, a statute exists establishing a process for local governments to create their development plans. Pohnpei has a detailed process for drafting, vetting, seeking public comment on, and approving local government development plans, which must address two topics of particular relevance to ocean management: identification and preservation of the history and culture of the local jurisdiction and its inhabitants; and conservation of the natural resources and protection of the environment of the local jurisdiction.

The Pohnpei State Constitution “upholds, respects, and protects the customs and traditions of the traditional kingdoms of Pohnpei.” The Government of Pohnpei is further required to respect and protect the customs and traditions of Pohnpei. State statutes may be enacted to uphold customs or traditions and, if such a statute is challenged as violating rights guaranteed by the State Constitution, it will be upheld on proof of the existence and regular practice of the custom or tradition and the reasonableness of the means established for its protection, as determined by the Pohnpei Supreme Court. The Pohnpei State Code includes the creation of a statutory fund, the Pohnpei Traditional Affairs Fund, “for the purpose of supporting the traditions and culture of this state, and for the support of traditional leaders in affairs of state and government.” In addition, the Division of Historic Preservation within Pohnpei’s Department of Land is responsible for developing “a written history of Pohnpei, compiling and indexing information on the traditional laws of the state and their underlying principles.” This division is further charged with establishing and implementing programs and projects to encourage the continuation of Pohnpeian customs and traditions.

In a recent case involving a dispute over the ongoing harvest and marketing of sea cucumber in Pohnpei State, the FSM Supreme Court recognized the challenge of accurately applying customary law:

Rare is the case [...] where the Court benefits from clear, uncontradicted evidence of custom on point in a given matter presented by knowledgeable authorities. The great difficulty in applying custom is that unlike other sources of law, it is uncodified. Custom is revealed through human practice and oral description, and owing to the diversity of cultures and languages in the FSM[,] the Court must rely almost entirely on witness testimony to elucidate particular customs and traditions.

The Court in that case recognized “the customary and traditional rights of municipalities, clans, families, and individuals to control the use of, or material in, marine areas below the ordinary

high watermark and otherwise engage in the harvesting of fish and other marine resources from reef areas.” An attempt has been made to codify the contours of those specific customary and traditional rights in the Pohnpei State Code. Even within this attempted codification, however, the problem of a lack of specificity re-emerges. For example, in two specific re-establishments of customary rights—one related to “rights in fish weirs or traps” and one to rights of abutting landowners to coconuts and “fishing rights on, and in waters over [shallow] reefs”—their precise contours are defined as they “were recognized by local customary law at the time the Japanese administration abolished them.” In addition, the codification recognizes a further challenge to the use of customary law: establishing the precise identity of the holder of rights bestowed by customary law. Thus, while the existence and legal standing in Pohnpei of its customs and traditions are recognized, the challenge lies in identifying the precise content of any claimed particular custom and tradition.

4.5 Environment & Climate Change Legislation & Policies

4.5.1 Climate Change Legislation & Policies

Pohnpei State Legislature amended the Pohnpei Code to include a new Title 30 cited as “Pohnpei Global Warming and Climate Change Act”. The Act is intended to institute a planning process, an action plan, and mechanisms for the identification and carrying out of relevant research and pilot projects, then to seek out and capitalize on engineering solutions to the problems caused by global warming, and to prescribe specific measures by which the state of Pohnpei can address the many serious challenges that global warming and climate change is imposing on the people and environment of Pohnpei.

The Act establishes a Commission on Climate Change to undertake an assessment of the threats of global warming and consequent climate change impacts on the state of Pohnpei, with members appointed by the Governor. The Commission shall have the duty to:

- review, assess, monitor, and update the assessment of the threats of global warming and consequent climate change on the state of Pohnpei;
- recommend legislation on the remaining chapters of the Code; recruit and manage such volunteer and paid assistants and consultants as the Commission deems necessary to carry out its duties and responsibilities;
- and, to identify and assist Pohnpei Government in receiving grants and other forms of assistance for projects and programs related to global warming and climate change, disaster preparedness, and alternative energy production.

There is to be a final report from the Commission containing a complete, updated assessment of the threats of global warming and consequent climate change on the state of Pohnpei and is

to be submitted to the Governor no later than January 15, 2021. The Commission shall cease to exist on February 26, 2021.

4.5.2 Land Ownership, Use, Planning and Management

Private lands

In Pohnpei, the acquisition of a permanent interest in real property is restricted to Pohnpeian citizens who also are *pwilidak* of Pohnpei.¹⁸⁴ No land may be sold, except as authorized by statute.¹⁸⁵ No lease of land, except from the government or as otherwise provided by the Legislature, may exceed 25 years.¹⁸⁶ An agreement that grants the user of land the unilateral authority to continue use for an indefinite term is prohibited.¹⁸⁷

Public lands

The Court of Land Tenure was established in 1995 to hear and determine claims of ownership, heirship, interest, right, and boundary to land, and to inquire into and determine whether any transfer in an interest in land conforms with the Constitution.¹⁸⁸ The Court's mandate is to register lands within a designated land registration area, then move to the next area.¹⁸⁹ The law provides a process by which the Court is to inquire into and register claims and interests in land.¹⁹⁰

Pohnpei has greater responsibilities over land than the other states in the FSM due to the extensive areas of public lands that were designated during the colonial era.¹⁹¹

Pursuant to the Public Lands Act of 1987, Pohnpei established within the Department of Land the Division of Public Land, into which was transferred the Pohnpei Public Lands Trust.¹⁹² Public

¹⁸⁴ Pohnpei Const. art. 12 § 2. See also 4 Pohnpei Code § 4-101 (only citizens of Pohnpei, or corporations wholly owned by citizens, may hold title to land in Pohnpei).

¹⁸⁵ Pohnpei Const. art. 12 § 5.

¹⁸⁶ Pohnpei Const. art. 12 §§ 1 & 4. Only exception under the law are as follow: **41 PC §5-110. Lease period.** Notwithstanding the provisions of Section 1 of Article 12 of the Pohnpei Constitution, lands in the state of Pohnpei may be leased for developmental purposes for a lease term of more than 25 years, but not more than 55 years, otherwise known as a "development lease"; PROVIDED that such leases shall contain the statutory provisions set forth in §5-111; PROVIDED FURTHER that, notwithstanding any other provision of this chapter, a lease to a foreign government pursuant to this chapter for the purpose of establishing a diplomatic mission in Pohnpei may contain a right of renewal for one additional term, for a total lease term not to exceed 110 years.

¹⁸⁷ Pohnpei Const. art. 12 § 3.

¹⁸⁸ 4 Pohnpei Code § 6-103(1)-(2).

¹⁸⁹ 4 Pohnpei Code § 6-105(1).

¹⁹⁰ See Pohnpei Code tit. 2 ch. 6.

¹⁹¹ Connell, J. and John P. Lea. 1998. "Island Towns: Managing Urbanization in Micronesia." Occasional Paper 40. Honolulu: University of Hawai'i at Manoa; and Sydney: University of Sydney: 143.

¹⁹² 42 Pohnpei Code §§ 1-102, 1-104, 1-105, & 1-112. Among the duties of the Division is to liaise through the Governor with the Legislature, the Administration, traditional leaders, and others concerned with the objectives and programs of the Division. *Id.* § 1-112(2). Traditional leaders include paramount traditional leaders of the Nahnwarki and Nahnken rank, or their equivalent, in local custom and tradition. *Id.* § 1-103(10).

lands are any lands capable of being held by the Pohnpei Public Lands Trust, in trust, for the people or Pohnpei as authorized by Pohnpei law or resolution.¹⁹³

The Board of Trustees of the Pohnpei Public Lands Trust (the Board) acts as trustee to all rights, title, and interest to public lands in Pohnpei for the benefit of the people of Pohnpei, subject to the obligations and restrictions of the State Constitution and laws.¹⁹⁴ The Board possesses various powers with respect to public lands, including the power to receive and hold title to public lands and the power to administer, manage, and regulate the use of such lands and any income they produce.¹⁹⁵ Specifically, the Board is authorized to execute leases and other use agreements with respect to public lands.¹⁹⁶ There is a Pohnpei Public Lands Trust Fund into which all revenue generated from the administration, management, and disposition of public lands is to be deposited.¹⁹⁷

Pohnpei has legislated on the nature of rights in areas below the high-water mark.¹⁹⁸ The general rule is that all marine areas below ordinary high-water mark belongs to the government, and that such lands are part of the Pohnpei Public Lands Trust, subject to the following exceptions:¹⁹⁹

- Such rights in fish weirs or traps as were recognized by local customary law at the time the Japanese administration abolished them have been reestablished—provided that no weirs or traps or other obstruction may be erected so as to interfere with established or future routes of water travel, marine sanctuaries, or wildlife refuges.²⁰⁰
- The right of the owner of abutting land to claim ownership of all materials, coconuts, and other small objects deposited on the shore or beach by action of the water, or falling from trees located on the abutting land, and such fishing rights on, and in, waters over reefs where the general depth of water does not exceed four feet at mean low water, as were recognized by local customary law at the time the Japanese administration abolished them have

¹⁹³ 42 Pohnpei Code § 1-103(9). Public lands also include lands as defined by U.S. Secretarial Order 2969 of 1974 (transferring Trust Territory public lands to district control). *Id.*

¹⁹⁴ 42 Pohnpei Code § 1-105. The Board of Trustees is successor to the Public Lands Authority. *Id.* § 1-120(2).

¹⁹⁵ 42 Pohnpei Code § 1-111(2)-(3).

¹⁹⁶ 42 Pohnpei Code § 2-101. Lease and use agreements for public lands are governed by Pohnpei Code tit. 42 ch. 2. Generally, the Board may enter into lease and use agreements—upon approval of the governor following consultation with the local government or the jurisdiction where the subject land is located, and after a determination of interests in the land by the Court of Land Tenure—where such land is held in trust and designated as available for lease or use by Pohnpei law to citizens of the FSM (and corporations wholly owned by citizens) and to corporations and businesses holding valid foreign investment permits in accordance with state law. *Id.* § 2-101. Pursuant to the Residential Shoreline Leasehold Act of 2009, submerged public trust lands extending to a distance of up to 150 feet seaward from a residential shoreline that have been filled for the purpose of construction of a residence prior to December 31, 2008, are designated as available for residential lease to citizens, subject to certain conditions. *Id.* § 2-112.

¹⁹⁷ 42 Pohnpei Code § 1-116. In turn, all monies received by the Trust Fund are to be appropriated by the Legislature for public purposes relative to the administration, management, development, and disposition of public lands. *Id.*

¹⁹⁸ See, generally, Pohnpei Code tit. 42 ch. 8 (Marine Areas).

¹⁹⁹ 42 Pohnpei Code § 8-101.

²⁰⁰ 42 Pohnpei Code § 8-101(1).

been reestablished—where such rights are not in conflict with State law or the inherent rights of the Pohnpei Public Lands Trust as the owner of all marine areas below the ordinary high water mark. This does not apply to any vessel wrecked or stranded on Pohnpei’s reefs or shores.²⁰¹

- The owner of land abutting the ocean, or a lagoon has the right to develop a reasonable area of the water and submerged land extending directly seaward from his abutting land, and also has ownership, control, and usage of such development, provided it does not interfere with navigation and is not within a marine sanctuary or wildlife refuge. Further specified conditions apply for development that will permanently alter the topography of the marine area or that will entail the dredging or filling of any of the submerged land.²⁰²

Each of these rights is granted to the person or group who held the right at the time it was abolished by the Japanese administration or is otherwise recognized by law, or to their successors in interest. The extent of each right is governed by provisions of this law and by the local customary law in effect at the time it was abolished or is otherwise recognized by law.²⁰³ Nothing in the law governing areas below high water mark withdraws or disturbs the traditional and customary right of the individual land owner, clan, family, or local government to control the use of, or material in, marine areas below the ordinary high water mark, subject only to, and limited by, the inherent rights of the Pohnpei Public Lands Trust as the owner of such marine areas. There is no right in the general public to misuse, abuse, destroy, or carry away mangrove trees or the land abutting the ocean or a lagoon, or to commit any act causing damage to such trees or land.²⁰⁴ Written notice of a legal interest or title with respect to areas below high-water mark must be filed with the Court of Land Tenure, which determines the validity of the claimed interest or title.²⁰⁵

The Pohnpei Land Use Planning and Zoning Commission is charged with preparing and presenting to the Legislature a comprehensive Master Plan and specific zoning legislation with respect to the zoning of submerged lands in the state, which plans and zoning recommendations are to contain detailed descriptions of areas of submerged lands suitable for specific types of development.²⁰⁶ Pending such action by the Commission, the Legislature, by statute, has zoned a number of designated parcels of submerged land, subject to specified terms and conditions.²⁰⁷

²⁰¹ 42 Pohnpei Code § 8-101(2).

