# Comprehensive Sustainable Development Plan

2020 - 2030



CNMI Department of COMMERCE



















# Endorsed by:

The undersigned members of the Planning and Development Advisory Council (PDAC) hereby endorse the Comprehensive Sustainable Development Plan, 2020-2030:

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The Comprehensive Sustainable Development Plan, 2020-2030 is Approved by:	
Governor Ralph DLG Torres	Date

# **Introductory Letters**

- Placeholder Text for formal introductory letters

From OPD and the PDAC – Planning for our Sustainable Future

The members of the Office of Planning and Development (OPD), Planning and Development Advisory Council (PDAC), planning partners, and supporting technical staff have created this roadmap for sustainability informed by current needs and priorities reflecting community feedback and metrics of progress. As directed by Public Law 20-20, this plan places emphasis on comprehensive and strategic planning needs across over twenty different "planning elements" to outline a strategic and integrated long-term trajectory and support short- and mid-range action planning and implementation efforts.

This planning effort began in 2018. In 2019 the Resources Report provided a snapshot of identified sustainability categories and indicators and suggested potential areas of further action to align management efforts. In 2020, comprehensive planning continued, however, in-person engagement efforts were hampered by the Covid19 pandemic. The economic, social, and environmental impacts of this virus highlight additional areas of vulnerability that will be assessed and detailed in future Resource Reports. Opportunities to build cross-cutting resiliency will continue to be assessed and incorporated into plans. For this ten-year planning period, four themes have been identified to guide supporting goals, objectives, and priority action items. In summary these are:

#### **Sustainable Systems**

- Build and Maintain Critical Infrastructure Power, Water, Wastewater, Complete Streets
- Implement Environmentally Compliant Solid Waste Systems and Zero Waste Goals
- Co-manage resources to ensure healthy environments and environmental services
- Ensure systems resilience through Smart, Safe Growth that helps maintain social, economic, and environmental co-benefits

#### **Networks of Care**

- Invest in education and workforce opportunities that promote sustainable economic growth
- Meet basic needs and providing necessary services to promote well-being for all

#### **Inclusive and Equitable Communities**

- Support equitable access to services while respecting diversity and providing opportunities to honor cultural identity and inclusion
- Promote just and peaceful development through continued investment in social services, including equitable housing, food assistance, and early intervention programs, as well as support services to address mental health and provide victims of violence

#### **Partnerships**

Build partnerships and alliances through alignment with the visions and objectives of existing
efforts across the public and private sectors to support the cross-cutting needs of the community

Cross-cutting Working Groups and regular Planning Taskforces and PDAC meetings continue to provide a process to further implementation actions. While Covid19 created social distancing challenges, it also normalized online meeting platforms which can and will continue to be used to make attendance to these meetings open to the entire community. Connectivity challenges – digital, infrastructure, and

service related – also came to light. These challenges and more will continue to be integrated into comprehensive planning efforts.

Plans are critical to provide guidance towards where we want to go. We must also have sufficient resources to get there. As such, the planning process must work to prioritize synergistic programs that can yield multiple benefits and invest in mechanisms to efficiently implement and maintain project momentum. This CSDP has focused on leveraging existing efforts to achieve such cross-cutting benefits, however, some capacity and funding gaps remain. OPD, the PDAC, and our planning partners will continue to seek creative and sustainable funding solutions. Already these efforts have produced positive outcomes of significant grant awards and expanded partnerships. Critical funding requests will be submitted for the consideration of the Legislature in annual budget requests. And, as described in this plan, we will work to continue to adaptively manage to support shared sustainability goals for our common resources. By regularly tracking progress, assessing priorities, and aligning management efforts, together we will build and maintain a more sustainable CNMI. OPD and the PDAC are grateful for this opportunity to create this living document and look forward to continuing to support these planning and implementation efforts as we move into a new decade of sustainable growth.

A. Kodep Ogumoro-Uludong, OPD Director Mark Rabauliman, PDAC Chairman

#### **About this Document**

The Commonwealth of the Northern Mariana Islands (CNMI) Comprehensive Sustainable Development Plan (CSDP) represents the ten-year growth visions, goals, and objectives the CNMI's leadership, agencies, and stakeholders to work towards the shared outcome of "sustainable development". This document is intended to frame adaptive management planning practices across twenty planning elements outlined in Public Law 20-20. The visions, goals, and recommendations of this plan are developed using guiding principles of "Smart, Safe Growth" supported by "right sized" sustainable development goals and cross-cutting principles. Priorities identified for immediate action in 3-5 year objectives are based on recommendations of the 2019-2020 Resources Report and related agency and resource specific management plans. As such, this plan aims to be a coordinating framework. The following pages detail the guiding themes, working visions, planning elements, goals and actions, and planning structure to support the achievement of sustainability outcomes. These components have been iteratively reviewed by Planning and Development Advisory Council (PDAC) and Planning Taskforce members and revised following community input in a planning process that was conducted throughout 2018 through 2020, in coordination between multiple agencies and community groups. This document offers framing guidelines and outlines priority actions to help reduce risks to people, the economy, and the environment. These challenges impact us all and it is ultimately up to the community and local agencies to work together in order to ensure a sustainable future for all inhabitants of the CNMI.

#### **Suggested Citation:**

CNMI Office of the Governor, Office of Planning and Development (OPD). (2021). 2021-2031 CNMI Comprehensive Sustainable Development Plan (CSDP). Endorsed by the Planning and Development Advisory Council, \_\_\_\_\_.

Prepared for the CNMI Office of the Governor and the 21st Legislature, Adopted \_\_\_\_\_.

#### **Contact:**

The CSDP was drafted by the Office of Planning and Development with support of the Planning and Development Advisory Council and Planning Taskforces. For more information contact: <a href="mailto:planning@opd.gov.mp">planning@opd.gov.mp</a>

#### **Access and Limitations**

This is an open-access document with <u>Creative Commons Attribution 4.0 International</u> (CC BY 4.0) and is available online at <>. The document may be distributed freely with attribution. The CSDP is intended for broad planning and policy purposes, and serves as a scoping document to inform future agency, resource, and sector-specific planning, as well as project development and implementation consistent with guiding principles as well as relevant standards and complementary special area plans. The CSDP is not intended for site-specific engineering or parcel-scale design purposes, nor should it be used in relation to litigation. Refer to identified agencies for relevant regulatory requirements and for early engagement in project development to ensure consistency with this planning guidance.

#### **Acknowledgments**

The CSDP would not have been possible without the time, resources, and contributions of many individuals and organizations. The plan was compiled and prepared by the Office of Planning and Development, with extensive contributions from the many partners on the PDAC and Planning Taskforces, as well as community stakeholders as outlined here following the implementation of a multi-year process. The PDAC Chairman and Secretary of the Department of Commerce Mark Rabauliman has been critical to the success of this effort. OPD would also like to thank the Taskforce and Working Group leads that include Bureau of Environmental and Coastal Quality, Commonwealth Healthcare Corporation, Commonwealth Utilities Corporation, Department of Lands and Natural Resources, Department of Public Lands, Department of Public Works, Marianas Visitors Authority, the Offices of the Mayors of Saipan, Tinian, Rota, and the Northern Islands, as well as the Saipan Chamber of Commerce for their ongoing collaboration and support.

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# **Acronyms**

ADA Americans with Disabilities Act

BECQ Bureau of Environmental and Coastal Quality

BMP Best Management Practices

CEDS Comprehensive Economic Development Strategy

CHCC Commonwealth Healthcare Corporation
CNMI Commonwealth of the Mariana Islands
CUC Commonwealth Utilities Corporation
DCRM Division of Coastal Resources Management

DEQ Division of Environmental Quality

DFEMS Department of Fire and Emergency Medical Services

DFW Division of Fish and Wildlife

DLNR Department of Land and Natural Resources

DPL Department of Public Lands
DPW Department of Public Works
GIS Geographic Information System

HANMI Hotel Association of the Northern Mariana Islands

IWM Integrated Watershed Management

MOS Mayor of Saipan

MOT Mayor of Tinian and Aguiguan

MOR Mayor of Rota

MSO/A Marine Sports Operators / Association

MVA Marianas Visitors Authority
NEPA National Environmental Policy Act
NGO Non-government Organization
NIMO Northern Islands Mayor's Office
NMC Northern Marianas College

NMHC Northern Marianas Housing Corporation NMTI Northern Marianas Technical Institute

NOAA National Oceanic and Atmospheric Association

NPS National Park Service

NRCS Natural Resources Conservation Service

OIA Office of Insular Affairs, United States Department of the Interior

OPD Office of Planning and Development

PDAC Planning and Development Advisory Council

PL Public Law

PSS Public Schools System

SCC Saipan Chamber of Commerce

SCORP Statewide Comprehensive Outdoor Recreation Plan

SDG(s) Sustainable Development Goal(s)

SEDC Strategic Economic Development Council

SSG Smart, Safe Growth

TF Taskforce (BE – Built Environment; SE/DRR – Socio-economic / Disaster Risk Reduction; NR – Natural Resources)

USDA United States Department of Agriculture

USEPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Service

WMP Watershed Management Plan WWG Watershed Working Group

# **Executive Summary**

This plan showcases our growth priorities to maintain a culture of sound leadership towards sustainability. It is rooted in principles of Smart, Safe Growth, Adaptive Management Planning, and Sustainable Development. Tremendous communities of practice support the alignment of these principles worldwide and so these concepts are not defined in great detail in this plan. Supporting background resources can be found at <a href="https://example.com/opt.nc/">opt.gov.mp/</a>.

To develop this plan, regular meetings with the PDAC were held to discuss current challenges, needs, and long-term objectives. The Core Values, Themes, Goals, and Objectives of this plan have been established through an iterative planning process. "Core Values" and "Themes" were extracted from CNMI agency mission statements, planning guidance, and community meetings and survey comments. Sustainable development concepts have been extracted from relevant CNMI and regional publications and adopted as guiding frameworks by the PDAC. Potential objectives and action items were developed based on assessment of data relating to SDG indicators which are used to track progress towards sustainability as well as address prioritized needs identified in CNMI planning documents. Further discussion and refinement of these goals and objectives was supported by the 2019-2020 Resources Report (Resources Report), which provides a snapshot of the current status of a wide range of resources covered by this comprehensive plan. Based on the assessment of available data and trends, the Resources Report outlined gaps, recommendations, next steps, as well as "guiding themes". These elements were developed further through meetings with stakeholders, agency leadership and technical staff, as well as numerous discussions with the Administration and representatives from the Legislature. The visions, goals, and objectives that follow represent this comprehensive effort to gather existing resources and create a sustainability targeted road map to chart a path towards lasting resiliency outcomes that reflect values of well-being and inclusiveness for the CNMI community.

**Section 1** provides an introduction on envisioning sustainability, an overview of the process, the structure, and the guiding values used to inform this effort. **Section 2** outlines "Planning Element Visions" and details "Sustainable Development Goals and Objectives" that aim to produce specific, actionable, and time-bound outcomes to achieve these interconnected visions. In **Section 3** supporting action plans are summarized and incorporated here by reference and a system for plan formation and implementation is described to support sustainability outcomes of community, special area, and functional plans as well as development guidelines. As detailed further in **Section 4**, OPD and the PDAC anticipate ongoing data collection to enable "adaptive management" planning with CSDP updates scheduled every five year for short- to mid-term objectives and every ten years for long-term goals. That section includes information about the adaptive management process and coordination measures that will continue to support this process. These objectives are listed and detailed further, identifying supporting partners, cross-cutting priorities, and unmet needs in Appendix I. **Section 5** concludes with high-level planning recommendations and a summary of cross-cutting next steps to ensure sustainability outcomes are being supported across planning elements identified in PL 20-20.

This process and the specific comments that were provided through surveys and interviews were collected and considered for over eighteen months. Public meetings were held in May, June, and July 2019, with initial visioning discussions and feedback collected to help develop the draft Resources Report and supporting recommendations. The Resources Report, which included plans and reports from all PDAC agencies as well as other CNMI planning partners, culminated in the collection of over 100 recommendations across "planning elements" areas identified in Public Law 20-20. A draft Resources Report was shared in August, with additional feedback and comments included in revisions that were shared with the PDAC and October and December of 2019. The PDAC reviewed the draft report in

January, 2020, and revisited the document for further review and endorsement in June, 2020 following a shifted meeting and review schedule due to Covid19. Supporting work plans with short- and mid-term implementation goals were developed and will continue to be reviewed and revised as needed through adaptive management processes. These goals and cross-cutting implementation actions will be incorporated into other relevant planning documents and considered to guide and prioritize funding requests. Additionally, stakeholder meetings to review implementation progress will be held semi-annually, with the goal to hold "Taskforces Meetings" at least quarterly, and comprehensive updates to the plan will occur every 5 years to reflect changes in the status of the resources and strategic actions.

Together we have worked to develop resource summaries that answer the questions "where are we now, where do we want to go, and how do we get there?"

This Plan provides a path towards a more sustainable tomorrow – we will have to continue to track our progress and work together to achieve it. This assessment has been supported by the Planning and Development Advisory Council (PDAC) and planning partners spanning government, non-profit, and private interest groups. On January 21, 2021, the PDAC endorsed the draft CSDP document to support finalization. The Final CSDP was published for public comment on \_\_\_\_\_ and public meetings were held on Saipan, Tinian, and Rota in <first week of March?>. Additional comments were addressed in a final update.

It was submitted to the PDAC for endorsement on \_\_\_\_\_, and to the Governor for approval on \_\_\_\_\_.

This living document aims to fulfill the mandates of Public Law 20-20 and create a structure that will support an adaptive management approach to achieving sustainability outcomes for the CNMI. Applying the triple-bottom line approach of the Sustainable Development Goals and framed by Smart Safe Growth principles, these efforts and the ongoing investments they will guide will pay dividends for people, property, and our planet. Together we can work to achieve this shared vision of a more sustainable CNMI.



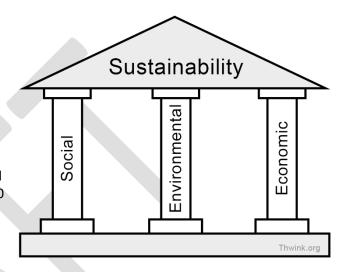
# I. Introduction: Envisioning Comprehensive Sustainable Development

A sustainable CNMI will build on the strengths of our diverse communities and geography to help us pursue our shared interests, embrace our differences, and enable us to continue to grow stronger and more resilient together. This plan outlines the 10-year vision and roadmap for CNMI's sustainable, livable, and prosperous future. It is the first plan of this scale in CNMI's history but it is built to last. Together we can work to implement and continue to refine this guidance and priorities based on shared values and goals to achieve a shared vision of a brighter tomorrow.

# What is Sustainability?

**Sustainability** means meeting our own needs without compromising the ability of future generations to meet their own needs. In addition to natural resources, this definition also includes meeting social and economic resource needs. Together, the environment, economy, and society are often thought of as the "three pillars" of sustainable development.

To ensure these pillars are well-reflected in the CSDP and align with planning elements outlined in Public Law 20-20 that include a strong emphasis on physical development, as well as to support issue-, and resource-specific management dialogs, OPD and the PDAC formed three "Taskforces" – the Socio-Economic, Natural Resources,



and Built Environment. After Super Typhoon Yutu struck Saipan and Tinian on October 25, 2018, the PDAC moved to include "disaster risk reduction" or "DRR" in Socio-economic planning conversations to further efforts to reduce vulnerabilities and build synergistic efforts to support resilience throughout our built, natural, and human systems in the CNMI.

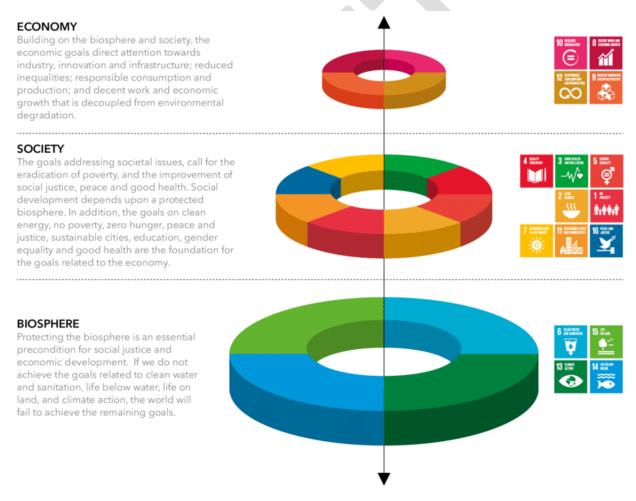
#### What is the Comprehensive Sustainable Development Plan?

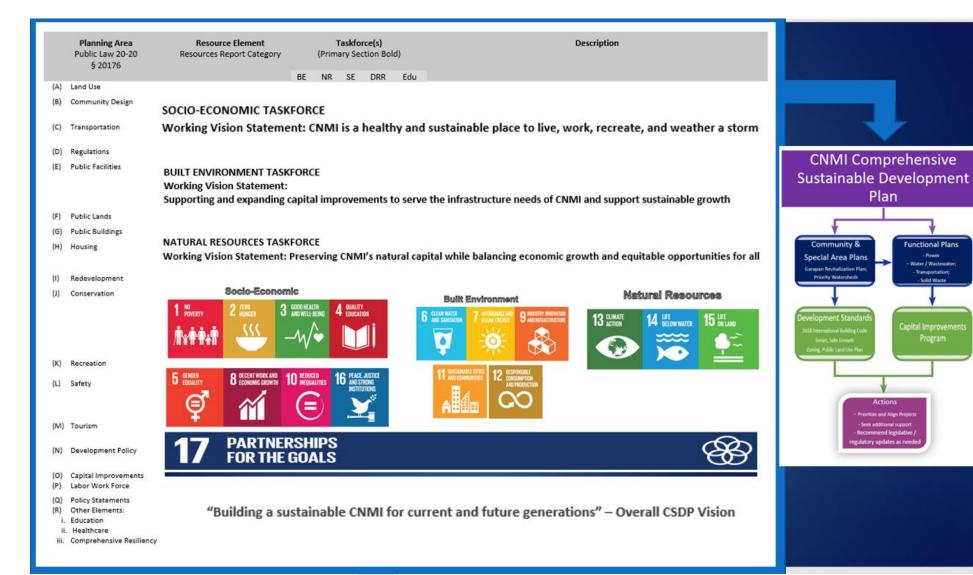
This comprehensive sustainable development plan showcases the growth priorities of the people of the Commonwealth of the Northern Mariana Islands. It reflects the values, goals, and objectives we can work towards to maintain a culture of sound leadership towards sustainability. It is rooted in principles of Smart, Safe Growth, Adaptive Management Planning, and Sustainable Development. There are tremendous communities of practice that are supporting the alignment of these principles worldwide so these concepts are not defined in great detail in this plan. Supporting background resources can be found at <a href="https://www.opd.gov.mp">www.opd.gov.mp</a>.

The Core Values, Themes, Goals, and Objectives of this plan have been established through an iterative planning process. These concepts have been extracted from relevant CNMI and regional publications as well as community surveys and stakeholder feedback. Sustainable Development values, themes, goals, and objectives have been refined and adopted as guiding frameworks by the PDAC. Potential objectives and action items were extracted from SDG indicators which are used to track progress towards sustainability as well as address prioritized needs identified in CNMI planning documents. Further discussion and refinement of these goals and objectives was supported by the 2019-2020 Resources Report (Resources Report), which provides a snapshot of the current status of a wide range of resources covered by this comprehensive plan. The Resources Report provides best available data to support this adaptive management planning process which requires regular monitoring of key indicators to track progress towards established goals. As such, OPD anticipates ongoing data collection to enable plan updates every five year for short- to mid-term objectives and every ten years for long-term goals.

Sustainable development envisions growth that meets the needs of today without compromising the needs of the future. Sustainable development is often discussed in terms of the built environment, the natural environment, and the socio-economic environment, which is how the PDAC's three Planning Task Force groups have been divided.

The PDAC, Taskforce groups, and resource or topic focused meetings have resulted in at least fifteen calendared and publicly noticed community meetings (in person and also via Zoom and socially distanced due to Covid) and over two hundred public comments that have supported the development of the values, themes, goals, and objectives that follow are rooted in principles of sustainable development that aims to ensure current needs are met across socio-economic, natural resources, and the built environment without compromising future growth. This plan adopts these sustainable development principles and supporting "guiding themes" to frame the recommended action items for this ten-year planning horizon. Working towards these reenforcing goals together will help CNMI to achieve sustainability for people, the economy, and our environment.





Functional Plans

## Implementing CSDP in CNMI

Sustainable development planning is a tool to create an informed decision-making that provides a framework for systematic thought across sectors. While these goals are ambitious, by charting a path towards sustainability as one Commonwealth, we can achieve improved resource management outcomes for people, the economy, and the environment that benefit everyone.



Figure 1 – Sustainable Development is often defined as "meeting the needs of the present without compromising the ability of future generations to meet theirs" and is envisioned using three main pillars: **economic**, **environmental**, and **social** as shown in the image above.

As described in the CNMI Planning and Development Act of 2017, Public Law 20-20, the creation of the Office of Planning and Development (OPD), the establishment of the Planning and Development Advisory Council, and this implementing legislation overall aims to create and implement CNMI's Comprehensive Sustainable Development Plan to ensure the protection of scarce resources including land, natural resources, and human resources, as well as improve planning processes, increase effectiveness, guide development, and establish a system for plan formation and program coordination for all major CNMI activities. The visions, goals, and objectives, as well as the supporting resource- and area-specific action plans and implementation guidance provided here aims to achieve this mandate.

# Planning Structure and Process

As reflected in Figure 2 at right, this CSDP provides a guiding framework to track a path towards sustainable development objectives. This framework is informed by "guiding values" and "themes" that serve as philosophical foundation for planning efforts. Themes reflect pillars of sustainable development and crosscutting planning integration opportunities identified in the existing governance framework. SDGs (10-year goals) and supporting priority objectives are discussed further in their respective taskforce categories. Community, special area, resource, and sector-specific plans as well as functional plans identify short-term goals and outcomes to further support implementation and achievement of the identified themes and visions across sections. These are collectively referenced as "action plans" as depicted in the CSDP Strategic Planning Hierarchy in Figure 3 that follows.

This CSDP concludes with discussions of "Crosswalk Opportunities" for mainstreaming SSG and SDG, discussion of development standards, implementation guidance and action plan, and policy recommendations to further support the implementation and regular review and update of this plan, as well as the proposed planning implementation schedule, required by Public Law 20-20 § 20182.

Public Law 20-20 further requires that all plans be reviewed and endorsed as planning elements upon recommendation of the PDAC and approval of the Legislature and the Governor (§ 20177, § 20179, § 20181).

# **COMPREHENSIVE SUSTAINABLE** DEVELOPMENT PLAN **COMMUNITY & FUNCTIONAL PLANS** SPECIAL AREA PLANS Power Garapan Water/Wastewater Revitalization Plan Transportation **Priority Watersheds** Solid Waste 2018 International Building Code DEVELOPMENT Smart, Safe Growth STANDARDS Zoning, Public Land Use Capital Improvements Program **FUNDING** Other **ACTIONS** Prioritize and align projects Seek additional support Recommend legislative and regulatory updates as needed

Figure 2 - Strategic Plans, Action Plans, and Implementing Actions.

It requires that the CSDP "or any of its elements prepared by the various public agencies or any private entity shall be submitted to the Council for review. Within forty-five (45) days following receipt of any such element or elements by the Council, the Council shall hold one (1) or more public hearings thereon in each Senatorial District. Announcements of such hearings shall be printed in a newspaper of general circulation in the CNMI ten (10) days and one (1) day prior thereto. Summaries of the element or elements to be heard shall be prepared by the Council and submitted to appropriate news media. Within thirty (30) days after the hearing of the Plan or any of its elements, the Council shall submit to the Governor and the mayor of each senatorial district its recommendation thereon including a summary of testimony at the hearing(s)" (§ 20178).

As such, this plan includes high-level summaries of supporting "Action Plans" and incorporates the current versions of these plans by reference. Future planning components will be regularly reviewed and incorporated through the process outlined by Public Law 20-20 and in the summary above. Table # that follows provides an overview of how plans reviewed for and incorporated in this CSDP align with guiding themes of sustainable development that are discussed in the supporting 2019-2020 Resources Report and further in this document.



Figure 3 – CSDP Strategic Planning Hierarchy for achieving our shared mission of a more sustainable CNMI. Strategic Planning Elements are detailed in Section II.

Action Plans are outlined in Section III. Implementation details are provided in Appendix I.

In discussion of goals, objectives, and action plans, where possible this CSDP summarizes key data points and indicators for success with references to the baseline information identified in the Resources Report. Where data gaps exist, objectives have been crafted to establish baseline data points by 2025 to support future planning updates. This adaptive planning approach is described more in the "Process and Next Steps" section, which further details implementation, monitoring, and evaluation strategies to support assessment of progress towards identified visions and modification of approaches as needed. Because this is a living document that ultimately aims to serve the needs of all people of the CNMI, a community engagement and outreach strategy is also included to support information sharing and feedback processes that are critical to ensuring the success of these planning efforts.

# Guiding Values and Themes for Sustainable Development

To ensure a comprehensive and adaptive planning approach, sustainable development goal "visions" were reviewed and modified by the PDAC and planning partners to reflect specific outcomes for CNMI, and resonate with "themes" identified in the Resources Report.

The guiding values or core values are those characteristics that we commit to as individuals and as an organization so we develop a culture that achieves our mission. The guiding values are a way that we deliver on our mission and execute our vision – they describe or define the culture. These are broad, subjective concepts that are intended to provide a sense of direction for planning efforts.

In the first community comment period from July 25 – August 25, 2020, fifty comments were received ranking or suggesting additional values to be assessed in follow-up community surveys.

# What three "core values" do you want to see reflected in the CNMI's CSDP?



Planning Themes reflect pillars of sustainable development and cross-cutting planning integration opportunities identified in the existing governance framework. SDGs (10-year goals) and supporting priority objectives are discussed further in their respective taskforce categories. As identified and discussed in more detail in the Resources Report, these are:

**Theme 1:** Build Resiliency of Natural, Built, and Human Systems through Safe, Smart Growth

Safe, Smart Growth aims to achieve development goals that reduce vulnerability and increase adaptive capacity of people, our economy, and our environment. By incorporating these principles using an approach that considers long-term resiliency outcomes, investment priorities and growth plans can be achieved more efficiently and sustainably. Mainstreaming Safe, Smart Growth principles will help to identify and address procedural as well as substantive resource management challenges identified in this report.



#### Theme 2: Maintain Efficient Governance and Social Safety Nets

The "social safety net" is a collection of services provided by the state or other institutions. It can include nutritional programs, healthcare, unemployment benefits, education, housing, legal aid, victims' rights, consumer protection, homeless shelters, and sometimes subsidized services such as public transport, which aim to prevent individuals from falling into poverty. By increasing coordination and implementing long-term plans to maintain and grow necessary government and private sector services, this theme aims to ensure CNMI meets the needs of vulnerable people while sustaining essential public health and safety protection programs and supporting wise development. This theme reflects and embodies the spirit of "inafa' maolek" or "making good for all" which in Chamorro culture considers the importance of well-being for the entire community.



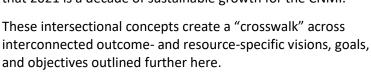
# **Theme 3:** Grow Inclusive, Cohesive Community to Achieve Shared Visions and Sustain the CNMI

"Community cohesion" describes the ability of communities to function and grow in harmony together rather than in conflict. It has strong links to concepts of equality and diversity given that community cohesion can only grow when society as a whole recognizes that individuals have the right to equality (of treatment, access to services etc.) and respects and appreciates the diverse nature of our communities. Forming strong and positive relationships between people from different backgrounds helps impower communities to address inequalities, support equity, and develop a positive and productive framework to support the exchange of information and opinions to nourish diversity and accomplish shared visions for the future.



### Theme 4: Leverage Partnerships and Alliances to Benefit All

Responding to public comments received in 2019 and 2020 public meetings regarding the importance of coordination of activities and transparent information sharing, a fourth theme, "leveraging partnerships", was proposed for inclusion. This theme emphasizes the fact that partnerships are a cross-walk between all of the sustainable growth goals that are detailed further in this plan. By working together, we will help to ensure that 2021 is a decade of sustainable growth for the CNMI.





#### **Theme**

# Related Sustainable Development Goal(s) "SDGs"

#### THEME 1

Build and Maintain Resiliency of Natural, Built, and Human Systems through Safe, Smart Growth

"Sustainable Systems"



### Major focus:

Sustainability
Infrastructure
Wise economic growth
Environmental protection
Resilience



SDG 6: Ensure availability and sustainable management of safe and environmentally compliant water and sanitation for all.



SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all.



SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.



SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable.



SDG 12: Ensure sustainable consumption and production patterns.



SDG 13: Take urgent action to combat climate change and its impacts.



SDG 14: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.



SDG 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, and preserve and halt degradation of biodiversity and resources of particular concern in the CNMI.

#### Theme

# Related Sustainable Development Goal(s) "SDGs"

#### THEME 2

Maintain Efficient Governance and Social Safety Nets

# "Networks of Care"



### Major focus:

Health and well-being Education Workforce opportunities Basic living standards for all Inafa' maolek



SDG 1: End poverty in all its forms and ensure that all people in the CNMI have their basic needs met.



SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable localized agriculture.



SDG 3: Ensure healthy lives and promote well-being for all people at all ages.



SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.



SDG 8: Promote inclusive and sustainable economic growth supported by expanded educational and employment opportunities for all.

#### **Theme**

# Related Sustainable Development Goal(s) "SDGs"

#### THEME 3

Grow Our Inclusive, Cohesive Community to Achieve Shared Visions and Sustain the CNMI

# "Inclusive and Equitable Communities"



Major focus:

Empowerment, equity, equality and justice



SDG 5: Achieve gender equality to empower all people.



SDG 10: Eliminate inequality and support diversity, equity, inclusion, and justice.



SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

#### THEME 4

Leverage Partnerships and Alliances to Benefit All

"Partnerships"



Major focus: Partnerships and alliances across the public and private sectors to support the needs of the community at large



SDG 17: Strengthen the means of implementation and support partnerships for sustainable development.



This comprehensive plan outlines an integrated approach to support more efficient and effective development strategies where resources are used to their maximum effect to achieve beneficial and sustained gains. This approach aims to achieve the co-benefits outlined in the graphic below.

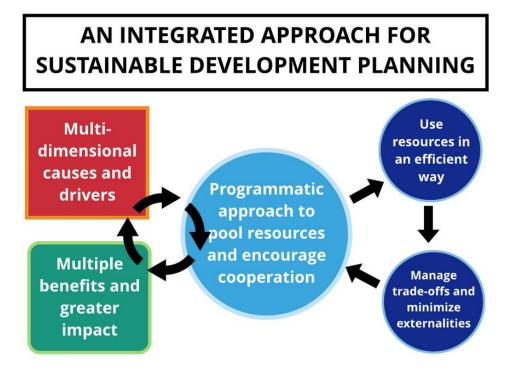


Figure 4 – Adaptive Management supports an integrated and flexible approach for ensuring progress is being made towards identified short-, mid- and long-term objectives.

Themes reflect cross-cutting values. Visions help track a course to identified goals. Objectives provide measurable and timebound benchmarks to help track progress to achieve the growth and resource management aims detailed in the Section II. Implementation details are outlined further in Section III, with short-, mid-, and long-term objectives listed with support partners, cross-cutting priorities, and unmet needs in Appendix I. These efforts are further supported by ongoing adaptive management and other supporting processes detailed in Section IV. Planning timelines listed in Appendix II will be scheduled as much as possible to allow for meaningful stakeholder engagement early and often in plan update processes, and related plan updates or supporting components will be aligned where possible. Cross-cutting priorities and implementation actions in turn will be furthered by planning-element specific policy recommendations provided in Section V. In addition to the numerous meetings and iterative feedback from agencies and the community at large, this plan has been informed by over two hundred public visioning comments included in Appendix III.

Together these efforts aim to apply a unifying, programmatic approach that allows the CNMI to pool resources, encourage cooperation, and address challenges to provide multiple benefits through comprehensive long-term planning and project implementation.

# II. Planning Elements, Goals, and Actions

To support comprehensive and integrated planning efforts at CNMI, island, and resource specific levels, this CSDP outlines "visions" for planning elements identified in Public Law 20-20 that together reflect the mission of this plan, to achieve sustainable growth for the CNMI now and for the future. Sustainable growth priorities are further discussed through the application of sustainable development goals and objectives, with at least one indicator or data point identified to enable the measurement of progress towards the goals over time. These goals and objectives have been "right-sized" for CNMI by the PDAC and Planning Taskforces and are discussed in their taskforce sections as these categories connect back to sustainable development themes. Resource-specific and functional "action plans" are then summarized to further highlight and incorporate existing planning efforts with critical short-term milestones outlined in the implementation section of this plan. These components serve as a roadmap to help CNMI track a course towards the sustainable future we hope to achieve.

Vision statements were further refined through public comments and feedback received from Community Taskforce Meetings held September 16-18, 2020, and the subsequent workshop with the PDAC and Coastal Resource Management Agency Board held September 21-22, 2020. One-on-one and resource-specific follow-up meetings were held in October to further refine vision and objective statements and capture short-term action items that are underway supporting these efforts.

To detail the planning process more specifically, the planning elements, goals, and action items as well as the plan itself have gone through several rounds of public review, comment, and revision. Building from the Resources Report and agency- and resource-specific visioning and action recommendations, initial planning element vision statements were developed from existing mission and vision statements to incorporate guiding themes and cross-cutting priorities. Working in Taskforce groupings, additional "wordsmithing" efforts aimed to "right size" the global sustainable goals to an appropriate context linked with existing data points for CNMI. Initial objectives were included to reflect ongoing projects and support procedural alignment with this comprehensive plan. An initial outline of visions, goals, and objectives was presented to the PDAC at the June 25, 2020 meeting. Comments were provided from PDAC members and planning partners to provide additional content. These updates were shared in "tracked changes" and "changes accepted" version with the PDAC for their further consideration and endorsement. Initial visioning was shared with the PDAC in July and published for public comment on August 1, 2020, with community meetings to discuss each goal and supporting objective held over three days of live streamed public meetings for each planning Taskforce September 16-18, 2020. Revisions based on community feedback were made and a revised draft was shared with the PDAC in October. The revised draft was discussed at the PDAC meetings November 19, when it was agreed it would be circulated along with action plans for public review at community meetings and December 22, 2020, and January 21, 2021. Additional public review and comment continued through the winter and early spring of 2021, with updates to the revised draft and a renewed request for public comments shared at the April 28, 2021 Taskforces meeting. A "pre-final" round of comments were requested by May 12, 2021 for this revision with the goal to discuss comments and finalize the draft CSDP with the PDAC at the scheduled May 18, 2021 meeting. Once endorsed as final by the PDAC, OPD will present the final revised CSDP at community meetings on Saipan, Tinian, and Rota and the public will have another opportunity for formal comments before the signed and endorsed plan is submitted to Governor Torres for his approval. <Will add summary of process when dates are available re publication of Final CSDP etc -> submitted to Gov in recommendations...>

### **Planning Elements**

The following "vision" statements were created in coordination with the Planning and Development Advisory Council's Natural Resources, Built Environment, and Socio-Economic/Disaster Risk Reduction Taskforces. They build from and connect to "functional plans" and cross-cutting sustainability priorities as informed by the "planning elements" identified for inclusion in the Comprehensive Sustainable Development Plan by Public Law 20-20. These vision statements help us chart our course to the future we hope to achieve by 2030. Ongoing interagency and inter-sectoral adaptive management planning efforts will help the CNMI leverage our resources to work towards the visions and supporting goals and objectives outlined here in the Comprehensive Sustainable Development Plan. Special area and resource management plans and functional plans for infrastructure development combined with development standards will reinforce the "Sustainable Development Goals" and "Planning Policy Crosswalks" outlined further here. Together these efforts will enable the CNMI's public, private, non-profit sectors and our stakeholders at large to achieve progress towards shared sustainable development objectives.

Guiding Mission: "Building a sustainable CNMI for current and future generations."

#### **Planning Elements Visions**

<u>Development Policy to Mainstream Smart, Safe Growth in Public Facilities, Public Buildings, and Capital Improvement Projects</u>

Vision: Ensure application of Smart, Safe Growth principles across planning elements to support development and conservation strategies to improve communities, strengthen economies, protect the natural environment, and improve resilience and recoverability of the built environment. (SSG Mainstreaming Vision)

Vision (CIP): CNMI's Capital Improvements Program supports the implementation of priority projects to achieve the visions, goals, and objectives of CNMI's Comprehensive Sustainable Development Plan, including special area, resource, and functional plans, to achieve infrastructure, health, and education investments that ensure strategic and resilient outcomes. (CIP Strategy)

#### **Public Land Use**

Vision: Provide for the efficient and effective services in the management, use, disposition and development of public lands for the economic and social betterment of individuals of Northern Marianas Descent and to implement the Strategic Public Land Use Plan to promote cultural and economic growth for the benefit of our present and future generations. (2019 PLUP)

#### Transportation, Community Design, and Design Regulations

Vision: Transportation infrastructure in CNMI is built & maintained to provide inviting, accessible, safe, convenient, and comfortable routes for walking, bicycling, and public transportation that encourage increased use of these modes of transportation, enable convenient travel as part of daily activities, improve the public welfare by addressing a wide array of health and environmental problems, and meet the needs of all users of the streets, including children, older adults, and people with disabilities. (Complete Streets Working Group)

#### **Economy and Work Force**

Vision: CNMI will leverage its assets of cultural and natural resources to grow a diverse economy grounded in a sustainable workforce and resiliency in our built environment to assure a safe, healthy, and vibrant community for all. (2019 CEDS)

#### Housing and Redevelopment

Vision: Support affordable, fair, equal opportunity of efficient and responsive delivery of housing, mortgage and community development programs to increase ownership of safe, sanitary, and affordable homes and promote economic independence, self-sufficiency, and upward mobility to the people of the Commonwealth and address the growing and future needs and economic viability. (NMHC)

# <u>Conservation – Natural Resou</u>rces

Vision: To sustainably conserve and use natural resources to support the development needs of today without compromising the needs of future generations. (NR Taskforce)

- Sustainable Use. To promote sustainable use and conservation of the CNMI's natural resources on land and in water that can meet development needs sustainably and preserves the integrity of these natural resources for future generations.
- Research, Education, and Preservation. To promote research and education about the CNMI's natural resources to acknowledge and support local stewardship, conservation management, and cultural practices that are integral to the CNMI community.
- Support Ecosystem Services and Nature-Based Solutions. Sustainable use, management, and conservation of natural systems will protect and promote the delivery of ecosystem services and implementation of green infrastructure and nature-based solutions to economically and efficiently mitigate the impacts of extreme weather events and maintain critical functions that support people, prosperity, and our healthy environment.
  - Conservation Integrated Watershed Management Planning

Vision: Applying integrated watershed management planning principles to ensure that the CNMI can safely weather storms and rebound with revitalized infrastructure to provide improved water supply and sanitation, reliable energy supplies and distribution, and sustainable localized agriculture and economic development, as well as achieve planning and management solutions where marine resources and terrestrial ecosystems are restored and used sustainably, and biodiversity is preserved while action is taken to combat climate change. (Modified from USACE Watershed Assessment Milestones Meeting, Jan. 2021)

#### Conservation – Cultural Resources

Vision: Through survey, research, education, and stewardship historic preservation management planning conserves and enhances important historic, archaeological, architectural and cultural resources on public and private lands throughout the Commonwealth improving the quality of life for all residents of the CNMI. (HPO 2015 Vision, updated)

#### Recreation

Vision: The Commonwealth of the Northern Mariana Islands seeks to welcome and encourage residents and visitors to enjoy our unique, sustainable, high-quality outdoor recreation environment developed for all abilities which also celebrates the history, culture and abundant natural resources across the region. (2020 SCORP)

#### Tourism and the Visitor Industry

Vision: To promote and develop the Northern Mariana Islands as a premier destination of choice for visitors from throughout the world while providing a maximum quality of life for our people. We nurture

and encourage cultural interchange and environmental sensitivity for visitors' enjoyment and for our children's children. (MVA Mission, pending updates from 2021 Tourism Plan *Draft in progress*)

#### Public Safety and Disaster Risk Reduction

Vision: Maintain and enhance community safety in the Commonwealth and work across sectors to identify and manage risks to ensure populations have adequate access to evacuation routes, food, water, shelter, and subsequent medical services during and after a disaster and that preparations are in place that make CNMI a safe place to weather a storm. (SE-DRR Taskforce)

#### Public Safety, Justice, and Strong Institutions

Vision: The CNMI Department of Public Safety will continue to provide the highest quality public safety service in order to enhance community safety, protect life and property, and reduce crime and the fear of crime by growing partnerships with the community, leading a community commitment to resolve problems, and improving the safety and quality of life in the Commonwealth. (DPS 2021 Citizen Centric Report Vision)

#### **Health Systems**

Vision: Improving CNMI health and well-being through excellence and innovation in services. (2015 CHCC Strategic Plan Plan)

The Commonwealth Healthcare Corporation's (CHCC) 2015-2020 Strategic Plan aims to improve the standard of services to the people of the CNMI as well as overall health and wellbeing of its populace. To achieve this goal, CHCC has been working to implement eight (8) operating strategies which include organizational and facilities objectives. Outcomes include obtaining full accreditation from the Centers for Medicare and Medicaid (CMS) for the hospital (recently surveyed in May 2019), public health, behavioral health, as well as decrease the incidence of the top six (6) major causes of death and debilitation in the CNMI: cancer, diabetes, hypertension/heart disease, teen pregnancy, HIV/STI, and substance abuse. These goals are aimed to address community health system needs and support achievement and maintenance of numerous targets of Sustainable Development Goal 3 – Good Health and Well Being.

