

EXECUTIVE SUMMARY

**CLIMATE CHANGE  
ADAPTATION PLANNING** *in the*  
**U.S. AFFILIATED PACIFIC ISLANDS**

*Assessment of Current Capacity  
and Recommendations for Future Opportunities*



PACIFIC ISLANDS  
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**THE PACIFIC ISLANDS CLIMATE CHANGE COOPERATIVE (PICCC)**

was established in 2009 to assist those who manage native species, island ecosystems and key cultural resources in adapting their management to climate change for the continuing benefit of the Pacific. As part of the international Landscape Conservation Cooperative Network, the PICCC consists of Federal, State, private, indigenous, and non-governmental conservation organizations and academic institutions forming a cooperative partnership that determines the overall organizational vision, mission, and goals.

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# PREFACE

At the request of the Department of the Interior's Office of Insular Affairs (OIA), the Pacific Islands Climate Change Cooperative (PICCC) was asked to provide technical assistance to the Commonwealth of the Northern Mariana Islands (CNMI), Territory of Guam, Territory of American Sāmoa, Republic of the Marshall Islands (RMI), Federated States of Micronesia (FSM), and Republic of Palau in understanding and planning for the localized impacts of global climate change.

OIA requested that the PICCC engage key cross-sector decision makers and stakeholders within each jurisdiction with the objectives to identify and articulate near-term priorities for funding as well as a process for developing long-term climate change adaptation plans. The desired outcomes of this technical assistance project were to increase each jurisdiction's capacity to,

- (1) understand the complexities of climate change adaptation planning, vulnerability assessments, and climate adaptation plan implementation;
- (2) be better prepared to complete a climate change adaptation plan application for funding purposes; and
- (3) be able to prioritize existing climate change initiatives and plan development activities for funding purposes.

It was envisioned that the project's final outputs would aid each jurisdiction additionally in identifying critical gaps to be filled by further technical assistance and funding requests to governmental and non-governmental organizations.

The final output of this OIA-funded project is a report that shares the findings of the climate change adaptation capacity assessments (Chapters 2-7), and recommendations based on these assessments as well as observations and feedback gathered during the workshops (Chapter 8). The full report is available for download at the PICCC web site: <http://piccc.net>.

# ASSESSING CAPACITY FOR AND CHALLENGES TO ADAPTATION

Climate change adaptation planning and implementation requires an effective constellation of partners to come together around shared goals and activities, backed with the legal authority and funding needed to make substantial and sustained change. This is of course challenging, due to the fragmentation of management authorities across government agencies combined with often overlapping mandates between agencies and competition for funding. Furthermore, legal jargon can make statutory authorities difficult to interpret without specialized training. Finding the right funding match can be challenging both for applicants and funders, as applicants work to design effective proposals and funders seek to identify the most strategic use of their funds as well as the appropriate government offices with which to work. To help address these challenges in the context of the U.S. Affiliated Pacific Islands, climate change adaptation capacity assessments were conducted for the Commonwealth of the Northern Mariana Islands, Territory of Guam, and Territory American Sāmoa (hereafter referred to as the U.S. Pacific Territories); and the Republic of the Marshall Islands, Federated States of Micronesia, and Republic of Palau (hereafter referred to as the Freely Associated States or FAS).

Each jurisdictional assessment in the full report is organized into the following categories:

- **Authorities:** key legal authorities applicable to climate change adaptation;
- **Institutions:** the capacity to utilize such authorities as reflected by the structure of the government executive branches;
- **Actions:** the implementation of their authorities as indicated by recent governmental actions focused on climate change; and
- **Future Needs:** near-future needs that would aid in climate change adaptation efforts.

The report then makes recommendations, organizing these into key sectors: zoning and land-use management, forest and watershed management, coral reef and marine systems management, outreach and education, renewable energy and energy efficiency, and food security.

This Executive Summary shares highlights from the report, working backwards from final recommendations to the institutional and legal context in the U.S. Pacific Territories and FAS.

# Key Sectors for Supporting Climate Change Resiliency



Fragmentation of climate change management authorities, as well as overlapping mandates between agencies, is common. This poses a particular challenge when it comes to preparing for climate change. Increasing the integration of adaptation strategies across departments will help climate change preparation work as it goes forward. Key opportunities for engagement on climate change preparations in U.S. Affiliated Pacific Islands are recommended below according to sector. For each opportunity, important government offices for engagement are provided in Chapter 8 of the full report.

## 1. ZONING AND LAND-USE MANAGEMENT

The production of spatially based vulnerability assessments, particularly for assets in the coastal zone, will be vital. This involves development or enhancement of centralized GIS capability in order to clearly delineate and visualize the vulnerabilities, and some level of authority to implement, or at least recommend, proper zoning and land-use planning so as to minimize future impacts.