²⁰² 42 Pohnpei Code §§ 8-101(3) & 8-301 to 8-310.

²⁰³ 42 Pohnpei Code § 8-101(4).

²⁰⁴ 42 Pohnpei Code § 8-101(5). Any legal interest or title in marine areas below the ordinary high-water mark specifically granted to an individual or group of individuals by the Pohnpei Government, the Trust Territory Government, or any previous administering authority, or recognized as a legal right, is unaffected by these legal provisions. *Id.* § 8-101(6).

²⁰⁵ 42 Pohnpei Code § 8-102.

²⁰⁶ 42 Pohnpei Code § 8-201. The authors have identified that several working drafts of a master plan have been developed, but it does not appear that an official Master Plan has been adopted.

²⁰⁷ 42 Pohnpei Code §§ 8-202 & 8-202.1 to 8-202.12.

Pohnpei ensures public access to the sea and to tidal areas by providing for the establishment of necessary public roads and paths across public lands that abut the sea and tidal areas.²⁰⁸

Land Use Planning and Regulation

The Legislature has enacted a wide range of land use designations (including for submerged public lands), typically specifying in detail the necessary action to be taken by the Public Lands Trust Board of Trustees.²⁰⁹

Among the four states of the FSM, Pohnpei has the most comprehensive set of laws pertaining to land use planning and regulation.

The Pohnpei Land Use Planning and Zoning Act of 1993 was enacted to encourage the most appropriate use of land, public as well as private, to provide adequate open spaces around buildings for light and air, prevent undue concentrations of population, protect the health and welfare of Pohnpei residents, promote responsible and balanced development, preserve and enhance cultural and traditional values, conserve and protect the natural environment, and assure adequate provision for community facilities and requirements. There is to be an overall Pohnpei land use Master Plan for the use of land in the state, as well as a comprehensive set of zoning and land use laws.²¹⁰ Primary responsibility for zoning rests with local communities, and local governments are to play a vital role in the development of standards controlling land use.²¹¹

The Pohnpei Land Use Planning and Zoning Commission (the Commission) is charged with preparing and recommending for enactment by the Legislature: a proposed master land use plan;²¹² any subsidiary plans and development programs as may be desirable for the implementation of the Master Plan; and any zoning and land use control laws necessary and proper for implementation of the Master Plan.²¹³ The Commission may adopt implementing regulations under the authority of the Administrative Procedures Act.²¹⁴ The Commission is supported by appropriations but may also receive grants and assistance from other sources.²¹⁵

²⁰⁸ 42 Pohnpei Code § 7-102.

²⁰⁹ Pohnpei Code tit. 42 ch. 10.

²¹⁰ 41 Pohnpei Code §1-102. Land for purposes of the Act include areas above and below the high-water mark. 41 Pohnpei Code § 1-105(3).

²¹¹ 41 Pohnpei Code §1-104. The Act also contemplates that local land use planning and zoning commissions may be established in the future. *Id.* § 1-105(5).

²¹² The Master Plan consists of a general body of texts, maps, and descriptive material that constitutes an overall plan for the development of land, physical resources, and facilities within the state. 41 Pohnpei Code § 1-105(6). The Master Plan must account for, among other factors, environmental needs and cultural considerations. *Id.* § 1-109.

²¹³ 41 Pohnpei Code §§ 1-106(1), 1-107(1)-(3), & 1-112. A “land use control law” refers to a zoning, subdivision, building, housing, “official map,” or other law that controls the use of land and improvements on the land. *Id.* § 1-107(4). A “zoning act, law, or ordinance” refers to a duly enacted land use control statute or ordinance that adopts a zoning plan or any amendments to it. *Id.* § 1-107(11). A “zoning plan” is the proposal of the appropriate land use planning and zoning commission prepared in accordance with the Act and setting out a system of zoning for the covered land. *Id.* § 1-107(12).

²¹⁴ 41 Pohnpei Code § 1-121.

²¹⁵ 41 Pohnpei Code § 1-120.

The State Commission shall train and assist local government officials and technicians in land planning and land use controls²¹⁶.

The Master Plan is prepared through public process and ultimately enacted by statute.²¹⁷ The Act includes a detailed list of a dozen elements to be contained in the Master Plan. Among them are the following:

- *A land use element* that shows the distribution, location, and extent of existing and proposed uses of land for housing, business, industry, agriculture, recreation, education, public buildings and grounds, and other categories of public and private land use. The land use element shall include a statement of standards of population density and building intensity recommended for the area covered by the master plan.
- *A conservation element* that provides for the conservation, development, utilization, and protection of natural resources, including forests, soils, rivers, streams, aquatic resources, estuaries, tidal lands, fisheries, marine resources, wildlife, minerals, and other natural resources. The conservation element also may cover reclamation of land and waters; permissible areas for dredging of sand and coral; flood control; prevention and control of pollution of streams and other waters; prevention, control, and correction of the erosion of soils, beaches, and shores; protection of coral and other marine growth; and protection of watersheds.
- *A culture and tradition element* that shows the location of historical and present-day areas and sites important to the preservation, reverence, and enhancement of cultural and traditional values of the peoples of the state.
- *A recreation element* showing the location and proposed development of recreational sites such as natural preserves, parks, artificial and natural beaches, playgrounds, vistas, waterfalls, nature walks, mangrove channels, and other areas of scenic importance.²¹⁸

The Legislature is to enact zoning and land use control laws for the implementation of the Master Plan. Zoning laws divide the Master Plan area into zones. Such laws are enacted for a variety of purposes, including achievement of the arrangement of land uses depicted in the Master Plan.²¹⁹

²¹⁶ 41 Pohnpei Code § 1-104

²¹⁷ 41 Pohnpei Code § 1-108.

²¹⁸ 41 Pohnpei Code § 1-110(3)-(5).

²¹⁹ 41 Pohnpei Code § 1-111.

The Act sets forth a detailed list of use zones.²²⁰ Among the zones listed are several that are environmentally oriented: conservation (CON);²²¹ watershed forest reserves (WFS);²²² important watershed areas (IWA);²²³ and mangrove forests (MF).²²⁴

The Commission, the attorney general, or any aggrieved person may bring suit for injunctive relief or any other civil remedy against a violator of the Act, any master plan, zoning law, land use control law, or zoning or land use regulation.²²⁵ A violator who acts willfully and knowingly is guilty of a misdemeanor, carrying a fine of US\$500 and a one-month of imprisonment for each day of a continuing violation.²²⁶

Pohnpei, by legislation, has established a system of plane coordinates—the 1970 Pohnpei Island Coordinate System—for designating positions within the state.²²⁷

Pohnpei has established a Soil and Water Conservation District co-extensive with the boundaries of the state. The district is administered and managed by the Department of Resources & Development, as the primary soil and water conservation agency in Pohnpei.²²⁸ The Soil and Water Conservation Board serves as an advisory body, assisting the state in the development of

²²⁰ 41 Pohnpei Code § 1-114.

²²¹ 41 Pohnpei Code § 1-114(13). This zone includes public open spaces and recreational areas, wilderness and tidal areas, marine and aquatic preserves, land reserved for control of flooding and soil erosion, and other uses not detrimental to a multiple use conservation concept. *Id.*

²²² 41 Pohnpei Code § 1-114(14). This zone corresponds to areas prescribed by 26 Pohnpei Code § 4-105. Pursuant to §4-114, the Pohnpei Public Lands Trust Board of Trustees is hereby empowered, authorized, and instructed to dedicate and vest the control and use rights in the following delineated public trust lands to the state government, Department of Land and Natural Resources, to be managed as a watershed forest reserve: all public lands within the green line on the USGS topographic map

²²³ 41 Pohnpei Code § 1-114(15). This zone corresponds to areas prescribed by 26 Pohnpei Code § 4-106. To assure the future protection of these important watershed areas, the following restrictions shall apply within them: (a) No additional building of roads or structures is permitted after the date that this subchapter becomes law; (b) No rebuilding or improvement of structures now in existence is permitted; (c) The Board of Directors of the Pohnpei Environmental Protection Agency shall strictly enforce all regulations pertaining to location and design of toilets, septic tanks, drain fields, piggeries, fire, use of chemicals, and other pertinent regulations within these areas; (d) All disposal of solid waste shall be at authorized dump sites located outside of the important watershed area; dumping of solid wastes within the area is forbidden; (e) Any dumps currently existing within this area shall be cleaned up within one year of the effective date of this subchapter[effective date is July 8, 1987], by those who created them or by the Office of Transportation and Infrastructure; and (f) It is at all times forbidden to dump polluting liquids on the ground or to dispose of them by any manner within the area.

²²⁴ 41 Pohnpei Code § 1-114(16). This zone corresponds to areas prescribed by 26 Pohnpei Code § 4-107. Broad goals for the mangrove forests of Pohnpei are to conserve these forests for the maximum sustainable benefit to people, and to minimize those non sustainable or conversion activities that lead to the destruction of the forests. Cooperation between the Department of Land and Natural Resources and the Board of Directors of the Pohnpei Environmental Protection Agency will be necessary to meet [these broad] goals: (b) All dredging, road building, and other major land-disturbing activities affecting mangrove forests, whether privately or publicly sponsored, will require approval and a permit from the Director, and environmental review will be required for all such projects prior to approval; (c) The building of new houses, sheds or other structures will be allowed only if the proponent can show a valid deed for the property to be built upon, or if the Pohnpei Public Lands Trust Board of Trustees and the Director agree that a permit can be issued without significantly harming the mangrove forest;

²²⁵ 41 Pohnpei Code § 1-119(1).

²²⁶ 41 Pohnpei Code § 1-119(2).

²²⁷ Pohnpei Code tit. 41 ch. 2.

²²⁸ 26 Pohnpei Code §§ 3-102(3), 3-104, & 3-107.

soil and water conservation plans and policies for private and public lands.²²⁹ As of the beginning of 2021 this board was not active anymore.

Earthmoving activities²³⁰: Pohnpei earthmoving regulations are promulgated under and by virtue of the provisions of Pohnpei State Law No. 3L-26-92 and any other applicable laws. All earthmoving activities within the State of Pohnpei shall be conducted in accordance with these regulations and in such a way as to prevent accelerated erosion and accelerated sedimentation. To accomplish this, all persons²³¹ engaging in earthmoving activities shall design, implement, and maintain erosion and sedimentation control measures which effectively prevent accelerated erosion and accelerated sedimentation. The erosion and sedimentation control measures must be set forth in a plan, must be available at all times at the site of the project, and must be filed with the EPA. Ongoing activities/operations of a continuous nature such as dredging, quarrying, etc.; construction operations and all new projects and new operations shall comply fully with these regulations. These Regulations provide guidance for applicable measures to control erosion and sedimentation such as limiting exposed area and stabilize all slopes, channels, ditches or disturbed areas on land and contain and restrict underwater sedimentation to reduce turbidity from underwater activities. Violators are subject to civil enforcement action by the EPA, in addition to criminal prosecution. Such enforcement action is outlined in Section 12 and 14 respectively of S.L. No. 3L-26-92.

Dredging and sand mining: In Pohnpei, mining and dredging activities carried out on certain listed public trust lands are authorized and regulated exclusively by the Pohnpei Public Lands Trust Board of Trustees.²³² Such activities on any other public trust lands are prohibited.²³³ Many of the public trust land sites listed in the statute include detailed, location-specific conditions—often environmental in nature—clarifying how the dredging or mining activity at the site will be carried out.²³⁴

It is unlawful to mine or dredge on public lands without a site permit from the Board of Trustees, by application through the Division of Public Lands of the Department of Land.²³⁵ Following mining or dredging activities, the permittee must return the site to "*an aesthetically and*

²²⁹ 26 Pohnpei Code §§ 3-102(3) & 3-108 to 3-112. Soil and water conservation activities in Pohnpei appear to be primarily terrestrial, with a focus on agricultural, watershed, and conservation areas. *Id.* § 3-111.

²³⁰ Earthmoving is defined as "any construction or other activity which disturbs or alters the surface of the land, a coral reef or bottom of a lagoon, including, but not limited to, excavations, dredging, embankments, land reclamation in a lagoon, land development, subdivision development, mineral extraction, ocean disposal, and the moving, depositing or storing of soil, rock, coral or earth.