#### **Education Systems**

Vision: CNMI will provide high quality, affordable and accessible educational programs and services to drive economic growth and the social and cultural vitality of the Commonwealth. (Edu Partners)

#### <u>Partnerships</u>

Vision: OPD and Planning Partners will Support Coordination for Comprehensive Planning (§ 20177)

#### **Senatorial District Planning Visions**

When OPD and the PDAC initially outlined an approach to the creation of CNMI's first CSDP there had been discussions regarding the articulation of precinct-level community planning visions. Unfortunately, the government shutdown and subsequent social distancing requirements due to COVID-19 resulted in insurmountable challenges to holding the community-level meetings necessary to further develop initial visioning comments that have been collected. As such, the guiding visions of each Mayors' Office reflecting island-specific planning trajectories are included here, and OPD and the PDAC intend to focus on expanding on these guiding visions at the village level in order to include additional community-specific planning objectives in the 2025 CSDP update.

#### Office of the Mayor of Saipan:

The vision of the Office of the Mayor of Saipan is to develop and preserve a diverse community that helps everyone as a stakeholder in maintaining a safe, clean, and healthy environment, where everyone has equal opportunities to grow, prosper, enjoy peace and respect.

### Office of the Mayor of the Northern Mariana Islands:

The vision of the Office of the Mayor of the Northern Mariana Islands is:

- To establish safe, reliable, and consistent transportation and communication system between Saipan and the Northern Islands;
- To create and/or establish permanent and meaningful jobs and other employment opportunities for the Northern Islands residents and CNMI residents in general;
- To establish and provide basic infrastructure facilities (water, power, sewer, roads, ports, etc.) on Anatahan, Alamagan, Pagan, and Agrigan;
- To establish local revenue generating activities through taxing or licensing commercial fisheries, volcanic mineral mining, and other related activities utilizing and/or harvesting the natural resources of the Northern Islands; and
- To expand the CNMI's tourism industry by opening the vast resources of the CNMI's Northern Frontier to allow a wider range of activities while in the CNMI to include ecotourism in the Northern Islands.

Note: Additional goals and objectives provided in the Draft 2021-2031 Strategic Plan for the Municipality of the Northern Islands are included as goal-specific objectives in the Implementation Plan in Appendix I and in full in comments in Appendix III.

#### Office of the Mayor and Municipal Council of Tinian and Aguiguan:

The Vision that guides this planning strategy for the Tinian Leadership (Office of the Mayor, Delegation, and Municipal Council of Tinian and Aguiguan) is:

To achieve the goal of securing a better quality of life for all residents of Tinian and the generations that follow. Through planning, developing and implementing cross-cutting action that supports the CNMI's Core Values and Planning Themes on Sustainable Systems, Networks of Care, Inclusive and Equitable Communities and Partnerships, with a focus on critical infrastructure and growth planning, economic diversification, jobs creation and zero waste management, as stated in the creation of the "first" Tinian Sustainability and Economical Master Plan.

Note: Additional goals and objectives provided in the Draft 2021-2031 Strategic Plan for the Municipality of Tinian and Aguiguan are included as goal-specific objectives in the Implementation Plan in Appendix I and in full in comments in Appendix III.

### Office of the Mayor of Rota:

The vision of the Municipality of Rota is to maximize opportunities for social and economic development while retaining an attractive, sustainable and secure environment for the enjoyment of residents and visitors. Through responsible and professional leadership and in partnership with others, the Municipality will strive to improve the quality of life for all residents living and working in our community.

# Sustainable Development Goals and Objectives

The list of goals and objectives outlined here represents the proposed "right-sized" sustainable development goals (SDG) and supporting objectives developed by the Office of Planning and Development (OPD), the Planning and Development Advisory Council (PDAC), and the Planning Taskforces on Socio-Economics / Disaster Risk Reduction, the Built Environment, and the Natural Environment. These dialogs were initiated by the endorsement of the Sustainable Development Goals as a planning framework by the PDAC over several meetings in 2018-2019 and Taskforce planning meetings held in February and June, 2020.

When discussing sustainability and "planning elements" outlined by Public Law 20-20 for inclusion in the Comprehensive Sustainable Development Plan, the PDAC identified and endorsed the use of the Agenda 2030 Sustainable Development Targets as a framework for baseline data collection and trend tracking. There are 230 internationally accepted indicators for the set of 17 goals. The 2019-2020 Resources Report focused on gathering existing data that correlates to selected indicators to further support identification of the "baseline" – where we are – and help the CNMI chart a path forward to achieve objectives such as reducing hunger, child mortality, and violence – indicators that relate to economic and environmental conditions of our society. By identifying relatable indicators, we can set achievable goals to ensure social equity, economic growth, and environmental well-being now and for the future.

Planning conversations were further supported by the analysis from the 2019-2020 Resources Report, which assessed the best available information across resources sectors to provide a "snapshot" of the state of the resources and provided additional recommendations from agencies, subject matter experts, and the community at large, summaries of which are included here. The ten-year SDG statements are intentionally ambitious – the aim of this planning exercise is to implement realistic objectives that help move the Commonwealth of the Northern Mariana Islands (CNMI) closer to its vision of sustainability for each of these sectors.



# Socio-economics and Disaster Risk Reduction (SE / DRR)

**Taskforce Vision:** CNMI is a healthy and safe place to live, work, and recreate, with communities resilient to disasters aiming at reducing risks important to sustainable development.

The Socio-Economic and Disaster Risk Reduction (SE/DRR) Taskforce focuses on SDGs 1, 2, 3, 4, 5, 8, 10, and 16. Key excerpts from the Resources Report as well as draft updated goal statements and objectives are outlined here. SDG 17, "Partnerships" is especially cross-cutting and is discussed at the closing of these taskforce-specific summary sections. The visions, goals, and objectives outlined here are further visualized in the "Implementation Plan" at the close of this document. This living document is intended to identify the necessary and sufficient next steps that will support cross-cutting sustainability outcomes across sectors while enabling each Taskforce grouping to leverage existing resources and fill gaps to meet the shared vision of sustainable growth and protection of the scarce human and natural resources of the CNMI for all. Critical 10-year visions and metrics for each of the SDG focal areas are outlined here and detailed further in the following subsections.











- CNMI population at or below US poverty level < 30% by 2030
- CUC, DEQ, NMHC, and planning partners work to achieve 100% inside flush toilets with compliant wastewater management and 100% 24-hr plateable water services by 2030
- GDP from agriculture increases from 1.7% in 2016 to >2.5% by 2030
- CNMI Nutrition Council and CHCC work to include assessment and policy updates in 2030 CSDP to track and achieve objectives to end hunger for all in the CNMI
- Land use and zoning updates will include incentives and designated community gardens in DPL's 2030 Public Land Use Plan update
- By 2030, CNMI-CHCC continues to track and make progress towards meeting all components of SDG#3 objectives and indicators
- By 2030, the proportion of incoming NMC freshmen placed in developmental courses reduced by 10% from 2020
- Proportion of women in CNMI Legislature is at least 33% by 2030



- By 2030 annual growth rate of real GDP per capita meets or exceeds U.S. annual average through diversified economic sectors
- Unemployment rate falls to below 10% by 2030 for CNMI residents
- Tourism remains a robust contributor to CNMI's economy with ongoing positive growth and a GDP contribution of at least 65% over a ten-year average between 2020 and 2030
- Less than 30% of CNMI population is living below 50 per cent of U.S. median income (by age, sex and persons with disabilities)
- CNMI sees a 10% reduction in ratio of violent crime per capita between 2020 and 2030 averages

As detailed further in the goal-specific issue summaries and corresponding goals and objectives that follow, cross-cutting recommendations include:

- Assess definition and requirements for a fair living wage in CNMI and establish systems to support social safety nets that ensure all people have access to safe shelter, food, health and wellness services, and quality education;
- Continue to support small local businesses that diversify and complement the tourism economy;
- Continue to invest in crime prevention including early intervention and community amenities as well as skill development for fair paying job opportunities; and
- Support CEDS projects that prioritize community investment districts and coordinated growth efforts including combined infrastructure, facilities, and amenities enhancements.



#### Goal 1 - Ending Poverty

SDG #1 – End poverty in all its forms	
Current Status	Targets
2016 CNMI population at or below US poverty level = 56%	<ul> <li>(a) - CNMI population at or below US poverty level</li> <li>&lt; 30% by 2030 (10-year Goal)</li> <li>(b) - By 2025, Dept. of Commerce works with SE Taskforce to establish a baseline for "living wages" for localized poverty assessment</li> </ul>
94.3% inside flush toilet; 81.6% 24-hr water service	(c) CUC, DEQ, NMHC, and planning partners work to achieve 100% inside flush toilets with compliant wastewater management by 2030; 100% 24-hr plateable water services by 2030

#### Resources Report Summary: Employment and Social Services

Employment and demand for subsidized social services are correlated and therefore are addressed together in this section. Analysis of population and income characteristics between 2005 and 2016 show volatility in part due to the loss of the garment industry and global economic recession. During this assessment period CNMI saw an overall decline in percent of adults in the workforce from 79.2% in 2005 to 70% in 2016, a corresponding increase in unemployment rates from 8.2% in 2005 to 12.8% in 2016, and decreases in median and mean household incomes - about 56% of CNMI's population was living in poverty in 2015 by the U.S. Census Bureau's definition (HIES 2016). Although the HIES report notes that rate is higher than it would be if access to traditional lands and housing were monetized, it remains substantial and requires various Federal Programs like the Women, Infants, and Children (WIC) and Nutritional Assistance Programs (NAP) and to offset the low wages and other incomes in the Commonwealth. Social services are supported at federal and state levels to reduce effects of income disparities including supporting nutritional, housing, and medical needs of qualifying individuals and families.

Water is essential to life and the Commonwealth Utilities Corporation (CUC) is working diligently to ensure continuous high-quality service at affordable costs. Because water services are an essential public service, ensuring that no one in the CNMI is faced with lack of affordable and safe drinking water is a goal with supporting objectives and metrics of SDG #1 as well as SDG #6, which is discussed further in the "Built Environment" section. As outlined by CUC's 2019 Citizen Centric Report, CUC achieved, for the first time, 24-hour water island wide in July of 2018 providing water to 60,000 residents in 14 Tank Service Areas (TSAs) using 131 wells to meet demand. Despite Typhoon Yutu, CUC only lost 24-hour water for less than two months which was a significant improvement over the five-month delay in providing scheduled water following Typhoon Soudelor. There are fourteen TSAs on Saipan with only one each on both Tinian and Rota. Water production reaches 265 mg/month with 119 mg/month of billings which represents 55.9% non-revenue water loss efficiency on Saipan. CUC is diligently working to reduce that loss due to leaks and to improve system pressures in support of new development opportunities as CUC and USEPA invest in rehabilitating the water system each year.

Sanitation is also identified as critical to support anti-poverty efforts as well as environmental and human health goals outlined in SDGs 6, 14, and 15. It is included as an indicator of poverty in part because often lower income households are more likely to be unable to ensure "safely managed sanitation service" that results in "compliant wastewater management" which aims to protect human health and the environment. As CNMI has come into the 21st century, almost all units now have flush

toilets. When the huge influx of foreign workers came in during the 1990s and early 2000s, some substandard housing was built and occupied, but now many units are vacant. Most of the remaining units have toilets. The percentage of units with an inside flush toilet increased from 90 to 94 percent between 2005 and 2016. All of Rota's selected units in the survey had at least one flush toilet as did 97 percent of those on Tinian. District 4 was the most likely to have a flush toilet, at 98 percent, up from 87 percent 11 years before. All Districts saw more than 90 percent of the units with a flush toilet. To further address water and wastewater management challenges CUC is supporting in-house and inter-governmental planning dialogs to identify plan updates and management options for Saipan, Tinian, and Rota.

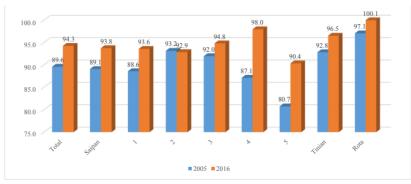


Figure 5- Percent with Inside Flush Toilet, CNMI: 2005 and 2016 (HIES, 2016)

# Goals and Objectives to End Poverty

- SDG #1 End poverty in all its forms
  - By 2024, OPD, PDAC, and the Socio-Economics (SE) Taskforce will work together with Commerce, OMB, and OGM to formalize a capital improvements plan and project prioritization proposal for inclusion in 2025 CSDP and CEDS planning updates
  - By 2025, Department of Commerce will work with the SE Taskforce to establish a baseline for "living wages" for localized poverty assessment to track progress towards poverty reduction and support of basic quality of life for all people in the CNMI;
  - By 2025, the Socio-Economic Taskforce will work with the Department of Labor to (i) improve access to paid sick leave for all participating in the CNMI workforce, with the aim to ensure that at least 75% of full-time CNMI workers have paid sick leave and (ii) reduce the proportion of community members with no health insurance from 32% in 2010 to 25%;
  - By 2023, CUC, BECQ-DEQ, DPW, and DPL will integrate geospatial utilities data to identify areas of wastewater services to support utility, capital improvement program, and land use planning updates, and by 2025, CUC will work with OPD/PDAC to include prioritized wastewater management community projects in capital improvement funding requests to achieve 100% inside flush toilets with compliant wastewater management by 2030; and
  - By 2023, CUC, BECQ-DEQ, DPW, and DPL will integrate geospatial utilities data to identify areas of water services to support utility, capital improvement program, and land use planning updates, and by 2025, CUC will work with OPD/PDAC to include prioritized water management community projects in capital improvement funding requests to achieve 100% 24-hr plateable water services by 2030.

#### Goal 2 - Ending Hunger

SDG #2 – End hunger		
Current Status	Targets	
DPL Ag. Homesteads and Land Cover data show agricultural areas have been decreasing while "developed land" has been increasing on Saipan, Tinian, and Rota.	(a) - GDP from agriculture increases from 1.7% in 2016 to >2.5% by 2030 (b) - Ensure more affordable supply of healthy local foods and reduce accessibility to unhealthy food; support home gardening and agroforestry initiatives; (c) - Metrics and plan for implementation of sustainable agricultural homestead program are established by 2025	

#### Resources Report Summary: Agricultural Data, NAP, and Free Lunch at PSS

Shifts in local food availability and reliance on imported food were identified as potential action areas to build resiliency, enhance self-sufficiency, and work at a local level to end hunger and increase food security in the CNMI. We are fortunate to have year-round growing seasons, but access to fertile, appropriately draining soils as well as reliable water supplies presents challenges for local agriculture. Agriculture, which includes small cattle ranches and farms producing coconuts, breadfruit, tomatoes, and other local produce contributed 1.7 percent of CNMI's GPD in 2016. According to the 2018 CNMI Census of Agriculture data, there were 253 farms reported totaling 1,515 acres with an average farm size of 6.0 acres. This reflects a decrease both in total farm operators as well as in average farm sizes from 2007, when 256 farms reported totaling 4,013 acres with an average size of 15.7 acres for farms classified as under "owned" tenure. Although both in 2007 and 2018 the majority of farms were in "individual" land ownership, 2018 saw an increase in farms owned by corporations or in partnerships. The CNMI Census of Agriculture also indicated that although land irrigation increased in 2018, overall value of total sales decreased with \$2,409,513 in total sales reported in 2007 and \$1,580,081 in 2018. In the Resources Report, DCCA indicated that there were 8,210 qualifying NAP participants in CNMI in Fiscal Year 2018 (FY18). In part to ensure healthy food access for all, in FY19, the Child Nutrition Program of the PSS began providing free meals to all its students.

The Coastal Change Analysis Program (C-CAP) High Resolution Land Cover database (NLCD2011) helps to track changes in land use over time. Based on 2011 C-CAP data included in the 2015 SWAP, total "developed" land area is 10.69%, 9.0%, and 8.29% on Saipan, Tinian, and Rota respectively including cropland. Land cover analysis for Saipan from 1978 to 2009 reveals that developed areas increased more than 10% from 1978 to 2009, and most of the changes came from forest and grassland (Wen, Y., & D. Chambers, Land Cover Change in Saipan, CNMI from 1978 to 2009, International Journal of Environment and Resource 5:7). Although the "developed" land totals reflect less than 10% land cover on Saipan, Tinian, and Rota if "cropland" is excluded, Site Planning for Urban Stream Protection, by the Center for Watershed Protection cites research conducted in many geographic areas that concludes that stream degradation occurs at relatively low levels of imperviousness of 10% to 20%. Due to the risk of negative water quality impacts and land degradation, zoning and land cover laws are in place to guide wise development and reduce risks to CNMI's land and water resources and support sustainable use.

#### Goals and Objectives to End Hunger

- SDG #2 End hunger, achieve food security and improved nutrition, and promote sustainable localized agriculture
  - Ensure a more affordable supply of healthy local foods and reduce accessibility to unhealthy food by: (i) working with CNMI Forestry and partners to launch community gardens in every village and senatorial district by 2025; (ii) working with CDA, NMC-CREES, and partners to expand agroforestry programs and demonstration projects with the goal of implementing at least one demonstration project or workshop annually between 2022 2025 to provide tool



- project or workshop annually between 2022 2025 to provide tools and knowledge to increase GDP from agriculture to over 2.5% by 2030; and (iii) supporting CHCC's inclusion of assessment of local food choices in periodic non-communicable disease surveys to provide data to further track these efforts by 2025.
- Support home gardening and agroforestry initiatives in partnership with CDA and NMC-CREES with through development of formal outreach plan and prioritized actions by 2022 for inclusion in future planning updates; include designated community gardens in DPL's 2030 Public Land Use Plan update;
- By 2025, CHCC in partnership with the CNMI Nutrition Council will work to improve access
  to strengthen local farmer livelihoods, increase food security, and improve nutrition through
  expansion of the Biba program to support a public food procurement policy which favors
  food produced locally and meets or exceeds nutrition standards;
- By 2025, CHCC in partnership with PSS and DCCA will establish nutrition guidelines and standards for meals, snacks, and beverages served to children on a regular basis by
  - institutions and businesses in the CNMI, including all public facilities which serve meals to children, all daycares, and all schools to improve health, food related knowledge, and food consumption patterns of children, their families, and staff; and
- By 2025, CHCC, CNMI Nutrition Council, and the Nutrition Assistance Program will develop policies and incentives to ensure that 20% of stores registered with the Nutrition Assistance Program adopt the Healthy Stores Initiative administered jointly by the CHCC and CNMI Nutrition Council.



Figure 6: Gof Mangge Marianas <a href="https://www.facebook.com/Gof-Mangge-Marianas-169596640120782/">https://www.facebook.com/Gof-Mangge-Marianas-169596640120782/</a>

#### Goal 3 - Ensure Healthy Lives

Current Status	Targets
CHCC tracks SDG#3 and WHO data. Reported 2020 trends and SDG Targets are summarized here with a full list included in the Implementation Plan.	(a) - Healthy community planning is integrated across planning sectors by 2025 (b) - Healthy affordable food choices are available in all CNMI schools by 2025 (CHCC/PSS/NMC-CREES) (c) - Maintain Goal 3 that CHCC tracks (see Implementation Plan) (d) - Reduce mortality and morbidity and maintain WHO goal stable incidence rates of diabetes cases annually with a focus on preventing chronic disease through active transportation, increased availability of healthy locally food, through healthy community design and healthy community planning

#### Resources Report Summary: Health Systems

Health is not a silo – it starts and is maintained outside of the health care system. Therefore, health considerations should be integrated into every aspect of planning from the sidewalks and roads people use, the air they breathe and the water they drink, the food they consume, the violence and trauma they experience – all of these things are interconnected and must be addressed together to work towards the goal of healthy people and a healthy community in the CNMI.



Commonwealth Healthcare Corporation strives to improve the quality of life for the CNMI community through its innovative preventive/urgent care services to foster responsible lifestyles.

CHCC is committed to exceed standards by providing a culture of quality care, honoring the dignity of its stakeholders and community, and promoting equality and accountability throughout the corporation.

Improving CNMI health and well-being through excellence and innovation in service.

The Commonwealth Healthcare Corporation's (CHCC) 2015-2020 Strategic Plan aims to improve the standard of services to the people of the CNMI as well as overall health and wellbeing of its populace. To achieve this goal, CHCC has been working to implement eight (8) operating strategies which include organizational and facilities objectives. Outcomes include obtaining full accreditation from the Centers for Medicare and Medicaid (CMS) for the hospital (recently surveyed in May 2019), public health, behavioral health, as well as decrease the incidence of the top six (6) major causes of death and debilitation in the CNMI: cancer, diabetes, hypertension/heart disease, teen pregnancy, HIV/STI, and substance abuse. These goals are aimed to address community health system needs and support achievement and maintenance of numerous targets of Sustainable Development Goal 3 – Good Health and Well Being.

CHCC tracks data and is meeting these standards for numerous SDG indicators, including maternal mortality ratio (3.1.1), under-five mortality rate (3.2.1), and neonatal mortality rate (3.2.2). Despite continued improvement in services and efforts to extend service areas, health system challenges remain. This is especially true regarding management of noncommunicable diseases (NCDs), which the leading causes of deaths and of premature deaths in CNMI. CHCC's 2016 NCDs Household Survey reported that over half (56%) of CNMI adults are estimated to have hypertension, one out of five (17.3%) CNMI adults are estimated to have high cholesterol, and estimated that 12.5-18.7% of adults in the CNMI have

diabetes. Additionally, almost half of CNMI adults (46.1%) do not have health care insurance, and only one-third (35.7%) of adults reported having an annual medical checkup in the past year. The Institute for Health Metrics and Evaluation (IHME) reports an average 2017 life expectancy of 76.45, over two years less on average than the total U.S. population average of 78.6 years. Asthma prevalence is 11.1% in CNMI, more than double the U.S. average of 5.45% (IHME, 2017). Lifestyle diseases such as diabetes, obesity, and hypertension are challenges that are being prioritized through comprehensive planning dialogs that further support redevelopment dialogs. For example, in addition to expanding the local hospital, located adjacent to Garapan, revitalization planning conversations are including prioritization of walkable communities to address health and socio-economic development objectives.

#### Goals and Objectives to Ensure Healthy Lives and Promote Well-Being

- SDG #3 Ensure healthy lives and promote well-being for all people at all ages
  - Reduce mortality and morbidity and maintain the WHO goal of stable incidence rates of diabetes cases annually with a focus on preventing chronic disease through active transportation, increased availability of healthy locally-sourced food, and healthy community design and planning. CHCC will work with OPD, the PDAC, and SE Planning Taskforce, and NCD Taskforce to integrate healthy community planning across all sectors by 2025;



- By 2025 CHCC, PSS, NMC-CREES, and supporting partners will implement plans to increase access to healthy, local, affordable food choices in all CNMI schools so that, by 2030, at least one "locally-sourced lunch" option can be made available to meet once-a-week serving demand for all students in primary and secondary schools and NMC;
- By 2025, the CNMI Department of Finance, Division of Procurement and Supply, in partnership with Socio-Economic Taskforce including CHCC and the CNMI Nutrition Council will develop policies to ensure that all public procurement from restaurants and caterers are from those businesses which meet or exceed BIBA Initiative standards which supports nutrition standards to promote healthy lives and well-being; and
- By 2030, CHCC leads interagency health and wellness planning efforts to ensure continued metric monitoring and progress towards achieving WHO goals and SDG Targets including:
  - SDG 3.1.1 By 2030, continue to maintain a maternal mortality ratio of less than 1 per 100,000 live births;
  - SDG 3.1.2 By 2030, continue to maintain a proportion of births attended by a skilled health professional at no less than 99%;
  - SDG 3.2.1 By 2030, continue to maintain deaths of newborns and children under 5 years of age to less than 1 per 1,000 live births;
  - SDG 3.2.2 By 2030, reduce neonatal mortality rate to 1 per 1,000 live births;
  - SDG 3.3.1 By 2030, reduce the number of new HIV infections per 1,000 uninfected population, by sex, age and key populations to 0;
  - SDG 3.3.2 a. 2030, reduce the incidence of tuberculosis per 100,000 from 90.4 to 75; b. % of patient population who are tested using Xpert MTB/RIF as the initial diagnostic test with a target of 95% of culture positive TB cases who receive a complete drug susceptibility examination within 60 days of MTB confirmation; and c. % of culture positive TB cases who receive a complete drug susceptibility examination within 60 days of MTB confirmation with a target of 95%;
  - SDG 3.3.3 By 2030, maintain a malaria incidence rate of 0 per 1,000;
  - SDG 3.3.4 By 2030, reduce the Hepatitis B incidence rate per 1,000 to 40;

- SDG 3.3.5 By 2030, maintain a number of zero people requiring interventions against neglected tropical diseases;
- SDG 3.4.1 By 2030, reduce the mortality rate per 100,000 between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases to 14,110 or less;
- SDG 3.4.2 By 2030, reduce the suicide mortality rate per 100,000 from 15.4 to 14 or less and maintain or increase suicide prevention outreach services
- SDG 3.4.2.a By 2030, reduce the percentage of high school students who actually attempted suicide in the past year by 10% of the rate reported in 2017;
- SDG 3.4.3 By 2030, show no increase in diabetes prevalence among adults;
- SDG 3.4.4 By 2030, show no increase in hypertension prevalence among adults;
- SDG 3.5.1 By 2030, the CNMI will have evidence-based treatment interventions across the continuum of care for substance use disorders. Partnership between the CHCC, the Substance Abuse, Addictions, and Rehabilitation (SAAR) Program under the Office of the Governor, Drug Court Program under the CNMI Superior Court, and other treatment and support facilities and organizations will work toward achievement of this goal;
- SDG 3.5.2 By 2030, the CNMI will aim for a 15% reduction in harmful use of alcohol in each of the following areas: underage drinking, binge drinking, and drinking and driving. Partnership between the CHCC, the Department of Commerce, and the Department of Public Safety will support work toward achievement of these goals
- SDG 3.6.1 By 2030, reduce the death rate due to road traffic injuries per 100,000 to 4 or less annually;
- SDG 3.7.2 By 2030, reduce the adolescent birth rate per 1,000 (ages 10 to 19) to 6.
- SDG 3.8.2 By 2030, reduce household expenditure on health to <15% of total income;</li>
- SDG 3.8.3 By 2030, increase the proportion of adults who have visited a medical provider for a general physical exam in the last year to 45%;
- SDG 3.8.4 By 2030, decrease the prevalence of dental cavities (tooth decay) in school aged children by 20%;
- SDG 3.8.5 By 2030, increase the percentage of adults who have received a dental exam in the past year to 32%;
- SDG 3.9.1 By 2030, continue to maintain a mortality rate attributed to household and ambient air pollution of fewer than 1 per 100,000;
- SDG 3.9.2 By 2030, continue to maintain a mortality rate attributed to unsafe water, unsafe sanitation, and lack of hygiene of fewer than 1 per 100,000;
- SDG 3.9.3 By 2030, continue to maintain a mortality rate attributed to unintentional poisoning of fewer than 1 per 100,000;
- SDG 3.a.1 By 2030, reduce age-standardized prevalence of current tobacco use among persons aged 15 years or older to 20% or less;
- SDG 3.c.1 By 2030, data is collected and regularly updated to assess the density of physicians per 1,000, nursing and midwifery personnel per 1,000, dentistry personnel per 1,000, and pharmaceutical personnel per 1,000.
- SDG 3.d.1 Percentage of attributes of 13 core capacities that have been attained at a specific point in time and planning efforts are implemented to ensure that CHCC meets or exceeds 70% percentage value based on 13 core capacities. The 13 core capacities are: (1) National legislation, policy and financing; (2) Coordination and National Focal Point communications; (3) Surveillance; (4) Response; (5) Preparedness; (6) Risk communication; (7) Human resources; (8) Laboratory; (9) Points of entry; (10) Zoonotic events; (11) Food safety; (12) Chemical events; and (13) Radionuclear emergencies.

CHCC's health and well-being indicators are detailed further in Appendix IV. In addition to these goals, objectives, and metrics, health considerations that interconnect with and support other SDG elements are detailed in the graphic below. Good health and well-being objectives are sustainability crosswalks that connect to and are supported by the other goals.



#### Goal 4 – Inclusive Education

SDG #4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	
Current Status	Targets
NMC first-time freshman in 2008-10 developmental courses for English (80%) and math (91%)	(a) – Proportion of incoming NMC freshmen placed in developmental courses reduced by 10% from 2020

#### Resources Report Summary: Education

Sustainable Development Goal (SDG) 4 aims "ensure inclusive and quality education for all and promote lifelong learning" because "obtaining a quality education underpins a range of fundamental development drivers". As outlined by education partners in the Resources Report, public education in the CNMI has expanded significantly in the past ten years. Issues surrounding the need to train the local workforce to take on jobs currently held by non-immigrant contract workers have also placed the impetus on public education entities to respond accordingly and immediately, thus resulting in an urgent compulsory rate of growth and development for all. Currently, four educational institutions are awarded funding from "CW visa" applications to support workforce training needs: the Northern Marianas College (NMC), the Northern Marianas Technical Institute, the Public School System (PSS), and the Latte Training Academy.

In 2017 the National Center for Education Evaluation and Regional Assistance (NCEERA) conducted a large-scale evaluation of the Northern Marianas College. The report, entitled "Comparing enrollment, characteristics, and academic outcomes of students in developmental courses and those in credit-bearing courses at Northern Marianas College" identified educational opportunities in respect to recent graduating high school classes in regards to English and math placement in college. Specifically, the report found that most students entering Northern Marianas College in 2008–10 were initially placed in non-credit-bearing developmental courses. In English, 80 percent of full-time first-time freshmen students seeking associate degrees were placed in developmental courses. In math, 91 percent were placed in developmental courses. Implications of this study highlighted that "very high percentages of high school graduates are unprepared for college coursework". As outlined in the *Northern Marianas College Five Year Strategic Plan 2015-2020—Full Speed Ahead*, NMC is working with PSS and partners at NMTI and the Latte Training Academy to improve student preparedness and success while increasing relevance to CNMI workforce and community needs. Plan updates will reflect revised education objectives.

#### Goals and Objectives to Achieve Inclusive, High-Quality Education

- SDG #4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
  - By 2022, NMC and PSS will re-evaluate and update their MOU to support student readiness and incorporate program priorities into an integrated education plan for lifelong learning opportunities in CNMI by 2025; and
  - By 2025, NMC and PSS planning updates will detail efforts to support the goal to decrease the percentage of incoming NMC freshmen in need of placement in remedial classes by 10% or more by 2030.

**OUALITY** 

**EDUCATION** 

#### Goal 5 - Gender Equality

SDG #5 – Achieve gender equality and empower all women and girls	
Current Status Targets	
% Women in CNMI 21st Legislature	(a) - Proportion of women in CNMI Legislature is at
House - 3/20 = 15%	least 33% by 2030
Senate – 1/9 = 11%	

#### Resources Report Summary: Gender and Equality

Gender equality is intrinsically linked to sustainable development. It reflects the aim to achieve conditions where all people enjoy the same opportunities, rights and obligations in all spheres of life. Gender and equality information is not specifically detailed in the Resources Report. However, in numerous community listening sessions and Taskforce discussions, stakeholders have indicated the importance of including goals that support equal personhood and



equal representation for all. Thus, this goal statement has been broadened to build emphasis on "equity" which seeks to ensure fair treatment, equality of opportunity, and fairness in access to information and resources for all. However, it is acknowledged that additional visioning is needed to identify what this would look like for CNMI and how to track progress. Additionally, equality for women and girls remains an important social equity issue. Although making up slightly more than half of the population, data from the national level indicates women often earn less than men and tend to be less represented in government offices.

In the 21<sup>st</sup> Legislature in the CNMI, women comprised 15% of the House and 11% of the legislature. Therefore, legislative representation was selected to serve as an indicator of progress towards equal political representation. Through at least quarterly meetings with an "Equality Working Group", additional equality and equity planning elements will be developed as cross-cutting considerations of the 2025 CSDP update.

#### Goals and Objectives to Achieve Equity for All

- SDG #5 Achieve gender equality to empower all people
  - By 2022, OPD will work with the Women's Affairs Office, PDAC, and planning taskforce partners as well as active community groups to establish a community meeting schedule for refining objectives and developing a gender equality, equity, and empowerment planning component for inclusion in 2025 CSDP planning update.



#### Goal 8- Decent Work and Economic Growth

SDG #8 – Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all	
Current Status	Targets
- Annual growth rate of real GDP per capita Between 2015 and 2019, change in GDP in the CNMI averaged 2.8 percent. For comparison, real GDP for the United States (excluding the territories) increased 2.9 percent in 2018.	(a) Annual growth rate of real GDP per capita meets or exceeds U.S. annual average through diversified economic sectors.
- Unemployment rate From 2005 to 2016, unemployment rates increased from 8.2 to 12.8%, with the highest rates on Tinian at 21.6%.	(b) Unemployment rate falls to below 10% by 2030 for CNMI residents.
- Tourism direct GDP as a proportion of total GDP BEA data shows that approximately 72 percent of CNMI's 2016 GDP was from travel and services associated with the tourism industry.	(c) Tourism remains a robust contributor to CNMI's economy with ongoing positive growth and a GDP contribution of at least 65% over a ten-year average between 2020 and 2030.

#### Resources Report Summary: GDP & Employment

As the Bureau of Economic Analysis (BEA) reports, the CNMI GDP increased incrementally between 2016 and 2017 and substantially in 2018 with growth led by tourism and gaming industry revenues. Estimated real GDP—GDP adjusted to remove price changes—decreased 19.6 percent in 2018 after increasing 25.5 percent in 2017. Between 2015 and 2019, change in GDP in the CNMI averaged 2.8 percent. For comparison, real GDP for the United States (excluding the territories) increased 2.9 percent in 2018. BEA data shows that approximately 72 percent of CNMI's 2016 GDP was from travel and services associated with the tourism industry. Federal grants have also contributed to economic growth and stability. In 2016, federal support amounted to \$101.4 billion which made up approximately 26 percent of the CNMI government's total revenues.

The CNMI uses the U.S. Census Bureau conventions for employment and unemployment. For a person to be in the labor force, a person must be 16 years and over and either in paid employment, temporarily on leave from paid employment, or unemployed but looking for work (including first time employees). This definition excludes those doing only subsistence activities. Many Pacific Islands countries have large parts of their populations doing subsistence only, which affects the employment and unemployment rates using the United Nations definition of labor force participation, but very few people in CNMI do subsistence activities only, so the rates would be comparable to those for Guam and the U.S. but not with other Pacific Islands' countries.

By the U.S. definition, about 4 in 5 adults were in the labor force in 2005 but that percentage decreased to about 7 in 10 in 2016, partly because of the end of the garment industries, but before the rise in tourism (which so far has not offset the decline in the former.) Only Rota saw an increase in labor force participation, from about 63 percent to 75 percent during the period. All the other Districts and Tinian saw decreases. Tinian's decrease was steepest, from about 9 in 10 adults all the way down to 7 in 10 in 2016. District 4's decrease was from 84 percent to 65 percent, the most substantial decline of the Saipan districts (Figure 39 in HIES, 2016, Figure 7 below). Unemployment rates increased from 8.2 to 12.8% during this reporting period, with the highest rates on Tinian at 21.6%.



Figure 7 - Percent in Labor Force, CNMI: 2005 and 2016 (HIES, 2016)

#### Goals and Objectives to Promote Inclusive, Sustainable Economic Growth

- SDG #8 Promote inclusive and sustainable economic growth supported by expanded educational and employment opportunities for all
  - By 2023, Commerce, Finance, OMB, and OPD, with support of the PDAC and planning partners, will work to draft guiding policies to address poverty reduction;



- By 2025, Commerce, OPD, PDAC, and partners will work to ensure that the CEDS update includes an unemployment and poverty reduction planning component to identify priority projects that support economic diversification and growth; and
- By 2025 MVA Tourism Plan will be updated to address sustainability recommendations, track progress, and assess successes and opportunities of tourism contributions to CNMI economy with the goal of achieving at least 65% GDP contribution over a ten-year average between 2020 and 2030.

#### Goal 10 - Eliminating Inequality

SDG #10 – Eliminate inequality and support diversity, equity, inclusion, and justice	
Current Status	Targets
2016 CNMI population at or below US poverty level = 56%	(a) - Less than 30% of CNMI population is living below 50 per cent of U.S. median income (by age, sex and persons with disabilities pending data discussion w/ Commerce and partners)

#### **Resources Report Summary:**

Equality and equity issues are not specifically discussed in the Resources Report, although economic indicators from the Department of Commerce Household Income and Expenditure Survey Report are detailed extensively. Gender, age, and disability status are not well documented and some consider this information to be sensitive, making application of international targets and indicators challenging for this goal. Additionally, during community meetings, stakeholders raised questions about the

# Equality

The assumption is that everyone benefits from the same supports. This is equal treatment.

# Equity

Everyone gets the supports they need (this is the concept of "affirmative action"), thus producing equity.

#### Justice



All 3 can see the game without supports or accommodations because the cause(s) of the inequity was addressed. The systemic barrier has been removed.

appropriateness of using federal income levels to assess standards of living in the CNMI. Therefore, short-term goals for SDG #10 aim to further develop baseline data for indicators of equality and equity to support the robust culture of inclusivity and diversity in the CNMI. These efforts will help to identify systemic challenges that may hinder just and equal access to socio-economic support services that are currently being provided or that could be expanded to ensure all people in the Commonwealth have the support they need to meet their basic needs and thrive as they contribute to and benefit from sustainable growth objectives and outcomes in our region.

#### Goals and Objectives to Eliminate Inequality

- SDG #10 Eliminate inequality and support diversity, equity, inclusion, and justice
  - By 2023, Commerce, Finance, OMB, and OPD with support of the PDAC and planning partners, will work to draft guiding policies that address poverty reduction; and
  - By 2025, Commerce, OPD, PDAC, and partners will work to ensure that the CEDS update includes unemployment and poverty reduction planning component to identify priority projects to support economic diversification, equality, equity, and growth.



Goal 16 – Peace, Justice, and Strong Institutions

SDG #16 – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels		
Current Status	Targets	
Number of victims of deaths under DPS investigation in the previous 12 months – 55 in 2018 – approximately 0.001% of the 2010 Census reported population.	(a) - Reduce the number of suspected homicides under investigation annually.	
Proportion of population reporting physical, psychological, or sexual violence in the previous 12 months – 260 in 2018 – approximately 0.0048% of the 2010 Census reported population	(b) - Reduce the proportion of the population experiencing reported physical, psychological, or sexual violence annually.	

#### Resources Report Summary: Law Enforcement

Peace and safety are critical for socio-economic development and well-being. While there are numerous agencies with regulatory enforcement authorities, the Department of Public Safety (DPS) is tasked broadly with maintaining peace and order in CNMI. Across the islands, DPS has been working to address a methamphetamine epidemic while increasing staff capacity through participation in training and educational programs relating to criminal justice and crime prevention. In 2018, the Department of Public Safety reported that crime plummeted as a result of its war on drugs, with the crime rate is down 63 percent since 2013. Crime statistics for the past five years show reported domestic violence offences have fallen by over 78 percent and property crimes are down by 58 percent, leading to an overall decline in criminal offenses of more than 60 percent. However, in some community meetings stakeholders noted that reduced reporting may not reflect a clear trend in actual occurrences of physical violence and abuse. CNMI police also said their awareness campaign on the dangers of drunk driving has reduced the rate of driving under the influence offences by nearly 80 percent. Unfortunately, car fatalities remain a leading cause of death in the CNMI. As outlined in the 2019 DPS Citizen Centric Report (CCR), the average population in custody has gone down since 2015 while the number of officers and civilian personal has increased.

In 2018, the Department of Public Safety reported that crime plummeted as a result of its war on drugs, with the crime rate is down 63 percent since 2013. Crime statistics for the past five years show reported domestic violence offences have fallen by over 78 percent and property crimes are down by 58 percent, leading to an overall decline in criminal offenses of more than 60 percent. CNMI police also said their awareness campaign on the dangers of drunk driving has reduced the rate of driving under the influence offences by nearly 80 percent. Master Transmittal Statistics for "deaths under investigation" and "sexual violence" in 2018 are summarized in the chart at right.

	Deaths Under	
Date	investigation	Sexual Violence
18-Jan	3	23
18-Feb	5	11
18-Mar	7	24
18-Apr	4	14
18-May	2	12
18-Jun	6	21
18-Jul	4	27
18-Aug	3	22
18-Sep	4	26
18-Oct	8	27
18-Nov	3	23
18-Dec	6	30
Total	55	260

#### Goal 16 - Promoting Peaceful and Inclusive Societies

- SDG #16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
  - By 2023, DPS and OPD, with support of the PDAC, CHCC, and other planning partners, will work to draft guiding policies that support reduction of physical, psychological, and sexual violence in the CNMI; and
  - By 2025, OPD, PDAC, and partners will work with DPS and the Judiciary to ensure that the CSDP update includes violence reduction policy recommendations and identifies priority projects to support this goal, with a target of 10% reduction in violent crimes and continued support for protective environments and support structures by 2030.

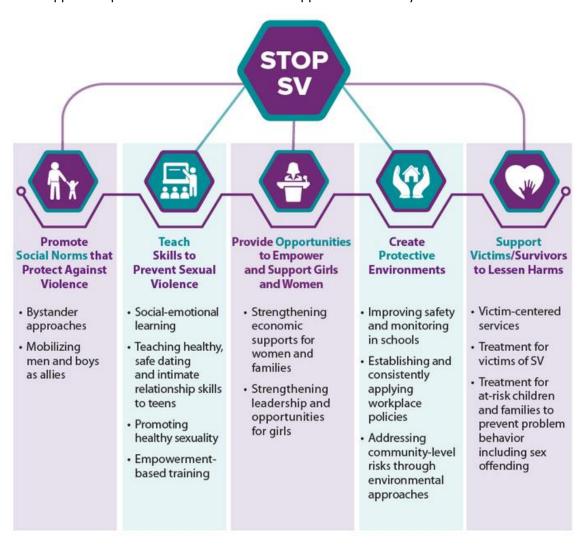


Figure 8 - In the United States the Center for Disease Control reports that sexual violence is common and costly to society. To address these impacts, CDC developed the "STOP SV: Technical Package to Prevent Sexual Violence" which aims to support peaceful and productive societies. Key recommendations are outlined above. Source: <a href="https://www.cdc.gov/violenceprevention/sexualviolence/fastfact.html">https://www.cdc.gov/violenceprevention/sexualviolence/fastfact.html</a>

#### Built Environment (BE)

**Taskforce Vision:** Realizing positive results for existing and new structures and infrastructure that considers current needs and future change and involve all stakeholders and supportive community that ensures sustainable outcomes, continuity of culture and traditions, and quality of life.