## 2. FOREST AND WATERSHED MANAGEMENT

One aspect of future climate change that has created significant concern is the potential for changes in precipitation patterns and stream discharges which can in turn lead to impacts on municipal water supplies, agriculture, and biodiversity conservation. However, at the present time the prediction of future rainfall trends is tenuous at best given the lack of downscaled climate models for parts of the region and first-generation models for the rest of the region. Despite this, it would be prudent to undertake scenario planning so as to more clearly understand potential vulnerabilities and tradeoffs going forward. Scenario planning would then inform watershed management strategies. These strategies will be of more immediate importance in Guam, American Sāmoa, FSM, and Palau, due to their perennial streams, and somewhat less so in CNMI which has few perennial streams.



### **3. CORAL REEF AND MARINE SYSTEMS MANAGEMENT**

Coral reefs are among the most vulnerable of ecosystem classes to the near-term effects of climate change. In the Pacific Islands, coral reefs provide vital ecosystem services including coastal protection, nearshore fisheries, and tourism. Monitoring coral bleaching events, assessments of the overall natural resource losses in reefs, and identification of potentially resilient reef areas that may require special protection are important activities for continued funding and collaboration.

In addition to the four sectors highlighted above, the two sectors below present opportunities for collaboration that are of particular importance in the Freely Associated States.

### **5. RENEWABLE ENERGY AND ENERGY EFFICIENCY**

The U.S. Pacific Island jurisdictions have recently completed energy action plans and energy strategies that will help increase their energy independence and overall resiliency when implemented. The FAS nations are almost totally reliant on imported fossil fuels for electricity generation. Adoption of renewable energy technologies has been quite limited and thus energy efficiency has significant room for improvement. In many cases the local energy offices that would oversee energy efficiency projects in the FAS are understaffed and would benefit from immediate capacity building.

### **4. OUTREACH AND EDUCATION**

Communicating to the greater public the future challenges posed by climate change, and the necessity of pursuing adaptive strategies, is essential for building and retaining popular support for difficult future decisions and for moving adaptation measures forward. Therefore, funding should be directed toward those agencies that have oversight of education at all levels.

### **6. FOOD SECURITY**

Climate change has the clear potential to affect food security in the FAS by changing rainfall patterns upon which crops depend, creating new climatic conditions to which traditional crops may not adapt, rendering croplands and groundwater unusable by way of saltwater intrusion (via increased storm surge and sea level rise), and by altering oceanographic conditions in such a way that key fisheries are diminished or geographically displaced. As such, there is a need to assess the vulnerability of current food crops and fishery stocks to predicted future climate regimes, and educate local farmers as to identify potential alternative crops and fishery conservation measures that might be employed if traditional staples begin to fail.

# Climate Change Planning Needs in the U.S. Pacific Territories



Immediate climate change adaptation needs in CNMI, Territory of Guam, and Territory of American Sāmoa are as follows:

## Commonwealth of the Northern Mariana Islands

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### Climate Change Adaptation Plan

The CNMI is in need of both a climate change Executive Order similar to those already promulgated in Guam and American Sāmoa, and an overall climate change action plan to provide a guiding document for executive branch agencies. The existing Saipan vulnerability assessment and the coral reef resilience study provide good foundational documents on which to base proposals for further assistance, particularly in regard to islands other than Saipan and sectors other than coastal zone management.

### Land-Use Management Plan

Climate change adaptation efforts will need continued coordination across the Commonwealth's agencies. There is a need for climate change vulnerability considerations to be incorporated into the land-use management plans mandated by the Public Lands Act of 2006 and the Saipan Zoning Law of 2013. This could be accomplished through collaborations with the Commonwealth Zoning Board and/or the CNMI Department of Public Lands.

## Territory of Guam

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### Vulnerability Assessment

Guam is in need of a comprehensive vulnerability assessment of the type recently completed for Saipan. Under the terms of Executive Order 2015-08 such assessments were planned with hopes of completion by April 2016.

### Climate Change Action Plan

Guam is also in need of an overall plan to guide climate change adaptation. The Governor has already expressed a desire for such a plan but has requested that it be based on priorities that emerge from future climate change vulnerability assessments.



## Territory of American Sāmoa

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### Vulnerability Assessment

The current Territorial Climate Change Action Framework does a good job of outlining climate change vulnerabilities but it does not analyze them in detail. A vulnerability assessment similar to that prepared for Saipan, incorporating GIS-based vulnerability mapping, would be extremely useful for climate change adaptation planning across the Territory. Given funding and data limitations, such an assessment be conducted incrementally beginning in Tutuila and could subsequently be extended to the other islands in the territory, including the atolls which have clear vulnerabilities to inundation.

### Coastal Hazards Assessment

Due to the steeply dropping nature of most shorelines on Tutuila, where the majority of American Sāmoa's population dwells, a significant number of villages, and a large amount of vital infrastructure, are located very close to the mean high water mark. Therefore, a specific assessment of coastal hazards and projected future inundation and erosion trends is important in regard to zoning and land-use planning.