²³¹ The erosion and sedimentation control plan should be prepared by a person trained and experienced in erosion and sedimentation control methods and techniques.

²³² 42 Pohnpei Code § 9-101.

²³³ *Id.*

²³⁴ *Id.*

²³⁵ 42 Pohnpei Code § 9-102(1)-(2). In addition, any person or entity performing such activities must hold a contractor's license from the Board of Trustees, by application through the Division of Public Lands of the Department of Land. 42 Pohnpei Code § 9-102A.

*environmentally acceptable condition.*²³⁶ The Board and the Division must jointly inspect and approve the reclamation work.²³⁷ Where inspections reveal noncompliance, reports must be submitted to the attorney general for legal proceedings.²³⁸

Violations of the mining and dredging provisions of the law are subject to a fine of US\$2,500 and 30 days in prison. Each day that a violation occurs is a separate offense.²³⁹ Material removed in violation of the law is subject to confiscation, and where such material is not reasonably capable of confiscation, the person responsible must pay compensation subject to a wrongful removal penalty charge calculated by the court.²⁴⁰ Failure to carry out proper reclamation subjects the violator to three times the estimated cost of restoration and a “civil fine” of US\$2,500, which is doubled for each subsequent offense during a 10-year period (not to exceed US\$100,000 per offense).²⁴¹ In addition to these penalties, a court may disallow a violator from mining and dredging activities for up to five years.²⁴²

Environmental Impact Assessment

The State of Pohnpei's statute requires that its EPA, within one year of the appointment of its leadership, develop EIA regulations.²⁴³ Similarly to Chuuk, the Pohnpei environmental statute relies heavily on regulations to flesh out the specific requirements for environmental assessments:

The Board shall establish standard procedures, through regulation, as administered by the executive officer, for the preparation of an environmental impact assessment statement prior to issuing permits for any public or private project that may significantly affect the quality of the environment to include land, water, and air. Regulations shall set forth criteria for the development of environmental impact statements and the payment for the preparation of such statements.²⁴⁴

²³⁶ 42 Pohnpei Code § 9-102(15). Section 102 spells out various other conditions for mining and dredging on public lands, mostly with respect to payment of fees and reporting. The Pohnpei Code also details how monetary receipts from fees, interest, and penalties under the mining and dredging law are to be allocated by the state. *Id.* § 9-105. Rocks and other materials unacceptable for removal, for instance, shall be returned to the dredging site as fill, so as not to be visible above the waterline and in an acceptable depth which shall be jointly inspected and approved by both the Board and the Office of Transportation and Infrastructure or its successor as acceptable safety standard for saltwater transportation; PROVIDED, that the permittee shall remove all the dredged materials or return the rocks and other unacceptable materials to the dredging site as fill at an acceptable depth not later than 120 days from the expiration date of the dredging permit

²³⁷ 42 Pohnpei Code § 9-102(15)-(16). Rocks and other materials used as dikes or berms, or otherwise unacceptable for removal, must be returned to the site as fill, so as not to be visible above the waterline and at an acceptable depth (including acceptability for safety standards for saltwater transportation, where relevant). *Id.* § 9-102(15).

²³⁸ 42 Pohnpei Code § 9-102(16).

²³⁹ 42 Pohnpei Code § 9-103(1).

²⁴⁰ 42 Pohnpei Code § 9-103(2).

²⁴¹ 42 Pohnpei Code § 9-103(3).

²⁴² 42 Pohnpei Code § 9-104.

²⁴³ 27 Pohnpei Code § 1-109(1)(c).

²⁴⁴ 27 Pohnpei Code § 1-109(2)(b).

The Pohnpei statute provides a definition of an EIS. An EIS is “a thorough study and intensive consideration of possible effects of a developmental action before it is undertaken.”²⁴⁵

4.5.3 Freshwater

Pohnpei developed the Pohnpei State Water Policy (2018), with the goal of having a well-managed and protected water supply, with environmental safeguards that preserves nature’s services to ensure the quality of source water, for sustainable distribution and equitable access to all people of Pohnpei, to guarantee social, cultural, recreational, and economic use. The policy covers all freshwater resources of the State of Pohnpei, surface water, groundwater, harvested water and desalinated water, promoting a ridge-to-reef approach that acknowledges the effects of freshwater on the quality of coastal and marine ecosystems.

The increasing demand in water and the limited access to safe drinking water prompted the need for active measures to address Pohnpei’s communities water rights, including equitable access. Limited households water security and sanitation need to be addressed to protect health and well-being and support economic development. Sources of pollution (i.e., piggeries, toilets, pesticides) and other human activities such as increasing unregulated burial sites and deforestation are posing a great threat to water resources and coastal areas, thereby further limiting access to clean freshwater. Climate change, through increasing climate variability, is expected to exacerbate impacts from human activities, threatening communities’ wellbeing and livelihoods.

The State determined that the Pohnpei State Water Policy is required to conserve and manage water resources in order to address challenges such as increased population and water demand for drinking and sanitation, increase in waste production, watershed deterioration, growth of the energy, agriculture, tourism and commercial sectors, sea level rise leading to deterioration of groundwater quality, floods and droughts associated with climate change.

4.5.4 Marine Conservation & Protected Areas

Prior to the FSM Congress’s adoption of the National PAN Policy Framework in 2018, Pohnpei, Kosrae and Chuuk already had established their own state-level networks of protected areas.

The state’s Marine Sanctuary and Wildlife Refuge Act of 1999 provides for the identification and designation of ecologically significant areas of the terrestrial and marine environment as state marine sanctuaries and wildlife refuges, and further provides authority for their comprehensive

²⁴⁵ 27 Pohnpei Code § 1-103(3).

and coordinated conservation and management.²⁴⁶ The Act was amended as recently as 2017 to add protected areas.

The Act establishes the Pohnpei State Marine Sanctuary and Wildlife Refuge System (hereafter, System). The System is administered by the director of the Department of R&D.²⁴⁷ Areas included in the System are designated by law and remain within the System until otherwise specified by law.²⁴⁸ Within 60 days of an area being designated for inclusion in the System, the director is required to issue regulations as necessary to administer the area. In so doing, the director must consult with the traditional leaders and the leaders of the local municipal government for the area in which the designated area is located.²⁴⁹ The Act does not spell out a specific process for designating an area for inclusion in the System.

No state property within the System, including mangrove areas, may be disturbed, or injured,²⁵⁰ and mining and dredging are prohibited.²⁵¹ Commercial exploitation of resources within the boundaries of the System is prohibited.²⁵² Various other activities (including fishing and taking wildlife) are prohibited within the boundaries of an area designated as part of the System, unless otherwise permitted by regulation.²⁵³

Nondestructive scientific investigation may be conducted by qualified institutions and individuals within the System, subject to prior written approval from the director, pursuant to regulations issued under the Act.²⁵⁴ More generally, the director, by regulation, may permit the use of areas within the System for noncommercial recreational hunting and fishing, subsistence fishing, public recreation, and scientific research, where such uses are compatible with the purposes for which the areas were established.²⁵⁵

Following designation of an area, the director of the System is required to prepare an inventory of the area's scenic, natural, and cultural features.²⁵⁶ The director must also prepare a general plan for the area (essentially a management plan).²⁵⁷

²⁴⁶ 26 Pohnpei Code § 5-102. The Act is supported by legislative findings and intended to achieve a range of beneficial purposes. *Id.* §§ 5-101 to 5-102.

²⁴⁷ 26 Pohnpei Code § 5-105. In administering the System, the director may enter into contracts for management of areas, accept funds to support the System, and acquire lands, waters, or interests therein. 26 Pohnpei Code § 5-106(1).

²⁴⁸ 26 Pohnpei Code § 5-105(1). For public lands located upland (above mean high tide mark), the Pohnpei Public Lands Trust Board of Trustees is authorized to vest control and use rights in the state, through the DR&D. *Id.* § 5-105(2).

²⁴⁹ 26 Pohnpei Code § 5-106(2).

²⁵⁰ 26 Pohnpei Code § 5-107(1)(a).

²⁵¹ 26 Pohnpei Code § 5-107(1)(d).

²⁵² 26 Pohnpei Code § 5-107(2).

²⁵³ 26 Pohnpei Code § 5-107(1)(b), (c), (e), (f).

²⁵⁴ 26 Pohnpei Code § 5-107(2).

²⁵⁵ 26 Pohnpei Code § 5-108(1).

²⁵⁶ 26 Pohnpei Code § 5-109.

²⁵⁷ 26 Pohnpei Code § 5-110.

The Act provides that funds may be appropriated annually to support the System.²⁵⁸

Violations of the Act are subject to imposition of a civil penalty of US\$20,000 per violation.²⁵⁹ Criminal penalties for knowingly violating the Act, its regulations, or a permit include a fine of US\$50,000 and imprisonment of one year.²⁶⁰ The attorney general may bring an action to enjoin an imminent or continuing violation.²⁶¹ A vessel used in the commission of a violation is liable in rem.²⁶² The Act contains a citizen suit provision pursuant to which “any person” may seek to enjoin, on his own behalf, a violation of the Act’s prohibition provisions.²⁶³

The Act, by its terms, establishes numerous named marine sanctuaries, a marine park, a marine protected area, two stingray sanctuaries, and a mangrove forest reserve.²⁶⁴ The general legal structuring of each area is similar: establishing the area; identifying its specific purposes; delineating the boundaries of the area; and authorizing the director to promulgate regulations to provide specific types of protection within each area.²⁶⁵

Pursuant to the Pohnpei Marine Resources Conservation Act of 1981, the director of the Department of R&D is required to identify specific marine areas that are known to be aggregation sites of sea turtles to be sea turtle conservation zones, from which no sea turtles may be taken, injured, or killed—or their parts taken.²⁶⁶ The statute establishes a process by which such areas were to be proposed in legislative form by 2020.²⁶⁷ Further provision is made for defining, publicizing, and marking these zones.²⁶⁸ All sea turtle conservation zones are to be recorded in a sea turtle conservation zone registry maintained at the headquarters of the Department of R&D and the Office of Fisheries and Aquaculture (OFA).²⁶⁹

The Pohnpei Watershed Forest Reserve and Mangrove Protection Act of 1987 affords multiple protections to mangrove forests:²⁷⁰ all cutting is prohibited, except as permitted by the director of the DR&D, through the chief of the Division of Natural Resource Management; dredging, road-building, and other major land-disturbing activities affecting mangrove forests are subject to environmental review and a permit from the director; limitations are placed on new homes and other construction; and the use of chemical pesticides and herbicides, as well as the

²⁵⁸ 26 Pohnpei Code § 5-111.

²⁵⁹ 26 Pohnpei Code § 5-112.

²⁶⁰ 26 Pohnpei Code § 5-113.

²⁶¹ 26 Pohnpei Code § 5-115. Each day of a continuing violation constitutes a separate offense with respect to civil and criminal penalties. *Id.* § 5-114.

²⁶² 26 Pohnpei Code § 5-116.

²⁶³ 26 Pohnpei Code § 5-117.

²⁶⁴ 26 Pohnpei Code §§ 5-118 to 5-132.

²⁶⁵ Four specified areas—Oroluk Marine Sanctuary, Minto Reef Marine Sanctuary, Senpehn/Lehdau Mangrove Forest Reserve, and Nanwap Marine Protection Area—are required to be granted “the highest level of protection available within the System.” 26 Pohnpei Code §§ 5-118(5) (Oroluk), 5-119(4) (Minto Reef); 5-130(5) (Senpehn/Lehdau), & 5-131(4) (Nanwap).

²⁶⁶ 26 Pohnpei Code § 6-203(1).

²⁶⁷ 26 Pohnpei Code § 6-203(1).

²⁶⁸ 26 Pohnpei Code § 6-203(2), (3), (4).

²⁶⁹ 26 Pohnpei Code § 6-203(5). The registry must be made publicly available in print and online. *Id.* § 6-203(6).