The Built Environment (BE) Taskforce focuses on SDGs 6, 7, 9, 11, and 12. Key excerpts from the Resources Report as well as draft updated goal statements and objectives are outlined here. SDG 17, "Partnerships" is especially cross-cutting and is discussed at the closing of these taskforce-specific summary sections. The visions, goals, and objectives outlined here are further visualized in the "Implementation Plan" at the close of this document. This living document is intended to identify the necessary and sufficient next steps that will support cross-cutting sustainability outcomes across sectors while enabling each Taskforce grouping to leverage existing resources and fill gaps to meet the shared vision of sustainable growth and protection of the scarce human and natural resources of the CNMI for all. Critical 10-year visions and metrics for each of the SDG focal areas are outlined here and detailed further in the following subsections.



- By 2030, CUC's Master Plan for drinking water will ensure access to healthy, palatable, affordable, and sustainable drinking water for all communities of the CNMI
- By 2030, comprehensive land management results in water source and quality protection and improvement that supports freshwater quality goals to provide potable, palatable, and sustainable drinking water availability for all communities in CNMI
- By 2030, CNMI will improve water quality and reduce risk of combined sewer overflows by implementing environmentally compliant point and nonpoint source pollution control programs for existing discharge systems and support implementation of SSG to implement nature-based solutions and other cost-efficient interventions identified in the 2025 stormwater management plan
- By 2030, implementation of CUC's Master Plan for wastewater, with support from planning partners, will result in at least a 30% reduction in unsewered households



- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- By 2030, CUC and planning partners have implemented an integrated utility scale photovoltaic system to meet 20% of the respective peak demand for Saipan, Tinian, and Rota
- By 2030, integrated resource management considerations are incorporated into transportation planning efforts and "Complete Streets" Action plan is revised as needed for the CSDP update
- By 2030, Complete Streets and integrated watershed resource management considerations are incorporated into land management and community development elements of Zoning



- regulations, vulnerability assessments and risk reduction planning (SSMP, NMHC), and Public Land Use Plan updates
- By 2030, CNMI's CSDP reflects full integration of SCORP into public land use, zoning, and transportation planning
- By 2030, alignment and cross-cutting priorities are identified with supporting action and implementation plans included in the 2030 CSDP update
- By 2030, 50% of the recyclable waste stream will be diverted from CNMI's landfill or RCRA-compliant waste management facilities on Saipan, Tinian, Rota, and the Northern Islands with diverted waste composted, reused, or sold to support sustainable waste management systems

As detailed further in the goal-specific issue summaries and corresponding goals and objectives that follow, cross-cutting recommendations include:

- Invest in "Complete Streets" concepts that plan for and achieve safe, multi-model transportation to community centers, encouraging health and well-being by creating walkable and inviting spaces that also accommodate the necessary infrastructure to support sustainable growth;
- Integrate utility planning, deployment, and maintenance with public land use planning, zoning, and other development guidance including providing incentives for "better buildings" and enforcing code and regulatory requirements that aim to protect human health and welfare and ensure wise resource use;
- Complete and implement a comprehensive integrated solid waste management plan that optimizes diversion and recycling to extend the life and reduce operations costs of solid waste management facilities; and
- Support CEDS and other grant applications and investment projects that prioritize sustainable infrastructure and coordinated growth efforts.



Goal 6 - Clean Water and Sanitation

SDG #6 – Ensure availability and sustainable management of water and sanitation for all	
Current Status	Targets
<ul><li>94.3% inside flush toilet</li><li>81.6% 24-hr water service</li></ul>	(a) - By 2030, 100% population is using environmentally compliant wastewater systems and there is 100% 24/hr service of plateable on Saipan, Tinian, and Rota;
<ul> <li>79% of assessed wetlands impaired</li> <li>42% of shorelines impaired for at least one use</li> </ul>	(b) - By 2030, impairment of water bodies is reduced to less than 50% for wetlands and less than 25% for shorelines

#### Resources Report Summary: Water / Wastewater

Water is life and is connected to numerous sustainability outcomes. The Commonwealth Utilities Corporation is working diligently to ensure continuous high-quality service at affordable costs. At the 2019 Climate Adaptation Planning training facilitated by BECQ-DCRM, CUC staff identified water wells as an essential resource that is vulnerable to sea level rise and climatic disruptions in addition to water loss and management and maintenance challenges due to aged infrastructure. This asset is vulnerable due to lack of power redundancy for pumps, physical vulnerability of the networked infrastructure, and information challenges due to lack of data availability regarding groundwater tables and freshwater inputs.

Consequences of impacts to this resource would be severe and could include major economic disruptions, declining water quality, and impacts to daily life and potentially to public health. Therefore, it is recommended that strategies and actions aggressively consider climate scenarios for data collection, during infrastructure design, and in mitigation planning.

The water we use ultimately must be disposed of, however, Saipan is the only island with sewage treatment. Tinian and Rota rely exclusively on septic systems. As CUC's 2019 Citizen Centric Report highlights, the age and condition of Saipan's two treatment plants and its collection system is fair to poor due to age, soil condition, harshness of the influent wastewater, and underinvestment in its rehabilitation and maintenance. CUC has plans to correct this condition and put both the wastewater plants back into their original design condition over the next year. The collections department is spending extra time identifying the highest priority sewer main repairs and is working to go back to identify new and existing sewer accounts CUC may have missed. For Rota and Tinian, CUC does not provide wastewater treatment services at this time but there is interest to introduce small modular systems for homesteads and to support new development. To further address these challenges CUC is supporting in-house and inter-governmental planning dialogs to identify wastewater management options for Saipan, Tinian, Rota, and the settlements on the Northern Islands. As detailed further in the "Action Plan" and "Implementation Plan" sections, water and wastewater planning updates are underway and will be incorporated when finalized through the CSDP process established by OPD and the PDAC as specified in Public Law 20-20.

#### Goals and Objectives for Clean Water and Sanitation

- SDG #6 Ensure availability and sustainable management of safe and environmentally compliant water and sanitation for all
  - By 2022, CUC's Master Plan will be updated to include details that address what steps are necessary and sufficient to reduce the salinity of the water in Saipan to the secondary standard of 250 ppm by 2030, including consideration of future precipitation patterns and potential impacts to the water system;
  - By 2023, CUC, BECQ-DEQ, DPW, and DPL will integrate geospatial utilities data to identify areas of water and wastewater services to support utility, capital improvement program, and land use planning updates to achieve 100% inside flush toilets with compliant wastewater management and 100% 24-hr palatable water services by 2030;
  - By 2025, CUC will update and implement priority action items for their service areas plan for unsewered areas, including consideration of actions to address changing environmental conditions to the wastewater management system; and
  - Led by the Bureau of Environmental and Coastal Quality, watershed management and restoration efforts will result in: (i) Reduction of saltwater intrusion into Saipan's freshwater lens by 20% by 2025 (as measured by reduced chloride levels in CUC managed assets); and (ii) Reduction of stormwater runoff by maintaining and increasing wetland, green infrastructure, and stormwater management processes including aquifer recharge by achieving a 50% reduction in water impairment ratings for the coastal waters of Saipan, Tinian, and Rota by 2030;
  - Led by DPW and supported by the Built Environment Taskforce, (i) by 2023 DPW will implement updated guidelines for the MS4 stormwater permit to ensure environmentally compliant and sustainable management of nonpoint source pollution conveyed by stormwater infrastructure; and (ii) by 2025 DPW will draft a stormwater management plan with interagency support that considers "Smart, Safe Growth" principles including projected changes to precipitation patterns and sea level rise to further enable these efforts; and
  - By 2021 CUC will work with BECQ-DEQ and CHCC to assess healthprotective safe drinking water standards and include resulting recommendations in the CUC Water Master Plan by 2022 and subsequent CEDS update by 2025.



**CLEAN WATER** 

**AND SANITATION** 

Figure 9 – Water and Sanitation For All Initiative highlights SDG connections.

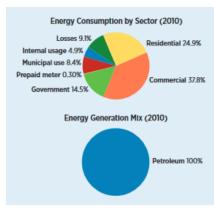
Source: <a href="https://sanitationandwaterforall.org/news/new-infoqraphic-how-wash-influences-other-sdgs">https://sanitationandwaterforall.org/news/new-infoqraphic-how-wash-influences-other-sdgs</a>

#### Goal 7 - Affordable, Modern Energy

SDG #7 – Ensure access to affordable, reliable, sustainable and modern energy for all	
Current Status Targets	
0% commercial renewable energy deployment	(a) - By 2030, power needs of Saipan, Tinian,
	and Rota are supported by deployment of at
	least 20% renewable energy portfolio

#### Resources Report Summary: Power

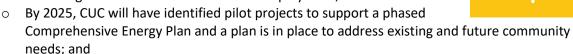
The Commonwealth Utilities Corporation (CUC) is the only publicly owned utility providing power, water, and wastewater services in the islands of Saipan, Tinian and Rota, Commonwealth of the Northern Mariana Islands (CNMI). CUC was created in 1986 as an autonomous agency of the CNMI government which is governed by an independent Board of Directors. Daily operations are managed by an Executive Director with a staff of approximately 400. CUC's rates, fees, charges, services, rules, and conditions of service are regulated by the Commonwealth Public Utilities Commission (CPUC).



CUC's renewable energy goal is facilitated by the CNMI's Renewable Portfolio Standard, established by Public Law 15-23 (4 CMC § 8112). Amendments to the law provide for the goal of 20% renewable power by 2016 provided these standards can be achieved in a "cost effective manner" (Public Law 15-23 as amended by P.L. 18-62, authorizing net metering and extending renewable standards to 20% by 2016). Notably, Public Law 18-75 amended P.L. 16-62, placing emphasis on prioritizing net metering to build renewable energy capacity for health and education facilities. The goal is to balance power purchase affordability and operational cost coverage though the integration of residential and utility scale renewable energy systems into CUC's electric power grid without compromising power system reliability

#### Goals and Objectives for Achieving Affordable, Modern Power

- SDG #7 Ensure access to affordable, reliable, sustainable and modern energy for all
  - By 2022, CUC will endorse a Comprehensive Energy Plan detailing the steps necessary and sufficient to diversify the CNMI's energy portfolio and make progress towards renewable energy standards;
  - By 2025, the CUC-led and OPD, DPW, and CBMA supported Energy Feasibility Assessment will be completed to inform and update public laws and pursue grants to facilitate incorporation of renewable energy into the grid and incentivize distributed deployment;



 By 2030, CUC and planning partners have implemented an integrated utility scale photovoltaic system to meet 20% of the respective peak demand for Saipan, Tinian, and Rota.

AFFORDABLE AND

Goal 9 - Industry Innovation and Infrastructure

SDG #9 – Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation		
Current Status	Targets	
100% transportation access within 2km of roads reported on Saipan.	<ul> <li>(a) - By 2022 CUC installs LED lighting at pilot area sites and works with DPW and CHCC to support safe road lighting deployment plan.</li> <li>(b) - By 2022 DPW adopt "safe and accessible" road plan for active, and accessible transportation.</li> <li>(c) - By 2021 OPD obtains complete coverage maps for cell and broadband coverage.</li> <li>(d) - Proportion of population within 1.5 miles of roads and safe and active and accessible transportation services meets or exceeds 90% by 2030.</li> </ul>	
In 2016, 1 in every 5 units was connected by in-home broadband.	(e) - By 2030 all residents of Saipan, Tinian, and Rota have in-home access to the internet through broadband connection or cell service provider	

#### Resources Report Summary: Primary and Secondary Roads; Broadband Coverage

The Department of Public Works (DPW) Roads and Grounds Division manages development and maintenance of primary roads and highways while respective Mayors' offices and at time private land owners maintain secondary unpaved roads. It is the mission of the Roads and Grounds Division to provide quality service to the general public in maintaining primary roads, road shoulder beautification, swale and drainage systems (island wide), traffic light intersections, and the opening of right-of way access roads to ensure the public safe driving conditions. According to DPW as of January 2019 there are 82.54 miles of primary road on Saipan, 39.30 miles of primary road on Rota, and 60.66 miles of primary road on Tinian. Stormwater management and flood risk reduction planning efforts are ongoing and will require coordination across jurisdictions and sectors to support road development and maintenance objectives. Currently DPW is working with partners at COTA, CHCC, OPD, and CUC, and other members of the "Complete Streets Working Group" to include road safety, accessibility, and multi-modal connectivity considerations into road planning updates.

Additionally, the 2015 CNMI Statistical Yearbook reports that the CNMI's Central Statistics Division has collected random samples of broadband internet use in recent years. In the 2014 Broadband survey, when the sample was weighted to the 2010 census count, about 88 percent of CNMI population had access to the internet. The percentages were similar for the islands – 88 percent on Saipan and Rota and 85 percent on Tinian. This data point also relates to SDG 17.8 to fully operationalize the technology bank and science and innovative capacity building mechanism by enabling the use of information and communications technology, a key driver of socioeconomic growth and sustainable development.

#### Goals and Objectives for Resilient Infrastructure

- SDG #9 Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation
  - By 2025, OPD ensures robust, integrated transportation planning is formalized and integrated into CNMI's CSDP. This effort includes implementing and measuring progress towards objectives where:



- (i) By 2022, CUC installs LED lighting at pilot area sites and works with DPW and CHCC to support safe road lighting deployment planning elements; (ii) By 2023 CHCC's Walkability Plan is incorporated into DPW and COTA plans to support implementation of "safe and accessible" roads for active, and accessible transportation; and (iii) By 2024, DPW, CPA, COTA, CPA, and CHCC, with support of other relevant partners, will endorse a comprehensive transportation planning vision, with supporting objectives, and goals for inclusion of a robust transportation planning element for the whole of CNMI in the 2025 CSDP update led by OPD;
- By 2022, OPD obtains complete coverage maps for cell and broadband coverage and works with Commerce to update HIES survey data specific to internet accessibility to support planning efforts that include subsidy programs or community connection hubs to ensure that all residents of Saipan, Tinian, and Rota have in-home access to the internet through broadband or wireless connection by 2030;
- By 2022, DPW works with OPD and Transportation Planning partners including COTA and CPA as well as CHCC to update the 20-year Highway Master Plan to include walkability and accessibility recommendations identified by this group in 2020 scoping discussions; and
- o Promote sustainable watershed and stormwater management planning through data-driven collaboration where (i) DPW with support of OPD, the Hazard Mitigation Office, and the Mayors Offices map all primary and secondary road infrastructure by 2023 to support the development of flood hazard mitigation and stormwater management planning guidance with support from DEQ by 2025; and (ii) DPW works with DEQ and partners to revise the 2005 Stormwater Management Plan for CNMI by 2025 to further support integration of land based pollution management across planning sectors and projects.

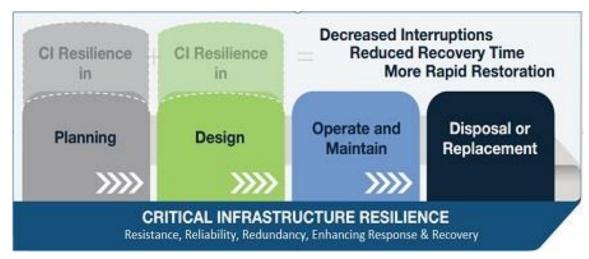


Figure 10 – By including considerations of resistance, reliability, redundancy, and enhanced response and recovery needs in infrastructure planning can result in improved sustainability outcomes. The <u>NSW Critical Infrastructure Resilience Strategy</u> recommends that planners implement a criticality assessment model to target appropriate investments in vital infrastructure.

#### Goal 11 - Resilient Communities

Current Status	Targets
100% access within 2km of roads reported on Saipan (see also Goal 9)	(a) - Proportion of population within 1.5 miles of roads and safe, active and ADA accessible transportation services meets or exceeds 90% by 2030 for Saipan, Tinian, and Rota
Developed space tracked in C-CAP and DFW-SWAP (see %s below) but "open space for public use" not well defined.  2014 C-CAP "developed" land cover: - Rota 8.29% - Tinian 9% - Saipan 10.69%	(b) - By 2025, SCORP, PLUP, Zoning, and Watershed Plans are aligned to identify publicly managed "open space" areas and ADA accessible areas with goal of at least 85% open space or pervious surface maintained in each sub-watershed

#### Resources Report Summary: Land Use, Land Management

Well planned and strategic use of land is especially critical for islands with limited land mass and numerous and sometimes competing land use needs. It is also essential to ensure that supporting infrastructure – from power, water, and wastewater to roads, waste management, and transportation services, as well as emergency response facilities are well distributed to meet community needs. This goal is currently discussed and metrics to track growth proposed for land cover and expansion of transportation services with an emphasis on "complete streets" planning that enables multi-modal connectivity for safe, affordable, and convenient movement of goods and people.

Developed areas are a land cover type used by the U.S. Forest Service to show areas of urban growth, cropland, and other uses characterized by impervious land cover. These areas are vital for economic growth and social services. The Coastal Change Analysis Program (C-CAP) High Resolution Land Cover database (NLCD2011) helps to track changes in land use over time. Although the totals below reflect less than 10% developed land cover on Saipan, Tinian, and Rota, *Site Planning for Urban Stream Protection*, by the Center for Watershed Protection cites research conducted in many geographic areas that has yielded a conclusion that stream degradation occurs at relatively low levels of imperviousness of 10% to 20%. Due to the risk of negative water quality impacts and land degradation, zoning and land cover laws are in place to guide wise development and reduce risks to CNMI's land and water resources.

Although maintaining open space is an element of the management mandates of multiple agencies, several implementation challenges are highlighted in the 2019-2022 Strategic Parks and Recreation Plan. The plan notes that high recent development pressure despite the constitutional mandate and public laws aimed to ensure that open spaces under public land are maintained for community purposes and activities. There is strong community support for completing these cross-cutting projects in the CNMI. Current efforts include incorporation of "Complete Streets" walkability concepts that support identified projects such as the expansion of greenways, rehabilitation of walking paths, and the revitalization of tourism districts. The recognition of limited operating resources and numerous needs challenges resource managers to find new partnerships and funding prior to initiating new projects. The Strategic Parks and Recreation Plan also notes that the community has indicated strong interest in "increasing access" to and use of parks while maintaining safety and security. To further support open space and recreation opportunity development and maintenance, the Statewide Comprehensive Outdoor Recreation Plan was published in September, 2020, and is incorporated by reference in the action planning section that follows.

#### Goals and Objectives for Resilient Communities

- SDG #11 Make cities and human settlements inclusive, safe, resilient, and sustainable
  - By 2025, CNMI's Statewide Comprehensive Outdoor Recreation Plan (SCORP)
    will be updated to include the conservation status of cultural, natural, and
    mixed-designation sites with area- and resource-specific plans and data
    collection, including the number of cultural and historical sites that are
    recorded and inventoried, with at least 50% annual preservation of newly
    discovered cultural heritage resources; public annual expenditures remain
    constant; private preservation data is collected; and
  - By 2025, SCORP, PLUP, Zoning, and Watershed Plans are aligned to identify publicly managed "open space" areas and ADA accessible areas with goal of at least 85% open space or pervious surface maintained in each sub-watershed.



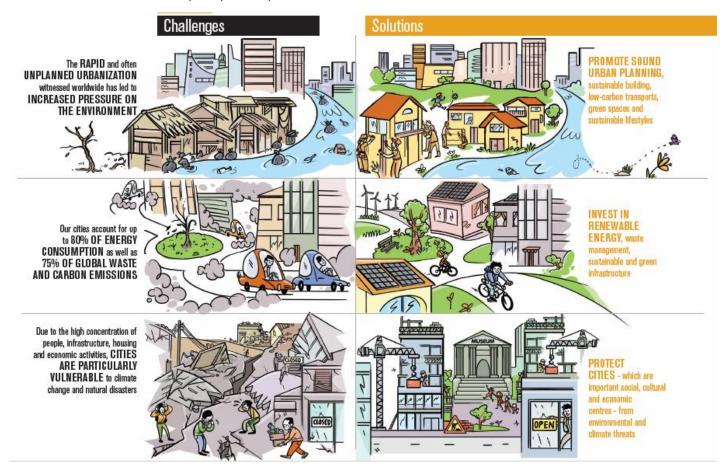


Figure 11 - As outlined in this infographic, rapid and unplanned development can have economic, environmental, and human impacts. By strategically densifying, investing in renewable energy and sustainable building techniques, valuing existing ecosystem services, and supporting increasing usage of sustainable transportation, urban centers and communities can both significantly contribute to the mitigation of harmful climate impacts and improve their own resilience to the inevitable resource shortages to come. Source: UNEP

#### Goal 12 - Responsible Consumption and Production

#### SDG #12 – Ensure sustainable consumption and production patterns

#### **Current Status**

The Saipan waste composition study identified the largest component, by weight, is fiber (33%), followed by glass (24%), and plastics (also 16%). These three materials, usually considered traditional recyclables, comprise nearly three-quarters of the waste stream by weight. There is also considerable opportunity for diversion in organics, which like plastics also represent 16% of the material, by weight.

#### **Targets**

- (a) By 2025 obtain centralized data and statistics on hazardous waste and CNMI-wide import/export stream for comprehensive waste management plan for solid and hazardous waste
- (b) By 2030 50% of recyclable waste stream is diverted from landfills and composted, reused, or sold to support sustainable waste management systems

#### Resources Report Summary: Solid Waste

Efficient solid waste management is an important consideration of sustainable consumption and production patterns. In CNMI, the solid waste stream is composed of sources from individuals, known as "general" solid waste, commercial, institutional and municipal solid waste. The U.S. Environmental Protection Agency (USEPA) estimates that the average American generates approximately 4.4 pounds of garbage per day. Solid waste from residential and commercial sources makes up the majority of the municipal solid waste (MSW). Although assessment studies are currently underway, generation rates are not available at a local level for CNMI; however, news coverage has highlighted numerous challenges with waste management in recent years. Saipan is the only island in CNMI that has a RCRA Subtitle D compliant "Municipal Solid Waste Landfill", however, space in the existing developed landfill cells is limited. Additionally, as BECQ-DEQ reports, illegal dumping is an environmental concern island-wide. As of 2020 efforts to comprehensively assess and manage waste streams on Saipan, Tinian, Rota, and the Northern Islands are underway.

#### Goals and Objectives for Responsible Consumption and Production

- SDG # 12 Ensure sustainable consumption and production patterns
  - By 2022, DEQ with support from DPW and OPD will obtain centralized data and statistics on hazardous waste and CNMIwide import / export stream for integrated waste management plan to be finalized by 2023 and included in 2025 CDSP update;
  - By 2025, OPD and DEQ will support DPW in the development and incorporation of the integrated waste management plan with recycling stream tracking and reporting protocols in place to support future updates and the PDAC, Legislature, and CNMI Governor adopt the plan update;
- RESPONSIBLE CONSUMPTION AND PRODUCTION
- By 2025, OPD, the CEDS Committee, and the Socio-Economic Planning Taskforce will include data collection and consideration of programs to support exportation of local produce in economic planning and development to enhance economic growth and sustainability;

By 2030, 50% of the recyclable waste stream will be diverted from CNMI's landfill or RCRA-compliant waste management facilities on Saipan, Tinian, Rota, and the Northern Islands with diverted waste composted, reused, or sold to support sustainable waste management systems.

#### Natural Resources (NR)

**Taskforce Vision:** Strong partners responsibly conserving the CNMI's natural capital by balancing sustainable and economic growth and supporting equitable opportunities for all.

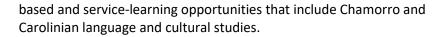
The Natural Resources Planning Taskforce has elaborated that the long-term vision for CNMI's natural resources is to ensure healthy ecosystems that support sustainable use, research, education, and preservation, as well as provisioning ecosystem services and nature-based solutions for people, prosperity, and planet where:

- Sustainable Use. To promote sustainable use and conservation of the CNMI's natural resources on land and in water that can meet development needs sustainably and preserves the integrity of these natural resources for future generations, including meeting local and regional conservation targets and policies that aim to protect people as well as the built and natural environments including cultural resources, provisioning uses, and aesthetic enjoyment.
- Research, Education, and Preservation. To promote research and education about the CNMI's natural resources to acknowledge and support local stewardship, conservation management, and cultural practices that are integral to the CNMI community.
- Support Ecosystem Services and Nature-Based Solutions. Sustainable use, management, and conservation of natural systems will protect and promote the delivery of ecosystem services and implementation of green infrastructure and nature-based solutions to economically and efficiently mitigate the impacts of extreme weather events and maintain critical functions that support people, prosperity, and our healthy environment.

The Natural Resources (NR) Taskforce focuses on SDGs 13, 14, and 15, which together help to achieve the CNMI's constitutional aim of ensuring a clean and health environment. Key excerpts from the Resources Report as well as draft updated goal statements and objectives are outlined here. SDG 17, "Partnerships" is especially cross-cutting and is discussed at the closing of these taskforce-specific summary sections. The visions, goals, and objectives outlined here are further visualized in the "Implementation Plan" at the close of this document, which details short- and mid-term objectives to support progress towards long-term goals as well as lead agencies and key partnerships. This living document is intended to identify the necessary and sufficient next steps that will support cross-cutting sustainability outcomes across sectors while enabling each Taskforce grouping to leverage existing resources and fill gaps to meet the shared vision of sustainable growth and protection of the scarce human and natural resources of the CNMI for all. Critical 10-year visions and metrics for each of the SDG focal areas are outlined here and detailed further in the following subsections.



- By 2030, OPD and the PDAC have incorporated climate action planning needs across resource management sectors for the next CSDP update;
- By 2030, reduce risks from climate impacts for communities within flood zones and on low-lying islands through flood zone map updates, implementation of education and outreach programs, application of current building codes, and permitting incentives;
- By 2030, PSS with support from the NR Taskforce, planning, and other education partners, has expanded climate considerations into integrated into public school science and social studies curriculum through place-





- By 2030, there are interagency programs to support active management of prioritized in-water resources and management areas reflected in the CSDP update and at least 50% of marine resources are being effectively managed through site-specific management plans;
- Meet or exceed local and regional conservation targets.



- By 2025, OPD and the Natural Resources Taskforce reassess and revise priorities to ensure that by 2030 there are interagency programs to support active management of prioritized resources and management areas on land and in nearshore waters reflected in the CSDP update;
- CNMI Forestry will work with management partners to monitor, maintain, and restore at least 10% land cover to native and endemic forest by 2030;
- By 2030, CNMI continues progress in maintaining open spaces and vegetative cover through fire reduction campaigns with the amount of man-made wildfires being reduced by 50% in area from 2020 numbers;
- Reduction of stormwater runoff by maintaining and increasing wetland, green infrastructure, and stormwater management processes including aquifer recharge by achieving a 50% reduction in water impairment ratings for coastal waters of Saipan, Tinian, and Rota by 2030;
- And at least 30% of terrestrial resources are being effectively managed through site-specific management plans.

As detailed further in the goal-specific issue summaries and corresponding goals and objectives that follow, cross-cutting recommendations include:

- Continue to invest in education and capacity building in and out of the classroom, including supporting efforts to preserve and share traditional local knowledge of these resources, in order to enable community-driven stewardship outcomes;
- Effectively manage marine and terrestrial resources integrating best available data through adaptive management approaches that incorporate local and regional conservation goals;
- Protect native plants and cultural resources using a balanced approach that preserves and enhances high value habitat to achieve "no loss" or "net gain" of the habitats and species as well as ecosystem services including use and non-use values that help to make CNMI an attractive tourist destination and preserve local heritage;
- Support holistically planned investments in ecosystems, special area management, and nature-based solutions through appropriate grant and management activities to fund coordinated restoration, conservation, and enhancement projects that protect people, infrastructure, and the environment for current and for future generations.



Goal 13 - Climate Action

SDG #13 — Take urgent action to combat climate change and its impacts	
Current Status	Targets
Currently CNMI has climate considerations incorporated into the State Standard Hazard Mitigation Plan;	(a) – By 2025 at least three sector specific disaster risk reduction strategies are included in CNMI's Comprehensive Sustainable Development Plan
PSS and BECQ-DCRM report 6th and 9th grade climate curricula have been created but has not yet been fully incorporated into public school curriculum	(b) – Climate considerations are incorporated into 100% of PSS 9th grade curricula by 2030

#### Resources Report Summary: Climate and Weather

In line with worldwide observations, warming land and sea temperatures, erratic precipitation patterns, and increasing storm frequency and intensity are influencing weather and climate patterns in the CNMI. Effects from more extreme weather can include increased coastal erosion and decreasing water quality, which can impact people and the environment. Predicted rising sea levels, altered precipitation patterns, higher temperatures and acidification of the ocean will increase these risks in the coming decades. These changes can jeopardize the livelihoods of the people, especially those engaged in tourism, agriculture, forestry, and fishing that are dependent on natural resources.

Internationally, "climate action" is addressed in Sustainable Development Goal 13. At the national level, the United States has adopted and implemented disaster risk management strategies in line with the Sendai Framework for Disaster Risk Reduction (Indicator 13.1.2), and, as discussed further in the disaster risk reduction subsection, the CNMI has also adopted and is implementing local disaster risk reduction strategies in line with national disaster risk reduction strategies (Indicator 13.1.3), however, beyond renewable energy standard goals, CNMI has not established or operationalized an integrated policy, strategy, or plan which increases their ability to adapt to the adverse impacts of climate change and foster climate resilience and lower greenhouse gas emissions development (Indicator 13.2.1). In terms of Target 13.3 to "improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning" by 2030 (Indicator 13.3.1), the Division of Coastal Resources Management has developed climate-specific curriculum for fourth and ninth graders in partnership

### CLIMATE CHANGE INDICATORS

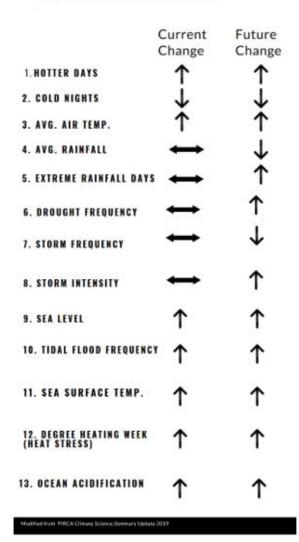


Figure 12 – Grenci et al, Summary of Observed and Projected Climate Impacts, modified from PIRCA Climate Science Summary, 2021 Update.

with the Public School System. Primary efforts to build institutional, systemic, and individual capacity to implement adaptation, mitigation, and technology transfer, and development actions" focus on disaster risk reduction (Indicator 13.3.2).

The CNMI has completed vulnerability assessments for Saipan, Tinian, and Rota. Climate adaptation is recognized as a need in the Saipan (2014) as well as Rota and Tinian (2015) vulnerability assessments. Despite 2015 and 2017 Executive Orders directing CNMI agencies to support climate adaptation and resilience planning, climate impact responsive planning deployment has been limited. The 2018 "Smart, Safe Growth Report" Guidance is being mainstreamed through government project scoping to help support assessment and adaptation to climate risks in CNMI. These efforts will support incorporation of climate adaptation planning into resource-specific management dialogs.

#### Goals and Objectives for Climate Action

- SDG #13 Take urgent action to combat climate change and its impacts
  - By 2023, the Office of Planning and Development (OPD) has launched a "Smart Safe Growth" (SSG) toolkit on the OPD website to support integration of climate impacts and adaptation opportunities into early planning and project scoping activities with at least three SSG trainings held for CNMI agencies and stakeholders by 2025;



- By 2025, resource management specialists across sectors will
   work with the Hazard Mitigation program and OPD to update and integrate climate data and
   sector-specific planning recommendations across sectors;
   By 2025, PSS and partners will work to establish and expand Marianas-wide educational
   programs or institutions and resources including materials translated into Chamorro and
   Carolinian languages with place-appropriate images to enable continued engagement and
   deep, solutions focused education in natural resources studies in CNMI;
- By 2030, OPD and the PDAC have incorporated cross-cutting climate action planning needs across resource management sectors for the next full CSDP update;
- By 2030, reduce risks from climate impacts for communities within flood zones and on lowlying islands through flood zone map updates, implementation of education and outreach programs, application of current building codes, and permitting incentives; and
- By 2030, PSS has expanded climate considerations into integrated into public school science and social studies curriculum through place-based and service-learning opportunities that include Chamorro and Carolinian language and cultural studies.







#### Goal 14 - Life Below Water

## SDG #14 – Conserve and sustainably use the oceans, seas, and marine resources for sustainable development

#### **Current Status**

- Coverage of protected areas in relation to marine areas The current area of "no-take" reserves is estimated at 9.63 km2 while the total area of all MPAs is estimated at 12.32 km2. The Marianas Trench Marine National Monument is about 246,608 km2. Together, these protected areas total 246,629.95 km2. The CNMI's Exclusive Economic Zone expands approximately 820,416 km2, therefore the total percentage of marine protected area is about 30% of CNMI's EEZ; however, some "take" is authorized within this area by federal agencies beyond the 3nm zone

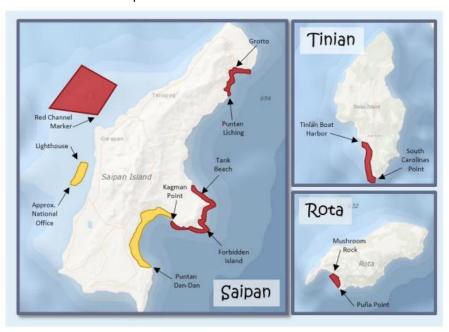
#### **Targets**

- (a) By 2025 CNMI establishes sustainable harvest levels for major fish stocks.
- (b) By 2025 include mechanism to include bycatch data with catch data collection.
- (c) Maintain 50% or more protected marine areas and support sustainable marine resources management through regular planning and updates including adoption of the Marianas Trench Marine National Monument management plan by 2025.

#### Resources Report Summary: Marine Resources

The Department of Lands and Natural Resources' Division of Fish and Wildlife (DLNR-DFW) works closely with resource management partners to ensure these areas promote conservation of wildlife and marine

life, protecting these areas in the public interest of CNMI. Currently, CNMI has seven "Marine Protected Areas" (MPAs). MPAs are defined areas where natural and/or cultural resources are given greater protection than the surrounding waters. MPAs in CNMI span a range of habitats and vary in purpose, legal authority, management approaches, levels of protection, and restrictions on human uses. These "no take" and "limited take" areas as well as harvest restrictions were established by numerous laws and regulations, with management authority resting on the DLNR's Division of Fish and Wildlife (Public Law 2-51, 18-42).



Of these, the Sasanhaya Bay Fish Reserve in Rota, the Mañagaha Marine Conservation Area, Forbidden Island Sanctuary, and Bird Island Sanctuary are established no-take zones for all marine resources by CNMI Public Law. In addition, permanent Topshell Gastropod Reserves exist on a mile-long stretch of the Saipan Lagoon barrier reef, the Lighthouse Reserve, and at Tank Beach. The Tank Beach Reserve overlaps with the Forbidden Island Sanctuary. Permanent Sea Cucumber Reserves have been established by DFW regulation at Lau Lau Bay and Bird Island, the latter of which overlaps with the Bird Island Sanctuary. The total area covered by no-take reserves is estimated at 9.63 km² while the total area of all MPAs is estimated at 12.32 km².

#### Goals and Objectives for Life Below Water

- SDG #14 Conserve and sustainably use the oceans, seas, and marine resources for sustainable development
  - By 2025, Coral Restoration Management Team comprised of DCRM and DFW support implementation of and regular updates to the Coral Reef Restoration Management Plan;
  - By 2025, DFW will work with partners to promote a sustainable fishing industry throughout the Marianas by creating a CNMI fisheries management program that includes expanded inhouse capacity to conduct resource assessments of fish and invertebrates in CNMI to support sustainable fisheries



- management through improved monitoring, data analysis, regulation assessment, and enforcement while factoring in fishing industry, development, and tourism needs;
- By 2025, DFW, supported by resource management partners at BECQ and others, will
  conduct and complete recruitment studies from marine protected areas (MPAs) to
  document benefits and to establish sustainable management program;
- Led by DFW and supported by resource management partners at BECQ and DPL, a Fish and Coral Restoration Program will be established by 2025 to create a fish and coral conservation action plan to enhance resource biodiversity and reef health;
- DFW will work with partners to conduct life history studies on targeted food fish in the CNMI to determine growth rates, longevity, reproduction, and mortality. The information generated will be used for sustainable management of fisheries by 2025;
- The DLNR-DFW will work on improving boating infrastructure by 2025 to minimize environmental impacts on nearshore resources and to allow for safe boating access;
- DLNR-DFW will work with regional partners to improve fishery data collection efforts in the CNMI and generate information needed to sustainably manage fishery resources by 2025;
- DLNR-DFW continues to work with state and federal partners in conducting nearshore fish, invertebrate and benthic assessments throughout the CNMI to better document resource abundance and diversity. Information generated from this work will be used to sustainably manage nearshore fishery resources;
- By 2025, DLNR-DFW will work with partners to improve enforcement capacity by evaluating existing fishery regulations and policies to determine validity within current concerns.
   Revisions will be made to ensure that these regulations meet current and future management needs;
- DLNR-DFW will work with partners to develop sustainable fishing access programs such as Fish Aggregating Devices (FADs) to promote alternative fishing opportunities that help reduce fishing impacts in nearshore waters; and
- By 2030, there are interagency programs to support active management of prioritized inwater resources and management areas reflected in the CSDP update and at least 50% of marine resources are being effectively managed through site-specific management plans.

#### Goal 15 - Life On Land

SDG #15 – Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss		
Current Status	Targets	
Forest area as a proportion of total land area – Saipan: 35%; Tinian: 24%; Rota: 62%  • 12% limestone forest cover remaining on Saipan, Tinian, and Rota; 11.76% (55.6 km² of 472.71km²) of terrestrial lands are conserved	(a) - Maintain and enhance forest cover levels	
Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type – currently 100% of wetlands protected by "no net loss" policy and supporting regulations;	(b) - Ensure no loss of remaining limestone forest (c) - Restore 10% land cover to native and endemic forest communities by 2030	

#### Resources Report Summary: Land Management

Nearly 89.5% of the 2010 population of the CNMI lives on Saipan, 5.8% lives on Tinian, and 4.7% lives on Rota, with a small number of inhabitants on Alamagan, Pagan, and Agrigan. Several legal mechanisms are in place to ensure management and protection of natural areas and guide development in CNMI, including protected conservation areas on land and in the water that are aimed at preserving habitat and supporting fishing, hunting, and other uses. According to DFW's 2015-2025 State Wildlife Action Plan, "native forest" which provides habitat for many listed species is primarily found on Rota and in the southwest region of Tinian, and has declined between 2014 and 2018 on Saipan with only 12% of native limestone forest cover recorded in the 2017 United States Fish and Wildlife Services' (USFWS) Vegetative Mapping of the Marianas. Managing invasive species and replanting native trees are identified as important management objectives to support native species conservation and recovery. The geology and population trends throughout the CNMI present management opportunities for many use outcomes.

#### Goals and Objectives for Life On Land

- SDG #15 Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, and preserve and halt degradation of biodiversity and resources of particular concern in the CNMI
  - By 2025 DLNR-DFW will update the State Wildlife Action Plan and continue periodic updates every ten years with data and input included from natural resource management partners at BECQ as appropriate;
  - CNMI Forestry will work with management partners to monitor, maintain, and restore at least 10% land cover to native and endemic forest communities by 2030;
  - CNMI's Department of Land and Natural Resources and Bureau
     of Environmental and Coastal Quality work together to ensure no net loss of limestone
     forest, coral reefs, sea grass, and wetlands to protect ecosystems and biodiversity and
     support habitat connectivity;

- By 2022, BECQ develops a Wildfire Management Plan that addresses planning, response and mitigation of wildfires to support efforts to reduce human induced wildfire, reduce fire risk, and restore fire-impacted sites to support healthy watersheds and communities; and by 2025 the amount of man-made wildfires is reduced by 50% in area;
- By 2021, BECQ-DCRM will reconvene the Wetlands Working Group including DLNR, DPL,
   OPD, and members of the Natural Resources Planning Taskforce to collaborate develop,
   adopt, and begin implementation of a Comprehensive Wetlands Management Plan by 2025;
- Led by the Bureau of Environmental and Coastal Quality, watershed management and restoration efforts will result in:
  - Reduction of saltwater intrusion into Saipan's freshwater lens by 20% by 2025 as measured by reduced chloride levels in CUC managed assets;
  - Reduction of stormwater runoff by maintaining and increasing wetland, green infrastructure, and stormwater management processes including aquifer recharge by achieving a 50% reduction in water impairment ratings for coastal waters of Saipan, Tinian, and Rota by 2030.
  - Reduction of stormwater runoff by maintaining and increasing wetland, green infrastructure, and stormwater management processes including aquifer recharge by achieving a 50% reduction in water impairment ratings for coastal waters of Saipan, Tinian, and Rota by 2030, and at least 30% of terrestrial resources are being effectively managed through site-specific management plans.

#### Nature Based Solutions and the 2030 Goals

Applying the global SDGs in a local context provides a "crosswalk" across planning elements. This approach recognizes the importance of ensuring a healthy environment. This integrated approach to the SDGs recognizes that healthy ecosystems support sustained and inclusive economic growth and social development. "Nature-based Solutions" (NbS) are increasingly being recognized as opportunities to invest in integrated efforts to restore and enhance ecosystems in ways that can yield benefits to the built environment, reduce impacts of flooding and surge from storm events, and support a range of ecosystem services. Currently, OPD and the PDAC are working closely with the Resiliency Coordinator and Hazard Mitigation Program to identify opportunities for NbS in risk reduction planning efforts. These intersectional efforts aim to leverage natural functions of coastal systems such as coral reefs, shoreline vegetation, and wetlands to achieve cost-efficient and long-lasting resiliency solutions to protect people and our built environment. As these plans are further developed, they will be incorporated into future CSDP updates and the SSG guidance and review process.