## Further Climate Change Adaptation Needs in the U.S. Pacific Territories

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The following engagement opportunities were identified as important near-term actions through climate change adaptation workshops in CNMI, Guam, and American Sāmoa.

### Creating Climate Coordinator Positions

At present, there is not a centralized office or program overseeing climate change vulnerability assessments and adaptation strategies between all jurisdictional authorities and across multiple sectors in CNMI, Guam, or American Sāmoa. Working around this, individuals have assumed either designated or *de facto* roles as climate change coordinators. Each of the jurisdictions is in need of a permanent, high-level climate coordinator who is not affiliated with a department in order to improve internal coordination and avoid the appearance that climate change activities are being directed by any single department.

### Mainstreaming of Climate Change into Government Agencies

While agency employees can be directed to participate in workshops, when they return to their daily routine climate change is not part of their job description (with a few notable exceptions). An approach that mainstreams climate change into agency missions and work plans would remedy this.



### **Building GIS Capacity**

CNMI, Guam, American Sāmoa all expressed the desire to design and/or improve GIS databases, and funding offered on this could be targeted to support the objectives of both climate change projects as well as those government agencies with lead roles in climate change adaptation.

### **Sustaining ‘Nature’s Infrastructure’**

Some of the most pressing climate change vulnerabilities identified by participants in our U.S. Pacific Territories workshops were related to infrastructure. However, the presence of infrastructure can increase the vulnerability of natural resources, depending on the design, both now and into the future. This is specifically the case with stormwater and wastewater runoff into marine systems and coastal roads that block the natural adaptive capacity of coastal ecosystems. This tension could be addressed by focusing efforts on sustaining and restoring natural infrastructure where feasible (e.g., coastal mangrove forests, wetlands, and natural drainage features).

### **Designing Environmentally Sound Development and Infrastructure**

CNMI and American Sāmoa expressed an interest in bringing in outside contractors (e.g., engineers) to work directly with agencies in adapting their plans and development projects for climate change. The on-island capacity to do this is limited which increases the risk of maladaptation, especially in the case of engineers who need to design projects that are environmentally sound and incorporate consideration of future climate impacts (e.g., increasingly powerful storms).

### **‘Climatizing’ of Existing Programs, Plans, and Projects**

There is a pervasive need for high level expertise to work directly within Territorial agencies to support incorporating climate change information, strategies, and actions into their existing programs, plans, and projects. This could begin with funding for short-term sit-in positions to help build capacity within and across local agencies. Positions like this already occur in the FAS through the U.S. Embassy Science Fellows and Peace Corps Response Programs.

### **Increasing Climate Change Legal Capacity**

Support for embedded legal fellows within various executive branch agencies of the U.S. Pacific Territories could be a useful means of incorporating climate change language amendments into existing statutes and administrative rules. The authorizing statutes of most agencies lack specific reference to climate change, therefore the authority to address its effects is implied rather than explicit. By embedding fellows who have both a law degree and appropriate sector expertise into selected agencies for 12 to 18 months, it would be possible to produce appropriately structured language relating to climate change that could then be incorporated into law, either through legislative action or agency rule-making.



# Climate Change Planning Needs in the Freely Associated States

The following adaptation needs of immediate importance for RMI, FSM, and Republic of Palau are summarized from the full report (Chapters 5-7).

## Republic of the Marshall Islands

### Climate Change Adaptation Plan

A variety of studies have highlighted the extreme vulnerability of the RMI to impacts from climate change, particularly in regard to inundation from rising sea levels (GFDRR 2011), but there does not appear to be any overall synthesis of these studies into a comprehensive adaptation plan for the country. The need for such a plan is laid out in the RMI National Strategic Plan of 2014, and the National Climate Change Policy Framework of 2011, the latter calling for the development of a Climate Change and Disaster Risk Management National Plan for RMI (a.k.a., Joint NAP). As previously noted, it is not clear where the development of the latter plan currently stands. Many of the previously developed strategic documents upon which it is based (relating to overall strategic development, energy policy, disaster risk management, and water resource management) are between 7 and 15 years old and in many cases did not fully anticipate the magnitude of the climate change impacts now facing the country. The agency with statutory authority for development of such a plan is the OEPPC in the Office of the President.

### Land-Use Management Plan

A detailed, GIS-based assessment of inundation risk needs to be undertaken for all islands in the RMI in order to understand the full extent of vulnerabilities faced by infrastructure and communities and as a basis for scenario planning in the event certain strategic retreats are required. Modeling of inundation risk to date has logically been

concentrated at Majuro and Kwajalein Atolls where the majority of the country's population resides. In addition to these localized case studies, a more comprehensive approach needs to be extended to the remainder of the country. This should include incorporation of wave force models on top of simple projections of sea level rise (Storlazzi et al. 2015). Such an assessment could also address two separate strategic goals – urban planning and infrastructure development, and land and coastal management – set forth in the RMI National Climate Change Policy Framework of 2011. The RMI Environmental Protection Authority, with its statutory mandates to oversee both land-use planning and impacts from rising sea levels, would be important in such efforts. OEPPC might also have a role to play.