²⁷⁰ A “mangrove forest” is a salt-tolerant tidal fringe ecosystem of trees, other plants, and animals. 26 Pohnpei Code § 4-104(6).

dumping of solid waste or polluting liquids, is prohibited in mangrove forests, except as may be permitted by the director after environmental review.²⁷¹ The director may promulgate implementing regulations with respect to mangrove forests.²⁷² The Act requires the director to engage in public education, including through the university and grade schools, with respect to forestry issues (including conservation of mangroves).²⁷³ Areas subject to these forestry provisions are patrolled by the Department of Public Safety—Division of Fish and Wildlife—although all Pohnpei law enforcement agencies may enforce that law.²⁷⁴ Violation of a mangrove forest protection provision subjects the violator to a fine of US\$1,000 and one year in prison, as well as liability for restoration of the site to as near its original condition as possible—with the caveat that cutting mangroves carries a fine of US\$1,000 per tree cut.²⁷⁵ Though all rights, title, and interest in mangrove and upland forests in the public domain remain in the Pohnpei Government, immediate supervision and control of these forests in each local jurisdiction is delegated to the chief executive of the local government.²⁷⁶

The Pohnpei’s Marine Sanctuary and Wildlife Refuge Act of 1999 resulted in the designation of protected areas benefiting specific fauna and flora, including mangroves.²⁷⁷

- Revenues realized through the administration of the Marine Resources Conservation Act of 1981, though deposited in the general fund of Pohnpei, may be appropriated by the Legislature for “conservation measures relative to the marine life of [the] state.”²⁷⁸
- Subject to a narrow exception,²⁷⁹ it is prohibited to knowingly catch fish or any other marine life by means of explosives, poisons, chemicals, or other substances that kill fish or marine life; to knowingly possess or sell fish or marine life so caught; or to knowingly place such articles or substances with the intent to kill.²⁸⁰ A violator of these prohibitions is subject to, upon conviction, a fine of between US\$100 and US\$2,000, and imprisonment of between six months and two years.²⁸¹

²⁷¹ 26 Pohnpei Code § 4-107(2).

²⁷² 26 Pohnpei Code § 4-108(1).

²⁷³ 26 Pohnpei Code § 4-108(3).

²⁷⁴ 26 Pohnpei Code § 4-108(4).

²⁷⁵ 26 Pohnpei Code § 4-108(5).

²⁷⁶ 26 Pohnpei Code § 4-120. Local councils may enact ordinances for the regulation, control, and taxation of these forests, subject to veto by the governor. *Id.* § 4-121.

²⁷⁷ See, e.g., 26 Pohnpei Code §§ 5-123, 5-124, & 5-130.

²⁷⁸ 26 Pohnpei Code § 6-103.

²⁷⁹ The governor may grant written permission to use an otherwise prohibited means where the purpose is to avoid waste or loss and where consumption or sale of the fish or other marine life is not harmful or hazardous to health and human life. 26 Pohnpei Code § 6-221(3).

²⁸⁰ 26 Pohnpei Code § 6-221(1), (2). The law gives a broad, open-ended definition to “poisons,” “chemicals,” and “substances.” *Id.* § 6-221(1). However, the prohibition is inapplicable to the use of local roots, nuts, or plants that have the effect of stupefying—but not killing—fish or other marine life. *Id.* § 6-221(4). A similar set of provisions prohibiting the use of poisons, chemicals, and substances to catch freshwater shrimp is found at 26 Pohnpei Code §§ 6-181 to 6-182.

²⁸¹ 26 Pohnpei Code § 6-221(5).

- As previously noted, Pohnpei’s Marine Sanctuary and Wildlife Refuge Act of 1999 resulted in the designation of protected areas benefiting specific fauna and flora, including stingrays and mangroves.²⁸²
- To prevent the introduction and further dissemination of injurious insects, pests, and diseases in Pohnpei, state law grants to the director of the DR&D, with approval of the governor, authority to issue plant and animal quarantines and regulations.²⁸³ All plants and animals, and their parts, entering or transported within the state are subject to inspection and may be refused entry or movement.²⁸⁴

Shark Protection

Pohnpei prohibits the possession, sale, offer for sale, trade, or distribution of shark fins.²⁸⁵ A violator is subject to a civil penalty of US\$5,000 per fin, plus an administrative fine beginning at US\$50,000 for a first offense, a fine of US\$50,000 to US\$100,000 for a second offense, and for a third or subsequent offense, a fine of US\$100,000 to US\$250,000 and one year of imprisonment. Shark fins, as well as commercial marine vessels, fishing equipment, and other property involved in a violation are subject to seizure and forfeiture.²⁸⁶ The following activities are exempt: shark research carried out under a valid license or permit; possession resulting from allowable subsistence fishing; and possession of live sharks for display to the public, with attendant scientific research and academic marine biology pursuits.²⁸⁷ The OFA is to promulgate, with approval of the governor, implementing regulations.²⁸⁸ (It is important to note that the Pohnpei State legislation predates the national law.)

Fisheries

The Pohnpei State Fisheries Protection Act of 1995 governs small-scale fishing. Unlike in Chuuk and Yap, Pohnpei does define subsistence fishing. It means fishing undertaken by citizens of Pohnpei to ensure the livelihood of the immediate or extended family as may be further defined by regulation.²⁸⁹ In contrast to the definition of the term in the FSM national statute, Pohnpei State’s definition is phrased in terms of livelihood and does not specifically bar the sale or trading

²⁸² See, e.g., 26 Pohnpei Code §§ 5-123, 5-124, & 5-130.

²⁸³ See Pohnpei Code tit. 28 ch. 1.

²⁸⁴ 28 Pohnpei Code § 1-105.

²⁸⁵ 29 Pohnpei Code § 4-103(1).

²⁸⁶ 29 Pohnpei Code § 4-103(2).

²⁸⁷ 29 Pohnpei Code § 4-104.

²⁸⁸ 29 Pohnpei Code § 4-105.

²⁸⁹ 29 Pohnpei Code § 1-103(29). Compare with 26 Pohnpei Code § 5-104(3) (same definition of subsistence fishing contained in the Pohnpei Marine Sanctuary and Wildlife Refuge Act of 1999).

of fish. Furthermore, the Act's purpose section recognizes that protection of small-scale fishing by Pohnpeians is paramount.²⁹⁰

The Pohnpei Act, like those in Chuuk and Yap, explicitly recognizes the small-scale fishing rights of Pohnpeians over submerged reefs in Pohnpei's jurisdiction.²⁹¹

Again, the precise language and geographic scope of these rights differ among the three statutes; as discussed previously, they also differ in the precise contours of each state's "traditional rights." Pohnpei's statute defines state waters in a substantially similar way to the statutes in Chuuk and Yap.²⁹² Pohnpei's statute explicitly prohibits "foreign fishing for sharks, shellfish, reef fish, bill fish, marine mammals or any other type of marine life."²⁹³ The statute also permits the OFA to determine the total allowable harvest or catch level of subsistence and recreational fishing with respect to any stock of fish, subject to the Act.²⁹⁴

Aquaculture

The State of Pohnpei has enacted two pieces of legislation relating to aquaculture. In 2008, the Advisory Board on Fisheries and Aquaculture was established within Pohnpei's OFA. The duties of the Board are to consider matters regarding fisheries and aquaculture in Pohnpei, formulate policy recommendations for all appropriate government agencies, review all financial reports and the annual budget of the OFA, and recommend legislation for improvement of Pohnpei's fisheries and aquaculture.²⁹⁵

In 2014, Pohnpei passed S.L. No. 8L-58-14, which was codified as "Commercialization of Sea Cucumbers."²⁹⁶ In support of the statute, the Legislature found that the harvesting of sea cucumbers from their natural marine habitat and the aquaculture farming of sea cucumbers are commercially viable ventures which, when properly controlled in a sustainable environment, can result in economic development for the state and meaningful employment for Pohnpeian citizens.²⁹⁷ Aquaculture is defined to mean the cultivation, propagation, or farming of aquatic organisms, including fish, mollusks, crustaceans, invertebrates, and any aquatic plants and

²⁹⁰ 29 Pohnpei Code § 1-102 ("In recognition of the fact that the marine resources of these [state] waters are a finite and renewable part of the physical heritage of our people, we choose to limit the use of such resources to the people of Pohnpei. For this reason, the commercial harvesting of these resources is prohibited to commercial foreign and domestic enterprises within state waters.").

²⁹¹ 29 Pohnpei Code § 1-105.

²⁹² See 29 Pohnpei Code § 1-103(19), (26), & (31).

²⁹³ 29 Pohnpei Code § 1-109. The statute defines "foreign fishing" to mean "any commercial fishing or commercial recreational fishing by a foreign fishing vessel." 29 Pohnpei Code § 1-103(17). "Foreign fishing vessel" is defined to mean "any foreign-owned or foreign-operated fishing vessel that conducts commercial fishing or commercial recreational fishing as defined by this chapter." 29 Pohnpei Code § 1-103(18). Finally, "commercial fishing" is defined to mean "any fishing undertaken for other than recreational, sport, or subsistence purposes. For the purposes of this chapter, fishing by a vessel measuring 27 feet or more in overall length and fishing by more than one vessel owned by a single person for the primary purpose of selling the fish in the commercial market shall be presumed to be commercial fishing." 29 Pohnpei Code § 1-103(7).

²⁹⁴ 29 Pohnpei Code § 1-111(1). See Section 5.2.3 of this report for details on the factors to be considered in setting these levels.

²⁹⁵ 39 Pohnpei Code § 3-101 et seq.

²⁹⁶ 26 Pohnpei Code § 7-101 et seq.

²⁹⁷ 26 Pohnpei Code § 7-101.

animals, whether from eggs, spawn, spat, seed, or other means, or by veering aquatic organisms taken from the wild or imported, or by similar processes.²⁹⁸

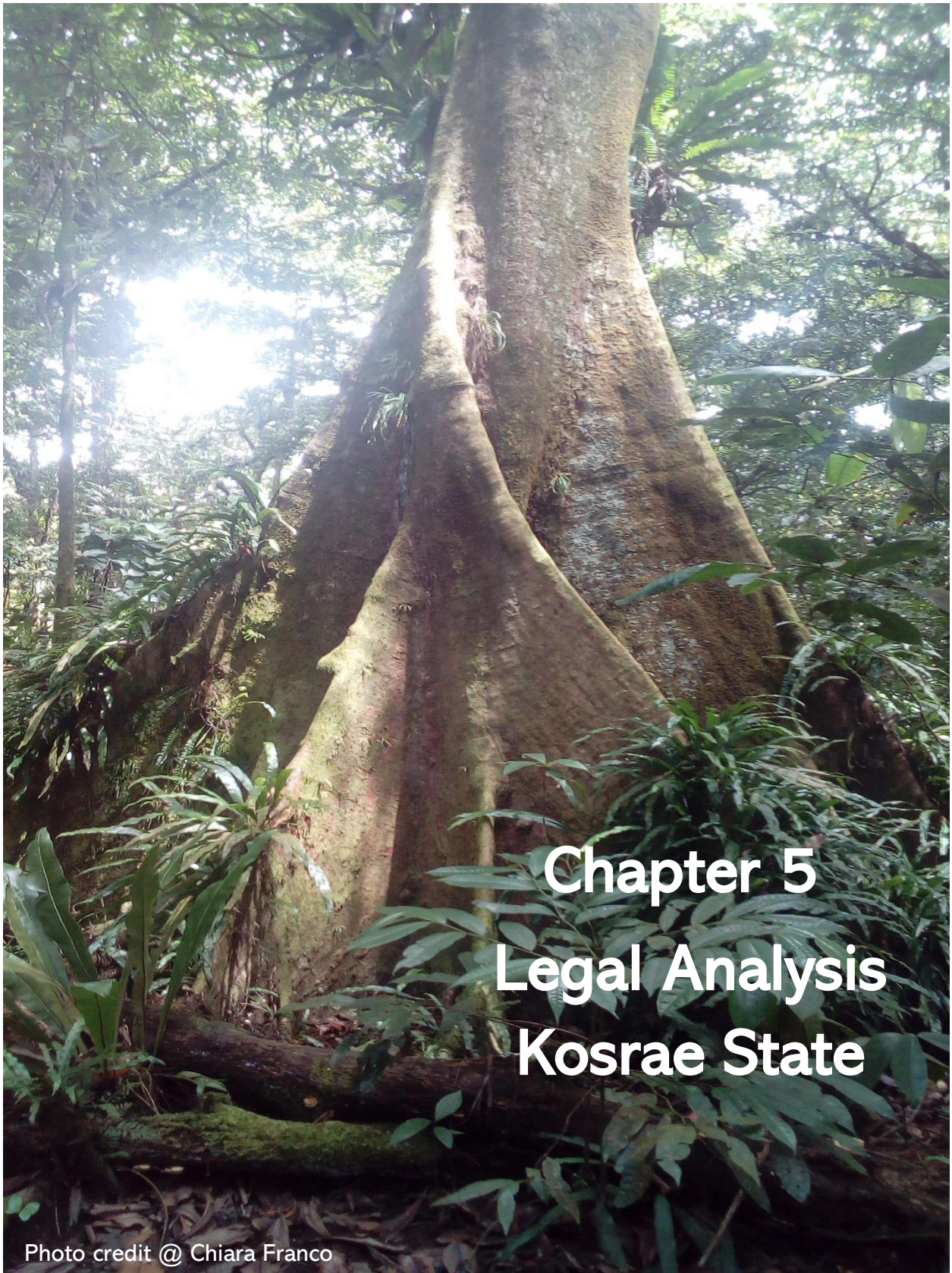
The statute establishes the Pohnpei Sea Cucumber Commission to administer and supervise the commercialization of sea cucumbers, whose membership includes an expert in low-impact aquaculture projects, “preferably an officer or employee of the Marine and Environmental Institute of Pohnpei.”²⁹⁹ Finally, the statute requires a feasibility study be conducted and filed with the Pohnpei Legislature not later than January 1, 2016; the study was to focus on “the sustainability and profitability of operating aquaculture farms for the seeding, raising, and marketing of sea cucumbers from the lagoons of Pohnpei Island and the outer islands of the s[t]ate.”³⁰⁰ The statute also required that any proposed legislation be attached to the study, if appropriate, to fulfill the recommendation of the report.³⁰¹

²⁹⁸ 26 Pohnpei Code § 7-102(1).