#### Regional Sustainability Planning

Where possible, alignment of state-level resource management efforts with regional, national, and international goals and programs will help the CNMI to avail of additional funding and support opportunities and streamline implementation efforts. Where possible, these goals will be considered and incorporated where appropriate to support local planning efforts. This includes continuing working towards "no net loss" of critical habitats and resources as well as commitments to conservation and management initiatives such as the Micronesia Challenge. These ongoing efforts will leverage existing efforts to implement efficient restoration and enhancement projects that promote regional, mutually reinforcing sustainability objectives.



#### Goal 17 and the Power of Partnerships

SDG #17 – Strengthen the means of implementation and support partnerships for sustainable development		
Current Status	Targets	
Total GDP by sector shows for 2018 expenditure %s were: Personal Consumption – 46.56% Private Fixed Investment – 18.52% Net Exports2.27% Government Spending (Fed) – 4.31% CNMI Spending – 31.67%	(a) By 2030 CNMI's GDP shows sustainable expenditures including net positive exports and reduces proportion of imported goods.	
The percentage of units connected to the internet by broadband increased significantly during the 11 years. In fact, in 2005 almost no units were connected via broadband. By 2016, about 1 in every 5 units was connected.	(b) - By 2030 all residents of Saipan, Tinian, and Rota have in-home access to high speed, reliable internet through broadband connection or cell service providers (see 9.c.1).	

As described by Public Law 20-20, the purpose of the CNMI Planning and Development Act of 2017 and the creation of the Office of Planning and Development and its Planning and Development Advisory Council is:

to establish a CNMI Comprehensive Sustainable Development Plan that shall serve as a guide for the future long-range development of the CNMI using and improving existing plans, maps and other resources; identify the goals, objectives, policies, and priorities for the CNMI; provide a basis for determining priorities and allocating limited resources, such as public funds, services, human resources, land, energy, water, and other resources; improve coordination of federal, and CNMI plans, policies, programs, projects, and regulatory activities; and to establish a system for plan formulation and program coordination to provide for an integration of all major CNMI and individual island activities.

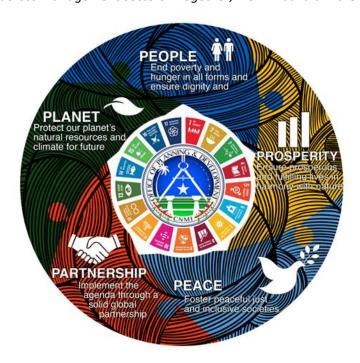
Just as compiling the visions, goals, and objectives to create this CSDP took leadership and dedication from numerous planning partners to create this plan, it will take a coordinated effort to make the sustainability objectives of this plan become a reality. Coordination and communication based in trust and alignment of shared objectives will continue to improve the efficiency of resource allocation and build stronger partnerships between agencies as well as the public and private sectors and with the community at large. Stronger partnerships will contribute to environmental stewardship and sustainable development by mobilizing resources, sharing knowledge, promoting the creation and transfer of environmentally sound technologies, and building capacity. By creating processes of information sharing and cooperation, OPD and the PDAC will work with planning partners across sectors to strengthen the means of implementation and support partnerships that enable sustainable development planning and effective project execution for the CNMI.

- SDG #17 Strengthen the means of implementation and support partnerships for sustainable development
  - By the end of 2020, OPD, Commerce, and PDAC, and other planning partners will endorse the sustainable development planning component and Smart, Safe Growth integration recommendations to identify priority projects to support economic diversification and growth for inclusion in the 2021-2025 CEDS update and future plan revisions;



- By 2023 Commerce, Finance, OMB, and OPD with support of the PDAC and planning partners, will work to draft guiding policies that address poverty reduction and track changes in annual GDP;
- By 2024, Commerce HIES surveys will provide data on internet access and use these data points to address remaining deployment gaps, if any, in the 2025 CEDS update with support from OPD, PDAC, and Planning Partners;
- By 2030, led by OPD and facilitated through partnerships with planning agencies and other stakeholders, scheduled planning updates detailed further in Appendix I of this CSDP, will be completed and incorporated into a 2030+ planning update;
- The 2030 CSDP update will reflect growth in community engagement as indicators of enhanced partnerships by at least doubling the number of public comments received in the 2019-2020 CSDP draft and comment period; and
- The 2030 CSDP and corresponding 2030 CEDS update will include a detailed assessment of GDP expenditures, imports, and exports trends, and other economic data identified by the PDAC and SE/DRR Planning Taskforce

Together, the Sustainable Development Goals and their objectives aim to support communities, people, the economy, and the environment. These goals and management areas are in many ways interconnected, as the image below attempts to help visualize. Sustainable management of these resource areas in turn supports better outcomes across management sectors. Together, we will build a more sustainable CNMI.

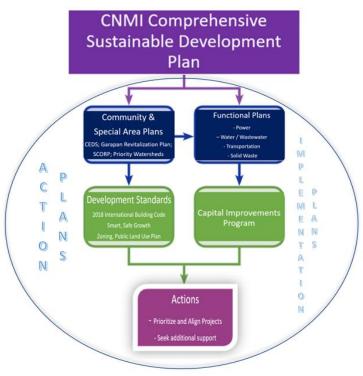


#### **III. Action Plans and Development Guidelines**

A Strategic Plan charts the course to where you want to go while an Action Plan provides the detailed directions for how to get there. Development standards help guide implementation, which is achieved through execution of strategically prioritized and funded actions. Together, these components support each other and the CSDP.

This section summarizes and incorporates by reference the following *Special / Functional / Resource*-specific action plans. These plans and this CSDP are further supported by the inclusion of development standards, and the implementation plan that follows. Together these planning components work to ensure efficient, well-aligned, and coordinated actions that are prioritized to meet urgent needs while addressing important cross-cutting sustainability outcomes.

Summaries of key components of plans and guidelines that have been finalized or that are currently near finalized that have been shared with OPD and the PDAC are included here. As a living document, these implementation and action plans as well as development standards will be regularly revised through the process established by Public Law 20-20 and supporting regulations. Currently this section includes summaries and references to the following:



#### **Community and Special Action Plans**

- Comprehensive Economic Development Strategy
- Public Land Use Plan
- Standard State Mitigation Plan
- Sustainable Tourism Plan
- State Comprehensive Outdoor Recreation Plan

#### **Functional Plans**

- Utilities Power, Water, Wastewater
- Transportation Roads and Services
- Transportation Ports and Airports Saipan Ports Improvement (Air & Sea); Tinian Ports Improvement (Air & Sea), Rota Ports Improvement (Air & Sea), and Pagan Airstrip Plan
- NMHC Strategic Plan and Disaster Action Plan
- CHCC Strategic Plan
- NMC Plan
- State Historic Preservation Plan
- Solid Waste Comprehensive Integrated Waste Management Plan

#### Area-focused Action Plans

- Garapan Revitalization Plan / Community Improvement District
- Saipan Lagoon Use Management Plan and Education Plan
- Watersheds
  - Achugao, Laolao, Garapan (SPN)
  - o Rota Talakhaya Integrated Watershed Management Plan

#### **Development Guidelines**

- 2018 International Building Code and International Residential Code
- 2006 Stormwater Manual
- Smart, Safe Growth Guidance

These plans and related planning elements and supporting action items will be regularly updated and reassessed for their consistency with the strategic components of the CSDP, implementation plan, and supporting actions regularly to ensure efficiency and leverage project synergies across these areas. Areas of interconnection are highlighted further in the "Plans" column of the implementation strategy of this CSDP.

What follows here are summaries and references to the following major plans that connect to sustainability development objectives and planning elements from PL 20-20. Additional considerations of "Smart, Safe Growth" as well as principles of integrated watershed management planning are discussed further as "development guidelines" which are intended to be incorporated as considerations early in project scoping and throughout plan update processes. Adaptive management and community engagement guidelines are also included and incorporated into planning recommendations here.

Together, these components function to support the priority planning crosswalks that aim to support sustainability outcomes by:

- Investing in critical lifelines and human resources;
- Improving supply chain resilience and economic diversification;
- Maintaining and enhancing environmental and cultural resources; and
- Expanding planning to support partnerships across sectors.

#### **Community and Special Action Plans**

#### Comprehensive Economic Development Strategy

The US Public Works and Economic Development Act of 1965 and regulations for the US Economic Development Administration (EDA) require states (and Territories) to prepare a Comprehensive Economic Development Strategy (CEDS) to apply for investment assistance under EDA's Public Works or Economic Adjustment Assistance Programs. The CEDS is the backbone planning document for EDA funding including funding for post-disaster recovery under the National Disaster Recovery Framework. Federal regulations mandate that economic resiliency to natural and man-made disasters be incorporated into CEDS updates.

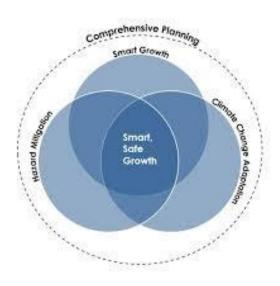
The Comprehensive Economic Development Strategy for the CNMI covers the operational period from 2016 to 2021. The approaching update presents an opportunity to incorporate SSG Principles. The plan provides a good summary of the CNMI economy and presents several strategies to bolster current economic conditions. However, the CEDS for the CNMI presently does not include discussions about economic resilience or economic recovery. Through the EDA, funds are made available to implement projects to improve economic resiliency and recovery that are identified in the CEDS following a disaster. EDA's requirements to address resiliency in the CEDS aligns well with SSG Principles. Incorporating SSG into the next update of the CEDS will help CNMI satisfy requirements to address resilience and provide access to funding to support long-term sustainability outcomes.

#### Public Land Use Plan

CNMI Public Law 15-02, Public Lands Act of 2006, mandates the Department of Public Lands (DPL) to prepare a comprehensive land use plan for public lands and update it every 5 years. An update is currently being prepared to cover the next 5-year period. The plan aims to promote cultural and economic growth for the benefit of current and future generations through eight land use objectives. The plan summarizes existing land use condition, provides an economic forecast, and details land use plans for Saipan, Tinian, and Rota. The DPL maintains geographic information pertaining to public lands in a GIS which is regularly updated.

#### Standard State Mitigation Plan

The CNMI SSMP identifies policies and actions that can be taken to reduce risk and future losses of property and life. Currently there is some overlap between the SSMP and the Climate Change Vulnerability Assessments for the Island of Saipan (2014), Rota and Tinian (2015). More thorough integration of the vulnerability assessments is recommended for the next SSMP update. The SSMP is essential for CNMI to access pre- and postdisaster hazard mitigation funds to implement SSG actions via FEMA funding programs. The FY20 Pre-disaster mitigation grant application from the Hazard Mitigation Office aims to update geospatial risk layers in close coordination with flood zone and wind map updates that are currently underway. This data will support an SSMP update by 2024 which will be incorporated into the 2025 CSDP revision. Information on natural hazards will be regularly revised as new data becomes available and reviewed considering design standards including applicable zoning and community development plan recommendation as well as the Smart, Safe Growth planning and project scoping review tool.



#### MVA Sustainable Tourism Plan

The Mariana Visitors Authority's mission is:

To promote and develop the Northern Mariana Islands as a premier destination of choice for visitors from throughout the world while providing maximum quality of life for our people. We nurture and encourage cultural interchange and environmental sensitivity for visitors' enjoyment and for our children's children.

To support this mandate, the draft vision of MVA's 2030 Sustainable Tourism Plan is:

Through integrated resource planning and management efforts, our islands support a modern, sustainable, and successful tourism industry that provides jobs, a good tax base, and diverse customer base that provides a healthy level of profit for businesses, supported by convenient, affordable transportation that promotes inter-island travel, and opportunities to enhance, preserve, and share CNMI's culture with the outside world.



Overarching draft 10-year goals include that, by 2030, the CNMI will:

- Honor Chamorro and Carolinian people heritage, natural and cultural resources;
- Provide authentic, meaningful, and memorable visitors experiences;
- Offer Northern Islands travel packages and excursions;
- Grow arrivals and average visitor expenditures;
- Increase diversity;
- Promote unique attractions; and
- Enhance tourist and historical sites to ensure a premier destination experience for visitors that nurtures local culture and resources while supporting a growing and diversified economy.



Objectives and action items to support these goals specific to research, marketing, and efforts to honor, preserve and protect our indigenous Chamorro and Carolinian culture and community are detailed further in the draft MVA 2030 Sustainable Tourism Plan which will be incorporated through this CSDP upon completion and endorsement. These goals and objectives will be updated pending MVA Board Approval of the revised Sustainable Tourism Development Plan.

The Northern Islands Mayor's Office further supports sustainable "eco-tourism" development that integrates right-sized facilities within the natural environment supporting sustainable infrastructure.

#### Statewide Comprehensive Outdoor Recreation Plan

The 2020 CNMI Statewide Comprehensive Outdoor Recreation Plan (SCORP) was developed to facilitate the planning, development and management of the CNMI's outdoor recreation resources by federal, state, local and private agencies. The CNMI's Office of the Governor has designated the Administrator of the Office of Grants Management and State Clearinghouse (OGM-SG) as the State Liaison Officer (SLO) responsible for preparing and implementing the SCORP.

"Conservation" is a planning element identified for inclusion in the Comprehensive Sustainable Development Plan (CSDP) currently in development, by Public Law 20-20, and relevant elements of the SCORP will regularly be reviewed, vetted, and integrated within the 2020 CSDP and periodic updates in coordination with the Planning and Development Advisory Council, the Legislative and Executive Branches, all three Senator Districts, and the diverse stakeholders of the CNMI.











Statewide Comprehensive
Outdoor Recreation Plan 2020
Office of Grants Management and
State Clearinghouse



The primary purpose of a SCORP is to not only lay out a vision for future parks, recreation and open space, but also serve as a roadmap to guide future funding priorities across a range of stakeholders. Complementing this is the opportunity to access new grant funding sources such as those available through the LWCF State Assistance Program, which provides a 100 percent match to insular areas. An emphasis on a well-crafted and inclusive public engagement process is critical in addressing the CNMI's changing demographics, diverse recreation needs and development patterns in the face of climate change and significant extreme weather events. Consistency with existing CNMI planning documents ensures that the goals, policies and actions included in the SCORP have been publicly vetted across a range of audiences and meets the needs of CNMI residents. The 2020 SCORP provides a detailed recreation resource inventory which is used to frame the vision, goals, and objectives as well as implementation projects that will be submitted by the SLO in annual funding cycles.

The vision for the CNMI SCORP will be realized through planning and coordination activities, legislative initiatives, programmatic changes, regulatory needs, and capital investments. The goals, policies and actions included here reflect the road map to achieving this vision:

The Commonwealth of the Northern Mariana Islands seeks to welcome and encourage residents and visitors to enjoy our unique, sustainable, high-quality outdoor recreation environment developed for all abilities which also celebrates the history, culture and abundant natural resources across the region.

As noted in the 2020 SCORP, the CNMI Comprehensive Sustainable Development Plan aims to ensure wise use of resources and positive growth outcomes for the people, environment, and the economy. Recreation planning is a critical component of these efforts. As such, the SCORP aims to align with the CSDP guiding values focusing on ensuring sustainability for outdoor resources and recreation planning in the CNMI.

Through adaptive management and efficient allocation of resources, the SCORP and resulting projects will provide world-class outdoor recreation experiences with high quality facilities and diverse activities and access opportunities for CNMI residents and visitors in harmony with land use and conservation objectives. Goals are listed here for reference while actions and policies identified to further support this vision are included in Chapter 8 of the 2020 SCORP.



Goal 1: Provide a world-class outdoor recreation experience (quality of facilities and opportunities).

Goal 2: Invest in new and improved opportunities for outdoor recreation to meet the public's needs (quantity of facilities and opportunities).

Goal 3: Improve access to the open space and outdoor recreation network by removing barriers and enhancing information dissemination and communication systems.

Goal 4: Promote outdoor recreational opportunities that preserve and sustain CNMI's natural, historic and cultural resources.

Goal 5: Ensure sustainable operation, maintenance and management of the outdoor recreation network.









# **Functional Plans**

#### **CUC Utilities Plans**

The Commonwealth Utilities Corporation (CUC) is the only publicly owned utility, providing power, water, and wastewater services in the Commonwealth of the Northern Mariana Islands (CNMI), although several private water companies operate, selling bottled water and ice. Draft management plans are in place for power, water, and wastewater infrastructure. CUC reports that updates are pending for these planning documents which will incorporate and further sustainable development goals and objectives outlined in this CSDP, and will support revisions of relevant implementation plan elements as needed. Thus, this section will be updated when revised plans are submitted and adopted as outlined in PL20-20.

#### Power

The Commonwealth Utilities Corporation provides electrical power in the CNMI. Electrical power is primarily generated in diesel-fueled power plants. Because CNMI relies almost entirely on imported diesel fuel for power generation, power supply and costs are vulnerable to fluctuations in the global oil market. Over the past 5 years, plans have been developed to explore options to increase energy security, improve operational efficiencies, and to lower power costs for the CNMI customers.

In 2013, the Office of Insular Affairs funded the development of a *CNMI Strategic Energy Plan* and a *CNMI Action Energy Plan* to investigate the feasibility of utilizing alternative energy sources to supplement diesel-fueled power plants. These plans offer several strategies and actions tailored for the CNMI to improve policies, the energy efficiency of buildings, viable renewable energy options, and other strategies to help increase energy security and lower the cost of energy.

In 2015, a draft *Integrated Resources Plan* was developed for the CUC to explore various options for power generation. As part of the planning process, the CNMI intended to issue a Request for Proposals to private companies for power generation projects, including renewable energy and fossil fuel generation. However, the RFP was canceled in 2016 and the *Integrated Resources Plan* is still a draft. The draft plan does not consider disaster resiliency, or the potential effects of climate change and these factors should be considered when selecting the best power generation solution for the CNMI.

These CUC planning resources provide an opportunity to promote SSG by incorporating relevant Principles. This can lead to steps towards increasing, where feasible, renewable energy, improving efficiencies in power generation, distribution, and in buildings, and improving the resiliency of the generation and distribution systems via retrofit and retreat. Renewable energy sources and greater efficiency are arguably the most important initiatives for CUC to pursue for future planning horizons. CUC reports that as of 2020 updates to existing plans with an emphasis on system redundancy and resiliency are underway.

# Water / Wastewater

CUC provides water service to the community which conforms to the U.S. Safe Drinking Water Act (SDWA). CUC has improved its water transmission and distribution systems throughout the recent years (i.e. new water mains, water tanks, booster stations, etc.). These improvements were made possible through local and federal funds from multiple U.S. Federal partners (OIA, USEPA, EDA). CUC continues to work with BECQ to improve its standards of operations and the quality of water supplied to the community. BECQ reports that there are 550 public and private permitted wells for drinking water, irrigation, monitoring, and exploration on Saipan, Tinian, and Rota. Of these, 342 groundwater well sources are used for drinking water with a permitted total of 16,587 gallons per minute or 995,220 gallons per hour production.

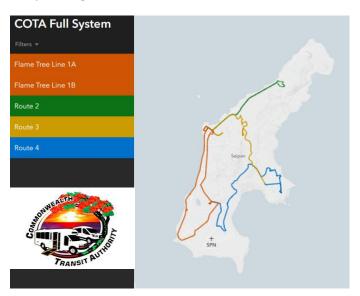
The Commonwealth Utilities Corporation operates two waste water treatment plants (WWTP) on Saipan, the Agingan and the Sadog Tasi systems, for the southern and northern collection systems respectively. Similar to the water system, CUC has received local and federal funds from the CNMI and U.S. government to rehabilitate and repair existing wastewater infrastructure to include wastewater lift station and treatment plant rehabilitations. These improvements will assist CUC to comply fully with the National Pollutant Discharge Elimination System (NPDES) requirements.

There are no CUC operated wastewater treatment systems on Tinian, Rota, or on any of the inhabited Northern Islands. CUC cannot promote or advocate for a specific treatment process, but has encouraged the respective legislative representatives to support additional research into current needs and buildout options for wastewater management systems on these islands. CUC has identified the need for updated studies and surveys to optimize systems operations and growth planning. In the next planning cycle, such data will be collected and shared to support comprehensive island-level growth discussions as area-specific plans are developed for each senatorial district and at precinct or other identified "special management area" levels.

# **Transportation Plans**

Federal law and regulations require the US Department of Transportation to integrate resilience into transportation planning processes. Federal funding is available to CNMI for highways through the Federal Territorial Highway Program (THP). Funds obligated under the THP must follow the requirements and eligibilities of 23 U.S.C. 165 as amended by the Fixing America's Surface Transportation (FAST) Act, which requires the planning process to consider projects/strategies to improve the resilience and reliability of the transportation system and improve stormwater mitigation. The DPW 20-year highway plan update, expected for adoption in 2021, will include "complete streets" concepts which emphasize designing the built environment with all transportation modalities and multiple benefits in mind, into long-term transportation planning efforts.

The CNMI DPW's the Territorial Transportation Improvement Plan includes a highways investment planning proposal as well as a transportation system plan with COTA. Incorporating SSG Principles in future transportation plans may help CNMI secure federal funds to improve the resilience of the islands' transportation systems. A 2020-2040 Highways strategic plan is currently in development with DPW and the Built Environment Taskforce members, who are working to include "complete streets" and intermodal connectivity to ensure sustainable and efficient transportation system investments. Complete streets is an approach that aims to plan



and design the built environment with all transportation modalities in mind with the goal to improve the ways in which we can travel safely and conveniently.

Additionally, the Commonwealth Ports Authority oversees port and airport-specific planning efforts that also further inter-island and international transportation needs and objectives. Quarantine and biosecurity measures are included in these efforts through DNLR-Quarantine and Customs programs.

# Commonwealth Ports Authority – Air and Sea Improvement Plans

The Commonwealth Ports Authority (CPA) oversees the management and operations of ports and airports in CNMI (Public Law 2-48). The mission of CPA is "to develop air and sea navigation to and from the CNMI to its fullest potential." CPA is responsible for three airports and three seaports on the islands of Saipan, Tinian and Rota. The Island of Pagan also has an airstrip but it is currently unavailable for air travel. CPA has shared Master Plans for the Rota and Tinian Harbors (2018) as well as a Master Plan for the Pagan Airstrip (2008), and is currently pursing port planning updates.

#### NMHC 5-Year and Disaster Action Plans

The US Department of Housing and Urban Development require states to prepare Consolidated Plans to be eligible for Housing and Urban Development (HUD) block grant programs. The CNMI 5-Year Consolidated Plan covers program years 2015-2019 and is due for an update. The past plan did not address hazard mitigation, climate change, or resilience. However, working in concert with OPD and Recovery and Resiliency planning partners, NMHC worked to ensure that the 2019 Disaster Action Plan incorporated SSG principles and planning recommendations and will be leveraging the SSG Matrix to review and revise project scopes as needed.

The update of the CDBG Consolidated Plan reflects an excellent opportunity to integrate SSG Principles. This is also a timely opportunity to use information from the SSMP, climate vulnerability assessments, and other land use planning documents to maximize the safety and resiliency of future CNMI community development. These coordinated efforts to share and act on updated information will result in improved outcomes to housing development and redevelopment as well as investment in critical infrastructure and other identified needs to support NMHC's mission to providing efficient and responsive delivery of housing, mortgage, and community development programs to the people of the Commonwealth; afford fair and equal opportunity to housing programs and services for all, with special emphasis to very-low, low and moderate income individuals, elderly and persons with disabilities; to increase and implement home ownership programs with houses that are safe, resilient, sanitary, and affordable; to encourage and promote economic independence, self-sufficiency, and upward mobility for families; and to implement programs to address the growing and future needs and economic viability of the communities in the Commonwealth.

#### State Wildlife Action Plan

DLNR-DFW's 2015 – 2025 State Wildlife Action Plan (SWAP) emphasizes the importance of coastal systems in supporting wildlife functions and human resource uses. Data points and recommendations of this plan were leveraged to identify planning coordination opportunities and support recommendations in the 2019-2020 Resources Report and this 2020 CSDP.

The 2015-2025 SWAP details threats to biodiversity and habitat in CNMI, including current invasive species, which include habitat modifiers, introduced ungulates, non-native predators, and invasive or nuisance marine species, as well as discusses threats of additional impacts due to development, climate change, military expansion, pollution, harvest, tourism and recreation, natural disasters, and sea transportation.

The SWAP outlines goals and strategies to reduce these pressures with a focus on:

- preventing introduction of new invasive species and managing known invasive species;
- (ii) increasing resources for regulatory enforcement on all islands as well as public

- awareness of conservation regulations;
- (iii) increasing public support for conservation of species and habitats and conservation mechanisms such as Marine Protected Areas;
- (iv) supporting coral restoration and reduction of pollution from land-based sources of pollution; and
- (v) building staff capacity to support these objectives.

These goals and strategies are further incorporated by reference here and will be revisited in the 2025 CSDP and SWAP update.

# CHCC Strategic Plan

The Commonwealth Healthcare Corporation's (CHCC) 2015-2020 Strategic Plan aims to improve the standard of services to the people of the CNMI as well as overall health and wellbeing of its populace. To achieve this goal, CHCC has been working to implement eight (8) operating strategies which include organizational and facilities objectives. Outcomes include obtaining full accreditation from the Centers for Medicare and Medicaid (CMS) for the hospital, public health, behavioral health, as well as decrease the incidence of the top six (6) major causes of death and debilitation in the CNMI: cancer, diabetes, hypertension/heart disease, teen pregnancy, HIV/STI, and substance abuse. These goals are aimed to address community health system needs and support achievement and maintenance of numerous targets of Sustainable Development Goal 3 – Good Health and Well Being. Updates to the prior CHCC Strategic Plan are pending and will continue to further these efforts.

# NMC Strategic Plan

The Northern Marianas College Five Year Strategic Plan 2015-2020—Full Speed Ahead provides direction for prioritizing future key initiatives, which will ultimately link to the allocation of resources. This Plan aims to assist NMC in focusing its efforts to cost-effectively provide the best services and learning opportunities for students across the Northern Mariana Islands of Rota, Saipan, and Tinian. The Strategic Plan identifies 24 benchmarks and target goals which will help NMC assess progress and support modifications in the next plan revision.

The Strategic Plan and the supporting annual operational plans apply an adaptive management approach to outline specific responsible parties, needed resources, and a timeline for implementation. These efforts aim to further support NMC's mission and vision statements:

#### **Mission Statement**

Northern Marianas College, through its commitment to student learning, provides high quality, affordable and accessible educational programs and services for the individual and people of the Commonwealth.

Adopted by the Board of Regents, September 26, 2013

#### Vision Statement

Northern Marianas College will serve as the engine to drive the economic growth and the social and cultural vitality of the Commonwealth.

Adopted by the Board of Regents, September 26, 2013

#### State Historic Preservation Plan

Public Law 3-39, the Commonwealth Historic Preservation Act of 1982, 1 CMC '§ 2381-2382 and 2 CMC '§ 4811-4842, created the Historic Preservation Office (HPO) within DCCA and an independent Historic Preservation Review Board. In 1994, Executive Order 94-3 reorganized the Commonwealth government's executive branch, changed agency names and official titles, and effected numerous revisions including abolishing the Review Board and transferring its functions to HPO. As such, HPO functions to regulate and maintain culture resources and implements regulations with the goal to balance "preservation of cultural and historic properties against the needs of development and continuing use of land and other resources" (2 CMC § 55-10-101). HPO's regulations further declare its policy "to foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony and fulfil the social, economic, and other requirements of present and future generations." These goals are supported by regular planning, reporting, and program implementation duties that include site recording, maintained, and community education that are reflected in the periodically updated State Historic Preservation Plan.

The State Historic Preservation Plan is a document required by the National Park Service's Historic Preservation Fund program. It is a five-year planning document intended to outline how Historic Preservation activities will integrate with other CNMI agencies. It also discusses current challenges faced by the program as well as outlines broad-based goals and specific objectives to address during the span of the document. The current Historic Preservation Plan is the 2011–2015 Historic Preservation Plan; it was extended due to natural disasters (Super Typhoon Soudelor in 2015 and Super Typhoon Yutu in 2019) and an update is pending. The current plan outlines major historic preservation activities which fall within several general program priority areas including survey, registration, project review, and public education and cultural preservation.

HPO envisions that now and in the future, historic preservation will play a key role in improving the quality of life for all residents of the CNMI. As the 2011-2015 CNMI Historic Preservation Plan describes this vision encompasses the Historic Preservation Office as well as schools and the community at large. Although an update to the Historic Preservation Plan is pending, the vision and discussion of challenges and opportunities are included here for additional context.

The 2011-2015 Historic Preservation Plan's vision includes aspirations that:

- Historic and cultural resources will be considered by CNMI residents as irreplaceable links to our past whose preservation and study will add to our understanding of the archipelago's unique cultures and history.
- Educators will take full advantage of historic preservation by ensuring that important historical and cultural data generated by archaeological and historical research is integrated into school curricula. Students will take inspiration from the past and use it as a compass to navigate an uncertain and challenging future.
- The legislature will recognize the importance of historic preservation and will appropriate adequate levels of funding to ensure that historic and cultural resources are identified, protected, studied and interpreted. The legislature will also enact stronger laws which will provide preservationists and others with the tools necessary to ensure that important resources are respectfully considered and afforded appropriate treatment.

- Historic Preservation will be integrated fully into economic development and historic resources will be viewed by developers as assets rather than liabilities. Preservationists and developers will recognize common ground, thus avoiding adversarial relationships.
- Visitors to the CNMI will be provided opportunities to learn about the history and cultures of the Northern Mariana Islands and residents will take rightful pride in the many accomplishments of their ancestors. Cultural tourism will be embraced and will serve as an important drawing attraction for visitors from around the world.

When discussing challenges and opportunities, the plan identified eight "issues" or challenges in accomplishing the vision as well as goals and objectives for achieving these goals. These include needs for (i) adequate funding for Historic Preservation, (ii) integration of historic preservation into the visitor industry of the CNMI, (iii) land use conflicts, (iv) public participation, (v) expanded survey, inventory, and registration of cultural and historic resources, (vi) federal agency cooperation, (vii) public education, and (viii) cultural preservation. These challenges and opportunities to support and expand on the 2011-2015 State Historic Preservation Planning vision will be addressed in subsequent plan updates.

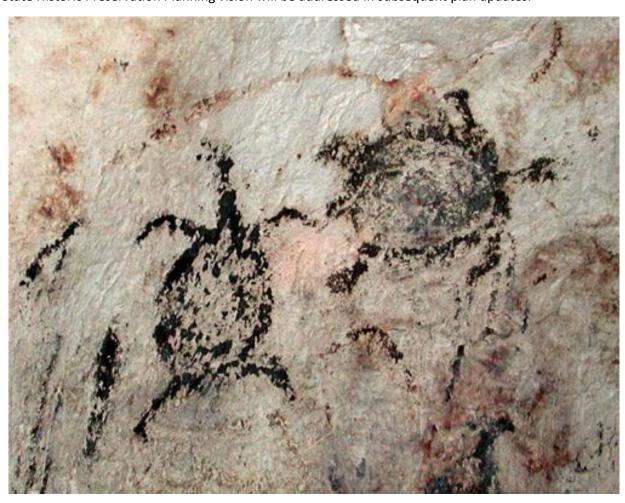


Figure 13 – The Chugai' Pictograph site on Rota is one of 37 National Parks Service designated Register of Historic Places sites on Rota, Saipan, and Tinian, which have 10, 20, and 7 sites listed respectively.

As of February 2021, there are no sites currently listed in the Northern Islands.

# Comprehensive Integrated Solid Waste Management Plan

In response to an unprecedented year of natural disasters the United States took action to provide dedicated funding to address numerous federally declared disasters. Public Law 116-20 earmarked \$56 million for the U.S. Environmental Protection Agency's (USEPA) State and Tribal Assistance grants to address necessary expenses related to the consequences of Super Typhoon Yutu and support comprehensive solid waste management planning efforts. Initial funding has been made available to support planning, capacity building, emergency repairs, and the



Figure 14 - The "zero waste" concept aims to reduce solid and hazardous waste protection at the source, support recycling and composting, and use conversion technologies to reduce the need for landfilling.

development of a comprehensive integrated solid waste management plan for all of the islands of the CNMI, with emphasis on achieving a self-sustaining waste management system that supports SDG 12 "responsible consumption and production patterns".

The Inter-Island Solid Waste Management Taskforce, comprised of representatives from DPW, OPD, BECQ, and the Offices of the Mayors and supported by USEPA aims to have a completed comprehensive integrated solid waste management plan that includes "Zero Waste" initatives ready for incorporation into the next CSDP update by 2025. This will support the 10-year goal that by 2030, 50% of the recyclable waste stream will be diverted from CNMI's landfill or RCRA-compliant waste management facilities on Saipan, Tinian, Rota, and the Northern Islands with diverted waste composted, reused, or sold to support sustainable waste management systems. Island-specific waste assessments and operational plans will be further developed through this process to support this goal.



Figure 15 – This slide from the Inter-Island Solid Waste Management Taskforce meeting kick-off meeting summarizes how a 2019 assessment of Saipan's waste stream reflected nearly 3/4s of materials entering the Marpi Landfill were identified as "traditionally recyclable" and highlights the waste management hierarchy which emphasizes avoidance, reduction, reuse, and recycling before waste disposal. The Inter-Island Solid Waste Management Taskforce will support comprehensive planning and project implementation efforts to meet or exceed diversion goals, extending the life of the Marpi Landfill and resulting in important improvements in waste management across the CNMI.

# **Area-Specific Plans**

# Saipan Zoning Law and CNMI Setback Requirements

Established in 2006, the Saipan Office of Zoning and its regulations guide growth on the island of Saipan. Zoning comes first in the development permitting process on Saipan, and pertains to considerations including but not limited to proposed land use, structure height, parking, signage, and overall design. Applications that require variances are reviewed and administered by the Zoning Board. The Office of Zoning has also led district specific planning such as the Garapan Revitalization Plan discussed further below. Together this guidance aims to improve quality of life of our community. Planning elements of this CSDP such as "land use", "community design", and "redevelopment" provisions closely align with ongoing programs within the Office of Zoning that support public health, safety, and general welfare of the residents and visitors of the CNMI as well as promote wise use of our natural resources. In part to further these goals, in 2017 the Office of Zoning was designated as the responsible agency to lead blighted building remediation efforts. The Office of Zoning, with support of the Department of Public Lands and with coordination from the Office of Planning and Development submitted a proposal to FEMA's Building Resilient Infrastructure and Communities grant program for FY21. If selected, this initiative will fund the creation of policies to support property acquisition and risk remediation for prioritized blighted structures. Such guidance will be included in future updates of the CSDP as applicable when it becomes available.

Development guidelines for setbacks and parking are also established for the rest of the CNMI through the Coastal Zone Management Program (CZMP) under DCRM. Although primarily focused on ensure avoidance of significant impacts to coastal resources of particular concern, since 1983 the CNMI's Coastal Program has provided area- and resource-specific management standards to achieve wise use of natural resources from ridge to reef on all islands. Current strategic planning efforts include supporting "Better Buildings" and reducing risks of coastal hazards to people, property, and the environment.

# Garapan Revitalization Plan and Community Improvement District

The 2007 Garapan and Beach Road Revitalization Plan was created to guide CNMI agencies, landowners, and developers to renew Garapan and Beach Road and achieve a vision of a "premier family-oriented destination for visitors and island residents, featuring a wide range of shopping, entertainment, civic, and commercial uses within a pristine ocean and island setting." The plan outlines aspirations for a "bustling" Garapan Core with "pedestrian areas and retail businesses with weather protection, landscaping, inviting buildings, and tasteful signage." The plan acknowledges that it is ambitious and recognizing funding challenges, suggests that to achieve this vision Garapan/Beach Road improvement efforts must: 1) start with several small, relatively inexpensive measures; 2) leverage existing public funds to achieve private investment; and 3) use this plan to secure additional funds. It emphasizes that the community (public and private organizations) must plan to address long-term concerns such as utility capacity, water quality, coordinated business development, and development of large sites.

It goes on to detail that the critical element in such an approach is collaboration among all parties. Efforts in one area—for example, parking or street improvements—will be much less effective unless coupled with sound development regulations and effective management of public spaces. Other communities have achieved the kind of success envisioned in this plan through a combination of:

- Strong zoning controls and enforcement
- Active public-private partnerships

- Effective public land management
- Cooperation among businesses for mutual benefit
- Strategies for public and private investment
- Sustained maintenance and management efforts

CNMI continues to work towards these goals and has made much progress. There has been considerable public and private investment in this special planning area, with numerous studies and implementation projects implemented or underway including roadway, infrastructure, and ecosystem restoration efforts.



Figure 16 - Detail of "Garapan Core"

Today, OPD is supporting interagency efforts to continue Garapan Revitalization implementation projects that aims to transform Garapan into a premier family-friendly destination that was envisioned over a decade ago. To achieve this, leveraging public-private partnerships and ongoing efforts to invest in Saipan's tourism center, the Garapan Revitalization Task Force (GRTF) was reestablished in 2018. Composed of businesses, residents, and relevant government agencies, the GRTF members are collaborating to alleviate some of the many challenges facing the area. The GRTF is updating the 2007 Garapan Revitalization Plan to reflect current needs and priorities, and has supported the proposal of legislation to create a "Community Investment District" that will establish a funding mechanism to support prioritized projects. This work aims to build organization and managerial infrastructure as well as improving the physical setting of the Garapan Core to make this district the vibrant, pedestrian friendly "cohesive community focal point" of business, cultural, and civic activities on Saipan.

As of the creation of this CSDP, legislation is pending to designate Garapan as a "Community Improvement District" and several federal grants are being implemented to support the Garapan Revitalization as a "Complete Streets" pilot project. By holistically investing in shared visions for the tourism hub of the CNMI, numerous sustainability outcomes will be furthered. Future updates to the Garapan Revitalization Plan will reflect this holistic approach of applying multidisciplinary knowledge to achieve socio-economic, human, and environmental health benefits for all.