### Energy Strategy and Policy Development

The RMI currently meets over 99% of its energy needs from imported fossil fuels (SPC 2012a). This is problematic both in terms of foreign exchange and climate change adaptation. Although there has been incipient adoption of solar photovoltaic technologies and initial experiments with coconut-based biofuels, the alternative energy sector is not fully developed. The most recent National Energy Action Plan was adopted in 2009 and is likely becoming dated given recent advances in technology, particularly in the solar PVE sector. Additional needs include development of policies for interconnection of renewable energy sources to the existing power grid, net metering, and power production outside of the two state-owned enterprises at Majuro and Ebeye.



## Federated States of Micronesia

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### **Integrated Climate Change Adaptation Strategy**

The FSM Climate Change Act of 2013 called for most executive branch departments to complete climate change plans. Developing a cohesive synthesis from emerging plans of individual agencies, and then integrating this with the existing FSM 2004-2023 Strategic Development Plan (which already has a significant climate change adaptation component) will be a substantial task. International and OIA funding could be directed toward assisting agencies in completing the plans and subsequent prioritization could in turn form the basis for sequencing future funding proposals for specific climate change adaptation projects.

### **Land-Use Management Planning and Zoning**

A detailed, GIS-based assessment of inundation risk needs to be undertaken for all islands in the FSM, particularly the outlying atolls, in order to understand the full extent of vulnerabilities faced by infrastructure and communities and as a basis for scenario planning in the event certain strategic retreats are required. In addition, there is a clear need to update the land cover analysis for the high islands in the FSM in order to assess the magnitude of significant recent losses of primary forest due to clearing for agriculture (e.g., on Pohnpei for kava cultivation in the uplands) and as a baseline by which to assess future climate-driven vegetation shifts.

Highlighted as a specific need in the FSM 2004-2023 Strategic Development Plan, there is a distinct lack of GIS capacity in the country with which to implement such analyses, and this is an area where external funding could help to fill a significant gap, possibly working through the College of Micronesia or the Department of Resources and Development.

### **Energy Policy Implementation**

Due to its fragmented geography, the power generation sector in the FSM is of necessity highly segmented, with each of the four states having a separate utility company, and fewer than 50% of households having a direct connection to one of these local grids. This would make the country an excellent candidate for deployment of distributed photovoltaic energy systems, which would also reduce carbon emissions and fossil fuel dependence. Assistance would be useful for the development of policies for interconnection of renewable energy sources to the existing power grid, net metering in relation to the four major power companies on Kosrae, Pohnpei, Chuuk, and Yap, and for deployment of renewable energy technologies on the smaller outlying islands.



## Republic of Palau

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### Vulnerability Assessment

A climate change vulnerability assessment using GIS-based mapping is needed. Palau does not seem to have a current climate change vulnerability assessment at the national level. A GIS-based study would be extremely useful in visualizing future risks, especially at Kayangel Atoll in the north of the country which is vulnerable to inundation. In addition, because many of the inhabited islands in Palau have steeply dropping limestone hills, with narrow coastal flats backed by cliffs, a significant amount of vital infrastructure is located very close to the mean high water mark. Therefore, a specific assessment of coastal hazards and projected future inundation and erosion trends is important in regard to zoning and land-use planning.

### Energy Policy Implementation

Palau is similar to the other FAS in that it currently meets over 99% of its energy needs from imported fossil fuels, which is undesirable in terms of both foreign exchange and climate change adaptation. Due to the fact that the population is relatively tightly concentrated on a few closely proximal islands in the north of the country, 99% of Palau households are connected to the public electrical grid, and there is only one public power company. This centralization of population and power infrastructure makes Palau a promising candidate for deployment of alternative energy technologies. Useful steps forward would include promoting deployment of residential rooftop solar photovoltaic capacity, developing policies for interconnection of renewable energy sources to the existing power grid, clarifying a net metering scheme, and generally improving energy efficiency across the country's economy as a whole.

# Key Authorities and Institutions Relevant to Climate Change Resiliency



An analysis of climate change relevant legal authorities, government institutions, and government actions relevant to climate change actions in the U.S. Affiliated Pacific Islands is listed in the following tables and explored in-depth in the full report (Chapters 2–7). This analysis is designed to provide readers with assistance in identifying the resources they currently can access — and the resources they need to obtain — to more effectively design strategies, build partnerships, and write funding applications for climate change resiliency work in the U.S. Affiliated Pacific Islands.