²⁹⁹ 26 Pohnpei Code § 7-106(2)(b).

³⁰⁰ 26 Pohnpei Code § 7-401.

³⁰¹ *Id.*



Chapter 5

Legal Analysis

Kosrae State

Photo credit @ Chiara Franco

5.1 Geography

Kosrae, in the east, is geologically the youngest, high volcanic island with a steep topography and a total landmass of approximately 111 km² (43 sq mi). The island is surrounded by coral reefs and has around 10.3 km² (4 sq mi) of land suitable for agriculture and 64.5 km² (25 sq mi) of forested land located on the steep mountains (Fig. 1). The majority of the island's coastline is experiencing chronic erosion. The highest elevation in Kosrae is Mt. Finkol at 635 m (2,083 ft). Kosrae is the only FSM state without outer islands (Fig. 1).³⁰²

5.2 Kosrae Climate Change Overview

Table 6. Overview of climate trends in Kosrae State

Climate feature	Climate trends
Air Temperature	Kosrae experiences little seasonal variation in mean air temperatures across the year (less than 1.5°C/ 2.7°F between the average hottest and coolest months), which is driven mainly by sea surface temperatures. In general, across the island groups, the mean annual temperature averages 27.1°C (80.8°F) over the period 1901–2019, but annual mean air temperatures have increased (~0.5 - 1°C) across the FSM since 1951.
Rainfall	Average annual rainfall in Kosrae is of 197 inches (500cm), with April tending to be the wettest month. Heaviest rainfall tends to occur between July and October, particularly when El Niño conditions are developing. In a typical El Niño, Kosrae can experience dryness and drought between October and December and significantly reduced rainfall between January and March in the following year.
Sea Level	The north-east trade winds tend to increase tide levels between November and April. Higher than normal high tides occur particularly between December and February, while much higher than normal high tides (known in Kosrae as King Tides) can occur during La Niña.
Storm patterns	Many of the typhoons that affect western Micronesia Region often originate around Kosrae as tropical depressions or storms developing into full typhoons to the west and north of the island. Typhoons, tropical depressions and storms that track close to Kosrae cause heavy rainfall. In 2015 Tropical storm Dolphin caused wave swells and flooding.
Sea Surface Temperature	Natural variability (i.e. year-to-year) still play a large role in determining the sea-surface temperature also in Yap. Historical changes are consistent with the broad-scale sea-surface temperature trends for the wider Pacific region, indicating increased SST warming.
Ocean Acidification	Ocean acidification is projected to continue, with consistent decline in aragonite saturation.

Sources: Pacific Climate change data portal, Data portal, NOAA National Centers for Environmental Information (NCEI), Australian Bureau of Meteorology and CSIRO-2014

³⁰² Government of the Federated States of Micronesia (2016). Kosrae Joint State Action Plan for Disaster Risk Management and Climate Change. SPC's Suva Regional Office, Fiji.

5.3 Kosrae Gender Legislation & Policies

Kosrae instituted the Family Protection Act in 2014 (7).³⁰³ This legislation seeks to reduce instances of violence within the home. Kosrae has also amended their State Law No. 8-24 so that access for people with disabilities will be taken into greater consideration when designing government facilities and other projects (10).³⁰⁴

The state of Kosrae has not yet increased its age of consent, thus it remains at 13 years old³⁰⁵.

5.4 Government Composition

The Kosrae State Legislature is a unicameral body comprised of 14 senators, elected to four-year terms from the electoral districts of Lelu (5), Malem (3), Tafunsak (4), and Utwe (2).¹³² The Legislature's power extends to "all rightful subjects of legislation not inconsistent with" the Kosrae Constitution. Kosrae's executive branch is led by the governor and lieutenant governor, who are elected jointly by a majority of votes cast. The Department of Resources and Economic Affairs is the most relevant department for ocean management and is composed of the following divisions: Trade and Investment; Agriculture and Land Management; Fisheries and Marine Resources; and Economic Planning.

By statute, the Department of Resources and Economic Affairs is required to manage, conserve, and develop marine resources. The department has other powers and duties pertinent to ocean management, as follows:

- To promote the development and improvement of private sector business and oversee foreign investment.
- To foster production, marketing, and protection of commercial production of land and sea produce.
- To assist private parties in the development of agriculture and forestry in an ecologically sound manner.
- To manage, conserve, and develop marine resources.
- To survey public and private lands and monitor the use of public lands, maintaining a written roster of all parcels of public land.
- To act as Registrar of Lands.

³⁰³ National report submitted in accordance with paragraph 5 of the annex to Human Rights Council resolution 16/21* Federated States of Micronesia - Human Rights Council, Working Group on the Universal Periodic Review (January 2021) (p.7) <https://undocs.org/pdf?symbol=en/A/HRC/WG.6/37/FSM/1>

³⁰⁴ National report submitted in accordance with paragraph 5 of the annex to Human Rights Council resolution 16/21* Federated States of Micronesia - Human Rights Council, Working Group on the Universal Periodic Review (January 2021) (p.10) <https://undocs.org/pdf?symbol=en/A/HRC/WG.6/37/FSM/1>

³⁰⁵ Micronesia 2018 Human Rights Report (p.8) <https://www.state.gov/wp-content/uploads/2019/03/MICRONESIA-2018.pdf>

- To coordinate economic planning.

The judicial branch in Kosrae State consists of the State Court and such inferior courts as may be created by law. The decisions of the highest division of the State Court are appealable to the appellate division of the FSM Supreme Court. Kosrae's Constitution contains a judicial guidance clause providing that court decisions shall be consistent with the Constitution, State traditions and customs, and the social and geographical configuration of the State.

Kosrae's Constitution recognizes the existence and limited powers of the four municipalities in Kosrae State (i.e., Lelu Municipality, Malem Municipality, Tafunsak Municipality, and Utwe Municipality). By state statute, a municipal government may not adopt an ordinance regarding, or regulate or control, an activity or subject that state law regulates or controls. Kosrae's Constitution requires the state government to protect the State's traditions "as may be required by the public interest."

The Kosrae Constitution recognizes a right to a healthful, clean, and stable environment, and the state, by law, must protect its environment, ecology, and natural resources from impairment in the public interest.³⁰⁶

5.5 Environment & Climate Change Legislation & Policies

5.5.1 Climate Change Legislation & Policies

In 2013, Kosrae adopted the *Regulations for development projects relating to climate change impacts and adaptation measures*. These Regulations amend selected provisions of Regulation 67-05 § 1.2 under Kosrae State Code³⁰⁷ with the purpose of establishing standard procedures for the formal review of development projects. These regulations are cross-cutting, requiring to integrate the Environmental Impact Assessment (EIA) process into early planning of projects and require development and public infrastructure projects to incorporate climate change adaptation measures³⁰⁸

KIRMA promulgated and issued Regulations pursuant Title 19, Chapter 2 of the Kosrae State Code. These Regulations amended the state Regulations for Development of Projects to require development activities in Kosrae State to take into account projected climate change impacts and to require the design and implementation of public infrastructure projects (e.g., roads and buildings) to incorporate climate change adaptation measures consistent with the FSM National Climate Change Policy 2009. The Regulations also includes other amendments to ensure that they are consistent with the best practices in international environmental law.

³⁰⁶ Kosrae const. art. XI § 1. The waters, land, and other natural resources within the marine space of the state are public property, the use of which the state government is required to regulate by law in the public interest. *Id.* § 4.

³⁰⁷ Kosrae State Code tit. 19, ch. 2.

³⁰⁸ 19 Kosrae State Code § 19.102(18)

5.5.2 Land Ownership, Use, Planning and Management

Private Lands

In Kosrae, only a person who is a citizen of the FSM and is Kosraen by descent, or a corporation wholly owned by such persons, may acquire title to land. Acquisition or utilization of interests in real property may be restricted or regulated by law.³⁰⁹

In Kosrae, the Land Court was established under the Land Court Act of 2000 as a subordinate court within the state court system for the purposes of title investigation, title determination, and the registration of interests in land, and to provide a single system of filing all recorded interests in land.³¹⁰ Each Land Court Justice was given responsibility for determining boundaries, title, and registration of the parcels located within an assigned registration area.³¹¹

Public lands

The waters, land, and other natural resources within the marine space of the Kosrae are public property, the use of which the state government regulates by law in the public interest, subject to the right of the owner of land abutting the marine space to fill in and construct on or over the marine space.³¹² Rivers and streams designated by law are public property, the use of which the state government regulates by law in the public interest.³¹³ The governor is authorized to transfer title to, or interest in, public land (Table 1) on the state's or the government's behalf, following approval by the Legislature.³¹⁴

The waters, land, and other natural resources within the marine space of the Kosrae are public property, the use of which the state government regulates by law in the public interest, subject to the right of the owner of land abutting the marine space to fill in and construct on or over the marine space.³¹⁵ Rivers and streams designated by law are public property, the use of which the state government regulates by law in the public interest.³¹⁶ The governor is authorized to

³⁰⁹ Kosrae Const. art. XI § 7.

³¹⁰ Kosrae State Code § 11.603(1).

³¹¹ Kosrae State Code § 11.612(2). Each Justice must institute diligent inquiries regarding each claim of interest within his area and set each well-founded claim for hearing once all claims are recorded. *Id.* § 11.612(3).

³¹² Kosrae Const. art. XI § 4. The right of the landowner may be limited by other provisions of this article, and any use of the waters, land, and other natural resources within the marine space of the municipality by the state government is subject to prior consultation between the state government and the municipality where the marine space is situated. Consultation procedures are to be provided by statute. *Id.*

³¹³ Kosrae Const. art. XI § 6.

³¹⁴ Kosrae State Code § 11.101.

³¹⁵ Kosrae Const. art. XI § 4. The right of the landowner may be limited by other provisions of this article, and any use of the waters, land, and other natural resources within the marine space of the municipality by the state government is subject to prior consultation between the state government and the municipality where the marine space is situated. Consultation procedures are to be provided by statute. *Id.*

³¹⁶ Kosrae Const. art. XI § 6.

transfer title to, or interest in, public land (Table 1) on the state’s or the government’s behalf, following approval by the Legislature.³¹⁷

Land Use Planning and Regulation

The law in Kosrae charged the governor with—within one year of the COFA taking effect—proposing legislation to regulate the use of land and other forms of real property.³¹⁸ Under Kosrae state law, it is prohibited to damage a reef by dredging, mining, removing coral or rocks, running a vessel aground, or by any other means.³¹⁹ Kosrae has a Land Use Plan which was developed in 1993, updated in 2003 and passed into law in 2005 (KSL 8-127). This Land use Plan is now being updated again with assistance from the Ridge-to-Reef project and the updated version is expected by the end of the year 2022.

Earthmoving activities are administered by KIRMA under Title 19 of Kosrae Constitution. In the mangrove forests “*All construction, earthmoving, fill and excavation from or in mangrove forest is prohibited, except following completion of environmental assessment and satisfaction of all applicable requirements of Chapter 2 of this Title, and all applicable regulations*”³²⁰. In the watershed forested areas, the activities of earthmoving, fill, excavation and removal of trees and other plants are prohibited for areas of land which has a slope of 30% or more³²¹. For watershed forest land which has a slope less of 30%, all construction, earthmoving, fill, and excavation is prohibited in a buffer zone of one hundred (100) feet adjacent to all rivers and streams upstream of all dams, established in all watershed forests³²².