# Saipan Lagoon Use Management Plan and Educational Plan

The Saipan Lagoon is one of CNMI's most treasured environmental, economic, and recreational resources. First published in 1985, the Saipan Lagoon Use Management Plan (SLUMP) outlines a strategy to ensure sustainable use and environmental quality for the diverse western lagoon. The SLUMP has been updated over the years to adapt to declining ecosystem health, eroding beaches, water quality challenges, and an expanding number of users. The most recent 2017 update incorporated recommendations and associated actions identified by a wide range of agencies, legislative leaders, and others with a stake in Lagoon use management, such as the Saipan Chamber of Commerce, marine sports operators, fishermen, hospitality groups, and the community at large. The 2017 update identified twelve recommendations, partners, and action items to support cross-cutting management goals:

Recommendations	Partners	Actions
#1 Designate Lagoon use areas	DPS-BS, DFW, US Coast Guard, USACE, HANMI, NOAA, MSOA	<ol> <li>1.1 Collaborate to finalize and adopt designated use areas.</li> <li>1.2 Develop a companion map that shows historical/cultural locations and areas for habitat protection.</li> <li>1.3 Map designated swimming areas to help with monitoring and enforcement of seagrass removal regulations.</li> <li>1.4 Evaluate the number, type, and location of existing and additional Lagoon moorings and markers.</li> <li>1.5 Educate Marine Sports Operators (MSOs), residents, and visitors on designated use areas, transits, and launches.</li> </ol>
#2 Update marine sports permit	DPS-BS, NOAA, MSOA, DLNR-DFW, Other Lagoon Groups	<ul> <li>2.1 Enforce the current cap on the number of commercial operator permits. Formally establish a quota.</li> <li>2.2 Update DCRM rules and regulations.</li> <li>2.3 Update permit conditions to be consistent with Sections 101 and 102 of the 1987 Boating Safety Regulations.</li> </ul>
#3 Minimize watershed impacts on northern Lagoon	DPL, Office of Zoning, CRM Agency Board, DLNR-DFW, BECQDEQ, DLNR-Parks & Recreation, DPW, Mayor's Office	<ul> <li>3.1 Collaborate with DPL to incorporate land conservation in the northern Lagoon.</li> <li>3.2 Establish a northern Lagoon watershed district with stringent environmentally-sensitive development criteria.</li> <li>3.3 Strengthen language in Chapter 15-10-100,300 regarding major and minor APC permit requirements.</li> <li>3.4 Develop a CAP or comprehensive watershed management plan for the Northern Lagoon Watershed.</li> <li>3.5 ID opportunities for improvement at permit renewal, road repair, and utility upgrades.</li> </ul>
#4 Develop and implement Lagoon user education plan	DLNR, DFW, DPL, Litter Control Board, MVA, MINA, Chamber of Commerce, MSOA, Northern Marianas Diving Operators Association, SFA	<ul> <li>4.1 Develop an overarching Lagoon education plan with target audiences, messaging, and delivery mechanism.</li> <li>4.2 Expand MVA pilot educational program targeting snorkeling and diving tour operators.</li> <li>4.3 Create Saipan Lagoon Sustainable Use educational brochures and maps for permittees, tourists, and residents.</li> <li>4.4 Develop a trash disposal educational video that could be shown on airplanes or at the airport.</li> <li>4.5 Collaborate with MVA, DFW, MINA, and DPL on trash management in the Lagoon.</li> <li>4.6 Consider implementing in-water/beach signage to provide information.</li> </ul>
#5 Improve wastewater infrastructure	CUC, BECQ-DEQ, US EPA	<ul><li>5.1 Coordinate on wastewater infrastructure demands, planned improvements, and water quality monitoring.</li><li>5.2 Support CUC in enforcement, securing grant funds, and fast-tracking permitting for priority upgrades.</li></ul>

		[ 2 Dayslan a hottor understanding of the hostoria
		5.3 Develop a better understanding of the bacteria concentrations in effluent discharge from the Sadog Tasi WWTP
#6 Improve public	HANMI, DPL, DPSBS,	6.1 Work with partners on priority improvements at Outer Cove
access	MSOA, DFW,	Marina, Sugar Dock, and beach barbeque areas.
infrastructure	DLNR-Parks &	6.2 Determine if there is a benefit to moving concessionaires off
iiiiastructure	Recreation, USACE	the beaches and into hotels.
		6.3 Ensure developers/hotels maintain a clearly marked,
		publicly accessible passage to the shoreline
#7 Encourage	DFW, DPS-BS, DPL,	7.1 Determine how to enforce motorized vessel restrictions and
sustainable use of	MVA, MINA,	integrate use area designations and transit routes.
Mañagaha	BECQ-DEQ	7.2 Discuss water quality and habitat protection concerns
resources		related to overcrowding with DFW and MVA.
		7.3 Discuss incorporating eco-friendly green business practices
		into permit requirements with partners.
		7.4 Review NPDES permit conditions, monitoring reports, and
		treatment technology to assess necessary upgrades
#8 Create	DLNR-DFW, DPS-BS, SFA	7.5 Provide signage about trash management on Mañagaha 8.1 Establish free equipment program for fishermen that
	DLINK-DEW, DES-BS, SEA	distributes adequate safety equipment and clothing.
fishermen safety		8.2 Provide a venue for a safety training program for fishermen,
equipment		as part of a Lagoon education plan (Rec. #4).
program		8.3 Distribute educational brochure to fishing community.
		8.4 Discuss a possible regulatory approach that would require
		fishermen to wear/carry proper safety equipment.
#9 Support BECQ	BECQ-DEQ, NOAA,	9.1 Improve monitoring capabilities.
monitoring	CUC, DPW,	9.2 Use monitoring data from permit requirements as additional
program	University of Guam-	data points for Lagoon-wide studies.
	WERI	9.3 Consult with the University of Guam-WERI about prioritizing
#40 F   1   1	CID Day areas DECODEO	data collection and analysis of ecological systems
#10 Evaluate and	CIP Program, BECQDEQ,	10.1 Require that public infrastructure improvement projects
implement	DFW, DPL, Legislature, DPW, USACE	constructed a certain distance from an eroding shoreline implement viable shoreline stabilization and/or beach re-
appropriate	OSACE	nourishment projects.
shoreline		10.2 Secure grant funding for shoreline enhancement and
stabilization and		stabilization projects not covered by CIP funds.
erosion control		10.3 As part of APC permit review, ensure that private
projects		applicants have considered shoreline stabilization concerns and
		needs.
		10.4 Consider allowing shoreline projects as part of permit
		mitigation alternatives.
		10.5 Incorporate education and outreach components into
		shoreline protection and climate adaptation projects.  10.6 Collaborate with DFW in re-vegetation efforts at
		Mañagaha.
		10.7 Condition as part of permitting that beach re-nourishment
#11 Improve	DPW, CUC, US EPA,	
#11 Improve stormwater	DPW, CUC, US EPA, BECQ-DEQ (Water	10.7 Condition as part of permitting that beach re-nourishment projects use clean, uncontaminated sand.
•		<ul> <li>10.7 Condition as part of permitting that beach re-nourishment projects use clean, uncontaminated sand.</li> <li>11.1 Meet with DPW and US EPA to review new MS4 program requirements, before the permit is issued.</li> <li>11.2 Update the CNMI stormwater management manual post-</li> </ul>
stormwater	BECQ-DEQ (Water	10.7 Condition as part of permitting that beach re-nourishment projects use clean, uncontaminated sand.  11.1 Meet with DPW and US EPA to review new MS4 program requirements, before the permit is issued.  11.2 Update the CNMI stormwater management manual post-construction standards.
stormwater	BECQ-DEQ (Water	10.7 Condition as part of permitting that beach re-nourishment projects use clean, uncontaminated sand.  11.1 Meet with DPW and US EPA to review new MS4 program requirements, before the permit is issued.  11.2 Update the CNMI stormwater management manual post-construction standards.  11.3 Prepare GIS maps and track status of stormwater outfalls
stormwater	BECQ-DEQ (Water	10.7 Condition as part of permitting that beach re-nourishment projects use clean, uncontaminated sand.  11.1 Meet with DPW and US EPA to review new MS4 program requirements, before the permit is issued.  11.2 Update the CNMI stormwater management manual post-construction standards.  11.3 Prepare GIS maps and track status of stormwater outfalls and piped contributing drainage areas within Lagoon
stormwater	BECQ-DEQ (Water	10.7 Condition as part of permitting that beach re-nourishment projects use clean, uncontaminated sand.  11.1 Meet with DPW and US EPA to review new MS4 program requirements, before the permit is issued.  11.2 Update the CNMI stormwater management manual post-construction standards.  11.3 Prepare GIS maps and track status of stormwater outfalls and piped contributing drainage areas within Lagoon watersheds.
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stormwater management	BECQ-DEQ (Water Quality Section)	10.7 Condition as part of permitting that beach re-nourishment projects use clean, uncontaminated sand.  11.1 Meet with DPW and US EPA to review new MS4 program requirements, before the permit is issued.  11.2 Update the CNMI stormwater management manual post-construction standards.  11.3 Prepare GIS maps and track status of stormwater outfalls and piped contributing drainage areas within Lagoon watersheds.  11.4 Update permitting conditions for redevelopment projects, repaving, and road improvements to encourage retrofitting of existing unmanaged impervious cover.
stormwater	BECQ-DEQ (Water	10.7 Condition as part of permitting that beach re-nourishment projects use clean, uncontaminated sand.  11.1 Meet with DPW and US EPA to review new MS4 program requirements, before the permit is issued.  11.2 Update the CNMI stormwater management manual post-construction standards.  11.3 Prepare GIS maps and track status of stormwater outfalls and piped contributing drainage areas within Lagoon watersheds.  11.4 Update permitting conditions for redevelopment projects, repaving, and road improvements to encourage retrofitting of

mechanism for	Commerce	source for Lagoon protection.
Lagoon protection		12.2 Leverage the Micronesia Challenge funds to protect
		Lagoon.
		12.3 Collaborate with MINA (Micronesia Islands Nature Alliance) on grant funding opportunities.
		12.3 Explore alternative revenue to the Marine Resource
		Investment Act, such as user fees or voluntary funds.
		12.4 Collect fees for luxury private boat and yacht docking or
		anchoring within the Lagoon.
		12.5 Research opportunities for public-private partnerships
		related to water quality improvements

To address Recommendation #4: Develop and Implement a Saipan Lagoon User Management Plan, in partnership with **Marianas Visitors** Authority (MVA), Northern Marianas College (NMC), and other agencies and with input from the Marine Sports Operator community, DCRM completed the Saipan Lagoon User Education Plan (SLUEP) in November 2020.

The recommendations offered in this guidance document will help lagoon users conduct their activities in a sustainable fashion that will minimize direct impacts on these important resources.

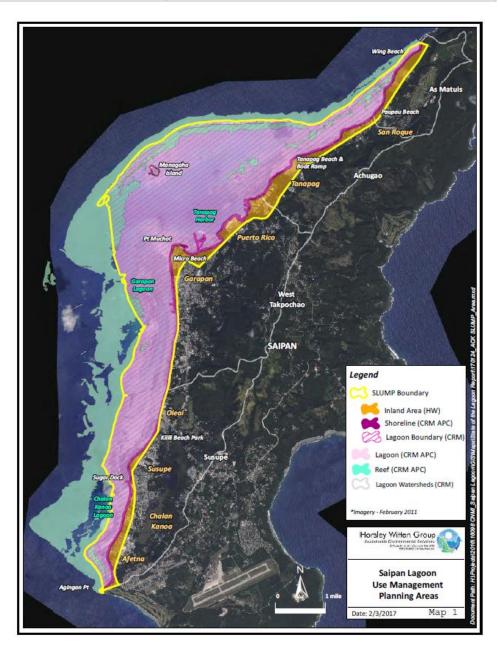
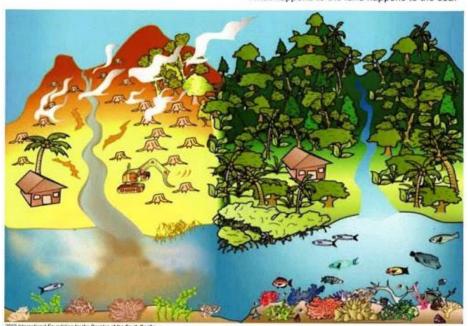


Figure 17 – SLUMP Planning Area, 2017 Update, BECQ-DCRM

# Priority Watersheds and the Integrated Watershed Management Planning Approach

A watershed is a topographically defined area, a drainage basin, wherein the total area encompasses all the water that drains into a single body of water (e.g. stream, pond, ocean). Watersheds are also hydrological response units, biophysical units, and holistic ecosystems in terms of the materials, energies, biota, knowledge, cultures, histories, futures, and assemblages that flow through them (Wang et al. 2016). Given the geological and biological relevance of watersheds as units for physical analysis, following the global efforts for using watersheds as socioeconomic-political units for management and planning, this plan recommends a shift towards the integrated approach of management that incorporates the relationships between institutions, humans, and non-humans – including soil, water, landscape, seascape, flora, and fauna.



What happens to the land happens to the sea.

Watershed management has existed throughout the world for thousands of years and was likely a critical component of the First People of the Marianas, utilizing freshwater resources to determine community locations and for agricultural benefits. The California Department of Conservation (2015) defines watershed management as "the study of the relevant characteristics of a watershed aimed at the sustainable distribution of its resources and the process of creating and implementing plans, programs, and projects to sustain and enhance watershed function that affect the plant, animal, and human communities within a watershed boundary." Integrated watershed management builds upon the foundational principles of watershed management to integrate various social, technical, and institutional dimensions, as well as conservation, social, and economic objectives (German et al. 2007).

"Integrated Management is an adaptive, comprehensive, integrated multi-resource management planning process that seeks to balance healthy ecological, economic, and cultural/social conditions within a watershed. It serves to integrate planning for land and water; it takes into account both ground and surface water flow, recognizing and planning for the interaction of water, plants, animals, and human land use found within the physical boundaries of a watershed" (Red Deer River Watershed Alliance 2015)

# Principles of Integrated Watershed Management

In a summary of integrated watershed management approaches in Canada (2016), the Canadian Council of Ministries of the Environment generated a list of eleven principles of Integrated Watershed Management (IWM) that this comprehensive management plan has incorporated into the planning, implanting, and evaluating processes:

- 1. **Geographical Scale**: Priority watersheds are identified as with planning boundaries at an appropriate scale to address the issues under consideration in a way that recognizes its connectedness to upstream and downstream systems.
- 2. **Ecosystem Approach**: An interconnected process that uses the best available knowledge, considers cumulative impacts, and promotes watershed and sub-watershed approaches.
- 3. **Adaptive Management**: Flexible and continuous improvement and adaptation of approaches, policies, and management are undertaken by incorporating new knowledge and innovative design, practices, and technology.
- 4. **Integrated Approach**: Land, water, and infrastructure planning; investment and management considering the direct, indirect, or potential impacts and their interdependencies.
- 5. **Cumulative Impacts**: Planning considers the cumulative effects on the environment and the interdependency of air, land, water, and living organisms.
- 6. **Precautionary Principle and No Regrets Actions:** Caution is exercised to protect the environment when there is uncertainty and environmental risk.
- 7. **Proactive Approach:** Environmental degradation is prevented because it is better for the environment and more cost-effective to prevent damage than to clean up after the fact.
- 8. **Shared Responsibility:** The responsibility for policy and program development and implementation is shared within the mandate of all actors at the appropriate scale.
- 9. **Engaging Communities and Indigenous Peoples:** The IWM process recognizes and supports the identity, culture, and interests of local communities and indigenous peoples, as well as enabling meaningful participation and incorporating traditional ecological knowledge and practices.
- 10. **Sustainable Development:** The right to development equally meets the economic and societal needs without compromising the environment for present and future generations.
- 11. **Natural Capital:** Natural capital is protected and managed to reduce short- and long-term negative economic and human health impacts; nature-based solutions are considered and applied where determined effective to build resilience of natural capital; natural systems are managed to provide goods and services of environmental, economic, social, cultural, and spiritual values, now and for the future.

These values are reflected in regularly updated plans for the Garapan, Laolao, Talakhaya, and Achugao priorities watersheds. Conservation Action Plans have been in place in Garapan, Laolao, and Talahaya since 2013, 2009, and 2012 respectively. Currently updates are underway for all of these watersheds. New priority area and plan in development for Achugao. While these updates have all been delayed due to Covid19, publications are forthcoming and plans will be reviewed and upon endorsement by the PDAC, incorporated here by reference.

# Garapan Watershed Management Plan - 2020 Update

The 2020 update for the Garapan Watershed Management Plan is pending but an early draft has been shared with the Watershed Working Group, with the draft vision and 10-year goals and objectives detailed here. This section will be updated as needed when the revised plan is submitted and adopted as outlined in P.L. 20-20.

Vision: The Garapan watershed is the CNMI's "Hafa Adai" and "Tirow" to the world. Garapan is the convergence of our economic, natural and cultural resources. It provides our community with safe and healthy resources to engage in and share with our visitors. It is thriving and resilient to the impacts of climate change through smart, safe, development and actions from ridge to reef.

10-year Goal: By 2030, Garapan will have:

- 1. Improved lagoon water quality through:
  - o Improved management to reduce illicit discharge and improper FOG disposal
  - Upgraded infrastructure to handle loads
  - Reduced stormwater runoff
  - Green infrastructure to reduce flooding events
  - Reduced and controlled stray animal population
  - Smart, Safe Growth Principles integrated into development permitting and management activities
- 2. Improved management of Critical Habitat (ie. wetlands, mangrove, seagrass, reef, forest) through:
  - Invasive species prevention and management
  - Greater compliance and enforcement of natural resource management regulations through clear updated regulations and regulatory framework.
- 3. More sustainable and resilient development through:
  - Improved permitting processes based on integrating Smart, Safe Growth principles and best available data that considers climate change and natural disaster impacts and risks
  - o Inter-agency collaboration and decision making for permitting
  - Community engagement that fosters environmental stewardship

# Lao Lao Watershed Management Plan - 2020 Update

The 2020 update for the Lao Lao Watershed Management Plan is pending. Thus, the 2009 plan is referenced here.

Vision: Laolao is world renowned as a beautiful tropical destination where natural, cultural and historical resources, knowledge and values are abundant for all to enjoy above and below the waves of Saipan.

Mission: In appreciation of the cultural, historical, and environmental significance and educational, economic, and social values that benefit all stakeholders—indigenous people, residents, tourists, traditional fishermen, dive operators and divers—we pledge to protect, preserve, restore, and manage Laolao Bay through stakeholder-driven sustainable resource management practices.

This section will be updated when the revised plan is revised and adopted as outlined in PL20-20.

# Talakhaya / Sabana Watershed Management Plan - 2019-2020 Update

The 2020 update for the Garapan Watershed Management Plan is pending but an early draft has been shared with the Watershed Working Group, with the draft vision and 10-year goals and objectives detailed here. This section will be updated as needed when the revised plan is submitted and adopted as outlined in PL20-20.

The vision for the Talakhaya watershed was developed by the management team of the CAP in 2007:

"Protehi i rikesan i tano yan i tasi" – "Protect the wealth of our land and sea"

Additionally, through the watershed management planning process of 2018, a number of mission statements for the future of Talakhaya stood out and have been highlighted throughout this document:

- 1. Ensure the value of the watershed (including the ecosystem services, economic benefits, cultural components, etc.) are equitably distributed to the entire community (as defined by both the human and non-human objects found in and around a watershed);
- Guarantee the integration of watershed protection, conservation, and management with the necessary provision of safe drinking water (particularly in the context of limited water resources on small islands);
- 3. Establish the role stakeholders and managers play in ensuring a resilient and productive watershed for future generations (without sacrificing the needs of the present or undervaluing the impact of today on the future of the watershed); and
- 4. Reflect the indigenous values relatedness, respect, and reciprocity and the traditional ecological knowledge via landowners, residents, elders, and managers throughout the planning process and allowing space for all stakeholders to contribute to the continued management of the watershed.

Five broad strategies were determined to best address the threats identified in the 2012 and 2015 Conservation Action Plans:

- A. Revegetation of critically eroding areas in the Talakhaya/Sabana;
- B. Implementation of engineering actions that would decrease erosion in the watershed;
- C. Raising awareness and education of the Rota community about how fires and poaching are affecting the watershed;
- D. Creation of effective enforcement measures for local laws; and
- E. Collection of necessary species populations information in the area to allow for more informed policy decisions.

Although there has been significant progress throughout the watershed, many of the problems are still present or have altered in unexpected ways. The following sub-sections identify the overarching goals for watershed planning, the actionable strategies for achieving those goals, the objectives for each strategy, and the recommended actions to guide managers and planners.

#### Goals

Utilizing background materials and informed by stakeholder participation, seven overarching goals have been identified for Talakhaya:

- 1. Equitable distribution of watershed values;
- 2. Dedication to the restoration of the landscape;
- 3. Increased knowledge of watershed systems:
- 4. Reduction of erosion and sedimentation;
- 5. Commitment to meet future water needs;
- 6. Raised community awareness of watershed; and
- 7. Improved monitoring and evaluation of the watershed area.

Please refer to the 2020 Talakhaya/Sabana Watershed Management Plan for detailed strategies, objectives, and actions.

As of 2021, there are ongoing island-wide and resource-specific watershed planning efforts underway. This section will continue to be updated when the revised plan is submitted and adopted as outlined in Public Law 20-20 and this planning document, which envisions executing implementation plan updates at least every five years and full plan review and revision every ten years.

# **Development Guidelines**

#### 2018 IBC

The International Building Code 2018 (2018 IBC) is a model code produced by the International Code Council (ICC). This document provides the foundation for many state and city codes. The 2018 IBC combined with local jurisdiction amendments form the state codes. The CNMI adopted 2018 IBC on July 28, 2020 through publication of updated regulations in the Commonwealth Register (42 CR 7 at 43713). As such, all new buildings and building repairs must meet or exceed these requirements as certified by DPW. Current capacity building and implementation training efforts are underway to further support this program, which aims to preserve public health and safety and provide safeguards from hazards associated with the built environment through guidance specific to design and installation of innovative materials that meet or exceed public health and safety goals.

#### Smart, Safe Growth

"Safe, Smart Growth" (SSG) is a set of development strategies that aim to ensure the growth of communities and infrastructure that are resilient to natural disasters with thriving economies and healthy environments. SSG is a comprehensive planning approach that emerges from the intersection of three key areas of practice – hazard mitigation, climate impact adaptation, and smart growth – which are each associated with voluminous policy guidance and best practices. Combining elements of these best practices can identify opportunities to incorporate successful implementation of SSG Principles in planning and development. These principles include considerations such as early planning collaboration, establishing policies to support sustainable development and maintenance of ecosystem services, and promotion of knowledgeable communities as well as adaptive management frameworks.

To support the operationalization of these principles in CNMI, a Guidance Manual for Smart, Safe Growth of the Northern Mariana Islands was developed for OPD as the product of a technical assistance grant from U.S. Federal Emergency Management Agency (FEMA) and the U.S. Environmental Protection Agency's Region IX Pacific Islands Office (EPA) in November, 2018. The guide included a "regulations review" highlighting opportunities to mainstream "smart, safe growth" (SSG) principles into CNMI law and policies.

The guide notes that "resilient communities that result from incorporation of SSG principles are planned and built to withstand current and future weather events and natural hazards with minimal physical damage or community disruption." These principles are compatible with complementary concepts of sustainable development as well as indicators and metrics of the United Nation's Sustainable Development Goals. They can also be applied to project-specific planning and project implementation review through the use of a checklist developed to incorporate these considerations, available here.

# CNMI Sustainability Guide for the Hospitality Industry

In 2018, BECQ-DCRM published an industry-targeted manual to support sustainable design, construction, and operation practices for CNMI's largest economic sector, the hospitality industry. This manual provides guidance on how the implementation of best management practices (BMPs) can contribute to long-term environmental, social/cultural, and economic sustainability with the goal to ensure that the tourism industry remains an economic driver now and in the future.

For the purposes of this Manual, sustainability is achieved when there is a balance between the planet, people, and profit. The Triple-bottom line is a concept familiar to the corporate world, and it is in this context that the hotel and accommodations sector is challenged to support a Sustainable CNMI.

The Manual includes 36 best management practices (BMPs) for sustainable development organized into 10 practice categories:

(A) Sustainable Sites; (B) Water Resources; (C) Material Resources and Solid Waste; (D) Energy and Global Climate; (E) Sustainable Management; (F) Sustainable Purchasing; (G) Engagement and Outreach; (H) Local Community Support and Human Resources; (I) Cultural Heritage; and (J) Biodiversity Conservation. BMPs are described within individual fact sheets that include a set of recommended actions; benchmarks to measure performance; and other information to support implementation, lower operating costs, and increase marketing power to environmentally conscious customers. BECQ-DCRM offers preapplication meetings to support early consideration of these recommendations as well as local regulatory requirements early in the scoping process. Visit <a href="mailto:dcrm.gov.mp/">dcrm.gov.mp/</a> to learn more.



Figure 18 – Sustainability Triple Bottom Line. Source: University of Wisconsin.

# 2006 Stormwater Management Manual

Stormwater management is an important part of site development to ensure nonpoint source pollution and water quality impacts are avoided and minimized. BECQ-DEQ administers the Nonpoint source pollution control program and requires that all earthmoving activities implement appropriate site management measures through the "One Start" permitting process. The 2006 Stormwater Management Manual outlines requirements and best practices for consideration to economically and efficiently reduce development impacts and protect new development from flooding and storm events.

#### Resilience Framework for Federal Infrastructure and Operations

In 2010 the National Infrastructure Advisory Council (NIAC) published *A Framework for Establishing Critical Infrastructure Resilience Goals, Final Report and Recommendations by the Council.* This report acknowledges unique challenges of risks to critical infrastructure. Recognizing that built infrastructure supports fundamental missions of ensuring economic stability and growth, national security, public safety, and quality of life, the report also recognizes that it is "neither practical nor possible to safeguard infrastructures from all hazards." Therefore, NIAC suggests that **resilience** be a fundamental strategy that makes our businesses stronger, our communities better prepared, and our nation more secure. It is often the most flexible and cost-effective strategy to ensure continuity of services and functions and to minimize the impact of disruptions. This report outlines challenges and opportunities for construction and maintenance of critical facilities in order to support more cost-efficient, resilient, and sustainable outcomes for service provides and the communities they serve. Many specific recommendations from the NIAC are incorporated into CNMI's SSG Guidance, however, the 2010 report provides additional resources and examples that are worth considering to support large critical infrastructure project planning and implementation efforts.

# Resilience Focus Areas

# Critical Infrastructure



# **Energy and Water**

Maintain a continuous power and water supply, enable energy and water systems to adapt to changing conditions and withstand and rapidly recover from disruption



# **Facilities**

Ensure that buildings, structures, and land assets can adapt to and continually operate during a disruption and recovery rapidly applying Smart Safe Growth Guidance for development and redevelopment



# Information and Communication Technology

Ensure that hardware, software, telecommunications infrastructure, programming, and information systems can adapt to changing conditions and withstand and rapidly recover from impacts



# Transportation

Maintain continuously available mobile assets (air, marine, and fleet) that can adapt to changing conditions and mobilize resources to assist the mission and withstand and rapidly recover from disruption and mitigate impacts

# SSG Tools and Recommendations

The tools outlined below highlight recommendations from the 2018 Smart, Safe Growth Guidance that aim to improve resiliency and support sustainable land use management and infrastructure deployment. The SSG tools and considerations outlined here are detailed further in Chapter 7 of the 2018 SSG, which includes an assessment matrix to help planners conduct early scoping efforts that can identify areas for SSG enhancements. These planning principles and recommendations shall be considered in project scoping, planning, and implementation efforts to support sustainable development outcomes.

# Critical Infrastructure Design, Engineering, and Construction

In order to grow smarter and safer, how utility infrastructure development is planned, sited, designed, constructed, and operated must adjust to changing conditions. Many SSG measures have significant co-benefits that justify infrastructure investment now, such as energy security, economic growth, job creation, and public safety. Including SSG Principles in early stages of utilities design can improve infrastructure attractiveness and support other community functions such as economic activity and public health.

Critical infrastructure located in high-hazard areas should be relocated to areas that are suitable to the respective uses. Flood mitigation and other retrofit protective measures to enhance the structural integrity, overall performance, and functionality of utility facilities that must be located in high-hazard areas should be undertaken. The goal is to ensure the continuity of operations of critical facilities and lifelines essential to helping residents remain in their homes following a disaster, and to facilitate and expedite community and regional post-disaster recovery. See Chapter 7.1 in the SSG for a full listing of infrastructure planning considerations, recommendations, and planning support tools.

#### Land Use Management Planning

Land use management, integral to most SSG Principles, is among the most important factors for all planning initiatives and is the common denominator for all infrastructure and development initiatives. Land use is best determined through use of data and is best managed through regulation. A highly developed and well-maintained GIS database, contemporary vulnerability assessments, and enhanced regulations are key to aligning land use with SSG objectives.

Land use management planning works to balance needs of development with maintenance of critical ecosystem services. The natural world provides many protective functions to the built environment for little or no cost. These services can degrade overtime if natural resources are not protected, conserved, and managed. Also, as the climate changes and new weather patterns develop, the level of protection provided by natural features may change. For example, as sea levels rise waves may overtop the barrier reef with more energy and result in more wave-run up and beach erosion. Establishing living shorelines by planting native coastal vegetation (or selected introduced species) is an example of green infrastructure that can slow coastal erosion. Watersheds provide other essential ecosystem services such as increased water infiltration, reduced storm water run-off, increased water recharge potential, and improved near-shore water quality. Increasingly, "nature-based solutions" are being hailed as interventions that can provide cost-efficient and long-lasting co-benefits to people, economies, and the environment. See Chapter 7.2 in the SSG for a full listing of land use management considerations, recommendations, and planning support tools that aim to improve land use functions and to restore, maintain, and enhance natural ecological processes and protect the communities that rely on them.

Draft for Review – CNMI's Sustainable Development Visions, Goals, and Objectives, April 30, 2021 Update

# **Disaster Recovery Planning**

Post-disaster recovery is best achieved through pre-disaster planning. Pre-disaster planning for recovery is critical to efficiently direct efforts following a natural disaster and to prepare for longterm recovery. Without a plan, recovery efforts are ad hoc and slow the return of community stability. Using a collaborative approach to develop a pre-disaster plan establishes resilience through government leadership and structure, forms communication channels, and builds wholecommunity partnerships to support recovery efforts. The US Department of Homeland Security and FEMA provide many tools under the National Disaster Recovery Framework to assist local governments and communities to identify critical components to include in pre- and post-disaster recovery plans, such as sector-specific plans for the recovery of essential services and for localized community plans (i.e., Village plans). The underlying idea of developing pre-and post- disaster plans before an event is to provide planners the opportunity to better understand how short- and long-term decisions made after a disaster will affect ongoing development priorities. Specific components of pre-disaster plans for CNMI need to be determined by government officials and agency staff. The tools below can guide pre- and post-disaster plan development in a manner that is consistent with SSG Principles and continue to reduce vulnerabilities over time. Selected tools to aid in pre- and post-disaster planning and post-disaster recovery are provided in SSG Chapter 7.3.

# **Funding Tools**

A challenge to implementing SSG is determining how to pay for initiatives such as retrofitting vulnerable infrastructure, buy-out programs for vulnerable development, and land acquisitions. Added to the challenge is that many SSG projects address hazards potentials that are likely over the long-term. In the near-term, it is often difficult to justify the added expense for long-term projects, especially when governments are fiscally constrained and have difficulty funding short- term priorities. However, several tools are available to assist governments and communities to develop multiple approaches to fund SSG projects. The tools presented in Chapter 7.4 may be adapted to meet the specific needs of CNMI. Also, many Federal agencies provide funding opportunities to help governments fund long-term projects that will foster SSG.

# Market-Based Tools

One of the most effective and popular strategies to encourage green infrastructure and green building is to incentivize the market by providing advantages for selection of SSG principles in proposed development. "Green infrastructure" is a cost effective, resilient approach to managing wet weather impacts. "Green Building" can be defined as the practice of increasing the efficiency with which buildings and their sites use energy, water, and materials, and reducing the potential negative impacts buildings have on human health and the environment through better siting, design, construction, operation, maintenance, and removal. Sustainable resilient buildings seek to limit resource consumption and environmental impacts over the life of buildings – from initial resource extraction to waste disposal – while simultaneously providing building occupants an optimized environment.

Types of SSG activities that could be made eligible for incentives include:

- Reduction and mitigation of stormwater runoff and erosion (e.g., downspout disconnection, rainwater harvesting, cisterns, rain gardens, planter boxes, bioswales, permeable pavements, green parking, green roofs, land conservation);
- Wetland protection through mitigation banking,

- permittee-pay, and in-lieu fee programs;
- Reduced exposure to risk in coastal hazard areas including shoreline setback requirements and buffer enhancement in high-risk areas;
- Standard application of low impact development and "green infrastructure" deployment in highly flood prone areas;
- Protection of natural hazard mitigation features such as strand vegetation, sea grass, and fringing reef structures;
- Additional BMPs for development and resource use activities
- Renewable energy development;
- Investments in energy-efficient buildings or components;
- Investments in systems to capture items from a company's waste stream for recycling or use by others;
- Manufacturing products from recycled materials;
- Undertaking environmental remediation activities;
- Use of alternate energy sources such as solar, wind, and biomass;
- Use of alternative fuels to power a company's fleet;
- Installation of pollution control devices.



Source: EPA 2015.



Source: Green Building Alliance 2013.

Market-based incentives can either be considered on a "first-come, first-serve" basis or be strategically applied to particular watersheds, villages, or land use types that are the highest priority. These tools and supporting recommendations are detailed further in SSG Chapter 7.5.

# **Capacity Building Tools**

To effectively plan and move towards SSG development, communities and elected government officials as well as workers and the public at large must be knowledgeable about SSG. The government and community must also be aware of the need and advantages of responding in advance of vulnerabilities from a progressively changing climate. To effectively work toward SSG, the CNMI needs to further build impact assessments, planning, and disaster risk reduction capacities.

Many of the hazard assessments are conducted by external consultants or short-term contract workers, which does not necessarily help to build local capacity to implement actions. With expected risks from climate change, integrating specialized local knowledge in the planning efforts will ensure that it is possible to adapt to climate change. Improving local capacity further ensures that impacted communities and the government have conserved intellectual capital and retained knowledge to recover and be resilient. Tools and recommendations to aid capacity building are detailed further in SSG Chapter 7.6.

# **Community Engagement Tools**

The successful implementation of SSG projects depends upon the knowledge and actions of all community stakeholders, including nongovernmental institutions and social networks. Governments alone cannot ensure SSG. Community leaders must be prepared to make decisions concerning SSG, before and after disasters. Underlying effective adaptation is public comprehension of the challenges and the solutions offered by adaptation interventions. Communication of complex science and engineering concepts and details to the general public is not easy. Regardless, this is essential and requires carefully crafted public programs that utilize formal and informal education as well as traditional media such as newspapers and radio along with digital social media.

Several challenges to community engagement specific to the CNMI were identified in 2012 and 2014 during preliminary climate change adaptation planning efforts. Additional capacity building among agencies and stakeholders is needed to develop a collaborative process to work toward SSG. Also, the culture of decision making is strongly influenced in the CNMI by traditional social structure. This may present opportunities to use engagement tools in smaller community village settings. Tools to aid community engagement are provided in SSG Chapter 7.7.

You can view the full SSG Guidance at <a href="https://opd.gov.mp/library/reports/opd-safe-smart-growth-guidance-for-cnmi">https://opd.gov.mp/library/reports/opd-safe-smart-growth-guidance-for-cnmi</a>



# IV. Process and Next Steps

In order to achieve the visions, goals, and objectives outlined in this Comprehensive Sustainable Development Plan, ongoing interagency and inter-sectoral efforts will be needed to implement short-and mid-term action items. This section outlines best practices in adaptive management planning, supporting implementation and monitoring strategy, information sharing protocols, as well as community engagement and outreach goals and methods. Together these procedural elements will support iterative reassessment of this living document, which, as directed by Public Law 20-20 § 20177, places emphasis on the "continuing nature of the comprehensive plan program rather than a final completion of a single plan." With the publication of the Draft CSDP for public comment in Fall 2020, it is anticipated that the next Resources Report review and updates will be completed by Winter 2023 to support an extensive review and update process with a revised Draft CSDP in circulation by Fall 2025 at the latest. Planning element updates and supporting Action Plans that are updated during this time period will be submitted to the OPD Director and the PDAC in the process established by PL 20-20 and detailed further in the coordination protocols in this section.

# **Adaptive Management**

Adaptive management is crucial for the success of plan implementation. Adaptive management is defined as a systematic process for continually improving management policies and practices by learning from the outcomes of past and current management activities. It is considered a planning best practice to include metrics and timelines in objectives so that progress can regularly be assessed. Adaptive management is the process of assessing progress and adjusting priorities or interventions should progress not be achieved or if conditions change. This process recognizes that there is a level of uncertainty about the "best" policy or action for a particular management issue, and requires that each management decision be revisited in the future to determine if it is providing the desired outcome. The approach builds upon prior results, both positive and negative, and allows managers to continually reassess and incorporate new knowledge into management practices.

Adaptive management can be resource intensive, requiring additional capacity throughout all stages of implementation. This presents additional challenges when limited funding and capacities can reduce viability of potential strategic actions. However, with cross-cutting priorities identified, **OPD**, the **PDAC**, and partners can work together to leverage existing resources and build capacity to implement, monitor, learn from, and readjust plans as needed to meet shared management objectives.

- Planning Next Steps and Policy Recommendations
  - Continue development, adoption, and integration of resource- and sectorspecific planning updates
  - Support information sharing and iterative planning
  - Enable financial transparency and accountability through online information sharing and involvement of stakeholders early in planning and project scoping
  - Next steps: Implement "Next Steps"; Work towards 3-5 year goals, continued data collection, integration of existing and new plans with these guiding principles, visions, goals, and objectives.

# Implementation Strategy

Specific project activities shall be submitted through annual budget submissions prior to the end of each fiscal year. Where possible, project elements will be highlighted in these submissions from OPD and the PDAC members. Upon endorsement and approval of this CSDP the PDAC, OPD, and Partners will further develop Master Plan elements to include cost estimates for short-, mid-, and long-term plan elements. OPD, the PDAC, and Planning Partners will work closely with the Legislature and the Administration to identify and leverage local and federal funding streams to support prioritized tasks and achieve sustainability outcomes detailed in this CSDP.

Monitoring, evaluation, and regular adjustment of management efforts are considered a best practice in planning to achieve long-term outcomes. Adaptive management can occur at multiple plan- and projectspecific levels, however, the process is similar. Once a planning trajectory is established, periodic data collection will support regular reassessment of progress, of what is working, and of what may need further modification. To support this, the goals and objectives outlined in this plan are wherever possible connected to measurable indicators using data points that are already being collected. This CSDP is itself a living document, which means it will periodically be reassessed as discussed in more detail in the subsequent sections on monitoring and measuring effectiveness here. Regular reassessment will allow planning partners to assess and address challenges to achieving specific objectives and their outcomes. Once an outcome has been completed, the next, equally important step in an adaptive management protocol is to assess its effectiveness. A review and evaluation of the results allows managers to decide whether to continue the action or to change course. This investigational approach to management means that regular feedback loops guide managers' decisions and ensure that future strategies better define and approach the objectives of the community, special area, and functional plans outlined here. By setting up regular stakeholder meetings, results can be reviewed before, during, and after implementation in order to guarantee actions are meeting the objectives agreed upon in this plan. As such, this implementation strategy aims to build capacity as well as systems to support effective plan execution and recalibration as needed to continue to support CNMI's path towards a more sustainable future for people, the environment, and the economy.

#### **Building Capacity and Leveraging Partnerships**

OPD, the PDAC, and planning partners will continue to work together to expand capacity within our organizations, and create a strategy-supportive work culture. Ongoing and strategic support from CNMI's Leadership, as well as the community at large is critical to the long-term success of these efforts. Therefore, in addition to annual reports being submitted the last Monday of every January and Citizen Centric Reports published every September, OPD is committed to regularly sharing planning engagement opportunities, providing relevant reports, and facilitating ongoing community dialogs to develop this CSDP and its components further. As mandated by PL 20-20, policy recommendations will be provided to support the development strategies outlined here as opportunities to address short- and long-range socio-economic and resource management planning efforts arise.

# Systemic Implementation through Funding Coordination

Funding is critical for objective implementation as well as to support short- and long-term adaptive management planning efforts. As detailed in PL 20-20 § 20182, this CSDP contains a schedule of programs and projects that will be implemented annually. Funding for the programs and projects outlined here in large part is already allocated through the budget requests and grant funds of identified "lead" agencies. Where data gaps are identified, OPD will work with planning and resource management partners as well as financial management partners within the CNMI Office of the Governor, federal grantors, and private or NGO representatives as appropriate to identify and support cross-cutting

priorities. Plans and project components that do not fall under the authority or responsibility of any particular department, agency, or instrumentality of the government of the CNMI shall be met through timely and coordinated requests submitted for annual appropriations to the Legislature.

# Monitoring and Evaluation Strategy

The following section provides details and guidance for monitoring and evaluating progress towards the goals of the CSDP. The primary objective is to articulate the expected activities associated with monitoring, with a focus on measuring performance of Sustainable Development Goal Objectives and outlining supporting procedures to track and share metrics used to support this analysis. Monitoring is essential to support adaptive management planning to allow partners to periodically reassess whether interventions are achieving desired outcomes and continue to work to leverage existing resources to achieve shared objectives. Therefore, OPD will work with the PDAC to continue to formalize and share monitoring and planning updates to ensure enduring implementation and usefulness of the CSDP.

# Coordination, Information Collection, and Data Sharing As detailed in PL 20-20 § 20185:

Any existing Committee, Commission, Task Force or body mandated to engage in planning for the CNMI or for particular areas or jurisdictions within the CNMI, shall seek to ensure that such planning efforts are provided the appropriate financial, human, technical and support resources necessary to accomplish any mandates or requirements of law relative to development planning; provided, however, that such planning efforts are supportive of and consistent with the intent of this article.

For purposes of this article, all plans prepared by any department, agency or instrumentality of the government of the CNMI shall be circulated to other agencies or instrumentalities affected by such plan and to the Office of Planning and Development for review and finalization not later than sixty (60) days prior to submission of the plan to the Council.

Coordination, data sharing, and plan review protocols are further detailed in OPD and PDAC implementing policies. Specifically, collecting and maintaining current information across planning sectors will be critical to the continued development of supporting components and updates of the CSDP. To that end, reflecting the mandates of Public Law 20-20, OPD has established CNMI-wide planning policy guidance that all agencies, departments, boards, commissions, and other instrumentalities of the government of the CNMI:

- Work with the Office of Planning and Development (OPD) to review their present statutory
  authority, administrative regulations and current planning policies and procedures to determine
  whether there is any duplication, any deficiencies or inconsistencies therein which prohibit
  integration, coordination, and compliance with respect to the purposes and provisions of Public
  Law 20-20 § 20177 to support and coordinate comprehensive planning;
- Provide requested public information within ten calendar days as established under the Open Government Act" 1 CMC §§ 9901 et seq., unless an alternate schedule is agreed to in advance by the OPD Director;
- Submit planning updates and relevant reports to OPD as they become available and if possible in the early coordination phase, providing time for comments on drafts and revisions to ensure plan alignment and integration into the comprehensive sustainable development plan; and
- As provided by 1 CMC § 20185, all plans prepared by any department, agency or instrumentality of the government of the CNMI shall be circulated to other agencies or instrumentalities affected by such plan and to the Office of Planning and Development for review and finalization

not later than sixty (60) days prior to submission of the plan to the ODP Director for review and comment by the Planning and Development Advisory Council.

# Community Engagement and Outreach Strategy

Ultimately it is people that must support strategy execution. Communications channels that enable two-way information sharing serve to increase awareness, build buy-in, and grow engagement. When implementing the adaptive management process, feedback from all stakeholders is critical to identifying challenges and crafting creative solutions in the "try-test-learn-revise" strategic planning cycle. As such, OPD will continue to build its publications and geospatial library, as well as invest resources that provide education, training, and engagement opportunities that promote innovation and creative problem solving to support the sustainable solutions outlined in this plan.

To support these objectives, OPD will convene publicly noticed PDAC meetings at least quarterly. Meeting minutes and presentation materials will be curated on the OPD website. Interested stakeholders can sign up for planning updates or view posts on social media. Our inboxes and doors are open, and yet communication is a two-way street.

When OPD and the PDAC agreed on the approach to craft this CDSP in 2018, community meetings were planned for scoping efforts which occurred in the Spring of 2019 and for precinct-level visioning and priority discussions in the Spring of 2020. Although the Covid19 pandemic required modification of this approach, this highlights a benefit of adaptive planning – if the planned approach becomes unviable flexible planning allows for recalibration to work towards the visions, goals, and objectives that guide our path.

# **Build Public Awareness and Support**

Community engagement is necessary to increase support and implementation of this integrated approach to achieving the shared visions of the CSDP. Over the next five-year planning cycle, OPD will continue to work with partner agencies to track data, identify trends, and communicate updates in quarterly PDAC meetings and in periodic Planning Taskforce and "Working Group" meetings as issues or opportunities for engagement emerge.

To build public awareness and support of ongoing sustainability planning and project implementation efforts, OPD will work with partners to expand communications capacities with a "Communications Team". This team will support identification of public outreach campaign opportunities.

#### Transparency and Community Engagement

Community engagement will focus on iterative and transparent information sharing, education, and training events. OPD, PDAC, and Planning Partners will follow requirements of the Open Government Act and go beyond those requirements whenever practicable in order to share information through multiple platforms including social media and other online forums. OPD, PDAC, and our Planning Partners are committed to supporting information accessibility and will work to provide services as needed to facilitate access to people for whom English is not a native language, or who have other accessibility challenges.