It is our hope that this Executive Summary and the full report will assist in connecting future projects, partners, legal authorities, and funding together, helping to move climate change planning and preparedness forward in the region. For more information on the programs and activities of the Pacific Islands Climate Change Cooperative, please visit our website at <http://piccc.net>.

## Commonwealth of the Northern Mariana Islands

### LEGAL AUTHORITIES RELEVANT TO CLIMATE CHANGE

Governor's Directive No. 2014-01 (2014)

Saipan Zoning Law of 2013 (SLL 18-5; codified Title 10 CMC, Ch. 5, Art. 1)

Public Lands Act of 2006 (PL 15-2)

Executive Directive 235 of 2003

Public Lands and Natural Resources Administration Act of 1997 (PL 10-57; codified Title 1 CMC Ch. 13)

Coastal Resources Management Act of 1983 (PL 3-47; codified Title 1 CMC Ch. 1 and 2)

CNMI Historic Preservation Act of 1982 (PL 3-39)

### INSTITUTIONAL STRUCTURES APPLICABLE TO CLIMATE CHANGE ADAPTATION

CNMI Office of the Governor

- CNMI Commonwealth Zoning Board (CZB)

- CNMI Bureau of Environmental and Coastal Quality (BECQ)

  - CNMI Division of Coastal Resources Management Office (CRM)

  - CNMI Division of Environmental Quality (DEQ)

CNMI Department of Public Lands (DPL)

CNMI Department of Commerce (DOC)

CNMI Department of Lands and Natural Resources (DLNR)

- CNMI Division of Fish and Wildlife (DFW)

CNMI Department of Public Works (DPW)

Commonwealth Ports Authority (CPA)

Department of Community and Cultural Affairs (CCA)

Commonwealth Utilities Corporation (CUC)

Northern Marianas College (NMC)

### GOVERNMENT ACTIONS ON CLIMATE CHANGE

Vulnerability and Resilience Assessments of Coral Reef Resources (2015)

CNMI State Flood Hazard Mitigation Plan (2015)

Rota and Tinian Vulnerability Assessment (2015)

Saipan Vulnerability Assessment of Coastal Resources and Infrastructure (2014)

Climate Change Task Force and Working Group (2012)

Garapan Conservation Action Plan

### INTERNATIONAL INITIATIVE

The Micronesia Challenge

## Territory of Guam

### LEGAL AUTHORITIES RELEVANT TO CLIMATE CHANGE

Executive Order 2015-08 (2015)  
Guam Office of Technology (2013) (Title 2 GCA Ch. 20)  
Executive Order 2012-05 (2012)  
Executive Order 2010-15 (2010)  
Executive Order 1997-10 (1997)  
Land Management Act (Title 21 GCA Ch. 60)  
Guam Territorial Seashore Protection Act of 1974 (PL 12-108; Title 21 GCA Ch. 63)  
Parks and Recreation (PL 20-151; codified as Title 21 GCA Ch. 77)  
Guam Environmental Protection Agency Act (Title 10 GCA Ch. 45)  
Fish, Game, Forestry and Conservation (Title 5 GCA Ch. 63)

### INSTITUTIONAL STRUCTURES APPLICABLE TO CLIMATE CHANGE ADAPTATION

Guam Office of the Governor

- Guam Office of Technology
- Guam Bureau of Statistics and Plans (BSP)
  - Guam Coastal Management Program
  - Land Use Planning Program (LUPP)

Guam Environmental Protection Agency (Guam EPA)  
Guam Department of Land Management (Guam DLM)

- Guam Land Use Commission (Guam LUC)
- Guam Seashore Protection Commission
- Guam Ancestral Lands Commission (ALC)
- Chamorro Land Trust Commission (CLTC)

Guam Department of Agriculture (DoAG)

- Division of Aquatic and Wildlife Resources (DAWR)
- Division of Forestry and Soil Resources (DFSR)

Guam Energy Office  
Guam Department of Public Works (DPW)  
Guam Homeland Security and Office of Civil Defense (GHS)  
Department of Chamorro Affairs (DCA)  
Department of Parks and Recreation  
University of Guam (UoG)  
Water and Environmental Research Institute of the Western Pacific (WERI)

### GOVERNMENT ACTIONS ON CLIMATE CHANGE

Guam Climate Change Task Force (2015)  
Marine Planning and Climate Change Policy (2015)  
Adapting to a Changing Climate Workshop (2014)  
Guam Strategic Energy Plan (2013)  
Coral Reef Resilience Local Action Strategy (2008)