Environmental Impact Assessment

The Kosrae State statute employs language similar to Yap’s statute with respect to environmental impact studies and statements while being more specific about when development action will trigger such requirements—specifically, all actions that “may significantly affect, directly or indirectly, natural or historic resources, significantly alter the landscape or be incompatible with surrounding air, land or water uses.”³²³

5.5.3 Freshwater

Kosrae addresses problems related to waterways fouling and sedimentation under Title 19 of the Kosrae State Code. Fouling of public waters (rivers, streams and water supply) through the introduction of impurities in a stream, river or public water supply, except for the introduction

³¹⁷ Kosrae State Code § 11.101.

³¹⁸ Kosrae State Code § 11.201.

³¹⁹ Kosrae State Code § 19.325.

³²⁰ Kosrae State Code § 19.806.

³²¹ Kosrae State Code § 19.807. (2)

³²² Kosrae State Code § 19.807. (1)

³²³ Kosrae State Code §§ 19.201 & 19.202. Interestingly, Kosrae’s statute specifically mentions an impact—direct or indirect—on historic resources as triggering environmental impact reporting requirements.

of impurities in a stream or river in connection with washing of clothes or a person is prohibited by the law³²⁴. Control of sediments and sedimentation due to earthmoving, fill, excavation and removal of trees and other plants in the watershed forest is prohibited on or from watershed forest land which has a slope of 30% or more³²⁵.

It is important to note that Kosrae does not have a Water Policy that focuses on conservation and management of the state water resources.

5.5.4 Marine Conservation & Protected Areas

Kosrae also enacted the "Protected Area Act of 2010"³²⁶, which empowers KIRMA to promulgate and enforce regulations, establish activities, and uses which are restricted or prohibited in protected areas, establishes procedures, conditions, and standards for development; and provides for the continuing administration of a permit program for development. The Act applies to all mangroves, upland, wetland, and watershed forests as delineated in Kosrae State Land Use Plan of 1994 (and revised in 2003).

The Kosrae Protected Area Act of 2010 is structured similar to that of the Pohnpei statute in that it provides for the establishment, operation, funding, and policing of protected areas.³²⁷ The Act establishes the Utwe Biosphere Reserve, the main objective of which is to preserve and to prohibit any human activities (particularly the harvesting of natural resources) within the core areas of the reserve.³²⁸ The reserve is a marine protected area, administered by the Kosrae Island Resource Management Authority (KIRMA)³²⁹. The Act also contains several preliminary sections that relate to the protection of "Mangrove Forests,"³³⁰ "Watershed Forests,"³³¹ and "Wetland Forests,"³³² as well as "Harvesting from State Owned Forests."³³³

In 2014, the State promulgated the Kosrae Island Resource Management Authority Protected Area (Forest management) Regulation. This Regulation was promulgated and adopted by Kosrae Island Resource Management Authority (KIRMA) pursuant to Kosrae State Code, Title 19, Sections 19.102(14) and 19.802. The purpose of this Regulation is to regulate and control the harvest and collection of trees and other resources in or from any public land and State-owned forests, including mangrove, watershed, wetland, and upland forests. This designates and regulates permitted harvesting zones, and prohibited harvest zone where harvest of trees and other forest resources is prohibited due to the importance of the forest in providing a buffer

³²⁴ Kosrae State Code tit. 19, ch.5, § 19.503.

³²⁵ Kosrae State Code tit.19 ch. 8 §19.807

³²⁶ Kosrae State Code § 19.801 et seq.

³²⁷ Kosrae State Code §§ 19.810 to 19.823

³²⁸ Kosrae State Code § 19.824(2).

³²⁹ Kosrae State Code § 19.824(1).

³³⁰ Kosrae State Code § 19.806.

³³¹ Kosrae State Code § 19.807.

³³² Kosrae State Code § 19.808.

³³³ Kosrae State Code § 19.809.

along a stream, river or other waterway, the coastline, or a road³³⁴. Section 4.4 (1) a – e designates five (5) key mangrove areas as “prohibited harvest zones”, where no person shall harvest, collect, burn, damage, or kill a tree at any time.

The Act prohibits: the disposal of any liquid or solid waste in any protected area; the building of any open fire in a mangrove, upland, wetland, or watershed forest; the harvest of any trees or plants from any State-owned Forest. Additionally, all construction, earthmoving, fill and excavation in mangrove forest is prohibited. The Act further establishes a buffer zone of one hundred feet adjacent to all rivers and streams upstream of all dams and prohibits all earthmoving and excavation from watershed forest land which has a slope of 30% or more. The Act prohibits the harvest of Terminalia trees except with written authorization by KIRMA.

The Act authorizes the KIRMA Administrator to: enter into contracts with any person for provision of facilities for the management of the area; to accept donations of funds and use such funds to acquire or manage lands. Within 60 days after designation as a protected area, the Administrator shall issue regulations for proper administration of the area. The Administrator is empowered to enforce the provisions through warnings, cease and desist orders, penalties, and through formal hearings.

The Act grants the Administrator Emergency Powers if it is determined that an imminent peril to the public health and safety requires immediate action and may order any person to immediately reduce or stop the action. The Administrator may also institute a civil action in court for an injunction. Penalties of up to \$10,000 may be assessed for each offense.

Mangrove forests and the activities that are prohibited in the mangrove forests are regulated in Title 19 of the Kosrae State Code. No trees or other plants may be collected or harvested in or from any mangrove forest, except by written authorization provided by KIRMA. However, the harvest or collection of reserved trees is prohibited at all locations at all times. KIRMA can also establish “no harvest zones” to prohibit all harvests in specific locations. Mangroves can be harvested for traditional use and customary personal non-commercial use. Constructions, earthmoving, fill, and excavation is pursuant to the completion of environmental assessment and satisfaction of all applicable regulations.

The Kosrae state statute include provisions that³³⁵ *“ apply to all mangrove, upland, wetland and watershed forests as delineate in Kosrae State Land Use Plan dated June 13, 1994, and revised 2003, as adopted by the Legislature, and other areas of biological significance as identified in the Kosrae Biodiversity Strategic Action Plan; and to all areas designated as protected areas in the System pursuant to law and pursuant to regulations adopted pursuant to the Chapter”*

³³⁴ The harvest of other organisms, such as mangrove crabs, may be permitted, provided that the harvesting method does not cause damage to trees or other vegetation

³³⁵ Kosrae State Code § 19.803

Contamination of fisher water through the discharge of non-biodegradable trash or debris, poison, oil, petroleum, solvents, metals, sewage, or other noxious substances or by taking action that are likely to damage the quality of fisher waters or fish is prohibited³³⁶.

Fisheries

There is no statute in the State of Kosrae that specifically defines subsistence fishing or protects traditional fishing rights in Kosrae’s waters. Any person engaging in subsistence fishing, however, must be exempt from any regulation requiring a fishing permit for any fishing other than fishing from a foreign fishing vessel and transshipment.³³⁷ The KIRMA administrator may require permits for other types of fishing—such as small-scale commercial fishing or fishing by “local fishing vessel”³³⁸—but he/she also may provide additional exemptions from such permit requirements. Finally, as do the other states, Kosrae prohibits any person from engaging in commercial fishing from a foreign fishing vessel in inland waters.³³⁹

Again, the precise language and geographic scope of these rights differ among the three statutes; as discussed previously, they also differ in the precise contours of each state’s “traditional rights.”

Aquaculture

The Environmental Protection and Management provisions of the Kosrae State Code indicates that nothing in the provisions shall be interpreted as prohibiting or authorizing the harvesting, processing, sale, or export of fish cultivated in an aquaculture center operated or approved by the FSMNG or the State Government of Kosrae.³⁴⁰ Aquaculture means any activity designed to cultivate or farm fish, and includes mariculture.³⁴¹ Finally, aquaculture in Kosrae may require a permit to first be issued by the KIRMA administrator.³⁴²

- The director of the Department of Agriculture, Land and Fisheries, by regulation, may provide for the time, place, and method of *trochus* harvesting by a permit system to assure responsible and environmentally sound harvesting; minimum and maximum shell size; and other limitations on harvesting.³⁴³
- It is prohibited to commercially harvest, commercially process, or commercially export sea cucumbers without a valid permit issued by the Development Review Commission. Nor may any person possess more than five sea cucumbers without a valid permit

³³⁶ 19 Kosrae State Code §19.505

³³⁷ Kosrae State Code § 19.306(2).

³³⁸ Kosrae State Code § 19.306(1).

³³⁹ Kosrae State Code § 19.316.

³⁴⁰ Kosrae State Code § 19.304.

³⁴¹ Kosrae State Code § 19.103(3).

³⁴² Kosrae State Code § 19.306(1)(c).

³⁴³ Kosrae State Code § 11.1101.

from the Commission. In consultation with the director, the Commission is authorized to adopt implementing regulations.³⁴⁴ The director shall monitor sea cucumber populations to determine whether the commercial harvesting, commercial processing, and commercial exportation of sea cucumbers remains within sustainable levels.³⁴⁵

³⁴⁴ Kosrae State Code § 11.1102. Detailed requirements for such regulations are provided, including a requirement of an absolute ban of the commercial harvesting, commercial processing, or commercial exportation of any species of sea cucumber that has been determined by the director of the Department of Agriculture, Land and Fisheries to require such protection. *Id.* § 11.1102(3).

³⁴⁵ Kosrae State Code § 11.1102(4).

APPENDIX 1. Marine species and other wildlife receiving protections under FSM law

Marine mammals. No marine mammal may be taken or killed by a commercial fishing party or for commercial purposes, but they may be killed for traditional purposes. This commercial prohibition covers, but is not limited to, porpoises, whales, seals, and dugongs.³⁴⁶

Sea turtles. Except as specifically authorized by the high commissioner for scientific purposes, it is prohibited to take or intentionally kill a hawksbill turtle or sea turtle while it is on shore, or to take her eggs. It is unlawful to take or kill a hawksbill turtle whose shell measures less than 27 inches (when measured over the top of the carapace shell, lengthwise) or a green turtle whose shell measures less than 34 inches. No sea turtle of any size may be taken during the closed season: June 1 to August 31, and December 1 to January 31.³⁴⁷

Sponges. No sponges that have been artificially planted or cultivated may be taken or molested, except by permission of the high commissioner.³⁴⁸

Black-lip mother-of-pearl oyster shell. No black-lip mother-of-pearl oyster shell, *Pinctada margaritifera*, may be taken during the closed season: August 1 to December 31. No such shell may be taken at any time if it is less than six inches in minimum diameter, measured by the longest dimension across the outside of the shell. Such shells of any size, however, may be taken at any time for scientific purposes when specifically authorized by the high commissioner.³⁴⁹

Sea snails. Except as otherwise provided by law, it is prohibited to harvest or intentionally interfere with the growth of *Trochus niloticus* in the water of the then-Trust Territory.³⁵⁰ Each district administrator may, with the advice and consent of the high commissioner, designate and vary from year to year, an open season during May through September for the harvesting of *trochus* in his district, and may designate certain reefs or sections as closed for the harvesting of *trochus*, notwithstanding an open season. The open season may vary in different areas or islands within each district.³⁵¹ No *trochus* may be taken whose shell is less than three inches in diameter at the base.³⁵² If a district administrator determines that underwater operations that will interfere

³⁴⁶ 23 FSM Code § 115.

³⁴⁷ 23 FSM Code § 105.

³⁴⁸ 23 FSM Code § 106.

³⁴⁹ 23 FSM Code § 107.

³⁵⁰ 23 FSM Code §§ 108-09.

³⁵¹ 23 FSM Code § 110. During an open season, any citizen of the then-Trust Territory may dive for and harvest *trochus* in the district to which the season applies, within those areas in which he has the right to fish under established local custom. *Id.* § 111. The harvesting of *trochus* also may be prohibited entirely. *Id.* § 113.