Engaging with the community through open and transparent processes ensures that OPD and the PDAC's research and policy advice is informed by those who are interested in, and affected by, that advice and that the analysis is tested publicly. As such, quarterly PDAC meetings and regular Taskforce meetings will be open to the public, and meeting minutes will be posted on the OPD website. Working groups will continue to be formed as needed to address specific locally-driven topics. Efficacy of these

efforts will be ensured through the use of meeting management tools such as clear agendas with additional time scheduled for networking and feedback on specific issues.

It is recognized that online participation venues offer important engagement alternatives for those unable or unwilling to attend meetings or events, especially during the days of Covid19. OPD will continue to support efforts to ensure multi-media access to meeting materials and planning documents and will support use of the OPD website through regular outreach across multiple platforms. We will continue to rely on multiple means of communication for outreach and feedback.

The strong partnerships developed through these efforts will support continued iterative and inclusive planning and build greater capacity and resources in the future. It is the intention that this CSDP is a living document and will continue to be updated and adapted to reflect changing needs and priorities as well as community input that stakeholders share.

# V. Planning Elements and Policy Recommendations

The following planning-element specific guidance aims to provide additional support to the cross-cutting themes, objectives, and priorities outlined in this CSDP. In summary these are:

#### **Sustainable Systems**

- Build and Maintain Critical Infrastructure Power, Water, Wastewater, Complete Streets
- Implement Environmentally Compliant Solid Waste Systems and Zero Waste Goals
- Co-manage resources to ensure healthy environments and environmental services
- Ensure systems resilience through Smart, Safe Growth that helps maintain social, economic, and environmental co-benefits

#### **Networks of Care**

- Invest in education and workforce opportunities that promote sustainable economic growth
- Meet basic needs and providing necessary services to promote well-being for all

#### **Inclusive and Equitable Communities**

- Support equitable access to services while respecting diversity and providing opportunities to honor cultural identity and inclusion
- Promote just and peaceful development through continued investment in social services, including equitable housing, food assistance, and early intervention programs, as well as support services to address mental health and provide victims of violence

# **Partnerships**

Build partnerships and alliances through alignment with the visions and objectives of existing
efforts across the public and private sectors to support the cross-cutting needs of the community

The additional planning-element specific recommendations detailed here highlight opportunities to achieve and expand on these priority sustainability objectives.

#### **Integrate Land Use and Hazard Risk Reduction Planning**

Through proactive planning, CNMI can evaluate the intersection of development and hazards to reduce vulnerabilities and increase resiliency of development and the CNMI economy. The Comprehensive Public Land Use Plan is a logical planning resource to integrate SSG Principles to maximize community, social, and economic benefits. However, the current plan does not consider SSG, hazard mitigation, or climate change. To effectively direct future development, in the 2025 PLUP update, it is recommended that the DPL incorporate high hazard areas identified in the 2014 CNMI Standard State Mitigation Plan (SSMP) and the Climate Vulnerability Assessments for the Islands of Saipan (2014), Rota and Tinian (2015) into the Public Lands GIS to assess the suitability of areas for future development. It is further recommended that the OPD coordinate with DPL, the Office of Homeland Security and Emergency Management, and other key CNMI agencies (e.g., built infrastructure and development regulation) to ensure that projects identified in the plan are sited and designed to withstand future impacts expected under conditions of a changing climate.

#### Support "Complete Streets" Planning for Community Design and Transportation

"Complete streets" is a development and redevelopment planning approach that aims to ensure that the needs of all transportation system users are considered in all transportation projects and project phases with the aim to support multiple sustainability objectives. Although efforts to achieve this through legislation have been introduced in the past, the current working group believes that existing frameworks may be sufficient to incorporate this

concept into transportation and development planning, particularly as this goal has been articulated and emphasized in this Comprehensive Sustainable Development Plan.

# Produce "Standard Operating Procedure" for all of CNMI government that includes considerations for Procurement, Staff Hiring and Advancement, and Grant Management requirements

Standard operating procedures (SOPs) are information management tools that serve multiple purposes. They help memorialize important institutional information in a way that helps new staff or individuals outside of an organization easily get up to speed with internal controls and requirements. They can also be used to help ensure consistency and provide guidance to program managers and staff alike. SOPs often offer step-by-step instructions to help all staff carry out routine operations with the aim to achieve efficiency, quality output and uniformity of performance, and reduce miscommunications and ensure financial compliance. Creating unified guidance that summaries current relevant procurement, hiring, and grant management regulations will help all agencies avoid common challenges such as inadequate documentation or missing paperwork. A unified procedures guide created in conjunction with the roll-out of the new online financial management system with references to the most current regulations would offer opportunities to streamline and unify financial tracking, management, and reporting, as well as create a standard framework to support staff hiring and retention, reporting, and other important administrative functions. Leveraging existing partnerships, such a tool could support unification of key procedures that would improve efficiencies and help all agencies and planning partners benefit from a common approach to common tasks.

#### **Conduct a Comprehensive Review and Update Key Regulations**

Upon initial review of enabling legislation and regulations relating to the planning elements identified in Public Law 20-20, it appears there may be numerous opportunities to update existing guidance with goals and objectives articulated in this CSDP. As such, OPD will continue to work with the PDAC to review existing laws and regulations and propose policies to foster and promote the improvement of planning activities and sustainable development outcomes as directed by Public Law 20-20. OPD will continue to avail of support from the Attorney General through legal services requests and may discuss the need for dedicated legal support services further should extensive revisions or policy updates be proposed.

#### Housing, Public Facilities, Capital Improvements, and Redevelopment

The Northern Marianas Housing Corporations Disaster Action Plan emphasizes the importance of supporting sustainable housing, infrastructure, and economic development. The housing plan component includes homeowner rehabilitation and reconstruction, rental rehabilitation and reconstruction, and homebuyer programs. The recovery plan will also invest in skilled workforce development and institutions of higher education, support tourism enhancement projects, provide deferred loans or low-interest loans for new landlords, to increase the rental housing stock of safe, decent, and sanitary units, develop additional rental housing stock, and support ports enhancement. These efforts will further be supported by targeted infrastructure investments. As such, continued communication and alignment between CNMI's Capital Improvements Program and priority implementation projects will help achieve the shared visions, goals, and objectives of CNMI's Comprehensive Sustainable Development Plan, including special area, resource, and functional plans, to achieve infrastructure, health, and education investments that ensure strategic and resilient outcomes. Where possible, priority "cross-walk" projects that address multiple needs or sustainability outcomes should be identified and funded through annual funding requests and grant applications.

#### **Risk Reduction and Safety**

Addressing hazard mitigation in the comprehensive plan enhances opportunities to integrate mitigation measures and to leverage multiple resources to create synergies towards SSG. Through this planning document, CEDS, CDBG, CIP, and other grant and local funding allocations will be reviewed for consistency with cross-cutting principles, goals, and objectives to ensure high priority management needs are effectively satisfied. The Governor's Authorized Representative and State Hazard Mitigation Officer have endorsed the application of the SSG Matrix to support creation and refinement of scopes of work relevant to FEMA-supported recovery and mitigation planning and implementation projects. The SSG Guidance and Matrix were also identified as project scoping and implementation considerations in the NMHC

Disaster Action Plan. Moving forward, OPD will work with our development and redevelopment planning partners to further mainstream this guidance and support early and user-friendly planning and project scoping using best available data to help us build and rebuild smarter and safer in the face of changing environmental conditions.

#### **Sustainable Tourism**

# ADD UPDATES FROM MVA HERE – PENDING MVA

# <OTHER KEY RECOMMENDATIONS?? PDAC AND PARTNERS>

Additional recommendations for planning elements identified under Public Law 20-20, as well as relevant existing plans and regulations, are listed in the table that follows.

Planning Area Element Public Law 20-20 § 20176	Relevant Plans and Standards	Planning and Policy Recommendations
(A) Land Use	2019 DPL Public Land Use Plan	<ul> <li>Include SSG considerations in PLUP and SSMP updates</li> </ul>
	Saipan Zoning Plan & Regulations	<ul> <li>Continue using watershed management planning to integrate development policies</li> </ul>
	BECQ-DCRM & DEQ Management Standards and Requirements	and identify priority actions with incorporation of these plans by reference at they are completed
	DLNR-DFW State Wildlife Action Plan	- Incorporate updated HPO plan and
	HPO – Management Plan and Regulations	regulatory requirements into cultural resources section by 2022
		<ul> <li>Include OPD as Ad Hoc member for Zoning Board and CRM Agency Board to support consistency across planning mandates</li> </ul>
(B) Community Design	CNMI Smart Safe Growth Guidance	- Incorporate SSG policy throughout
	NMHC Disaster Action Plan	planning, project prioritization, and implementation across sectors - Include updated asset vulnerability
	State Standard Mitigation Plan	assessments to be produced in 2020 PDM grant task into geospatially reference "Resilience Hubs" data set to support planning, project scoping, and early issue identification
(C) Transportation	DPW Territorial Highways Plan (THP) and	Projects are listed in THP as well as COTA and
	Implementation Plan  COTA – Territorial  Implementation Plan	CPA planning documents – by 2025 unified comprehensive transportation planning element for endorsement with decadal updates starting in 2030

	СРА	
(D) Regulations	See SSG recommendations	Line agencies include planning periods in ongoing regulation updates to solidify planning horizons and coordination with OPD and partners
(E) Public Facilities	SSG, CEDS	OMB/CIP have endorsed use of SSG in project planning; by 2025 work with OGM, NMHC, and CEDS Commission to update public buildings and utilities plan with inclusion of prioritized projects list
(F) Public Lands	PLUP, CEDS	Work with DPL to incorporate watershed management plan components into 2030 update of PLUP
(G) Public Buildings	SSG, CEDS	OMB/CIP have endorsed use of SSG in project planning; by 2025 work with OGM, NMHC, and CEDS Commission to update public buildings and utilities plan with inclusion of prioritized projects list
(H) Housing	NMHC	NMHC to include plan updates in CEDS project listings and CSDP goals and objectives by 2030
(I) Redevelopment	NMHC, Zoning, DPL, Garapan CID*	<ul> <li>Incorporate CIDs into CSDP by reference as they are adopted</li> <li>Work with Zoning, DPL, and NMHC to create and fund revitalization incentives and requirements under the Blighted Buildings Zoning Law to support reuse of existing resources</li> <li>Identify and fund brownfield remediation on public lands and in identified redevelopment opportunity areas (in and in proximity to CIDs)</li> <li>By 2025 include expanded, targeted redevelopment planning elements in CSDP</li> </ul>
(1) 6	CAMAR CLUBAR CCORR	W   W   DECC DIAIR DRI 1100   L

(K) Recreation SCORP, SLUMP

SWAP, SLUMP, SCORP,

HPO

(J) Conservation

Work with BECQ, DLNR, DPL, HPO, and other

partners to align planning priorities and

implement SMART Objectives

(L) Safety CHCC CHCC planning updates are incorporated by reference into CSDP MVA (M) Tourism MVA updates and incorporates Tourism Sustainability Plan by 2025 (N) Development Policy CSDP, CEDS Incorporate CIDs into CSDP by reference as they are adopted Include SSG principles and prioritized projects in CEDS updates every five years OMB/CIP have endorsed use of SSG in project (O) Capital Improvements planning; by 2025 work with OGM, NMHC, and CEDS Commission to update public buildings and utilities plan with inclusion of prioritized projects list Integrated Solid Waste Management Plan for Saipan, Tinian, Rota, and the Northern Islands is drafted and approved by PDAC for incorporation into CSDP by 2023 (P) Labor Work Force **CEDS** DOL and DOC to work with OPD and CEDS commission to develop Labor Work Force plan with contingencies for CW expiration addressed and included by 2025 (Q) Policy Statements Policy statements are regularly reviewed and updated on a five-year planning cycle with changes incorporated by reference and explicitly into decadal CSDP updates (R) Other Elements: i. Education PSS, NMC Strategic Regularly convene education partners to share **Plans** and build on updated goals and objectives. ii. Healthcare **CHCC Strategic Plan** Mainstream SSG policies across planning sectors iii. Comprehensive Resiliency **Standard State** Support Resiliency Taskforce to mainstream **Hazard Mitigation** sustainability objectives Plan, SSG Guidance

# Appendix I - Implementation Plan

Progress towards annual, short-, and long-term goals, objectives, and action items will be assessed in quarterly Planning Taskforce meetings. These meetings will be open to the public and notes will be taken, shared with Taskforce Listservs and curated on the OPD website to track progress, identify opportunities for co-benefits, and address challenges.

"Action plans" will be supported by metrics or "performance measures" and regular reporting as required by federal grantors and local annual reporting requirements. Actions will be reviewed and revised as needed to ensure consistency with this plan and leverage funded efforts to meet crosscutting sustainability priorities as further outlined and detailed here.

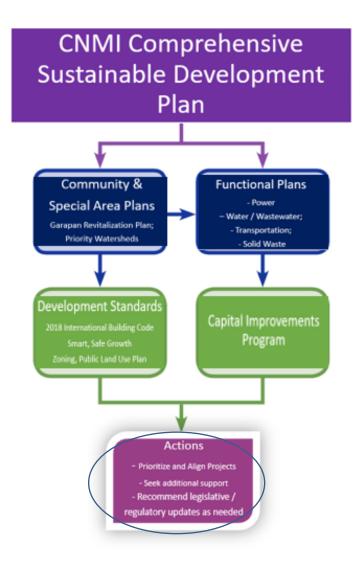
Initial priority needs that have been identified as supporting cross-cutting sustainable development priorities have been submitted in annual funding requests. Similarly, additional grant funding is being sought out to further address unmet needs.

The implementation plan that follows highlights the 2021-2031 priorities that align with sustainability themes and goals identified in this comprehensive plan. The short- and mid-term objectives detailed here aim to support progress towards the long-term ten-year sustainability goals. Using the adaptive management approach described in further detail in

this plan, progress towards these objectives and goals will be regularly monitored and reported on in annual Citizen Centric Reports and regular updates to the Resources Report as needed.

Quarterly "Taskforce" meetings and regular PDAC meetings will continue to be held to regularly reassess and update priorities and share project updates. Where possible, existing resources will be leveraged to support current as well as newly identified planning and implementation needs. When needed, additional capacity building in terms of staffing, training, accessing technical assistance, and other mechanisms including expanding partnerships will be sought to address high priority unmet needs that support cross-cutting sustainability objectives.

This Comprehensive Sustainable Development Plan – including the strategic plan and the implementation planning components that follow – is a living document. It has gone through numerous revisions in an attempt to "get it right", and OPD will continue to seek feedback from our numerous partners to revise and update the implementation components that follow at least every five years.



		CNMI	CSDP - Implementation Plan									
	Socio-Economics and Disaster Risk Reduction (SE/DRR)											
Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items Action Lead(s)		Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?					
	ENDING POVERTY											
	CNMI population at or below US poverty level < 30% by 2030	By 2025, Dept. of Commerce works with SE Taskforce to establish a baseline for "living wages" for localized poverty assessment	SE/DRR Taskforce meets at least quarterly	OPD convenes TF meetings, Commerce leads CEDS updates	SE/DRR Taskforce	CEDS	CEDS supported through Commerce, CEDA, GCEA and others					
SDG 1 – End poverty in all its forms	CUC, DEQ, NMHC, and planning partners work to achieve 100% inside flush toilets with compliant wastewater management by 2030; 100% 24-hr plateable water services by 2030	By 2023, CUC, BECQ-DEQ, DPW, and DPL will integrate geospatial utilities data to identify areas of water and wastewater services to support utility, capital improvement program, and land use planning updates, and by 2025, CUC will work with OPD/PDAC to include prioritized water and wastewater management community projects in capital improvement funding requests to achieve 100% inside flush toilets with compliant wastewater management and 24-hr plateable water services by 2030	BE Taskforce discussions with SE/DRR Taskforce on plan updates and funding needs for water and wastewater infrastructure at least bi-annually	CUC, DEQ, NMHC	Supported by SE/DRR Taskforce	CDBG / NMHC Strategic Plan; CUC Wastewater Management Plan / CIP	Funding gaps identified for infrastructure projects – prioritization and assessment of additional funding mechanisms recommended					

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
			ENDING HUNGER				
	GDP from agriculture increases from 1.7% in 2016 to >2.5% by 2030	Metrics and plan for implementation of sustainable agricultural homestead program are established by 2025	Sustainable agriculture workshop held to identify target audience(s), develop action plan including metrics and supporting objectives further	DPL-Homesteads; DLNR-Forestry	Supported by SE/DRR Taskforce, CDA, Biba Nutrition Program, NMC CREES	DPL Public Land Use Plan	Community gardens are being supported by grant allocations from DLNR - Division of Ag.
2 ZERO HUNGER  SDG 2 – End hunger	CNMI Nutrition Council and CHCC work to include assessment and policy updates in 2030 CSDP to track and achieve objectives to end hunger for all in the CNMI	CHCC includes of assessment of local food choices in periodic non-communicable disease surveys to provide data to further track nutrition and food security needs and management efforts by 2025; so that CHCC, CNMI Nutrition Council, and the Nutrition Assistance Program will develop policies and incentives to ensure that 20% of registered stores adopt the Healthy Stores Initiative administered jointly by the CHCC and CNMI Nutrition Council, with adaptive management measures in place to support reassessment and plan update by 2030	CHCC includes local food choices in updated draft survey; meets with and reports out on Goal 2 efforts at periodic PDAC and Planning Taskforce meetings	СНСС	CNMI Nutrition Council, NMC CREES	Forestry Action Plan, CEDS, CDA	Agriculture Production and Nutrition and Health Program supported by NMC CREES
	Land use and zoning updates will include incentives and designated community gardens in DPL's 2030 Public Land Use Plan update	Support home gardening and agroforestry initiatives in partnership with CDA and NMC-CREES with through development of formal outreach plan and prioritized actions by 2022	DPL and DLNR-Forestry identify community plots and meet to formalize outreach plan with support from OPD and relevant PDAC and Taskforce members	DLNR-Forestry and DPL with support from OPD, PDAC, Taskforces, as well as CDA & NMC-CREES	Supporting by BE/SE/NR Taskforces, CDA, NMHC, NMC-CREES and others	Forestry Plan (update pending); PLUP (include community gardens in 2025 update)	Agroforestry technical assistance supported by NMC CRESS Agriculture Production Program

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
3 GOOD HEALTH AND WELL-BEING  SDG 3 — Ensure healthy lives and promote well-being for all at all ages	By 2030, CNMI-CHCC continues to track and make progress towards meeting all components of SDG#3 objectives and indicators  See full listing of 10-year SDGs tracked by CHCC in Appendix IV that follows.	CHCC continues to update 5-year strategy to track progress and support achievement of health systems objectives and prioritized management interventions;  By 2023, OPD works with CHCC, the Office of the Mayor of Rota, and other partners to conduct a feasibility study on an alternative health care system with the goal of making healthcare more affordable, improve access to healthcare resources, upgrade, advance and improve the inter-island medical referral program and reduce social inequality and to incorporate actionable recommendations in the 2025 CSDP update.	CHCC continues 2020 Strategic Plan update with goal to complete assessment (delayed by Covid19) by 2021	СНСС	Supporting by BE/SE/NR Taskforces, CDA, NMC (Nursing Program), and relevant stakeholders including public- and private partnerships	CHCC Strategic Plan, CEDS, OPC	Primary CHCC activities including metric tracking and reporting funded
			QUALITY EDUCATION				
SDG 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4(a) – Proportion of incoming NMC freshmen placed in developmental courses reduced by 10% from 2020	By 2025, NMC and PSS planning updates will detail efforts to support the goal to decrease the percentage of incoming NMC freshmen in need of placement in remedial classes by 10% or more by 2030.	By 2022, NMC and PSS will re-evaluate and update their MOU to support student readiness and incorporates program priorities into an integrated education plan for lifelong learning opportunities in CNMI by 2025	NMC, PSS	Education Planning Partners	NMC Strategic Plan	Primary PSS, NMC, NMTI activities are funded, but additional funding for support services and life-long learning opportunities continues to be sought through local allocation requests and grants

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
			GENDER EQUALITY				
SDG 5 – Achieve gender equality and empower all women and girls	Proportion of women in CNMI Legislature is at least 33% by 2030	By 2022, OPD will work with the Women's Affairs Office, PDAC, and planning taskforce partners as well as active community groups to establish a community meeting schedule for refining objectives and developing a gender equality, equity, and empowerment planning component for inclusion in 2025 CSDP planning update.	Convene working group and schedule at least quarterly meetings	OPD, WAO	SE/DRR Taskforce Planning Partners	CSDP	According to the Sept. 2020 WAO Citizen Centric Report, "on April 2020, WAO had a significant reduction of staff due to the COVID-19 outbreak in numerous foreign countries, the United States and the CNMI has resulted in a dramatic and severe reduction in economic activities and thus government revenue" — funding to sustain program and services being sought

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
		DECENT W	ORK AND ECONOMIC GROW	тн			
8 DECENT WORK AND ECONOMIC GROWTH	Annual growth rate of real GDP per capita meets or exceeds U.S. annual average through diversified economic sectors	By 2023, Commerce, Finance, OMB, and OPD, with support of the PDAC and planning partners, will work to draft guiding policies to address poverty reduction	By 2022 OPD and the SE- Taskforce convenes SE working group and schedules at least quarterly meetings	OPD	SE/DRR Taskforce Planning Partners	CSDP	Planning efforts supported by existing staff funding at OPD and SE Taskforce Agencies;
SDG 8 – Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all	Unemployment rate falls to below 10% by 2030 for CNMI residents; and  By 2030, the Tinian Economical and Sustainability Master Plan will be reviewed and revised by the State Agencies and the Tinian Leadership with support of OPD in preparation for the update of the CNMI's CSDP and other relevant implementation plans facilitating the revision of priorities for submission to relevant supporting action plan updates.	By 2023, the Municipality of Tinian and Aguiguan will work with OPD to coordinate with local and federal funding partners to ensure investment in and implementation of prioritized sustainability action items including critical infrastructure and growth planning, economic diversification, job creation, and Zero Waste management  By 2026, Commerce, OPD, PDAC, and partners will work to ensure that the CEDS update includes an unemployment and poverty reduction planning component to identify priority projects that support economic diversification and growth	By 2021 and every five years thereafter, a Comprehensive Economic Development Strategy update will be submitted, with proposals on priority projects that focus on critical infrastructure and growth planning, economic diversification, job creation and other economic development opportunities for OPD to support sustainable growth objectives as stated in this document; and By 2021, the Department of Commerce's CEDS update includes crosscutting economic development priorities identified in the CSDP;	Commerce	OPD, SE/DRR Taskforce Planning Partners, DOL, CEDA, MANGO, SCC, GCEA	CEDS	Planning efforts supported by existing staff funding at OPD, Commerce, and SE Taskforce Agencies;

8 DECENT WORK AND ECONOMIC GROWTH	Tourism remains a robust contributor to CNMI's economy with ongoing positive growth and a GDP contribution of at least 65% over a tenyear average between 2020 and 2030	By 2025 MVA Tourism Plan will be updated to address sustainability recommendations, track progress, and assess successes and opportunities of tourism contributions to CNMI economy with the goal of achieving at least 65% GDP contribution over a ten-year average between 2021 and 2031	By 2022, the MVA Sustainable Tourism Plan is updated and the MVA Board has endorsed priorities to support alignment with numerous funding streams including the SCORP and CEDS	MVA	GCEA,	CEDS, Sustainable Tourism Plan, SCORP	Plan update is in progress; dedicated planning and implementatio n support may facilitate regular planning updates and reporting moving forward
Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
		E	LIMINATE INEQUALITY			Γ	
SDG 10 - Eliminate inequality and support diversity, equity, inclusion, and justice	10(a) - Less than 30% of CNMI population is living below 50 per cent of U.S. median income (by age, sex and persons with disabilities	By 2023, Commerce, Finance, OMB, and OPD with support of the PDAC and planning partners, will work to draft guiding policies that address poverty reduction; and  By 2025, Commerce, OPD, PDAC, and partners will work to ensure that the CEDS update includes unemployment and poverty reduction planning component to identify priority projects to support economic diversification, equality, equity, and growth.	Taskforce works with Commerce to include indicators for age, sex, and disability in HIES survey to support baseline establishment and metric tracking	OPD, Commerce	SE/DRR Taskforce Planning Partners	CEDS	Planning efforts supported by existing staff funding at OPD, Commerce, Finance, CEDA, NMHC, and others, however, additional funding and alignment of cross-cutting priorities may be beneficial

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
		PEACE, J	USTICE, STRONG INSTITUTION				
SDG 16 – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	10% reduction in violent crimes by 2030 from 2020 levels.	By 2023, DPS and OPD, with support of the PDAC, CHCC, and other planning partners, will work to draft guiding policies that support reduction of physical, psychological, and sexual violence in the CNMI; and  By 2025, OPD, PDAC, and partners will work with DPS and the Judiciary to ensure that the CSDP update includes violence reduction policy recommendations and identifies priority projects to support this goal, with a target of 10% reduction in violent crimes by 2030.	Continue annual reporting, with targeted Socio-economic Taskforce meeting to support discussion of crosswalk opportunities and supporting needs by 2022	DPS, Karidat, CWA, DYS, Coalition Against Domestic Violence	PDAC Socio- Economic Taskforce		Expansion of DPS programs with other public-private partnerships may benefit from additional support.

			CNMI CSDP - Implement	tation Plan								
			Built Environme	ent								
Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?					
	CLEAN WATER AND SANITATION											
SDG 6 – Ensure availability and sustainable management of safe and environmentally compliant water and sanitation for all	By 2030, CUC's Master Plan for drinking water will ensure access to healthy, palatable, affordable, and sustainable drinking water for all communities of the CNMI	By 2022, CUC's Master Plan will be updated to include details that address what steps are necessary and sufficient to reduce the salinity of the water in Saipan to the secondary standard of 250 ppm by 2030; and 6(b) By 2023, CUC, BECQ-DEQ, DPW, and DPL will integrate geospatial utilities data to identify areas of water and wastewater services to support utility, capital improvement program, and land use planning updates; and  By 2022, the BE taskforce under OPD will work closely with the Rota Mayor's Office and other key partners to establish a Public-Private Partnership between the Municipality	BE Taskforce meets at least quarterly - CUC will provide updates on and opportunities for engagement in pending planning update; By 2021 CUC will work with CHCC to assess health-protective safe drinking water standards and include resulting recommendations in the CUC Water Master Plan by 2022	CUC (utilities); OPD convenes BE Taskforce	BECQ, USEPA, OPD-CIP;	CEDS, CUC Master Plan	Substantial water and wastewater infrastructure funding is being sought through numerous funding streams					

6 CLEAN WATER AND SANITATION	By 2030, comprehensive land management results in water source and quality protection that supports freshwater quality goals to provide potable, palatable, and sustainable drinking water availability for all communities in CNMI.	of Rota and a private entity to utilize an existing water treatment facility on Rota with the goal of minimizing the risk of exposing our precious water table to harmful contaminants and ensure that the water quality on Rota is protected for generations to come.  Led by the Bureau of Environmental and Coastal Quality, watershed management and restoration efforts will result in: (i) Reduction of saltwater intrusion into Saipan's freshwater lens by 20% by 2025 (as measured by reduced chloride levels in CUC managed assets); and (ii) Reduction of stormwater runoff by maintaining and increasing wetland, green infrastructure, and stormwater management processes including aquifer recharge by achieving a 50% reduction in water impairment ratings for the coastal waters of Saipan, Tinian, and Rota by 2030;	BE Taskforce members continue to attend ongoing Watershed Working Group meetings and support incorporation of water source and quality protection into crosscutting planning and project development efforts	BECQ-DEQ (stormwater regulation); BECQ-DCRM (watersheds)	DPW, DPL, Zoning, DLNR (stormwater and watershed management)	Watershed management plans	Watershed management planning efforts led by BECQ are federally funded and supported by additional ongoing local and federal planning and implementation efforts
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	By 2030, CNMI will	Led by DPW and supported	Support development	DPW	BE Taskforce, BECQ,	Stormwater	Substantial
6 CLEAN WATER AND SANITATION	improve water	by the Built Environment	of stormwater			management	infrastructure
U AND SANITATION	quality and reduce	Taskforce, (i) by 2023 DPW	management and MS4			plan (anticipated	funding is being
	risk of combined	will implement updated	compliance plan			by 2025); 2006	sought through
	sewer overflows by	guidelines for the MS4				Stormwater	numerous
	implementing	stormwater permit to				Manual	funding
	environmentally	ensure environmentally					streams
	compliant point	compliant and sustainable					
	and nonpoint	management of nonpoint					
	source pollution	source pollution conveyed					
	control programs	by stormwater					
	for existing	infrastructure; and (ii) by					
	discharge systems	2025 DPW will draft a					
	and support	stormwater management					
	implementation of	plan with interagency					
	SSG to implement	support to further enable					
	nature-based	these efforts;					
	solutions and other						
	cost-efficient						
	interventions						
	identified in the						
	2025 stormwater						
	management plan.						
	By 2030,	By 2025, CUC will update	BE Taskforce members	CUC, DEQ, NMHC	Supported by BE, NR,	CDBG / NMHC	Substantial
	implementation of	and implement priority	continue to attend		and SE/DRR	Strategic Plan;	water and
	CUC's Master Plan	action items for their	ongoing Watershed		Taskforces	CUC Wastewater	wastewater
	for wastewater,	service areas plan for	Working Group			Management	infrastructure
	with support from	unsewered areas	meetings and support			Plan	funding is being
	planning partners,		incorporation of water				sought through
	will result in at		source and quality				numerous
	least a 30%		protection into cross-				funding
	reduction in		cutting planning and				streams
	unsewered		project development				
	households		efforts to protect and				
			restore water related				
			ecosystems				
	1		1		1		

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?				
	AFFORDABLE AND CLEAN ENERGY										
SDG 7 – Ensure access to affordable, reliable, sustainable and modern energy for all	By 2030, CUC and planning partners have implemented an integrated utility scale photovoltaic system to meet 20% of the respective peak demand for Saipan, Tinian, and Rota	By 2022, CUC will endorse a Comprehensive Energy Plan detailing the steps necessary and sufficient to diversify the CNMI's energy portfolio and make progress towards renewable energy standards;  By 2025, the CUC-led and OPD, DPW, and CBMA supported Energy Feasibility Assessment will be completed to inform and update public laws and pursue grants to facilitate incorporation of renewable energy into the grid and incentivize distributed deployment; and By 2025, CUC will have identified pilot projects to support a phased Comprehensive Energy Plan and a plan is in place to address existing and future community needs	CUC leads and BE Taskforce supports Comprehensive Energy Plan currently in development with support from USDOE	CUC for utilities deployment, DPW-Energy supporting community efficiency initiatives	OPD, BE Taskforce	DOE/NREL Renewable Energy Plan / Strategic Energy Plan (2014 update in development)	Substantial power infrastructure funding is being sought through numerous funding streams				

Goal#	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?				
	INDUSTRY, INNOVATION, AND INFRASTRUCTURE										
SDG 9 — Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation	By 2030, integrated resource management considerations are incorporated into transportation planning efforts and "Complete Streets" Action plan is revised as needed for the CSDP update.	By 2025, OPD ensures robust, integrated transportation planning is formalized and integrated into CNMI's CSDP. This includes objectives where: (i) By 2022, CUC installs LED lighting at pilot area sites and works with DPW and CHCC to support safe road lighting deployment planning elements; (ii) By 2023 CHCC's Walkability Plan is incorporated into DPW and COTA plans to support implementation of "safe and accessible" roads for active, and accessible transportation; and (iii) By 2024, DPW, CPA, COTA, CPA, and CHCC, with support of other relevant partners, will endorse a comprehensive transportation planning vision, with supporting objectives, and goals for inclusion of a robust transportation planning element for the whole of CNMI in the 2025 CSDP update led by OPD	By 2022, DPW works with OPD and Transportation Planning partners including COTA and CPA as well as CHCC to update the 20-year Highway Master Plan to include walkability and accessibility recommendations identified by this group in 2020 scoping discussions;	DPW	OPD, BE Taskforce	CSDP, Highway Plan, TIPP	DPW Highways is federally funded; "Complete Streets" planning integration is being supported through local and federal funding and existing financial and technical support is being sought by the Complete Streets Working Group				

	By 2030,	By 2022, OPD obtains	BE Taskforce meetings;	OPD, CDA, Private	BE Taskforce,	Broadband plan
	integrated	complete coverage maps	continue broadband	sector partners	Commerce, CDA	Broadbaria plair
	resource	for cell and broadband	mapping and	Sector partiters	Commerce, CDA	
	management	coverage and works with	technological			
	considerations are	Commerce to update HIES	innovation planning			
		survey data specific to	discussions			
	incorporated into internet	internet accessibility to	discussions			
		•				
	connectivity and	support planning efforts that include subsidy				
	technological	_ ·				
	innovation	programs, public private				
	planning efforts	partnerships, or				
		community connection				
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE		hubs to ensuring that all				
AND INFRASTRUCTURE		residents of Saipan, Tinian,				
		and Rota have in-home				
	B 2000	internet access by 2030	FI II O	2500	504/ 7 . 504	
	By 2030,	Promote sustainable	Finalize Garapan,	BECQ	DPW, Zoning, DPL,	Watershed
	integrated	watershed management	Laolao, Achugao plans,		BE Taskforce	Conservation
	watershed	planning through data-	support updates and			Action Plans /
	resource	driven collaboration where	integration of			Management
	management	(i) DPW with support of	stormwater			Plans
	considerations are	OPD, the Hazard	management plans			
	incorporated into	Mitigation Office, and the				
	land management	Mayors Offices map all				
	and community	primary and secondary				
	development	road infrastructure by				
	elements of Zoning	2023 to support the				
	regulations,	development of flood				
	vulnerability	hazard mitigation and				
	assessments and	stormwater management				
	risk reduction	planning guidance and				
	planning (SSMP,	projects by 2025; and (ii)				
	NMHC), and Public	DPW works with DEQ and				
	Land Use Plan	partners to revise the 2006				
	updates.	Stormwater Management				
		Manual to integrate BMPs				
		across planning sectors				
		and projects				

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?			
	SUSTAINABLE CITIES AND COMMUNITIES									
SDG 11 – Make cities and human settlements inclusive, safe, resilient, and sustainable	By 2030, CNMI's CSDP reflects full integration of SCORP into public land use and transportation planning	By 2025, CNMI's State Comprehensive Outdoor Recreation Plan (SCORP) will be updated to include the conservation status of cultural, natural, and mixed- designation sites with area- and resource-specific plans and data collection, including the number of cultural and historical sites that are recorded and inventoried, with at least 50% annual preservation of newly discovered cultural heritage resources; public annual expenditures remain constant; private preservation data is collected; and By 2025, SCORP, PLUP, Zoning, and Watershed Plans are aligned to identify publicly managed "open space" areas and ADA accessible areas with goal of at least 85% open space or pervious surface maintained in each sub- watershed	Continue BE Taskforce meetings and include meeting with SCORP presentation for all planners when SCORP projects are being solicited;	OPD	BE / SE-DRR / NR Taskforces	Saipan Zoning Code, Garapan Revitalization Plan, SCORP, Strategic Parks and Recreation Plan, and other area- and resource- specific strategies and implementation plans and policies (for example the pending Blighted Buildings prioritization and mitigation guidance proposed in the FY21 BRIC) — cross cutting themes, goals, and priorities are highlighted in the CSDP	Federal SCORP funding is allocated annually and administered through the State Liaison Officer (OGM); Numerous agencies support components of this goal through local and federal funding streams; efforts to identify and leverage public private partnerships and other sustainable funding streams are underway			

11 SUSTAINABLE CITIES AND COMMUNITIES	By 2030, alignment and cross-cutting priorities are identified with supporting action and implementation plans included in the 2030 CSDP update	By 2025, SCORP, PLUP, Zoning, and Watershed Plans are aligned to identify publicly managed "open space" areas and ADA accessible areas with goal of at least 85% open space or pervious surface maintained in each sub- watershed	Continue BE Taskforce meetings and include watershed presentations for all planners when watershed management plans are finalized and when PLUP updates or Zoning regulation modifications are proposed	OPD, BE Taskforce	PDAC, All Taskforces, OGM	SCORP, PLUP, Saipan Zoning Regulations	See above
Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
		SUSTAINAB	BLE PRODUCTION A	ND CONSUMP	TION		
12 RESPONSIBLE CONSUMPTION AND PRODUCTION  SDG 12 — Ensure sustainable consumption and production patterns	By 2030, 50% of the recyclable waste stream will be diverted from CNMI's landfill or RCRA-compliant waste management facilities on Saipan, Tinian, Rota, and the Northern Islands with diverted waste composted, reused, or sold to support sustainable waste management systems	By 2025, OPD and DEQ will support DPW in the development and incorporation of the integrated waste management plan with recycling stream tracking and reporting protocols in place to support future updates and the PDAC, Legislature, and CNMI Governor adopt the plan update; and By 2025, OPD, the CEDS Committee, and the Socio-Economic Planning Taskforce will include data collection and consideration of programs to support exportation of local produce in economic planning and development to enhance economic growth and sustainability	BE Taskforce meetings continue, By 2022, DEQ with support from DPW and OPD will obtain centralized data and statistics on hazardous waste and CNMI-wide import / export stream for integrated waste management plan to be finalized by 2023 and included in 2025 CDSP update	OPD for SW planning DPW for SW implementation DEQ and others for SW regulation	DPW, BECQ, BE Taskforce, Mayors Offices	Comprehensive integrated waste management plan in development	Sustainable solid waste management planning and project implementation efforts are currently being supported by federally allocated disaster response funding

		CNM	I CSDP - Implementati	on Plan			
			Natural Resources				
Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
			<b>CLIMATE ACTION</b>	J			
SDG 13 – Take urgent action to combat climate change and its impacts	By 2030, OPD and the PDAC have incorporated crosscutting climate action planning needs across resource management sectors for the next full CSDP update; and By 2030, CNMI will reduce risks from climate impacts for communities within flood zones through flood zone map updates, implementation of education and outreach programs, application of current building codes, and permitting incentives	By 2023, the Office of Planning and Development (OPD) has launched a "Smart Safe Growth" (SSG) toolkit on the OPD website to support integration of climate impacts and adaptation opportunities into early planning and project scoping activities with at least three SSG trainings held for CNMI agencies and stakeholders by 2025; and By 2025, resource management specialists across sectors will work with the Hazard Mitigation program and OPD to update and integrate climate data and sector-specific planning recommendations across sectors	Continue SSG training development and outreach efforts; regular NR Taskforce meetings	OPD	NR, BE, and SE/DRR Taskforces; FEMA & USEPA	2018 SSG Guidance, DCRM "Better Buildings" guidance and supporting materials; see also climate action policy suggestions in Appendix V	SSG Part II update funded by FEMA and being supported by USEPA and OPD; additional planning support including updated hazards mapping and building analysis tools are being sought to further support these effort BECQ-DCRM has included "better buildings" as a 309 funded focal area and continues to work to expand guidance and resources for "climate smart" development

13 CLIMATE ACTION	By 2030, PSS has expanded climate considerations into integrated into public school science and social studies curriculum through place-based and service-learning opportunities that include Chamorro and Carolinian language and cultural studies	By 2025, PSS and partners will work to establish and expand Marianas-wide educational programs or institutions and resources including materials translated into Chamorro and Carolinian languages with place-appropriate images to enable continued engagement and deep, solutions focused education in natural resources studies in CNMI	PSS with BECQ-DCRM support meets to review and revise draft lessons as needed and identified opportunities for funding support in partnership with the NR Taskforce	PSS, BECQ- DCRM,	NR Taskforce	2018 SSG Guidance, 2021 CNMI Climate Report (PIRCA)	DCRM has developed climate curriculum and is working to support revisions for integration of these teaching tools into PSS curriculum in a way that aligns with efforts to leverage place-based and service-learning opportunities that include language and cultural studies
	By 2030, CNMI has constructed a "Marine Center" that includes holistic education and outreach components that include Marianas specific climate change information that supports K-12 and college level curriculum components as well as community and tourism information sharing and events	By 2025, the Marine Center will be fully funded and under construction with support from OPD and the Natural Resources Taskforce	By 2021, OPD and the Natural Resources Taskforce convene to revise project proposal details to support submission of funding proposals for a "Marine Center" that will serve as the marine science hub of the CNMI, supporting PSS and NMC curriculum components and community and tourist education and outreach as well as inter-agency coral and mangrove restoration studies	opd to lead on meeting scheduling and interagency funding requests; DFW and DCRM to lead on Marine Center plan updates and staffing once constructed	NR Taskforce DLNR-DFW BECQ_DCRM	CSDP	~\$50,000 from NFWF Coastal Resilience earmarked for coral nursery build-out' may need match for additional funding to build the proposed \$1.25M facility and additional funding to support coral propagation studies and staff center for maintenance and outreach events

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
		SUSTAINAE	BLE USE OF OCEAN	RESOURCE	S		
14 LIFE BELOW WATER	By 2030 Marine Center construction complete, resulting in inter-agency marine studies that support the creation of jobs, integrate with school curriculum and outreach programs with sustainable revenue being generated through guided tours, book sales, special events, and/or other dedicated funding mechanisms	By 2023 NFWF grant and other funding streams have been leveraged to construct 45,000-gallon coral tank and closed loop filtration system at a site designated for Marine Center build-out; and By 2025, the Marine Center will be fully funded and under construction with support from OPD and the Natural Resources Taskforce	By 2021, OPD and the Natural Resources Taskforce convene to revise project proposal details to support submission of funding proposals for a "Marine Center" that will serve as the marine science hub of the CNMI, supporting PSS and NMC curriculum components and community and tourist education and outreach as well as inter-agency coral and mangrove restoration	OPD to lead on meeting scheduling and interagency funding requests; DFW and DCRM to lead on Marine Center plan updates and staffing once constructed	NR Taskforce DLNR-DFW BECQ_DCRM	CSDP	~\$50,000 from NFWF Coastal Resilience earmarked for coral nursery build-out' may need match for additional funding to build the proposed \$1.25M facility and additional funding to support coral propagation studies and staff center for maintenance and outreach events
SDG 14 - Conserve and sustainably use the oceans, seas, and marine resources for sustainable development	By 2030 there are interagency programs to support active management of prioritized in water resources and management areas reflected in the CSDP update and at least 50% of marine resources are being effectively managed through site-specific management plans	By 2025, OPD and the Natural Resources Taskforce reassess and revise priorities to ensure that by 2030 there are interagency programs to support active management of prioritized in water resources and management areas reflected in the CSDP update, including:	At least quarterly meetings with NR Taskforce; ongoing support of referenced plans and programs	OPD	NR Taskforce	CSDP	Planning efforts supported by existing staff funding at OPD and NR Taskforce Agencies; OPD is requesting additional funding for dedicated NRTF facilitator position and administrative support staff through local and competitive funding streams