### INTERNATIONAL INITIATIVE

The Micronesia Challenge



## Territory of American Sāmoa

### LEGAL AUTHORITIES RELEVANT TO CLIMATE CHANGE

Executive Order 009-2013 (2013)  
Executive Order 03-2012 (2012)  
Executive Order 002-2011 (2011)  
Executive Order 004-2010 (2010)  
Executive Order 010A-2007 (2007)  
American Sāmoa Soil and Water Conservation District Act of 1993 (PL 23-8; ASCA Title 24 Ch. 9)  
American Sāmoa Coastal Management Act of 1990 (PL 21-35; ASCA Title 24 Ch. 5)  
Department of Marine and Wildlife Resources of 1987 (PL 20-12; ASCA Title 24 Ch. 3)  
American Sāmoa Natural Resources Commission of 1982 (PL 17-49; ASCA Title 24 Ch. 7)  
Department of Parks and Recreation of 1980 (PL 16-55; ASCA Title 18 Ch. 2)  
Planning and Economic Development of 1978 (PL 15-64; ASCA Title 10 Ch. 1)  
Environmental Quality Act of 1972 (PL 12-45; ASCA Title 24 Ch. 1)  
Executive Departments, Boards and Agencies of 1962 (PL 7-28; ASCA Title 4 Ch. 3)

### INSTITUTIONAL STRUCTURES APPLICABLE TO CLIMATE CHANGE ADAPTATION

American Sāmoa Office of the Governor  
American Sāmoa Department of Marine and Wildlife Resources (DMWR)  
American Sāmoa Natural Resources Commission (ASNRC)  
American Sāmoa Environmental Protection Agency (ASEPA)  
American Sāmoa Department of Parks and Recreation (ASDPR)  
American Sāmoa Department of Commerce (ASDOC)  
American Sāmoa Department of Agriculture  
American Sāmoa Power Authority (ASPA)  
American Sāmoa Department of Public Works  
American Sāmoa Department of Health  
American Sāmoa Department of Education (ASDOE)  
American Sāmoa Historic Preservation Office (ASHPO)  
American Samoa Community College (ASCC)  
American Samoa Coral Reef Advisory Group (CRAG)

### GOVERNMENT ACTIONS ON CLIMATE CHANGE

American Sāmoa Climate Change Task Force (2015)  
Territorial Climate Change Adaptation Framework (2012)  
Territorial Climate Change Advisory Group (2012)  
Climate Change Summit (2011)  
American Sāmoa Renewable Energy Committee (2010)  
Coral Reef Resilience Local Action Strategy (2008)

### INTERNATIONAL INITIATIVE

2 Sāmoas Environmental Collaboration Initiative

## Republic of the Marshall Islands

### LEGAL AUTHORITIES RELEVANT TO CLIMATE CHANGE

Office of Environmental Planning and Policy Coordination (OEPPC) Act of 2003 (PL 2003-83; codified Title 35 MIRC Ch. 4)  
Marshall Islands Marine Resources Act of 1997 (PL 1997-60; codified Title 51 MIRC Ch. 1-5)  
Alternative Energy Act of 1989 (PL 1989-63; codified Title 11 MIRC Ch. 17)  
Coast Conservation Act of 1988 (PL 1988-13; codified Title 35 MIRC Ch. 3)  
National Environmental Protection Act of 1984 (PL 1984-31; codified Title 35 MIRC Ch. 1)  
Public Lands and Resources Act of 1966 (TTC 1966; PL 2008-2; codified Title 9 MIRC Ch. 1)

### INSTITUTIONAL STRUCTURES APPLICABLE TO CLIMATE CHANGE ADAPTATION

RMI Office of the President

- Economic Policy, Planning and Statistics Office (EPPSO)
- Office of Environmental Planning and Policy Coordination (OEPPC)
- National Climate Change Committee (NCCC)

Ministry of Public Works (MPW)

Ministry of Resources and Development (MRD)

National Environmental Protection Authority (RMIEPA)

Marshall Islands Marine Resources Authority (MIMRA)

Ministry of Foreign Affairs (MoF)

Ministry of Education

Marshalls Energy Company (MEC)

Kwajalein Joint Utilities Resources (KAJUR)

Marshall Islands Historic Preservation Office (HPO)

### GOVERNMENT ACTIONS ON CLIMATE CHANGE

National Strategic Plan (2014)

Joint National Action Plan for Climate Change and Disaster Risk Management 2014-2018

RMI National Energy Policy and Planning Workshop (2012)

RMI National Climate Change Policy Framework (2011)

RMI Climate Change Roadmap (2010)

National Energy Policy and Energy Action Plan (2009)

RMI Coastal Management Framework (2009)

RMI Disaster Risk Management National Action Plan 2008-2018 (2008)

Reimaanlok: National Conservation Area Plan for the Marshall Islands 2007-2012 (2008)

Vision 2018. The Strategic Development Plan Framework 2003-2018 (2001)

### INTERNATIONAL INITIATIVES

The Micronesia Challenge

Majuro Declaration for Climate Leadership

2015 United Nations Climate Change Conference, Conference of the Parties 21

### POLICY AND ANALYSIS DOCUMENTS PREPARED BY THIRD PARTIES WORKING WITH THE RMI GOVERNMENT

Climate Change Finance Assessment (2014)