³⁵² 23 FSM Code § 112.

with an existing *trochus* bed are in the public interest, he may issue a written permit for the removal and replanting of the bed at the expense of the operator.³⁵³

Except where the law provides a different penalty, a person violating any of the provisions set forth above (i.e., provisions contained in the FSM Code's resource conservation title) is, upon conviction, subject to a fine of US\$100 and imprisonment of six months.³⁵⁴

Pohnpei

- Except with written authorization for scientific purposes, it is prohibited to take or kill a Hawksbill turtle whose shell measures less than 27 inches (when measured over the top of the carapace shell lengthwise) or a Green turtle whose shell measures less than 34 inches. No sea turtle of any size may be taken during the closed season: June 1 to August 31, and December 1 to January 31. No sea turtle may be killed or disturbed while on shore or in immediately adjacent waters to a depth of six feet, inclusive of breeding, feeding, or seeking shelter to lay eggs. It is prohibited to take, disturb, molest, harass, transfer, or sell sea turtle nests, eggs, or hatchlings.³⁵⁵ The director of the Department of Resources and Development is authorized to issue implementing regulations.³⁵⁶ A willful violator is subject to a fine of between US\$500 and US\$1,000 and one year in prison.³⁵⁷ The Division of Fish and Wildlife is responsible for enforcement.³⁵⁸
- It is prohibited to harvest black coral without a permit, or to take or tamper with black coral for personal accumulation or use, or to sell or transfer it.³⁵⁹ The director of the DR&D may issue processing licenses and commercial harvesting permits.³⁶⁰ The director may designate closed seasons and may designate certain reefs or sections to be closed.³⁶¹ A violator is subject to a US\$1,000 fine and one year in prison.³⁶² A civil penalty may be imposed at three times the current market value of the affected black coral; unlawfully harvested or possessed black coral is subject to forfeiture.³⁶³

³⁵³ 23 FSM Code § 114(1). A district administrator, at any time, may authorize the removal and transport of *trochus* for the purpose of introduction to other reefs, islands, or atolls. *Id.* § 114(2).

³⁵⁴ 23 FSM Code § 116.

³⁵⁵ 26 Pohnpei Code §§ 6-202 & 6-204. "Sea turtle" is defined to include the following species: Green, Loggerhead, Kemp's Ridley, Olive Ridley, Hawksbill, Flatback, and Leatherback. *Id.* § 6-201.

³⁵⁶ 26 Pohnpei Code § 6-207.

³⁵⁷ 26 Pohnpei Code § 6-206.

³⁵⁸ 26 Pohnpei Code § 6-206.

³⁵⁹ 26 Pohnpei Code § 6-113. Black coral is *Antipathes ulex* or any other *Antipatharia* species. *Id.* § 6-111(1).

³⁶⁰ 26 Pohnpei Code §§ 6-114 to 6-115.

³⁶¹ 26 Pohnpei Code § 6-116.

³⁶² 26 Pohnpei Code § 6-120.

³⁶³ 26 Pohnpei Code § 6-121.

- It is prohibited to take, sell, or possess for sale bumphead parrotfish.³⁶⁴ A violator is subject to a US\$1,000 fine and one year in prison.³⁶⁵ A civil penalty may be imposed at five times the current market value of the bumphead parrotfish, with the fish to be forfeited.³⁶⁶
- It is prohibited to take or possess a mangrove crab carrying eggs, except for licensed and permitted cultured mangrove crab producers.³⁶⁷ A violator is subject to a US\$1,000 fine and one year in prison.³⁶⁸ A civil penalty may be imposed at 10 times the current market value of the crabs carrying eggs, with the crabs to be forfeited—and, where possible, returned to their natural environment and released.³⁶⁹
- The director of the DR&D has expansive authority with respect to the harvesting of *Trochus niloticus* (e.g., fixing open and closed seasons, designating harvest locations, fixing size restrictions and catch limits, etc.) and is charged with balancing its exploitation as an economic resource with its preservation as a renewable resource.³⁷⁰ A marketing license is required to commercially purchase or handle *trochus*.³⁷¹ A violator is subject to a US\$1,000 fine and one year in prison.³⁷² A civil penalty may be imposed at three times the current market value of the affected *trochus*, unlawfully harvested or possessed *trochus* is subject to forfeiture.³⁷³
- Except for scientific purposes as authorized by the governor, it is prohibited to take black-lip mother-of-pearl oyster shell (*Pinctada margaritifera*) during the closed season: August 1 to December 31. No such shell may be taken at any time if it is less than six inches in minimum diameter, measured by the longest dimension across the outside of the shell.³⁷⁴ A violator is subject to a fine of US\$100 and six months in prison.³⁷⁵
- No sponges that have been artificially planted or cultivated may be taken or molested, except by permission of the governor.³⁷⁶ A violator is subject to a fine of US\$100 and six months in prison.³⁷⁷

³⁶⁴ 26 Pohnpei Code § 6-132. Bumphead parrotfish refers to *Bolibometopan muraticus*, or “kemeik.” *Id.* § 6-131.

³⁶⁵ 26 Pohnpei Code § 6-133.

³⁶⁶ 26 Pohnpei Code § 6-134.

³⁶⁷ 26 Pohnpei Code § 6-142. Mangrove crab refers to *Seylla serrata*, or “eliming.” *Id.* § 6-141. The DR&D is to promulgate regulations governing mangrove crab farming.

³⁶⁸ 26 Pohnpei Code § 6-143.

³⁶⁹ 26 Pohnpei Code § 6-144.

³⁷⁰ 26 Pohnpei Code § 6-163. The term *trochus* means *Trochus niloticus* and includes *Trochus maximus*, *tectus nilticus* [sic], and *tectos maximus*. *Id.* § 6-161.

³⁷¹ 26 Pohnpei Code § 6-164.

³⁷² 26 Pohnpei Code § 6-168.

³⁷³ 26 Pohnpei Code § 6-169.

³⁷⁴ 26 Pohnpei Code § 6-171.

³⁷⁵ 26 Pohnpei Code § 6-172.

³⁷⁶ 26 Pohnpei Code § 6-191.

³⁷⁷ 26 Pohnpei Code § 6-192.

- Except pursuant to permit, the export of mangrove crabs, coconut crabs, and lobsters from Pohnpei is prohibited.³⁷⁸ A violator is subject to a US\$1,000 fine and two years in prison.³⁷⁹

Yap

- It is prohibited to commercially sell turtle meat or turtle eggs in any wholesale or retail store licensed to do business in the state.³⁸⁰
- It is prohibited to take or kill coconut crab, *Birgus latre* (or "ayuy"), whose shell is less than three inches in diameter measured at the base, nor may coconut crabs be taken or killed during their breeding season (June 1 to September 30). It is further prohibited to commercially sell coconut crabs in any wholesale or retail store licensed to do business in the state. A violator is guilty of a misdemeanor and, upon conviction, subject to a fine of US\$100 and one month of imprisonment.³⁸¹
- The harvest or intentional interference with the growth of *trochus* in the waters of the State of Yap is prohibited except as provided by law; the state provisions in this regard track the language contained in national law.³⁸²
- The governor is authorized to declare a harvesting season and to set a size limit for the taking or harvesting of clams. It is prohibited to commercially sell clam meat in any wholesale or retail store licensed to do business in the state.³⁸³

³⁷⁸ 26 Pohnpei Code § 6-211.

³⁷⁹ 26 Pohnpei Code § 6-212.

³⁸⁰ 18 Yap State Code § 1005.

³⁸¹ 18 Yap State Code § 1004.

³⁸² 18 Yap State Code § 1009.

³⁸³ 18 Yap State Code § 1006.

APPENDIX 2. Commercial fishing

Commercial fishing is a primary focus of the Marine Resources Act of 2002, which comprises the entirety of Title 24 of the FSM Code.³⁸⁴ The Act provides a comprehensive permitting and enforcement regime for controlling commercial fishing, primarily by foreign fishing vessels, in order to maximize economic contributions from the FSM's fisheries while seeking to preserve this national resource for future generations. The purpose of the Act "is to ensure the sustainable development, conservation, and use of the marine resources in the [EEZ] by promoting development of, and investment in, fishing and related activities in the context of effective stewardship and to regulate fishing and related activities of vessels entitled to fly the flag of the [FSM] beyond the fishery waters."³⁸⁵

Chapter 1 of the Act lays out the definition of key terms (including access agreement;³⁸⁶ commercial fishing; domestic fishing; fisheries management agreement; fishery; fishing; foreign fishing; local fishing vessel; and permit) and establishes that commercial fishing in the EEZ of the FSM requires a permit³⁸⁷ as well as an access agreement.³⁸⁸ Section 106 grants to NORMA the authority to enter into fisheries management agreements for cooperation in or coordination of fisheries management measures in all or part of the region or for the implementation of a multilateral access agreement.³⁸⁹ This authority allows NORMA to work effectively to meet the FSM's obligations under the PNA, as discussed in Section 2.6.2 of this report. The remainder of Chapter 1 relates to the mechanics of permitting; that is, the application process;³⁹⁰ scope of

³⁸⁴ The Act's definition of "commercial fishing" is set forth in Section 5.2.1 of this report.

³⁸⁵ 24 FSM Code § 101(1).

³⁸⁶ An access agreement is a treaty, agreement, or arrangement entered into by the Authority pursuant to the Act in relation to access to the EEZ for fishing by foreign fishing vessels; and includes bilateral and multilateral instruments applicable at the national, subregional, regional, or international level. 24 FSM Code § 102(1).

³⁸⁷ No domestic fishing, commercial pilot fishing, foreign fishing, or such other fishing or related activity as may be prescribed shall be allowed in the EEZ unless it is in accordance with: (i) a valid and applicable permit issued under authority conferred by the Act or its regulations; or (ii) a valid and applicable license issued by an administrator pursuant to a multilateral access agreement. 24 FSM Code § 103.

³⁸⁸ No foreign fishing vessel shall be issued a permit to fish in the EEZ unless an applicable access agreement is in force. The Authority is authorized to negotiate and enter into access agreements on behalf of the Government of the FSM. See 24 FSM Code § 105.

³⁸⁹ 24 FSM Code § 106. A fisheries management agreement means any agreement, arrangement, or treaty in force to which the FSM is a party, not including any access agreement, which has as its primary purpose cooperation in or coordination of fisheries management measures in all or part of the region, or implementation of a multilateral access agreement including, but not limited to, fisheries monitoring, control and surveillance, and establishing criteria or requirements for fishing and fisheries access. 24 FSM Code § 102(29). A multilateral access agreement means an access agreement between a foreign party and one or more regional parties to which the FSM is a party. 24 FSM Code § 102(45).

³⁹⁰ 24 FSM Code §§ 107-09.

permits;³⁹¹ management of permits, including conditions and duration;³⁹² fees;³⁹³ and required reporting of permit holding vessels.³⁹⁴

Chapter 2 of the Act establishes NORMA, comprised of a five-member Board, managed by an executive director, and charged with responsibility for overseeing the FSM EEZ.³⁹⁵ NORMA has the authority to enact regulations on a broad range of commercial fishing related topics (e.g., the sustainable use of fisheries resources; fisheries monitoring and control; implementing access agreements; research; and observer and port sampling programs)³⁹⁶ and possesses an array of duties and functions (e.g., providing technical assistance to delimit the EEZ; negotiating access agreements; issuing fishing permits; and engaging in international and regional cooperation relating to fisheries).³⁹⁷

One additional duty of NORMA is to convene and chair a Fisheries Management and Surveillance Working Group.³⁹⁸ The Working Group consists of representatives from NORMA and the DoJ. Representatives from other divisions and departments of the national and state governments, engaged in activities concerning surveillance, may be invited to participate. The recommendations of the working group regarding surveillance planning and strategy must be consistent with the objectives and general principles of conservation, management, and sustainable use of fishery resources set forth in the Act, and with the provisions of any national tuna management plan adopted pursuant to the Act.³⁹⁹

Chapter 4 contains the provisions governing the process for negotiating the access agreements, including minimum terms and fees, that provide the right of foreign fishing vessels to engage in commercial fishing within the FSM's EEZ.⁴⁰⁰ Section 407 contains provisions specifically relating to transshipment. Chapter 5 requires NORMA to adopt various management measures designed to conserve, manage, and sustainably use the FSM's fishery resources.⁴⁰¹ NORMA is also required to perform a variety of conservation tasks, such as to assess the impact of fishing on other species; minimize pollution from fishing gear; protect marine biodiversity; prevent overfishing; determine and allocate participatory rights in the fishery; and the like.⁴⁰² The Act specifies how NORMA should make such allocations for domestic fishing vessels and foreign fishing

³⁹¹ 24 FSM Code § 110. Section 110 does contain provisions that arguably enhance protection of traditional fishing rights of FSM citizens within state jurisdiction: no permit can authorize "fishing by foreign fishing vessels on, over or within one nautical mile of the edge of a coral reef that is wholly submerged at mean high tide within the exclusive economic zone;" 24 FSM Code § 110(2)(a); and any marine scientific research taking place within that area is subject to consent by the leadership of the "customary inhabitants [who] have been traditionally ascribed the authority to control the fishing over such reef;" 24 FSM Code § 110(3)(c), (d).