	By 2022, DCRM will	BECQ-DCRM,	NR Taskforce	Coral	NFWF funding for
By 2025, Coral Restoration	facilitate the	DLNR-DFW		Restorations	2021-2023 will
Management Team comprised	development and			Priorities Plan (in	support Coral
of DCRM and DFW support	endorsement of the			development),	Specialist position –
implementation of and regular	Coral Restorations			Saipan Lagoon	DCRM and DFW will
updates to the Coral Reef	Priorities Plan and			Use	continue to work
Restoration Management Plan	continue to support			Management	together to leverage
and support ongoing review	related use			Plan (SLUMP)	existing resources
and updates of out-planting	management planning			, ,	and build capacity to
proposals as well as public	efforts including				study and manage
access and use assessments	periodic updates to				the marine resources
and management efforts	the SLUMP with				of the CNMI
	recommendations				
	incorporated into the				
	CSDP update by 2025				
By 2025, the Division of Fish	DFW program	DLNR-DFW	NR Taskforce	WesPac	DFW has secured
and Wildlife (DFW) will work	provides updates to			Fisheries Plan	grants to support
with partners to promote a	NR Taskforce to				fish tagging and
sustainable fishing industry	discuss sustainability				monitoring efforts;
throughout the Marianas by	definitions and next				additional
creating a CNMI fisheries	steps				assessment support
management program that					is being sought for
includes expanded in-house					socio-economic use
capacity to conduct resource					and impact analysis
assessments of fish and					
invertebrates in CNMI to					
support sustainable fisheries					
management through					
improved monitoring, data					
analysis, regulation					
assessment, and enforcement					
while factoring in fishing					
industry, development, and					
tourism needs					



By 2025, the Division of Fish and Wildlife, supported by resource management partners at BECQ and others, will conduct and complete recruitment studies from marine protected areas (MPAs) to document benefits and to establish sustainable management program	DFW continues recruitment studies and provides updates to NR Taskforce, and leads efforts to collect and share baseline data and assess trends on MPA recruitment and migration patterns to further support adaptive resource management planning efforts	DLNR-DFW	BECQ, NR Taskforce	MPA Management Plan	Planning efforts supported by existing staff funding at OPD and NR Taskforce Agencies;
Led by DFW and supported by resource management partners at BECQ and DLNR, as well as other agency and NGO partners, a Fish and Coral Restoration Program will be established by 2025 to create a fish and coral conservation action plan to enhance resource biodiversity and reef health	By 2021, OPD has supported interagency site and resource prioritization discussions with management partners including DLNR and DPL to identify locations that may be viable to support coral restoration activities on Saipan, Tinian, Rota, and the Northern Islands	DLNR-DFW	BECQ, NR Taskforce	Coral Restoration Plan	Planning efforts supported by existing staff funding at OPD and NR Taskforce Agencies;
DFW will work with partners to conduct life history studies on targeted food fish in the CNMI to determine growth rates, longevity, reproduction, and mortality. The information generated will be used for sustainable management of fisheries by 2025	DFW and DCRM continue coral restoration planning efforts with the goal to finalize action plan by 2021 and share new data through NR Taskforce meetings to support ongoing management planning efforts	DLNR-DFW	BECQ, DPL, NR Taskforce	Coral Restorations Priorities Plan (in development); MPA Management Plan updates?	Planning efforts supported by existing staff funding; Additional funding will be sought to support planning, Marine Center design revisions, and implementation activities



		The Department of Lands & Natural Resources (DLNR) - DFW will work on improving boating infrastructure by 2025 to minimize environmental impacts on nearshore resources and to allow for safe boating access	DFW program provides updates to NR Taskforce to discuss sustainability definitions and next steps with data and planning efforts incorporated into the 2025 CSDP plan update	DLNR-DFW	NMC-CREES, NR Taskforce	WesPac Fisheries Plan	Planning efforts supported by existing staff funding at OPD and NR Taskforce Agencies;
LIFE BELOW WATER		DLNR/DFW will work with regional partners to improve fishery data collection efforts in the CNMI and generate information needed to sustainably manage fishery resources by 2025	DLNR/DFW continues to work with state and federal partners in conducting nearshore fish, invertebrate and benthic assessments throughout the CNMI to better document resource abundance and diversity. Information generated from this work will be used to sustainably manage nearshore fishery resources	DLNR-DFW	BECQ-DCRM, NMC-CREES, NR Taskforce		DFW has secured grants to support nearshore fish and invertebrate studies  DCRM has a long-standing marine monitoring program with data that can be leveraged to further support these efforts
	By 2030 there are interagency programs to support active management of prioritized inwater resources and management areas reflected in the CSDP update	By 2025, DLNR/DFW will work with partners to improve enforcement capacity by evaluating existing fishery regulations and policies to determine validity within current concerns. Revisions will be made to ensure that these regulations meet current and future management needs	DLNR/DFW continues to work with state and federal partners in conducting nearshore fish, invertebrate and benthic assessments throughout the CNMI to better document resource abundance and diversity.	DLNR-DFW	BECQ-DCRM MMT, NR Taskforce	SWAP, SLUMP	DFW has secured grants to support nearshore fish and invertebrate studies  DFW is seeking legal support services to evaluate regulations and policies

14 LIFE BELOW WATER			DLNR/DFW works with AAG to evaluate fishery regulations and policies and provides updates to NR Taskforce at regular meetings  Information generated from this work will be used to sustainably manage nearshore fishery resources				
	By 2030, interagency planning efforts support cross-cutting marine management and conservation goals that incorporate data-driven adaptive principles to achieve the vision of ensuring wise use of marine resources that meets the needs of the community now and in the future	By 2025, recommendations for FADs deployment as well as other marine resource management supportive programs and initiatives including coral restoration and resiliency support efforts and other adaptive management approaches are incorporated into CSDP updates	DLNR/DFW will work with partners to develop sustainable fishing access programs such as Fish Aggregating Devices (FADs) to promote alternative fishing opportunities that help reduce fishing impacts in nearshore waters	DLNR-DFW	BECQ-DCRM MMT, NR Taskforce	CSDP, Coral Restoration Plan, SWAP, SLUMP	Marine management efforts are supported by existing staff and project support funding at DFW and DCRM, and NRTF agencies are working to leverage existing resources and obtain additional funding to continue to build out these critical marine resource management efforts

Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?
		SUSTAINAI	BLE TERRESTRIAL ANI	NEARSHORE F	RESOURCES		
SDG 15 - Protect, restore, and promote sustainable use of terrestrial and nearshore	By 2030 there are interagency programs to support active management of prioritized resources and management areas on land and in nearshore waters reflected in the CSDP update and at least 30% of terrestrial resources are being effectively managed through site-specific	By 2025 the Department of Lands and Natural Resources will update the State Wildlife Action Plan and continue periodic updates every ten years with data and input included from natural resource management partners at BECQ as appropriate	By 2021, BECQ-DCRM will reconvene the Wetlands Restoration and Management Team including DLNR-DFW and DoAg, DPL, OPD, and other members of the Natural Resources Planning Taskforce to collaborate develop, adopt, and begin implementation of a Comprehensive Wetlands Management and Restoration Plan by 2025	NR Taskforce	BECQ, DLNR, DPL, Zoning, NMC- CREES	Comprehensive wetlands management plan (SPN, 1991); State Wildlife Action Plan; Watershed management plans, Public Land Use Plan	Planning efforts supported by existing staff funding at OPD and NR Taskforce Agencies;  Additional planning and project implementation support being sought through dedicated and competitive funding sources
ecosystems, sustainably manage forests, and preserve and halt degradation of biodiversity and resources of particular concern in the CNMI	CNMI Forestry will work with management partners to monitor, maintain, and restore at least 10% land cover to native and endemic forest communities by 2030	By 2025, and in all periodic updates, Statewide Forestry Assessment and Resource Strategy includes management provisions for limestone forests and wetlands as well as considerations to support nearshore conservation	CNMI's Department of Land and Natural Resources and Bureau of Environmental and Coastal Quality work together to ensure no net loss of limestone forest, coral reefs, sea grass, and wetlands to protect ecosystems and biodiversity and support habitat connectivity, with meetings held at least quarterly with the Natural	DLNR-Division of Agriculture – Forestry leading Forest Action Plan update	CNMI Natural Resources Management partners support implementation and updates to Forest Action Plan as Advisory Council members	Forest Action Plan (2021 update pending), SCORP, Strategic Parks and Recreation Plan, SWAP	Planning efforts supported by existing staff funding at OPD and NR Taskforce Agencies;  Additional planning and project implementation support being sought through dedicated and competitive funding sources

15 LIFE ON LAND		efforts, with forestry-specific updates included in regular visions to the Forest Action Plan, Strategic Parks and Recreation Plan, and other relevant land use and land cover plans, regulations, and policies as appropriate	Resources Planning Taskforce to identify planning and project alignment opportunities and share out updates on progress and challenges as needed to support this effort				
	By 2030 CNMI continues progress in maintaining the amount of man- made wildfires is reduced by 50% in area from 2020 numbers	By 2022, BECQ develops a Wildfire Management Plan that addresses planning, response and mitigation of wildfires to support efforts to reduce human induced wildfire, reduce fire risk, and restore fire-impacted sites to support healthy watersheds and communities; and  By 2025 the amount of man-made wildfires is reduced by 50% in area from 2020 numbers	BECQ-DCRM and DLNR-Forestry convene wildfire management meetings to share information and discuss planning needs with partners including DFEMS, HMGP, HSEM, DPL, and other relevant planning partners	DLNR-Forestry, BECQ-DCRM	NR and SE/DRR Taskforces; DFEMS, HMGP, HSEM, DPL	Standard State Hazard Mitigation Plan	Planning efforts supported by existing staff funding at OPD and NR Taskforce Agencies;  Additional planning and project implementation support being sought through dedicated and competitive funding sources

15 LIFE ON LAND	Reduction of stormwater runoff by maintaining and increasing wetland, green infrastructure, and stormwater management processes including aquifer recharge by achieving a 50% reduction in water impairment ratings for coastal waters of Saipan, Tinian, and Rota by 2030	Led by the Bureau of Environmental and Coastal Quality, watershed management and restoration efforts will result in (i) reduction of saltwater intrusion into Saipan's freshwater lens by 20% by 2025 as measured by reduced chloride levels in CUC managed assets; and (ii) reduction of stormwater runoff by maintaining and increasing wetland, green infrastructure, and stormwater management processes including aquifer recharge by achieving a 50% reduction in water impairment ratings for coastal waters of Saipan, Tinian, and Rota by 2030.	Continue watershed management meetings; convene working group with DPW to support stormwater management planning also described in Goal 6	BECQ-DCRM	DPW, NR and BE Taskforces	CUC water management plan (update pending); watershed management plans for priority watersheds	Planning efforts supported by existing staff funding at OPD and NR/BE Taskforce Agencies;  Additional planning and project implementation support being sought through dedicated and competitive funding sources
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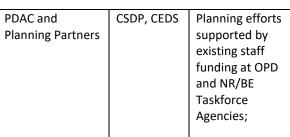
	CNMI CSDP - Implementation Plan							
Goal 17 - Partnerships								
Goal #	10+ Year Goals	3-5 Year "SMART" Objectives	FY20-21 Action Items	Action Lead(s)	Partnerships	Supporting Action Plan(s)	Funding Status / Unmet Need(s)?	
PARTNERSHIPS								
17 PARTINERSHIPS FOR THE GOALS  SDG 17 -	By 2030, led by OPD and facilitated through partnerships with planning agencies and other stakeholders, scheduled planning updates detailed further in Appendix I of this CSDP, will be completed and incorporated into a 2030+ planning update	By 2025, led by OPD and facilitated through partnerships with planning agencies and other stakeholders, scheduled planning updates detailed further in Appendix I of this CSDP, will be completed and incorporated into the five-year planning update;	PDAC and Planning Partners continue regularly scheduled meetings and develop additional tools to track implementation progress, identify synergies, build capacities, and address remaining needs and caps	OPD	PDAC and Planning Partners	2018 SSG Guidance, CSDP	Planning efforts supported by existing staff funding at OPD and NR/BE Taskforce Agencies;  Additional planning and project	
Strengthen the means of implementation and support partnerships for sustainable development	The 2030 CSDP update will reflect growth in community engagement as indicators of enhanced partnerships by at least doubling the number of public comments received in the 2019-2020 CSDP draft and comment period;	By 2024, Commerce HIES surveys will provide data on internet access and use these data points to address remaining deployment gaps, if any, in the 2025 CEDS update with support from OPD, PDAC, and Planning Partners	SE and BE Taskforces will work with Commerce CSD to include key data points in CEDS and address identified gaps through future HIES survey updates	OPD	SE and BE Taskforces	CSDP, CEDS	- implementation support being sought through dedicated and competitive funding sources	

	The 2030 CSDP and corresponding 2030
17 PARTNERSHIPS	CEDS update will
FOR THE GOALS	include a detailed
$\sim$	assessment of GDP
	expenditures, imports,
	and exports trends,
	and other economic
	data identified by the
	PDAC and SE/DRR
	Planning Taskforce

By 2023 Commerce, Finance, OMB, and OPD with support of the PDAC and planning partners, will work to draft guiding policies that address poverty reduction and track changes in annual GDP by building partnerships with DCCA's NAP program to track the number of NAP recipients, the Department of Labor to track the number of unemployment and those seeking employment and NMHC (Section 8) to track the number of those seeking government housing assistance.

By the end of 2020,
OPD, Commerce, and
PDAC, and other
planning partners will
endorse the
sustainable
development
planning component
and Smart, Safe
Growth integration
recommendations to
identify priority
projects to support
economic
diversification and
growth for inclusion
in the 2021-2025
CEDS update and
future plan revisions

OPD



Additional planning and project implementation support being sought through dedicated and competitive funding sources



# Appendix II – 2020 – 2030 Planning Timeline

Plan Name	Agency / Lead POC	Plan Duration/Update Frequency	Update Status
2021-2031 CSDP	OPD	CSDP will be reviewed and revised every 10 years, with implementation plan updates (Appendix I) to be executed at least every 5 years to collect data and track progress towards identified goals and objectives	Created 2021, full review every 10 years, implementation plan update every 5 years at least
2008 Coastal and Estuarine Land Conservation Plan for The Commonwealth of the Northern Mariana Islands	Bureau of Environmental and Coastal Quality Division of Coastal Resources Management	2008-2020	No update specifics found
2017 Saipan Lagoon Use Management Plan	Bureau of Environmental and Coastal Quality Division of Coastal Resources Management	Created on 1985; revised and updated on 1997, 2012, and 2017	Created on 1985; updated on 2017
1990/91 Saipan Comprehensive Wetlands Management Plan	Bureau of Environmental and Coastal Quality Division of Coastal Resources Management	Not specified	No update specifics found
2009 Laolao Bay Conservation Action Plan	Bureau of Environmental and Coastal Quality Division of Coastal Resources Management	2009-2018	Updated on 2012, 2020 update pending
2012 Talakhaya / Sabana Conservation Action Plan	Bureau of Environmental and Coastal Quality Division of Coastal Resources Management	Upon funding availability	2020 update underway

Plan Name	Agency / Lead POC	Plan Duration/Update Frequency	Update Status	
2013 Garapan Conservation Action Plan	Bureau of Environmental and Coastal Quality Division of Coastal Resources Management	The CAP will be reviewed and updated by the advisory group every five years to track improvements and initiate new conservation projects and programs. Associated with the CAP is a workplan that will be updated by the advisory group every two years to provide guidance when implementing actions to improve our natural resources.	2020 update underway	
2002 Watershed Restoration Action Strategy	Bureau of Environmental and Coastal Quality Division of Coastal Resources Management Division of Environmental Quality	2002-2014	No update specifics found	
2007-2012 Comprehensive Cancer Control Plan	Commonwealth Healthcare Corporation	Plan is a living document and will be reviewed annually. Updates are made when needed	Last updated on 2007	
2015-2020 Commonwealth Healthcare Corporation Strategic Plan	Commonwealth Healthcare Corporation	Five (5) year plan	Current until end of 2020 fiscal year, update pending	
2018 Rota West Harbor Master Plan	Commonwealth Ports Authority	Not specified	Has not been updated since 2018	
2018 Tinian Harbor Master Plan	Commonwealth Ports Authority	Over 20 years later in since 1997, the stated harbor conditions and vision for Tinian Harbor remain unchanged with the following updates based on information provided during the October 28, 2014 stakeholder meeting	The current Tinian Harbor Master Plan was prepared in 1997 and it has not been updated significantly since its original preparation.	
Pagan Airfield Master Plan	Commonwealth Ports Authority	Not specified	No current updates	

Plan Name	Agency / Lead POC	Plan Duration/Update Frequency	Update Status
2017 Tarmac Delay Emergency Contingency Plan (Saipan)	Commonwealth Ports Authority	Not specified	Unknown
TARMAC DELAY EMERGENCY CONTINGENCY PLAN (Rota)	Commonwealth Ports Authority	Not specified	Created on June 2012; Revised in May 2017
TARMAC DELAY EMERGENCY CONTINGENCY PLAN (Tinian)	Commonwealth Ports Authority	Not specified	Unknown
2015 Drinking Water and Wastewater Master Plan – Rota (Final Draft)	Commonwealth Utilities Corporation	Based on the projected funding available from EPA State Revolving Fund (SRF) grants, one project for the Rota water system will be implemented during the first 5-year CIP period from 2016 through	CUC reports updates pending
2015 Drinking Water and Wastewater Master Plan – Tinian (Final Draft)	Commonwealth Utilities Corporation	Upgrade HMT (FY 2016-2020) Improvements to Maui Well & Upgrade QMT Tank (FY 2021-2025)	Plan is based on Stipulated Order requirements; CUC reports updates are pending
2015 Wastewater Master Plan – Saipan (Final Draft)	Commonwealth Utilities Corporation	Based on Stipulated Order requirements, goals that CUC has for its wastewater system on Saipan, and information collected as part to the 20-year Master Plan (2016-2035)	No current updates
Groundwater  Management and Protection Plan, Commonwealth of the Northern Mariana Islands	Commonwealth Utilities Corporation	Duration is determined based on Section B4 of the Stipulated Order that addresses development and implementation of a required Groundwater Management and Protection Plan over a 20-year planning horizon	No current updates

Plan Name	Agency / Lead POC	Plan Duration/Update Frequency	Update Status
2009-2014 Comprehensive Economic Development Strategy	Department of Commerce	Updated every (5) years	See Current CEDS Plan
2013 CNMI Energy Action Plan	Department of Interior Office of Insular Affairs/ NREL	The CNMI Energy Action Plan is a living document that will be regularly updated by the taskforce	Created on 2013; Graph Wedge analysis performed covers a period from 2010 projected out to 2025; CUC reports update pending
Action Plan for Oryctes rhinoceros 2018 – 2023	Department of Lands and Natural Resources	Five (5) Years	Current through 2025
2009 Fishery Ecosystem Plan for the Mariana Archipelago (Western Pacific Regional Fishery Management Council)	Department of Lands and Natural Resources Western Fishery Regional Fishery Management Council	Updates provided annually based on new information	Created on June 2009; Updates unknown
Commonwealth of the Northern Mariana Islands State Wildland Fire Plan	Department of Lands and Natural Resources Division of Agriculture Forestry Section	Based on funding availability from USFS State Fire Assistance Grant Program	Updated on 2015; current through 2024
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS (CNMI) STATEWIDE ASSESSMENT AND RESOURCE STRATEGY 2010-2015+	Department of Lands and Natural Resources Division of Agriculture Forestry Section	Created on 2010; Updates provided based on new information	Updates unknown; Forestry notes plan update pending
2005 Management Plan for the Managaha Marine Conservation Area	Department of Lands and Natural Resources Division of Fish & Wildlife	Non-Specified	No updates since creation
Wildlife Action Plan for the Commonwealth of	Department of Lands and Natural Resources Division of Fish & Wildlife	Ten (10) Years	Current through 2025

Plan Name Agency / Lead POC		Plan Duration/Update Frequency	Update Status	
the Northern Mariana Islands 2015-2025				
Five-year strategic plan for Parks and Recreation, CNMI 2019-2024	Department of Lands and Natural Resources Division of Parks and Recreation	Five (5) Years	Updated on 2014; current through 2024	
2019 DPL Land Use Plan	Department of Public Lands	Created in1989; Updated in 2019 for 5- year plan	Updated on 2019; current through 2024	
2017 CNMI Catastrophic Typhoon Plan	FEMA, Homeland Security Emergency Management, and supporting partner agencies	This plan will undergo periodic reviews to incorporate policy updates, new guidance, lessons learned from exercises and actual incidents in order to best protect the lives, property, and environment of communities and jurisdictions within the CNMI	No updates currently underway	
Maritime transport system 2014 RECOVERY PLAN (The Mariana Islands Transportation System Recovery Plan)	Guam/CNMI Maritime Transportation System Advisory Group	MTS Recovery Plan is a living document and will continue to evolve, reflecting lessons learned from application, training, actual operations and exercises.	Created on June 2014; Updates unknown	
2018 CNMI Standard State Mitigation Plan	Hazard Mitigation	Updates follow the 5-year HMGP planning cycle	Updated on 2018; current through 2024	
CNMI State Plan 2011- 2015 (Preservation CNMI Caring for the past in an uncertain future)	Historic Preservation Office	Four (4) Year Plan	No current update	
2011-2015 Aquaculture Development Plan	Northern Marianas College Cooperative Research, Extension, and Education Service (CREES)	Five (5) Year Plan	No current update	
2012-2016 Northern Mariana Tourism Master Plan	Marianas Visitors Authority	Four (4) year plan	Update pending with MVA	
1995-2015 The Rota Master Plan-Alternative Vision Report	Office of the Mayor of Rota	Not specified	Has not been updated	
2007 Garapan and Beach Road Revitalization Plan	Office of Planning and Development / Zoning	Ten (10) Year Plan	Updates currently in progress	

# Appendix III – Community Comments

This section includes plan-related and substantive community comments submitted during the July 25 – August 25, 2020 comment period through emails (three comments and two questions received), phone calls (two received), and online survey results (149 received as of 8/28/20, to be included upon close of the survey).

Subsequently, three additional written comments from the Offices of the Mayors of Rota, Tinian, and the Northern Islands specific to planning updates were received during the following public comment period which are included here with relevant updates regarding goal- and island-specific plans incorporated into the revised CSDP.

Email Received August 3, 2020

Thanks for sending the visions document out. I just had a few comments on there. I think it's a great idea to incorporate the reef priorities for the comprehensive plan.

For NR Taskforce Vision, can this be fleshed out more because natural resources is such a big part of the culture and identity for the CNMI. Something like:

To promote sustainable use and conservation of the CNMI's natural resources on land and in water that can meet development needs sustainably and preserves the integrity of these natural resources for future generations. To promote research and education about the CNMI's natural resources to acknowledge and support local stewardship, conservation management, and cultural practices that are integral to the CNMI community.

For SDG 14, specify regarding recruitment studies – are these for fish? For coral? Both? Can something be added on developing a data management plan for sharing fisheries data?

For SDG 15, can marine ecosystems be included here since reefs and seagrass are also listed?

Regarding "no net loss" Is this goal realistic? There is already net loss of coral and seagrass cover documented and it will happen again, much of which is climate change related, COTS, or storms. Coral and seagrass cover fluctuates due to those disturbances. Some of the mortality can be alleviated by local action to help improve reef resiliency and natural recovery. I think the "no net loss" can be reworded.

Attached comments on Visioning Document suggested adding coral restoration management outcomes to SDG #14 and include nearshore environment in SDG #15, summarized in text above. Suggestions to expand the Natural Resources Conservation Vision are included in tracked changes in this updated visioning document. Questions were also raised regarding the viability and framing of "no net loss".

These tracked changes additions and questions have been flagged in tracked changes in the visioning document for further discussion with the PDAC and Planning Taskforces.

Email Received August 7, 2020

Thank you for the opportunity to provide comment on this impressive draft.

Page 1: I think "integrity" and "innovation" are great core values for the CNMI. The concept of integrity brings together many positive connotations of thoughtfulness, use of evidence for decision-making, being fair/balanced, and the quality of behaving ethically. Innovation is essential for the CNMI which has very little resources and an operating environment unique from most other places on the planet.

While I think the values of the CNMI should reflect the values of the culture here, I don't think a core value of the specific word "cultural" fits. Perhaps "culture" would be a better way of expressing it, but "culture" is a very broad term, especially in reference to the CNMI which is culturally heterogeneous.

Page 2: Planning elements visions - Development policy: I think it's important that development policy for infrastructure projects prioritize environmental health as well (environmental health as in the field which deals with water and sanitation, air pollution, waste management, safe housing, transportation etc.)

Page 3: The tourism and visitor industry vision is long, and unnecessarily cumbersome. This should probably be edited to be more clear and succinct.

Thank you!

Email Received August 18, 2020

**Guiding Values Section:** 

Resiliency did not show on the word map even though it was a choice in the survey. The under-representation of resiliency can be interpreted as people not valuing this concept, perhaps due to other more pressing immediate or short-term concerns, or that people may not know what resiliency means/encompasses. Recommend this term be unpacked and more information be provided so people have a better idea of what the term represents. Perhaps "Disaster-Resilient Communities and Economies".

Sustainability Visioning Section:

Define SSG here - a set of development strategies focused on improving the resiliency of the built environment (Guidance Manual for SSG, p.4). Put (SSG) behind the words since it is the first use of the term.

Regarding the Public Land Use Plan - The PLUP in an excellent plan to help mainstream SSG principles into CNMI planning efforts and to align the PLUP with the Comprehensive Sustainable Development Plan (CSDP). Recommend adding language that the PLUP will also promote safe, resilient communities.

Regarding Transportation, Community Design, and Design Regulations:

Complete streets is an element of the EPA's Smart Growth program and is a component of SSG. Not only does Complete Streets work towards improving community health by encouraging walking and bike riding, but it also help reduce emissions and fuel/energy consumption which align with SSG. It is recommended that the Complete Streets Working Groups attend SSG training and become familiar with the principles to incorporate additional measures for healthy, safe, resilient communities during planning and project development phases.

Regarding Housing and Redevelopment:

Natural disasters disproportionately affect low income people and the cycle of disaster rebuild can have significant negative consequences for these households (SAMHSA, 2017). The current vision does not include concepts of natural hazard mitigation or resiliency. Add resilience to the vision. Perhaps - ..."to increase ownership of safe, resilient, sanitary, and affordable homes".

### Regarding Conservation – Natural Resources

The vision statement does not include the concept of green infrastructure or ecosystem services. Conserving natural features such as reefs, watersheds, and wetlands provides significant services including protecting and buffering the built environment from extreme weather events. Add to the vision statement the concept that conservation helps protect/promote ecosystem services and green infrastructure and helps to mitigate the impacts from extreme weather events.

### Regarding Public Safety and Disaster Risk Reduction

The vision as stated focuses on public safety during and post disaster. There are no elements that speak to disaster risk reduction in this vision statement. Disaster risk reduction, specifically under future climate conditions, is a cornerstone of SSG. The Guidance Manual for SSG discusses how to incorporate disaster risk reduction into planning and regulations in Chapters 4 & 5. Expand the vision statement to include language that address actions for disaster risk reduction.

#### Sustainable Development Goals:

#### SE/DRR Taskforce - SDG#1

The impacts of natural disasters and the disaster-rebuild cycle disproportionately affect low income households and perpetuate poverty (SAMHSA, 2017). The Guidance Manual for SSG points out that every \$1 spent on hazard mitigation today saves \$6 in future costs (p. 10). When considering the factors that contribute to poverty, the disaster-rebuild cycle should be acknowledged and considered.

Incorporate concepts that the disaster-rebuild cycle helps perpetuate poverty and consider actions/steps to break the cycle by incorporating SSG into capital improvement and other building projects. Additionally, investigate programs via the Comprehensive Economic Development Strategy to assist low income households recover following disasters. Third bullet is about prioritized wastewater management, seems out of place. Connect wastewater projects to poverty reduction.

#### SE/DRR Taskforce - SDG#17

Switch the position of the bullets to put the 2020 objective regarding SSG integration first.

## BE Taskforce - Taskforce Vision

The current vision statement includes sustainability but does not clearly mention SSG or the concept of building to meet future climate conditions and to withstand future extreme weather events. Per the Guidance Manual for SSG, projected future conditions will likely tax some existing infrastructure and new CIP projects should be planned with future hazards in mind. Expand the vision to include planning/building to withstand future climate conditions to achieve sustainability and resiliency. Having these concepts in the vision statement will further help to mainstream SSG into planning and building practices.

#### BE Taskforce - SDG#6

Current goals to update the CUC Master Plan and to develop the Master Water Plan do not mention SSG or future climate conditions. Per the Guidance Manual for SSG, precipitation patterns for CNMI are expected to change and less frequent, but more intense rainfall events are projected (p. 16). These changes will likely affect the recharge rate of the fresh water lens and affect drinking water salinity. It is recommended that you include wording in the goals/objectives to address climate change and projected changes in future precipitation patterns.

It is unclear if the proposed plans to manage stormwater runoff are considering future climate conditions or are being planned/built to current weather conditions. Include wording in the goals/objectives to address climate change and projected future precipitation patterns and increased stormwater runoff due to extreme rainfall events.

BE Taskforce - SDG#9

The wording does not clearly state that the infrastructure will be build to withstand anticipated future climate conditions. Infrastructure can be built to be resilient to today's weather extremes, but this same infrastructure may be vulnerable as weather changes over time due to climate change. The difference between hazard mitigation and SSG is that hazard mitigation primarily focuses on the hazards of today while SSG attempts to mitigate the hazards of tomorrow. Include wording in the goals/objectives include wording to address climate change and anticipated future extreme weather.

Same comment as above regarding planning toward future projected precipitation patterns. Include wording in the goals/objectives to address climate change and projected future conditions of increased runoff due to extreme rainfall events.

BE Taskforce - SDG#12

Building resilient buildings/infrastructure based on SSG principles can help reduce waste needing to be landfilled following severe weather events (Guidance Manual for SSG, p. 11). Highlight connection between SSG and waste management.

BE Taskforce - SDG#17

There is no mention of training or educating partners regarding SSG. Add SSG training for the Built Environment task force and their planning partners to the goals.

NR Taskforce: SDGs 13, 14, & 15

Many of the objectives of these goals promote natural protective features (e.g., reefs, watersheds, etc.) as well as ecosystem services. These activities naturally link to SSG. The connection between conservation activities and community benefits should be highlighted in plans and messaging.

Promoting natural protective features is addressed in the Guidance Manual for SSG (p. 20) and tools to promote green infrastructure are provided in Chapter 7.2. Recommended that the task force continue to connect conservation actions with community benefits via green infrastructure and ecosystem services in plans and messaging to the community.

Visioning Document: pg. 15

"Image" to visualize SDGs does not include goals #1, #9, and #11. Image is fuzzy and hard to read. Ensure all SDGs are included in the figure and improve the graphic quality/resolution.

Planning Elements: (A) Land Use

SSG is not included under the Planning and Policy Recommendations. The Guidance Manual for SSG stresses the importance of using zoning plans and regulations to ensure development is sited in less risky areas. The manual offers land planning tools in Chapter 7.2. Clearly link SSG to zoning plans and regulations. It is through zoning and regulations that development can be driven by government action towards less risky areas.

Planning Elements: (H) Housing

Ensuring housing follows SSG principles to increase resiliency towards future climate conditions is essential to breaking the disaster-rebuild cycle and to lessening economic hardship to people in lower income classes (SAMHSA, 2017). Clearly link SSG to housing plans/designs. See US Substance Abuse and Mental Health Services Administration (SAMHSA) (2017). Greater Impact: How Disasters Affect People of Low Socioeconomic Status. SAMHSA Disaster Technical Assistance Center Supplemental Bulletin, US Department of Health and Human Services.

Planning Elements: (I) Redevelopment

SSG is not included under Redevelopment. The Guidance Manual for SSG stresses the importance of using zoning plans and regulations to ensure development is sited in less risky areas. The manual offers land planning tools in Chapter 7.2. Clearly link SSG to redevelopment especially for housing and Garapan revitalization. It is through zoning and regulations that development can be driven by government action towards less risky areas.

September 5<sup>th</sup> Addendum:

To help clarify our comment regarding including disaster risk reduction (DRR) to the vision statement developed by the Socio-economic and Disaster Risk Reduction taskforce we looked at DRR vision statements from other organizations, such as the United Nations.

DRR is more than just weathering a storm. It implies proactive actions to reduce vulnerabilities to extreme weather to protect and sustain the health, safety, and socioeconomic well-being of the CNMI. Since vision statements are usually very personal to the group, the statements below are recommendations to help link the concepts of disaster risk reduction or resilience (that results from reducing risks) to healthy, prosperous communities.

Current CNMI Socio-economic and Disaster Risk Reduction Taskforce Vision Statement Taskforce Vision: CNMI is a healthy and safe place to live, work, recreate, and weather a storm

Suggested language/concepts for the taskforce to consider to more explicitly tie DRR to the taskforce vision.

1. CNMI is a healthy and safe place to live, work, and recreate with communities resilient to natural disasters.

- 2. CNMI invests in disaster risk reduction for resilient communities that are healthy and safe places to live, work, recreate, and weather storms.
- 3. CNMI is a disaster resilient state that provides a healthy and safe place to live, work, recreate, and weather a storm.
- 4. CNMI is a healthy and safe place to live, work, recreate, and weather a storm. Disaster risk reduction is essential to sustainable development.
- 5. CNMI is a healthy and safe place to live, work, recreate, with disaster resilient communities.

Email and Attachment Received September 4, 2020

**OPD Visioning Document** 

**Reviewer: DCRM Planning Section** 

SDG #2 - End hunger, achieve food security and improved nutrition, and promote sustainable localized agriculture

- Would USDA/ NRCS be available for potential funding opportunities for assistance.

SDG #3 - Ensure healthy lives and promote well-being for all people at all ages

- This may be a bit premature, but CHCC should set a standard procedure for public gatherings to reduce the spread of COVID-19.

SDG # 12 - Ensure sustainable consumption and production patterns

By 2030, 50% of the recyclable waste stream will be diverted from CNMI's landfill or RCRA-compliant waste management facilities on Saipan, Tinian, Rota, and the Northern Islands with diverted waste composted, reused, or sold to support sustainable waste management systems.

- This assumes that Tinian and Rota will have a RCRA compliant facility by 2030. Will the facility be in operation by then?

SDG #13 - Take urgent action to combat climate change and its impacts

By 2023 OPD has launched SSD toolkit to support integration of climate impacts and adaptation opportunities into early planning and project scoping activities with at least three SSG trainings held for CNMI agencies and stakeholders by 2025.

- Possible way to incorporate DCRM Better Buildings criteria such as upcoming handbook, etc. with SSG.

By 2025, BECQ-DCRM will work with PSS and partners to establish Marianas-wide educational programs or institutions to enable continued education in natural resources studies in CNMI.

- Should this be more specific in terms of what natural resource studies curriculum is proposed or is general curriculum preferred? Perhaps we could have more incorporation of native plants and their local names in the public CCLHS curriculum?

- What about previous climate change curriculum given to PSS, and previous obstacles for DCRM to implement this curriculum working with PSS?

#### SDG #14

- By 2025, the Division of Fish and Wildlife, supported by resource management partners at BECQ and others, will conduct and complete recruitment studies from marine protected areas (MPAs) to document benefits and to establish sustainable management program.
- Is the MPA coordinator position being changed to a Fisheries Ecologist position and if so how might this affect progress of this goal?

SDG #15 - Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, and preserve and halt degradation of biodiversity and resources of particular concern in the CNMI - CNMI's Department of Land and Natural Resources and Bureau of Environmental and Coastal Quality work together to ensure no net loss of limestone forest, coral reefs, sea grass, and wetlands to protect ecosystems and biodiversity and support habitat connectivity

-Does this need to be time bound?

CNMI Forestry will work with management partners to monitor, maintain, and restore at least 10% land cover to native and endemic forest communities by 2030

- Will it be helpful or important to mention DPL on this statement? Would they be an important stakeholder in this objective?
- By 2022, BECQ develops a Wildfire Management Plan that addresses planning, response and mitigation of wildfires ..." but then later states that DLNR-Forestry will be in charge of Wildland Fire Plan. Are these the same plan? If they are should DPS-Fire and other groups be included in this.

By 2021, BECQ-DCRM will reconvene the Wetlands Working Group including DLNR, DPL, OPD, and members of the Natural Resources Planning Taskforce to collaborate develop, adopt, and begin implementation of a Comprehensive Wetlands Management Plan by 2025;

 Recommend changing to 2022 since that is when DCRM will have this task written into the annual Cooperative agreement.

#### Email Received September 4, 2020

What would it look like to have the Micronesia Challenge as an overarching theme for the NRTF, similar to the G3 Initiative on Guam? I'd like to be able to incorporate (and reference) its conservation and community benefit targets moving to 2030:

Effectively manage at least 50% of marine resources (SDG Goal #14.5) and 30% of terrestrial resources (SDG Goal #15.1) across Micronesia;

Increase the number of community members within each jurisdiction who are deriving livelihoods, including any type of income or revenue, from sustainably managed natural resources (as determined by MC Measures Working Group) (SDG Goal #14.7);

Reduce the risks from climate impacts for communities within flood zones and on low-lying islands (SDG Goal #13.1, 14.2) and;

Reduce invasive species and increase restoration of habitats (SDG Goal #15.5).

#### Email Received September 10, 2020

Thanks again for the opportunity to comment on these planning efforts. The CHCC has been planning and implementing various telehealth modalities to expand access to care for residents of Saipan, Tinian, and Rota. Telehealth has great potential to improve the quality, and scope of health care services for CNMI residents, and reduce the need for patients to travel long distances to receive health care. However, effective telehealth services are dependent on reliable, fast internet access for both the provider and the patient. Currently, despite the CNMI being connected to the world with two fiber optic cables, CHCC staff and patients continue to experience unreliable, slow and expensive broadband service.

As an objective, the CNMI should seek opportunities to bring down the cost and improve the quality of broadband service. Fast, affordable broadband also encourages economic growth. While private marketplace competition is not easy to attract in a small, remote, under resourced market like the CNMI, there is nothing which bars the CNMI government itself from making investments to provide this increasingly essential "utility" to its residents, businesses, and public sector.

Investment by the CNMI government in better, more affordable broadband for its residents would not only give residents access to more telehealth options, but would support businesses, tele-education and telework which is becoming increasingly more important in a COVID and post-COVID world.

Email Received September 26, 2020

#### <u>Conservation – Natural Resources</u>

Vision: To sustainably conserve and use natural resources to support the development needs of today without compromising the needs of future generations. (NR Taskforce) Please include the following as part of the revised NR vision, even if you just tack them on to the end.

- Sustainable Use. To promote sustainable use and conservation of the CNMI's natural resources on land and in water that can meet development needs sustainably and preserves the integrity of these natural resources for future generations.
- Research, Education, and Preservation. To promote research and education about the CNMI's natural resources to acknowledge and support local stewardship, conservation management, and cultural practices that are integral to the CNMI community.
- Support Ecosystem Services and Nature-Based Solutions. Sustainable use, management, and conservation of natural systems will protect and promote the delivery of ecosystem services and implementation of green infrastructure and nature-based solutions to economically and efficiently mitigate the impacts of extreme weather events and maintain critical functions that support people, prosperity, and our healthy environment.

#### Comment Received:

What would it look like to have the Micronesia Challenge as an overarching theme for the NRTF, similar to the G3 Initiative on Guam? I'd like to be able to incorporate (and reference) its conservation and community benefit targets moving to 2030:

- Effectively manage at least 50% of marine resources (SDG Goal #14.5) and 30% of terrestrial resources (SDG Goal #15.1); I don't believe "effectively manage" has been defined in this context, so I want to say that as long as we have site-specific plans in place, we can consider those "managed." Example, the watershed management plans, the SLUMP, the monument.
- Increase the number of community members within each jurisdiction who are deriving livelihoods, including any type of income or revenue, from sustainably managed natural resources (as determined by MC Measures Working Group) (SDG Goal #14.7); We would need to work on establishing that baseline then supporting an increase.
- Reduce the risks from climate impacts for communities within flood zones and on low-lying islands (SDG Goal #13.1, 14.2) Through flood zone map updates and implementation of education / outreach programs? And building code updates? CRM permitting incentives?
- Reduce invasive species and increase restoration of habitats (SDG Goal #15.5). Maybe good to ask the newly hired Invasive Species Coordinator at DLNR for metrics?

#### Call Received August 5, 2020

Caller requested clarification on planning process and was informed of timeline for this initial notice and comment period, followed by community meetings scheduled for September 15-17, sharing of draft Comprehensive Sustainable Development Plan with PDAC and then public hearing after 45 days of official draft submission. Commenter noted OPD was doing a good job and encouraged continued efforts to interconnect and clarify overlapping plan components.

#### Call Received August 19, 2020

Caller noted BECQ-DEQ would need to be involved in water management systems planning and suggested water system management plans should be developed to consider current population and growth trends as well as projected climate impacts. Low impact development isn't well represented in guidance and recommendations and should be included along with required stormwater standards.