Vulnerability and Adaptation Assessment for the Water Sector in Majuro (2014)

Republic of the Marshall Islands Country Energy Security Indicator Profile 2009 (2012)

National Integrated Water Resources Management Report (2007)

## Federated States of Micronesia

### LEGAL AUTHORITIES RELEVANT TO CLIMATE CHANGE

Federated States of Micronesia Climate Change Act of 2014 (PL 18-34)  
Federated States of Micronesia Environmental Protection Act of 1984 (PL 3-83§1; codified Title 25 FSMC Ch. 5-7)  
Trust Territory Endangered Species Act of 1975 (PL 6-55§1; codified Title 23 FSMC Ch. 3)  
Educational System (PL 8-132§4; codified Title 40 FSMC Ch. 1)  
College of Micronesia (PL 7-29§1; codified Title 40 FSMC Ch. 4)

### INSTITUTIONAL STRUCTURES APPLICABLE TO CLIMATE CHANGE ADAPTATION

FSM Office of the President  
-Office of Statistics, Budget, and Economic Management Overseas Development (SBOC)  
-Office of Administrative Services (OAS)  
Department of Transportation, Communications and Infrastructure (TCI)  
Department of Resources and Development (R&D)  
Office of Environment and Emergency Management (OEEM)  
Department of Human Resources (DHR)  
Department of External Affairs (DEA)  
Department of Foreign Affairs  
Department of Education  
Department of Health and Social Affairs (DHSA)  
Kosrae Utilities Authority (KUA)  
Pohnpei Utilities Corporation (PUC)  
Chuuk Public Utilities Corporation  
Yap State Public Service Corporation (YSPSC)  
College of Micronesia  
Office of National Archives, Culture, and Historic Preservation (NACH)

### GOVERNMENT ACTIONS ON CLIMATE CHANGE

Nation Wide Integrated Disaster Risk Management and Climate Change Policy (2013)  
FSM Energy Policy (2012)  
FSM Agriculture Policy 2012-2016 (2012)  
FSM Framework National Water and Sanitation Policy (2011)  
FSM National Climate Change and Health Action Plan (2011)  
FSM State-Wide Assessment and Resource Strategy (2010)  
FSM Climate Change Policy 2009 (2009)  
FSM 2004-2023 Strategic Development Plan (2004)  
FSM Biodiversity Strategy and Action Plan (2002)

### INTERNATIONAL INITIATIVES

The Micronesia Challenge  
Majuro Declaration for Climate Leadership  
2015 United Nations Climate Change Conference, Conference of the Parties 21

### POLICY AND ANALYSIS DOCUMENTS PREPARED BY THIRD PARTIES WORKING WITH THE FSM GOVERNMENT

Climate Change Legislation in the Federated States of Micronesia (2015)  
Federated States of Micronesia Country Energy Security Indicator Profile 2009 (2012)

## Republic of Palau

### LEGAL AUTHORITIES RELEVANT TO CLIMATE CHANGE

Palau Public Lands (PNCA Title 35 Ch. 1-2)  
Palau Environmental Protection Act (PL 1-58 § 1 modified; PNCA Title 24 Ch. 1)  
Palau Community College (PL 4.2 § 3 (2) modified; PNCA Title 22 Ch. 3)  
Historical and Cultural Preservation Act (PL 1-48 § 1 (a) modified; PNCA Title 19 Ch. 1)  
Aeronautics (PL 7-35 as amended; PNCA Title 8 Ch. 1)  
Executive Branch Organization Act (PL 7-8-8 § 1 modified; PNCA Title 2 Ch. 1)

### INSTITUTIONAL STRUCTURES APPLICABLE TO CLIMATE CHANGE ADAPTATION

Palau Office of the President

- Palau Environmental Quality Protection Board (EQPB)
- Office of Environmental Response and Coordination (OERC)

Ministry of Finance (MOF)

- Bureau of Budget and Planning
  - Office of Palau Automated Land and Resources Information System (PALARIS)
  - Office of Climate Change

Ministry of Natural Resources, Environment and Tourism (MNRET)

- Bureau of Agriculture
- Bureau of Marine Resources (BMR)
- Protected Areas Network (PAN)

Ministry of Public Infrastructure, Industry and Commerce (MPIIC)

- Bureau of Aviation
- Bureau of Public Works (BPW)
- Bureau of Lands and Survey (BLS)

Palau Public Lands Authority (DPLA)

Palau Public Utilities Corporation (PPUC)

Ministry of Health (MOH)

Ministry of Education (MOE)

Palau Community College (PCC)

Ministry of Cultural and Community Affairs (MCCA)

National Emergency Management Office (NEMO)