³⁹² 24 FSM Code §§ 111-12.

³⁹³ 24 FSM Code §§ 113-14.

³⁹⁴ 24 FSM Code § 115.

³⁹⁵ 24 FSM Code §§ 201 & 206.

³⁹⁶ 24 FSM Code § 204.

³⁹⁷ 24 FSM Code § 205.

³⁹⁸ 24 FSM Code § 205(9).

³⁹⁹ 24 FSM Code § 207.

⁴⁰⁰ 24 FSM Code § 402 et seq.

⁴⁰¹ 24 FSM Code § 501 et seq.

⁴⁰² 25 FSM Code § 502.

vessels.⁴⁰³ In 2017, Congress added a new provision to the Act, creating a “closed area” coterminous with the FSM’s contiguous zone.⁴⁰⁴

Chapter 6 of the Act, as previously discussed in Section 2.5 of this report, provides for enforcement in the fisheries sector. Chapter 7 lays out the judicial process that applies to any case arising under the Marine Resources Act.⁴⁰⁵ Jurisdiction is in the Supreme Court of the FSM;⁴⁰⁶ standing to sue is broad;⁴⁰⁷ citations and administrative penalties may be imposed;⁴⁰⁸ fishing is prohibited pending payment of administrative penalties;⁴⁰⁹ and specific rebuttable presumptions and burdens of proof are established.⁴¹⁰ Chapter 8 provides the procedure for the forfeiture, disposition, holding, and release of certain property (i.e., fishing vessels; fishing gear; perishable fish or fish products; and any vessel, vehicle, aircraft or other item) in relation to violations of the Act.

Chapter 9 lays out the civil and criminal penalties to be imposed on any person who has committed a prohibited act,⁴¹¹ as well as the civil liability to be imposed for loss or damage and on operators and fishing company officers.⁴¹² Sections 906 to 919 specify general “prohibited acts”⁴¹³ as well as specific prohibited acts (and the corresponding penalties), such as the following: fishing without a valid permit;⁴¹⁴ violation of marine space;⁴¹⁵ fishing on or near submerged reefs or fish aggregating devices;⁴¹⁶ or contamination of the EEZ.⁴¹⁷ The Act establishes a maximum civil penalty of US\$100,000 for violations for which no specific civil penalty is prescribed; however, some civil penalties can extend up to US\$500,000 for a single violation.⁴¹⁸

Chapter 10 contains provision relating to how a state may “establish by law an entity to promote, develop, and support commercial utilization of living marine resources within its jurisdiction.”⁴¹⁹ Other provisions of Chapter 10 relate to the initial funding of such state entities as well as their reporting requirements.⁴²⁰ Finally, Chapter 11 of Title 24 relates to the creation and operation of the National Fisheries Corporation of the FSM, colloquially referred to as NFC,

⁴⁰³ 25 FSM Code §§ 503-04.

⁴⁰⁴ See Public Law No. 19-167, at www.c fsm.gov.fm/iframe/19th%20Congress/LAWS/PUBLIC_LAW_19-167.pdf; and accompanying Standing Committee Report, at www.c fsm.gov.fm/iframe/19th%20Congress/REPORTS/SCR_No_19-222.pdf. The new closed area is discussed in Section 3.1 of this report.

⁴⁰⁵ 24 FSM Code § 701 et seq.

⁴⁰⁶ 24 FSM Code § 701.

⁴⁰⁷ See 24 FSM Code § 702.

⁴⁰⁸ 24 FSM Code § 703.

⁴⁰⁹ 24 FSM Code § 704.

⁴¹⁰ 24 FSM Code §§ 706-07.

⁴¹¹ 24 FSM Code §§ 901-02.

⁴¹² 24 FSM Code §§ 903-05.

⁴¹³ 24 FSM Code § 906.

⁴¹⁴ 24 FSM Code § 907.

⁴¹⁵ 24 FSM Code § 911.

⁴¹⁶ 24 FSM Code § 912.

⁴¹⁷ 24 FSM Code § 918.

⁴¹⁸ 24 FSM Code § 920.

⁴¹⁹ 24 FSM Code § 1001.

⁴²⁰ 24 FSM Code § 1004 to 1006.

as a public corporation.⁴²¹ NFC's purpose is to promote the development of pelagic fisheries and related industries within the extended fishery zone, for the benefit of the people of the FSM.⁴²² While NFC's corporate structure and governance are comparable to that of other public corporations established in the FSM, NFC is explicitly granted significant statutory authority and flexibility with respect to fishing and the fisheries industry.⁴²³ As for commercial fishing in the states—with the exception of Pohnpei—commercial "foreign fishing" is permitted within state waters subject to a permitting and enforcement system that roughly parallels that employed by NORMA at the national level.⁴²⁴ With the creation in 2017, however, of a 12 mile "closed area" contiguous to the 12 nm of state waters governed by the states (i.e., the territorial sea), it remains to be seen whether commercial fishing—at least by foreign fishing vessels—in state waters will decline given a lack of continuity in fishing area.⁴²⁵

⁴²¹ 24 FSM Code § 1103.

⁴²² 24 FSM Code § 1102.

⁴²³ See 24 FSM Code § 1106(2)(a), (d), & (f) through (h).

⁴²⁴ See generally 18 Yap State Code § 201 et seq; 25 Draft Chuuk State Code § 1001 et seq; and Kosrae State Code § 19.301 et seq.

⁴²⁵ The recent amendment to the Marine Resources Act does permit an exception from the prohibition for a "locally owned fishing company." 24 FSM Code § 504. Though this term is not defined in the statute, "local fishing vessel" is defined as previously discussed. Discussions with government officials confirm that, to date, NORMA has taken no action under this exception in the absence of a definition. Interview notes on file with the authors.

APPENDIX 3. Recreational Fishing

At the national level, “foreign recreational fishing” in the EEZ is prohibited except in accordance with a valid and applicable permit issued by NORMA on such terms and conditions as it shall require.⁴²⁶ Foreign recreational fishing is defined to mean fishing using a foreign fishing vessel for recreational or sport purposes.⁴²⁷ The fact the prohibition applies only to such “foreign” recreational fishing implies that local fishing vessels may engage in recreational fishing in the EEZ without a permit.

Pohnpei

This is the only state of the four in which the law specifically addresses recreational fishing in a robust, substantive manner. Prior to laying out the specifics of “Section 1-108 Recreational and sport fishing,” the Pohnpei State Code expresses the purpose of the Pohnpei State Fisheries Protection Act of 1995 to:

enforce the general prohibition against non-recreational commercial fishing by establishing a fine structure that will effectively limit the economic feasibility of illegally fishing within state waters, to regulate allowable non-commercial and commercial recreational fishing in state waters by establishing the necessary permit system for such fishing, and to finance both the enforcement and regulatory effort.⁴²⁸

Essentially, Pohnpei’s recreational and sport fishing statute permits recreational fishing by non-FSM citizens subject to a strict limit: “the total catch, inclusive of the catch of species of bill fish prohibited to foreign fishing vessels under § 1-105, attributable to any one such person in any one day shall not exceed 150 pounds or three fish, whichever is greater.”⁴²⁹ Persons fishing as part of a registered and approved sport fishing contest are exempt from this limit, so long as the contest restricts the methods of fishing that can be used in the contest to handlines and rods and reels.⁴³⁰ The statute also directs the state to “seek the cooperation of the operators of sport fishing vessels and the members of sport fishing clubs to preserve populations of marine life and promote their use in recreational fishing.”⁴³¹

Finally, the statute permits the state to “determine the total allowable harvest or catch level of subsistence and recreational fishing with respect to any stock of fish subject to this chapter.”⁴³²

⁴²⁶ 24 FSM Code § 104.

⁴²⁷ 24 FSM Code § 102(39). The Act also defines “recreational fishing” to mean “fishing for sport or leisure.” 24 FSM Code § 102(52).

⁴²⁸ 29 Pohnpei Code § 1-102. Commercial recreational fishing is defined to mean the hiring out of a fishing vessel or the services thereof for recreational purposes and includes sport fishing. 29 Pohnpei Code § 1-103(7).

⁴²⁹ 29 Pohnpei Code § 1-108(1).

⁴³⁰ 29 Pohnpei Code § 1-108(2).

⁴³¹ 29 Pohnpei Code § 1-108(3).

⁴³² 29 Pohnpei Code § 1-111(1).

The level is to be set for optimum sustainable yield and development as determined by the best scientific evidence available, including statistical and other information concerning such stocks of fish; and conservation, management, and sustainable development measures contained in management plans relating to such stocks of fish.⁴³³

In setting these levels, the state may place restrictions on vessel type, gear type, seasons of operations, areas in which the fishing can take place, or any other restriction relevant to conservation, management, and sustainable development.⁴³⁴

Chuuk and Yap

Both states parallel this approach to restricting recreational fishing within their jurisdictions. Pursuant to the relevant legal provision in each state, the regulatory authority may provide for the issuance of permits, on reasonable conditions, to foreign vessels or parties for research, survey, recreational, or noncommercial fishing within the State Fishery Zone and internal waters.⁴³⁵

Kosrae

The Kosrae State Code only mentions recreational fishing in the context of marine protected areas (discussed above), which sets up a system of permitting within the areas for noncommercial recreational fishing, subsistence fishing, public recreation and accommodations, and scientific research.⁴³⁶

⁴³³ *Id.*

⁴³⁴ 29 Pohnpei Code § 1-111(2).

⁴³⁵ 18 Yap State Code § 211(j); 25 Draft Chuuk State Code § 1011(10).

⁴³⁶ Kosrae State Code § 19.813. Pohnpei has a similar provision with respect to its protected area network. 26 Pohnpei Code § 5-108.

APPENDIX 4. Recreational boating

Pohnpei: At the state level, Pohnpei also regulates recreational boating. Code provisions on water traffic controls are intended to construct and maintain a system of standardized reef markers in Pohnpei State.⁴³⁷ The law establishes standards for reef markers relating to shape, color, and height above the high-water mark—all of which work to provide boaters with information concerning safety and navigability near reefs.⁴³⁸ Additionally, it is unlawful to remove, change, destroy, or moor a boat, canoe, or any object to any reef marker or other aid-to-navigation deployed by the U.S. Coast Guard, the FSM, Pohnpei State, or local governments.⁴³⁹

The “watercraft” provisions of the Pohnpei State Code⁴⁴⁰ ensure that watercraft operate safely near culverts, bridges, and tunnels; when entering or passing through channels; when operating in narrow channels of 60 feet or less in width; and when passing other watercraft.⁴⁴¹ In particular, it is unlawful to tie, moor, or anchor a boat, canoe, or other craft or logs in the middle of any channel of Pohnpei State. It is unlawful to put up or cause to be put branches of trees, nets, rocks, or any other obstacle in the channel or leave such obstacles as are no longer in use in waterways of Pohnpei State that interfere with free and safe passage.⁴⁴²

Chuuk: Divers seeking to access the Chuuk Lagoon State Monument must first obtain a permit from a duly licensed dive shop.⁴⁴³ It does not appear as though any of the other three states, or the FSM, has legislated in the area of diving and snorkeling.

Kosrae: The public nuisance law in Kosrae State accomplishes a similar objective relating to the free and safe passage of waterways by criminalizing any public nuisance that “obstructs the free passage or use, in the customary manner, of any navigable lake, river, bay, stream, canal, or basin.”⁴⁴⁴

⁴³⁷ 32 Pohnpei Code § 6-101 et seq.

⁴³⁸ 32 Pohnpei Code § 6-104.

⁴³⁹ 32 Pohnpei Code § 6-105.

⁴⁴⁰ 32 Pohnpei Code § 7-101 et seq.

⁴⁴¹ See, respectively, 32 Pohnpei Code § 7-101, 32 Pohnpei Code § 7-102, 32 Pohnpei Code § 7-103, and 32 Pohnpei Code § 7-106.

⁴⁴² 32 Pohnpei Code § 7-104.

⁴⁴³ 25 Draft Chuuk State Code § 1705. This section of the Truk District era statute was subsequently amended by Chuuk State Law No. 5-99-19, which was signed into law in February 2000. Consequently, the language of this section has substituted “Chuuk” for “Truk” and “State” for “District” where appropriate.

⁴⁴⁴ Kosrae State Code § 13.509 (emphasis added).