### GOVERNMENT ACTIONS ON CLIMATE CHANGE

Palau Climate Change Policy for Climate & Disaster Resilient Low Emissions Development (2015)

National Energy Policy (2010)

National Disaster Risk Management Framework (2010)

Actions for Palau's Future - The Medium-Term Development Strategy 2009-2014 (2009)

### INTERNATIONAL INITIATIVES

The Micronesia Challenge

Majuro Declaration for Climate Leadership

2015 United Nations Climate Change Conference, Conference of the Parties 21

Institutional Strengthening in Pacific Island Countries to Adapt to Climate Change (ISACC) Project (2017)

### POLICY AND ANALYSIS DOCUMENTS PREPARED BY THIRD PARTIES WORKING WITH THE PALAU GOVERNMENT

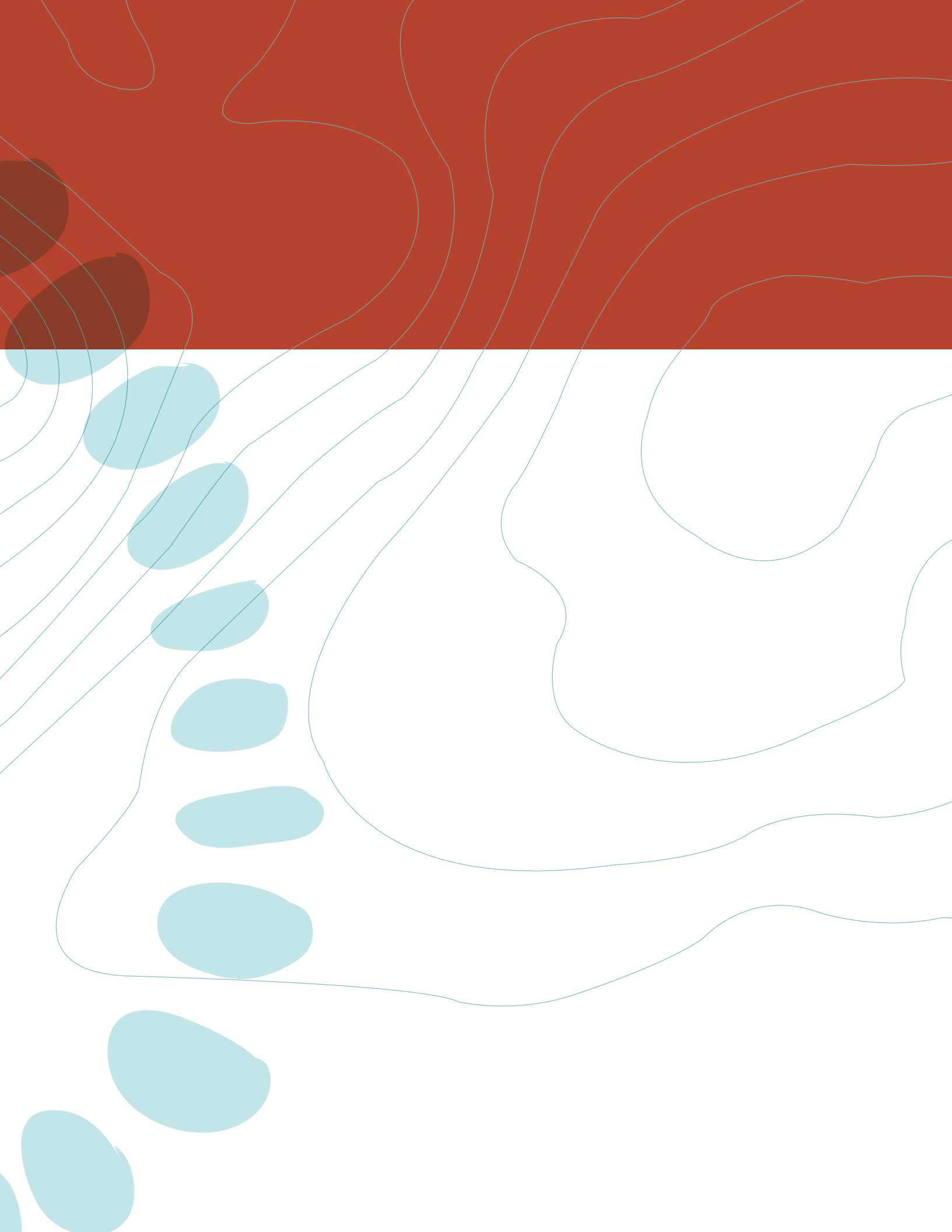
Palau Country Energy Security Indicator Profile 2009 (2012)

It is our hope that this Executive Summary and the full report will assist in connecting future projects, partners, legal authorities, and funding together, helping to move climate change planning and preparedness forward in the region.

For more information on the programs and activities of the Pacific Islands Climate Change Cooperative, please visit our website at <http://piccc.net>.



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