Comment Received April 1, 2021 from the Office of the Mayor of Rota:

#### Under SDG# 3 - Ensure healthy lives and promote well-being for all people at all ages

The office of the Mayor on Rota recognizes the need to prioritize access to affordable health care on the island of Rota and suggests that OPD Initiate a feasibility study on an alternative health care system with the goal of making healthcare more affordable, improve access to healthcare resources, upgrade, advance and improve the inter-island medical referral program and reduce social inequality. Suggest OPD conduct research and provide findings to: the Governor, the Lt. Governor, the CNMI legislature and the Mayor's of each Municipality, placing special emphasis on feasibility, a cost benefit analysis and an analysis on the pros and cons of establishing a universal health care system here in the CNMI. Knowing the limitations of our inter-island transportation system, we also ask that OPD look into improving the response times during inter-island medical evacuations and how to improve the facilities at the Rota Health Center so they we would be able to work more independently and become more self-sufficient.

## Under SDG #17 -Strengthen the means of implementation and support partnerships for sustainable development

The office of the Mayor on Rota also suggests adding on to the following statement (second bullet point) under SDG#17 "... draft guiding policies that address poverty reduction and track changes in the annual GDP;" by building partnerships with DCCA's NAP program to track the number of NAP recipients, the Department of Labor to track the number of unemployment and those seeking employment and NMHC (Section 8) to track the number of those seeking government housing assistance. Because we believe these indicators will help us better understand and track the progression or reduction of poverty in our communities.

## Under SDG #6 – Ensure available and sustainable management of safe and environmentally compliant water and sanitation for all

By 2022, The built environment taskforce under OPD will work closely with the Rota Mayor's office to establish a Public-Private Partnership between the Municipality of Rota and a private entity to utilize an existing water treatment facility on Rota with the goal of minimizing the risk of exposing our precious water table to harmful contaminants and ensure that the water quality on Rota is protected for generations to come.

#### **Under Planning Elements Visions**

The Office of the Mayor on Rota also suggest separating the vision for Public Safety and Disaster Risk Reduction as the duties and responsibilities of the Department of Public Safety go far beyond just disaster risk reduction and should have more discussions and focused on promoting SDG#16 Peace Justice and Strong Institutions.



Edwin P. Aldan Mayor

MOT-21-041

April 14, 2021

Kodep Ogumoro-Uludong Director Office of Planning & Development Office of the Governor Commonwealth of the Northern Mariana Islands Caller Box 10007 Saipan, MP 96950 USA

Ref: Public Comments to the Draft Comprehensive Sustainable Development Plan

#### Hafa Adai Director Ogumoro-Uludong:

I am in support of the information outlined in the Draft Comprehensive Sustainable Development Plan (CSDP). I agree with the overall CNMI goal stated by Governor Torres and Lt. Governor Palacios for the "Resiliency and Sustainable Growth in the CNMI." Along with the Planning and Development Advisory Council, we have worked to chart a path towards sustainability in regards to the CSDP Values, Visions, Goals, and Objectives backed with the Smart Safe Growth Guidance and Principles. These goals and objectives also align with the Municipality's shared vision of securing a better quality of life for all residents on Tinian, including supporting social and cultural programs through the development and establishment of economic development, sustainability, and resiliency planning and services. I believe that the Draft CSDP will assist us in implementing action items to achieve these goals.

Although I support the process and the strategic approach of the CSDP Draft, I am concerned that under the 2019 Comprehensive Economic Development Strategies and Project listings, Tinian did not have a project included in the top 10 projects. I feel that at least one project from each island should be prioritized and included in the top 10 projects. Moreover, a representative from Tinian should have the authority to evaluate the submission of projects for future CEDS

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and other projects needing review and prioritization planning updates. This includes, as we have commented previously, representation in CNMI-wide allocation planning activities, such as the Statewide Comprehensive Outdoor Recreation Plan, Watershed conservation area designation, and management support. Sharing capacity and resources across all municipalities will help us all achieve these comprehensive sustainability goals for the CNMI.

I look forward to having my staff continue to work with your OPD team to ensure that all required documents pertaining to the Draft CSDP be provided for the inclusion of the Municipality of Tinian and Aguiguan Values, Visions, Goals and Objectives. The current working draft for the 2021-2031 Strategic Plan for the Municipality of Tinian and Aguiguan is attached for your reference.

Sincerely,

Edwin P. Aldan

Mayor of Tinian and Aguiguan



# Draft 2021-2031 Strategic Plan for the Municipality of Tinian and Aguiguan

## **Purpose**

This strategic plan outlines the vision, mission, values, goals, and objectives of the Municipality of Tinian and Aguiguan. This document will guide short- and midterm project priorities to support the overarching sustainable development goals of the Commonwealth of the Northern Islands (CNMI) and for the islands of Tinian and Aguiguan, specifically. It will be reviewed regularly and updated as needed in coordination with the comprehensive planning and review update on the 2025 process which will be facilitated by the CNMI's Office of Planning and Development; in the 2021 Comprehensive Sustainable Development Plan as authorized and mandated by Public Law 20-20.

## Vision and Mission

The Vision that guides this planning strategy for the Tinian Leadership (Office of the Mayor, Delegation, and Municipal Council of Tinian and Aguiguan) is:

To achieve the goal of securing a better quality of life for all residents of Tinian and the generations that follow. Through planning, developing and implementing cross-cutting action that supports the CNMI's Core Values and Planning Themes on Sustainable Systems, Networks of Care, Inclusive and Equitable Communities and Partnerships, with a focus on critical infrastructure and growth planning, economic diversification, jobs creation and zero waste management, as stated in the creation of the "first" Tinian Sustainability and Economical Master Plan.

## **Core Values and Planning Themes**

The vision, mission, and resulting strategic goals and objectives are guided by the core values and planning themes identified in the CNMI's 2021 Comprehensive Sustainable Development Plan:

### Sustainable Systems

- Build and improve Critical Infrastructure: Power, Water, Wastewater, and Roads/streets
- Implement Environmentally- Compliant Solid Waste Systems and Zero Waste Goals
- Co-manage resources to ensure healthy environments and environmental services
- Ensure resilient systems through smart and safe growth that helps maintain social, economic, and environmental co-benefits

#### Networks of Care

- Invest in education and workforce opportunities that promote sustainable economic growth
- Meet basic needs and providing necessary services to promote well-being for all
- Improve internet connectivity on networking

## Inclusive and Equitable Communities

- Support equitable access to services while respecting diversity and providing opportunities to honor cultural identity and inclusion
- Promote just and peaceful development through continued investment in social services, including equitable housing, food assistance, and early intervention programs
- Provide support services to address mental health and victims of violence





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## **Partnerships**

 Build partnerships and alliances through alignment with the vision and objectives of existing efforts across the public and private sectors to support the cross-cutting needs of the community



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## Goals and Objectives

## Strategic Goals

Within the ten-year planning horizon, the Tinian Leadership (Mayor's Office, Delegation, and Municipal Council of Tinian and Aguiguan) will work to ensure that community members have access to economic opportunity, improved critical infrastructure, and social services to achieve sustainable growth and resiliency envisioned for the Municipality of Tinian and Aguiguan. This will focus on developing a Sustainability and Economical Master Plan and implementing its programs and services. This will identify priority projects and potential funding sources to support cross-cutting priority projects on sustainable systems, networks of care, and inclusive and equitable communities and partnerships; with a focus on critical infrastructure and growth planning, economic diversification, jobs creation and zero waste management. The Tinian Sustainability and Economical Master Plan will involve partners from public, private, and non-profit sectors to create an inclusive road map for growth and development that will be supported by public private partnerships and government-led programs and activities.

## Objectives

SMART (specific, measurable, achievable, realistic, and time-bound) objectives establish the next steps for plan implementation by charting a course for achievable progress towards the vision and goals. These include:

By 2021 and every five years thereafter, a Comprehensive Economic Development Strategy update will be submitted, with proposals on priority projects that focus on critical infrastructure and growth planning, economic diversification, job creation and other economic development opportunities for OPD to support sustainable growth objectives as stated in this document.

By 2022, the planning stages with the State agencies (Governors' Office, OPD, CIP, Mitigation, OGM, HSEM, PA, CBMA, BECQ, HPO, DFW and DPW) and the Municipality of Tinian and Aguiguan will work together to develop an action plan and implement budget appropriations focusing on critical infrastructure and growth planning, economic diversification, job creation and other economic development opportunities for OPD to support sustainable growth objectives.

By 2023, we hope to receive funds from the State and Federal Agencies for the Economic Development Administration, Environment Protection Agency, Federal Emergency Management Agency, Office of Insular Affairs, Department of Defense, Department of Agriculture, and Department of Commerce Small Business and Development Center to implement projects in support of the following sustainability action items related to Critical Infrastructure and Growth Planning:

Critical Infrastructure and Growth Planning

Project Name: Tinian Economical Sustainability Master Plan

Project funding: EDA / OPD

By 2023, State Agencies and Tinian Leadership will work with other planning partners to implement projects in support of the following sustainability action items related to Economic Diversification:

Economic Diversification

Project Name: Tinian Cattlemen Association's Slaughterhouse Project funding: EDA for Phase II to expand on Mobile slaughterhouse on Tinian to include processing and business development center By 2024, State Agencies and Tinian Leadership will work with other planning partners to implement projects in support of the following sustainability action items related to Job Creation:

Job Creation

Project Name: Tinian Mayor's Office Vocational Tech Center

Project funding: EDA / OPD

By 2025, State Agencies and Tinian Leadership will work with other planning partners to implement projects in support of the following sustainability action items related to zero waste management:

Zero Waste Management

Project Name: Tinian Mayor's Office Recycling Program

Project funding: EDA/ EPA / OPD

By 2030, the Tinian Economical and Sustainability Master Plan will be reviewed and revised by the State Agencies and the Tinian Leadership Office in support of OPD in preparation for the 2025 update of the CNMI's Comprehensive Sustainable Development Plan and other relevant implementation plans facilitating the revision of priorities for submission to relevant supporting action plan updates.



# OFFICE OFTHE MAYOR The Northern Islands Commonwealth of the Northern Mariana Islands

Caller Box 10007 Capitol Hill Ascencion Ct. Saipan, MP 96950 Telephone # (670) 664-6469/70/7

April 27, 2021

Kodep Ogumoro-Uludong

Director

Office of Planning & Development

Office of the Governor

Commonwealth of the Northern Mariana Islands

Caller Box 10007

Saipan, MP 96950

Ref: Public Comments to the Draft Comprehensive Sustainable Development Plan

Hafa Adai Director Ogumoro-Uludong;

I am in support of the information outlined in the Draft Comprehensive Sustainable Development Plan (CSDP). I agree with the overall CNMI goal stated by Governor Torres and Lt. Governor Palacios for the "Resiliency and Sustainable Growth in the CNMI." Along with the Planning and Development Advisory Council, we have worked to chart a path towards sustainability in regards to the CSDP Values, Visions, Goals, and Objectives backed with the Smart Safe Growth Guidance and Principles. These goals and objectives also align with the Municipality's shared vision of securing a better quality of life for all residents on Northern Islands, including supporting transportation and communication systems, tourism, infrastructure development, and commercial activities through the development and establishment of economic development, sustainability, and resiliency planning and services. I believe that the Draft CSDP will assist us in implementing action items to achieve these goals.

I look forward to having myself and my staff continue to work with your OPD team to ensure that all required documents pertaining to the Draft CSDP be provided for the inclusion of the Municipality of the Northern Islands Values, Visions, Goals and Objectives. The current working draft for the 2021-2031 Strategic Plan for the Northern Islands Mayor's Office is attached for your reference.

Sincerely

Mayor, Northern Islands

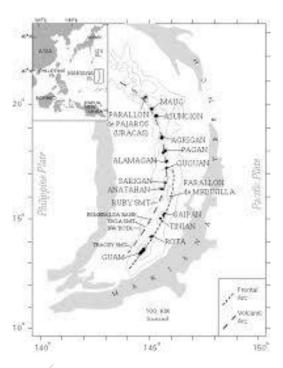


# Northern Islands Mayor's Office

Strategic Plan 2021 – 2031

#### Purpose

This strategic plan outlines the vision, mission, values, goals, and objectives of the Northern Islands Mayor's Office (NIMO). This living document will guide short- and mid-term project priorities to support the overarching sustainable development goals of the Commonwealth of the Northern Islands (CNMI) overall and for the Northern Islands of Anatahan, Sarigan, Guguan, Alamagan, Agrigan, Asuncion, Maug, and Uracas, as well as the ocean resources that connect our island chain. It will be regularly reviewed and updated as needed in coordination with the comprehensive planning and review update process facilitated by the CNMI's Office of Planning and Development in the 2021 Comprehensive Sustainable Development Plan as authorized and mandated by Public Law 20-20.



#### Vision and Mission

The **Vision** that guides this planning strategy for the Northern Islands is:

- To establish safe, reliable, and consistent transportation and communication system between Saipan and the Northern Islands;
- To create and/or establish permanent and meaningful jobs and other employment opportunities for the Northern Islands residents and CNMI residents in general;
- To establish and provide basic infrastructure facilities (water, power, sewer, roads, ports, etc.) on Anatahan, Alamagan, Pagan, and Agrigan;
- To establish local revenue generating activities through taxing or licensing commercial fisheries, volcanic mineral mining, and other related activities utilizing and/or harvesting the natural resources of the Northern Islands; and
- To expand the CNMI's tourism industry by opening the vast resources of the CNMI's Northern Frontier to allow a wider range of activities while in the CNMI to include eco-tourism in the Northern Islands.

The **Mission** that reflects the purpose and focus of this work is:

To provide safe, reliable, and consistent infrastructure and create diverse employment opportunities for Northern Islands Residents to ensure sustainable and high-quality living standards throughout our remote and beautiful islands.

#### Core Values and Planning Themes

The vision, mission, and resulting strategic goals and objectives are guided by the core values and planning themes identified in the CNMI's 2021 Comprehensive Sustainable Development Plan:

#### **Sustainable Systems**

- Build and Maintain Critical Infrastructure Power, Water,
   Wastewater, Complete Streets
- Implement Environmentally Compliant Solid Waste Systems and Zero Waste Goals
- Co-manage resources to ensure healthy environments and environmental services
- Ensure systems resilience through Smart, Safe Growth that helps maintain social, economic, and environmental co-benefits



#### **Networks of Care**

- Invest in education and workforce opportunities that promote sustainable economic growth
- Meet basic needs and providing necessary services to promote well-being for all



#### **Inclusive and Equitable Communities**

- Support equitable access to services while respecting diversity and providing opportunities to honor cultural identity and inclusion
- Promote just and peaceful development through continued investment in social services, including equitable housing, food assistance, and early intervention programs, as well as support services to address mental health and provide victims of violence



#### **Partnerships**

 Build partnerships and alliances through alignment with the visions and objectives of existing efforts across the public and private sectors to support the cross-cutting needs of the community



#### Strategic Goals

In the next ten-year planning horizon, the Northern Islands Mayor's Office will work to ensure safety, economic opportunity, and sustainable growth on the islands of Agrigan, Alamagan, Pagan, and Anatahan. This will focus on developing and maintaining safe harbor structures that support structure and emergency response, as well as function as storage for all terrain vehicles (ATVs), provide back-up water, and serve as information and tourist centers. These goals will focus on supporting sustainable transportation systems, centralized shelters that serve multiple infrastructure support needs including providing back-up power, water, communications, and tourist information services, invest in Pagan as the transit and tourism hub of the Northern Frontier, and expand ecotourism infrastructure in addition to supporting programs and activities.

#### Objectives

SMART (specific, measurable, audience- or issue-directed, realistic and ambitious, and time-bound) objectives establish next steps for plan implementation by charting a course for achievable progress towards the vision and goals. These are:

#### **Transportation**

By 2022, NIMO and CPA update the 2008 Pagan Airfield plan with current survey to identify needs for removal of lava rocks on runway to achieve 3000 ft runway clearance to support air travel to and from Pagan with the goal to secure funding for architecture and engineering and permitting by 2025.

By 2023, NIMO has a dedicated and funded vessel to provide safe transportation between the Northern Islands with established mooring at the transit and tourism hub of Pagan.

By 2025, NIMO has a passenger carrier (15-20 pax, ~30ft speed boat) to provide safe inter-island transportation between Pagan, Alamagan, and Agrigan.

By 2025, NIMO has a dedicated fuel station on Pagan for boat refueling to support environmentally compliant fuel storage and safe inter-island transportation between Pagan, Alamagan, and Agrigan.

By 2025, NIMO has doubled ATV supply and has dedicated maintenance and storage facilities on Pagan, Alamagan, Agrigan, and Anatahan.

By 2026, NIMO has established dedicated mooring for the Northern Islands vessel at Agrigan, Alamagan, Pagan, Anatahan.

By 2030, Pagan Runway has been permitted, cleared, and is operational, supported by a sustainable funding stream.

#### **Shelter and Safety Services**

By 2024, NIMO has a dedicated facility that serves as an information center and shelter / storage / safehouse at the transit and tourism hub of Pagan.

By 2026, NIMO has dedicated facilities serve as an information centers and shelters / storage / safehouse with emergency communications, backup water, solar, and ice makers at Agrigan, Alamagan, and Anatahan.

By 2030, NIMO has dedicated facilities serve as an information centers and shelters / storage / safehouse with emergency communications, backup water, solar, and ice machine at Ascension.

#### **Eco-tourism**

By 2022, NIMO works with MVA, OPD, and other planning partners to develop an ecotourism plan for the Northern Islands that includes hunting, diving, hiking, historical sites, medical sites, volunteer activities, school trips, camps, and more. This "eco-tourism" plan will identify opportunities for development that integrates right-sized facilities within the natural environment to support sustainable infrastructure and diversified economic opportunities in the Northern Islands.

By 2025, support facilities identified in the Northern Islands Sustainable Eco-Tourism plan are being implemented.

By 2030, NIMO and MVA work with OPD and the Planning and Development Advisory Council to support incorporation of updates specific to sustainable eco-tourism planning in the 2031-2041 Comprehensive Sustainable Development Plan.

#### **Agricultural Homesteads**

By 2023, NIMO, DPL, and partners have established fencing and irrigation systems at Pagan agricultural homesteads.

By 2025, NIMO, DPL, BECQ, and partners have planned and are working to fund designs and environmental assessments to support permitting of centralized power, water, wastewater, and solid waste management facilities on Pagan.

By 2030, NIMO, DPL, BECQ, and partners have implemented centralized power, water, wastewater, and solid waste management facilities at the agricultural homesteads on Pagan.

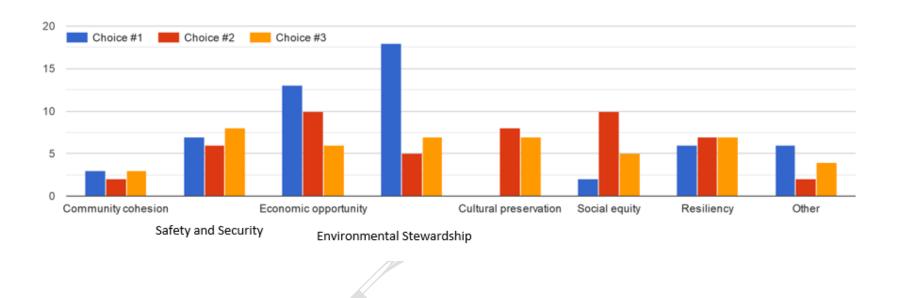


Surveyor from Department of Public Lands assessing viable homestead areas on Pagan, 2017.

Draft for Review – CNMI's Sustainable Development Visions, Goals, and Objectives, April 27, 2021 Update Comments as of 4/27/2021

## Guiding Values Survey Results, 8/28/2020

What core values do you hope to see guide development planning in the CNMI? Please pick three from this list or add new values under "other" for inclusion in updated surveys.



If you answered "other" please list other values you would like to see emphasized in planning efforts here.

10 responses

Preventive Health Care--Primary, Secondary and Tertiary

Why not combined all of the above into one whole otherwise your so called sustainable plan will not go far in the real world.

Physical and mental health

Honesty, Trust, Commitment, and Courage.

Health promotion and physical fitness through sports

Economic "independence" instead of "opportunity"

Preference for NMDs and NMD-owned businesses and developments.

decentralization

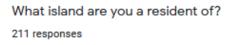
Expand "Resiliency" to "Disaster-Resilient Communities and Economies"

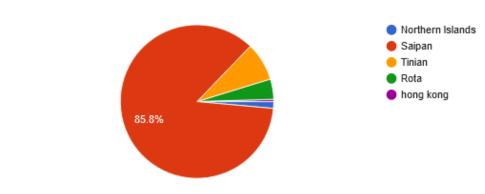
All are important. Not focusing on aspect will effect the other

## **Visioning Survey Results**

The following survey results were collected from 211 community members between November 2019 and March 2021 to obtain feedback about needs and planning priorities for this CSDP. Although the majority of respondents (86%) were from Saipan, feedback was also provided from residents of Tinian (8%), Rota (4%), and the Northern Islands (1.5%).

The majority of survey respondents identified as public sector employees (49%), followed by private sector employees (12%), students (11%), business owners (11%), and civil society / NGO representatives (5%). Identified affiliations include numerous CNMI agencies and public and private education partners, Saipan Chamber of Commerce, Marianas Alliance of Nonprofit Organizations (MANGO), Marianas Young Professionals, Red Cross, the Legislative Bureau, and community groups ranging from churches and sports groups to specific businesses.





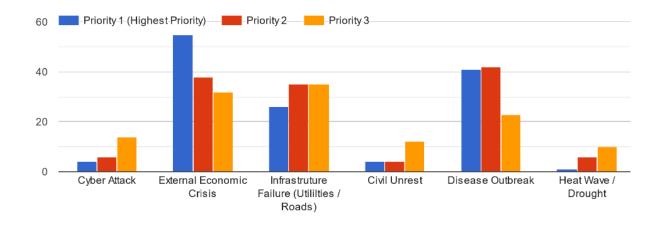
OPD and the PDAC thank all respondents for their thoughtful feedback and support.

The following clips provide data and brief analysis of the trends and community comments provided in this survey.

#### Assessing Resiliency – Shocks and Stressors

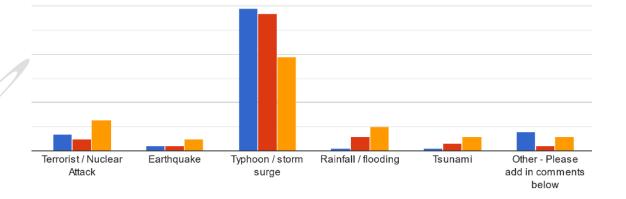
The following questions aim to help build understanding of community perspective of overall resilience and perspectives about risk to short-term shocks and long-term stressors to support sustainability goal development and prioritization.

Question: What are the three most important issues that should be addressed to ensure a good quality of life in CNMI? Please pick three priorities from the choices below with "1" being the highest or add your own ideas under "other".

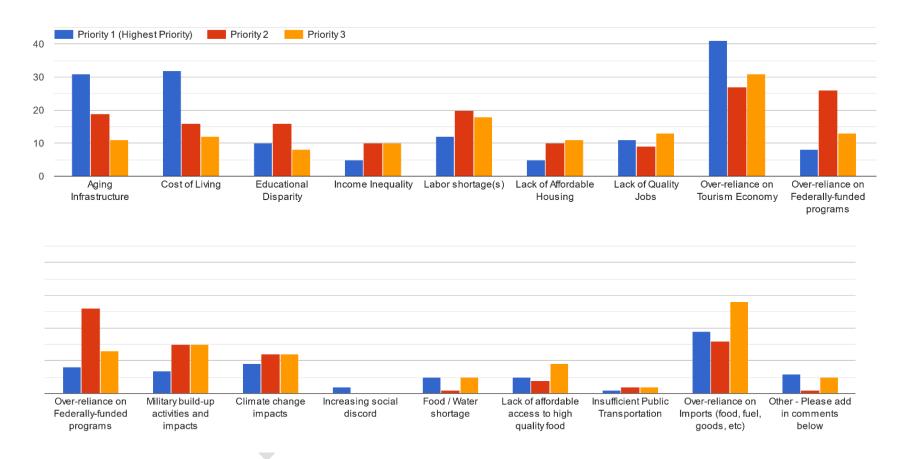


Note: Numeric "Top 3" by weighted responses

- 1. Typhoon / Storm Surge
- 2. External Economic Crisis
- 3. Disease Outbreak



Question: A shock is a sudden event that impacts the vulnerability of a system. In your view, what are the TOP 3 shocks that are MOST LIKELY to impact CNMI's long-term sustainability? Please select only three with "Priority 1" being the highest ranking.

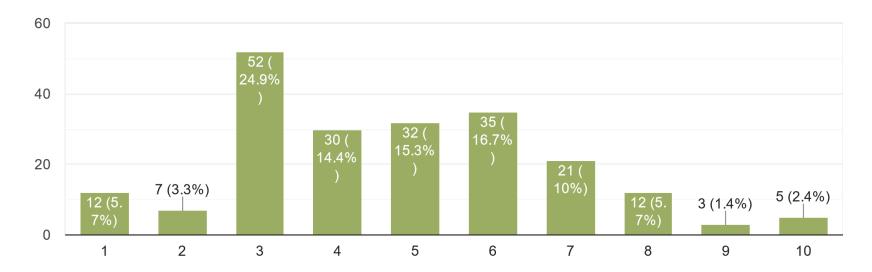


Note: Numeric "Top 3" by weighted responses

- 1. Over-reliance on Tourism Economy
- 2. Cost of Living
- 3. Aging Infrastructure

Question: On a scale of 1-10 with "10" being high, how "resilient" or prepared to "bounce back" disruptions (natural/social/economic) do you think CNMI is today?

## 209 responses





#### Community Visioning

#### Question:

What is your vision (hopes/dreams/ideal outcomes) for island-wide growth in 2030? (177 responses)

#### Response:

Saipan is self reliant and sustainable. We have a litter free environment with trash cans and trash pick up at public places and recycling with safe recreation locations for locals and tourists. Food and power and transportation are more affordable - maybe we can reduce costs by making more things we need here. We would have a credited university and good diverse jobs and skilled local technical workers so we don't need to rely on CWs. We could nationalize people who have been here helping build and contribute to CNMI and can grow population centers throughout our beautiful islands.

For the people living in the CNMI to be healthy, financially stable and no drug/domestic violence/child abuse/sexual, etc

Sustainable power & water, smaller government and increased private ventures/business with adequate pay, locally grown agriculture and fish industries to help with over reliance of import for healthy nutrition needs, green tourism and retreat/conference tourism, alternative education and SEL Gap charter schools targeting Gr3-Gr4 (catch disparity low) and increased village/community level Family wrap around programs (advocate led family & school connections / ongoing organized localized physical activity Rotation groups of 1:1 or 1:3 youth-adult mentors hiking, fishing, proa sailing, swimming, camping/ upper elementary & middle school 1:1 or 1:3 youth adult literacy booster )

To be able a staple in self sustainability in the CNMI, more local produce and organic alternatives throughout the marketplace.

Self sustainable

A self-sufficient and sustainable community environment promoting health, safety, and financial security.

self sustaining energy food and water

More sustainability actions, limit military activities, be eco-friendly (ban plastic bags, green roof project), vocational courses to be taught in high school, prioritize educational advancement.

I want people of CNMI to have good jobs and safe and fun places to live so people can be happy and

healthy and stay on our beautiful islands.

DPL to have farmer friendly rates for commercial agriculture, less dependence on imports of fresh produce, increase commerce within Micronesia region, heftier fines and punishments for drug use/distribution, heftier fines on littering, cameras in public spaces

Strong diversified economy free from reliance on federal handouts or federal law changes

Resilience of infrastructure to future storms, gradual switch to renewable energy that may be well-suited to the impacts of typhoons, increased knowledge of climate change impacts and more public involvement in civil affairs and community building

Repave beach road and middle road and add center lanes on both roads

100% self sustaining electricity island based on renewable energy; food sustainability through agriculture, aquaculture, and fisheries management, resiliency and adaptation to increasing natural disasters including high quality infrastructure. Strict enforcement for environmental regulations, Improved solid waste management and implementation of effective recycling program; 100% literacy rate and high school graduation rate, growth of NMC college to include more Bachelors Programs and

scholarship opportunities for under-served communities, more quality job openings to improve all these areas, etc.

A self-sustaining community of happy, healthy people

More actual sailing programs on par with soccer and dune buggies/ driving pink mustang muscle cars. Get Velomobiles here; These are electric power assisted pedal vehicles. Look at the ELF by Organic Transit and PEBL on www.betterbike.com

Independence of our nation through a stable work-force, social tolerance, and overall healthy well-being for each and every single individual who is born and raised here.

Unity, unity, unity. Unity despite political affiliation, unity against foreign power or monies and unity within each available system to push forward for a self sustainable Marianas.

More trees! Emphasis on education, locally-produced food, and more priority on tourist attractions that can garner a bigger pool of people (not just the rich aka casino).

To be more economically efficient and more new buildings and roads being built

Better housing plans for single and families.

Fix and improve school systems. Hopwood Junior High School is a disaster. Increase funding for DPS to increase efficiency. Fix our roads and stop letting Chinese lease lands to rent rooms for unreasonable prices. Also, government officials should calm down with spending public funds while the CNMI is taking way too long to recover from every typhoon that comes.

To be more self sufficient

#### None

Healthy and thriving natural environment (land/ocean), government system that is not so corrupt like it's a damn game of monopoly, better healthcare system, better educational system, more hardworking locals and a stronger sense of community and practice of local culture and lifestyle.

That there would be less people struggling to find homes or transportation to work and/or school

sustainable toursim and another burgeoning industry that is except by the public

i hope saipan will recover from lack of tourist arrival. and wish the government will beautify the island again specially beachroad and garapan.

Generally more financially successful, (no offense) beautiful, less pokers and cafes, more divers businesses and entertainment places and please.. Please.. Better education.

#### Sustainable Tourism

measured economic growth with a focus on destination enhancement...priority 1 is waterfront improvements. Also an emphasis on the warm welcoming Hafa Adai spirit..every resident has a role to play in making our tourist feel welcome

SOLAR PANELS ON ALL ROOFTOPS!! break our energy dependence on carbon fuels.

CNMI needs to take a hard look at the price that they paying to sell our islands to the highest bidder. Control what is being built....should make our island better and keep it beautiful.

My ideal vision of island life in 2030 would first of all be able to fully trust and rely on the hospital, bringing in surgeons and other important doctors that can immediately detect any forms of cancers/diseases. As well as a revitalization of all the equipment there and for new equipment to be brought in. Eliminating the need to go off-Island. Find a solution to the ever growing car population. Etc

#### Complete sovereignty

Sustainable; considers long-term impacts, and factors environmental/cultural needs into planning. Moves away from gambling/gaming-based tourism and embraces ecotourism (and leans into marijuana-based tourism out of Asia).

#### **Economy**

More sustainability, transportation & increase in population...

Transition into renewable energies and energy methods that are resistant against powerful typhoons and may aid in adapting to climate change. More focus on locally grown foods rather than imported. Increase awareness on climate change and how to adapt to typhoons and other climate-generated hazards. Proper rebuilding of vital public infrastructure and private homes. Shift of government funds focus on community development rather than economic growth. Plight to better management of vacation rentals to better addressing the housing issues present on the island (like higher cost of living, foreign ownership, unbalanced focus on tourism and commercial rather than residential); note: Hawai'i Island forcing permitting on short-term vacation rentals.

More nature trails with appropriate signage and camp sites and good facilities with outdoor education, cultural engagement, and activities for locals and tourists.

Focus on not relying a lot on tourists. Time will come forces we cant control, like climate, external political situations, would hinder people from coming to the islands, and what would happen to people here? People here should be strong internally, strong agriculture, strong culture, strong bond between people -- all within so everyone on the island will be okay whatever happens.

CNMI has affordable transportation between islands, affordable commodities, good paying jobs, and a functional healthcare system so all people can have access to high quality lifestyles.

Saipan is self reliant and sustainable. We have a litter free environment with trash cans and trash pick up at public places and recycling with safe recreation locations for locals and tourists. Food and power and transportation are more affordable - maybe we can reduce costs by making more things we need here. We would have a credited university and good diverse jobs and skilled local technical workers so we don't need to rely on CWs. We could nationalize people who have been here helping build and contribute to CNMI and can grow population centers throughout our beautiful islands.

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Thriving and healthy community

Become a Blue Zone country

Civic education, environmentally-friendly laws and enforcement of laws, higher minimum wage, government transparency, quality primary and secondary education, higher GDP, more community events, climate adaptation, no austerity

An economic industry that provides jobs that don't really on tourism, marijuana, or the casino. Having a mall that sells affordable clothes and products and not little Chinese shops. Having more affordable housing for all citizens and preventing landlords from gradually raising rent prices.

Environmental shift toward a more eco-friendly island. Island-wide sustainability.

Growth in CNMI prioritizes our culture, our people, and our environment to ensure people have access to diverse job opportunities and are able to maintain our way of life now and in the future.

family and cultural growth

A healthy and thriving community actively engaged the local culture(s).

Rota is a peaceful and safe place were residents can make a good living and have health and education needs met here so our youth can stay and the community can thrive through local entrepreneurism.

Tinian is a thriving tourism hub that supports local businesses and reinvestment in the community.

Saipan has local food, local jobs, and better internet to support a growing tech innovation economy that showcases the talents of our young people on island.

Organic Community farm for needy individuals

The will to live off of land as an indigenous and not be forced to practice the western ways so alien and unhealthy. That alien way of life is killing an endangered human race. We need help.

Saipan is a self-sustaining island that has abundance of well managed resources including an educated community that invests in youth, wellness systems, and provides opportunities for all.

Growth happens when you nurture those that make growth possible. You only have 24-hrs in a day exhaust the effort in people, operations and industries that actually produce results.

In the year of 2030, I hope for the CNMI population to have had adapted to a sustainable way of living. There will be constant collaborative effort from the government, the private sector, and the local community.

Subsidized water catchment and solar panels. Decentralized smartgrid power infrastructure. Subsidize organic/hydroponic farming. Island-wide soil testing and remediation using best available science to encourage healthy food supply.

survival

#### More natural features

Balanced economic and social growth. One that does not place too much strain on our environment and resources.

The island has incredible opportunities if we think long term rather than short term, copy beneficial ideas from other jurisdictions, and then execute competently. For example, the CNMI has all the ingredients (except a reputation for clean, competent governance) to become a leading jurisdiction for trusts, intangible assets (like intellectual property), and forming LLCs by 2030.

to build a university and sports-centric economy

#### To be self sufficient

For the people living in the CNMI to be healthy, financially stable and no drug/domestic violence/child abuse/sexual, etc

- 1) Quality public education and trades education
- 2) Strong healthcare system
- 3) Awareness of, accessibility to, and enforcement of eco-friendly practices, like banning grocery/produce bags (& other single-use plastics) and municipal composting & recycling, instead of just a landfill
- 4) Making the minimum wage rate a living wage
- 5) Encourage more local food practices

Overall, a self-sufficient island chain.

Sustainable power & water, smaller government and increased private ventures/business with adequate pay, locally grown agriculture and fish industries to help with over reliance of import for healthy nutrition needs, green tourism and retreat/conference tourism, alternative education and SEL Gap charter schools targeting Gr3-Gr4 (catch disparity low) and increased village/community level Family wrap around programs (advocate led family & school connections / ongoing organized localized physical activity Rotation groups of 1:1 or 1:3 youth-adult mentors hiking, fishing, proa sailing, swimming, camping/ upper elementary & middle school 1:1 or 1:3 youth adult literacy booster )

renewal energy

Sustainable power & water, smaller government and increased private ventures/business with adequate pay, locally grown agriculture and fish industries to help with over reliance of import for healthy nutrition needs, green tourism and retreat/conference tourism, alternative education and SEL

Gap charter schools targeting Gr3-Gr4 (catch disparity low) and increased village/community level Family wrap around programs (advocate led family & school connections / ongoing organized localized physical activity Rotation groups of 1:1 or 1:3 youth-adult mentors hiking, fishing, proa sailing, swimming, camping/ upper elementary & middle school 1:1 or 1:3 youth adult literacy booster ) We find true investors that we protect as symbiotic relationship.

Self sufficiency

For the people living in the CNMI to be healthy, financially stable and no drug/domestic violence/child abuse/sexual, etc

Need to come up with real world solutions for bringing income into the CNMI not just federal money.

To unite. To grow in preserving our island, culturally and through agriculture.

No additional military bombing, protect Indigenous lands and rights, 100% govt renewable energy, Northern Islands into protected Indigenous lands with eco-tourism/education programs, increased farming programs

A self-reliant CNMI with every family in the highest paid bracket worldwide, and one of the smallest carbon prints in the world.

Positive. The economy will be self-sustaining able to utilize existing workforce.

That are economy is stable

\$50 per hour

Better roads, sidewalks on each street, cleaner environment, less corruption, better investors, smaller government, diversified economy

By 2030, the CNMI will have a mental health institute w/professionals, Agriculture production will be enough to sustain the islands, Reforestation of the islands terrestrial environment will occur on public and private properties, reduce run off by 70%, and Reestablish coral populations as well as establish artificial habitat around the islands to enhance fish population

Increased infrastructure should be given thoughtful consideration. Saipan is an island paradise and all these developments simply negates the aesthetic ideals. There needs to be a well-balanced approach to providing increased infrastructure to meet the demands versus "how much more is enough?" The vision presented by Jerry Tan pleaded for a world class destination. That should translate to High Income with Quality Destination. How does the our vision tie-in with this theme? Would we be doing CNMI a favor with increased developments? Or, should we focus on increased aesthetic developments? For me personally, beauty in an island setting is well worth the trip.

Having a sustainable renewable power source for the islands, green development becoming the norm and not a mitigation measure.

More forward thinking in government decisions rather than immediate gratification

Sustainable Economic development that incorporates local jobs and promotes environmental protection as well as the health of our residents. Economic growth needs to be tied to direct benefits to residents and not just for economic sake. We shouldn't promote development of 12 hotel projects when we only need 5. We need to be watchful for the laws of diminishing returns. Too much development hurts our island and

makes it less desirable for tourism.

Sustainable economic engine

Beautification island-wide with a bustling economy. Think mini Singapore. We have potential, but we need to get our priorities straight.

All abandoned buildings greater than 2000 sqft and two or more stories high renovated and in use or completely demolished by 2030.

1) Supporting Small Businesses, not Big Corporations. Tax breaks to small business, Not Big Businesses. More jobs can be created if we have increased entrepreneurship and business enterprises. 2) Infrastructure Upgrades: Water, Sewer/Roads.

Moving forward with clear consensus

Why is "growth" viewed as a positive thing too often? My hope is to live in a clean, safe and healthy island environment without too many tall buildings, overpopulation and with a government that actually serves the public. I understand the limitations we face and acknowledge the good work by CUC and CHCC.

Highly Educated & Skilled local labor force; Tech Centered; High Paying Satisfying Jobs

Financial/Job security and abundance for all. And no virus.

Elect person(s) that stir us in the right direction, embrace the military's presence economically, and trim the fat in this government.

Economic development that creates wealth & job opportunities that provides tax revenues to improve & provide public services.

Multiple self-sustaining economic infrastructures (not depending on only casino or tourism).

Better management of environmental policies and regulations.

Less reliance on tourism as a sustainable economy.

Less reliance on imported goods for sustainable living.

No "other" islands leased to the military for destructive training.

A more locally trained workforce to lessen dependence on CWs.

island can achieve independency in energy supply leveraging natural power and food supply from on island farming

My vision for the CNMI is to have a sustainable, high end tourism, combined with island hopping to each of the Northern Islands either via plane or by boat.

Parks and tour sites should be properly maintained, with good landscaping, public amenities, and security

Diversification of industry can occur with either medical/retirement tourism, along with fintech, or low taxation (similar to Puerto Rico)

A clean, trash-free, healthy terrestrial and marine environment.

Quality of living for all CNMI residence

100% renewable energy, environmental/health/education investments, Indigenous Renaissance

An informed CNMI with a self-sustaining economy that does not sacrifice the region's natural resources.

Smart development that includes beautifying the island at the same time. No new developments until all old dilapidated buildings are either coverted to new, remodeled or removed to eliminate the constant eye sores around island. New legislation that requires proper bonding and ways for the CNMI to enforce smart, safe growth both from a utilities perspective but as an island wide economy.

Economic stability, especially if casino industry collapses.

Widespread Economic Diversity

lessen governmental influence in day to day life; get rid of useless governmental programs and regulations

That we collectively have an action plan on diversifying the economy, and are taking steps that address the underlying reasons why we haven't successfully diversified before. Promote more small business and locally-owned business growth.

cleaner water thru faucets, recycling centers, free wifi in community centers, more manufacturing, more entertainment

I envision better healthcare system, and state of the art critical infrastructure

I envision our CNMI's natural beauty continuing to flourish for the generations to come. Our people are willing and committed to protecting our lands, teaching our children to build a sustainable future, and uniting the Marianas and the Pacific Islands in the Micronesian region.

Reduction of fossil fuel and more renewable energy i.e. solar power

CNMI embodies great value for family; yet, I do not see our government making the same decisions. CNMI community wants family values. We do not want casino, we do not want poker; these are not family values.

CNMI have plenty islands. You have the goat island. You need deer island, pig island, cow island.

An educated populace that are proactively involved in all facet of our community.

#### Increase in tourists

Technology is improved so there is wifi access and devices for everyone. Government offices could be online so people don't have to drive all over. And services for water and trash would be more reliable and deliver better quality. People are healthier and there are more and better jobs.

Improved economy through enhanced/improved economic infrastructure.

Increased ecotourism, focus on well funded education, better marketing to non-Asian markets

That we will still continue our traditions and culture in a sustainable matter.

Ocean elders preserving culture alongside scientist teaching our children to become culturally aware scientists for our community; ultimately leading to better decisions about policy. A sports-centric economy that thrives because of external drivers providing resources for internal capacity building. Using current federal funds to improve every last bit of infrastructure as possible to position the CNMI for the next 50 years.

To be able a staple in self sustainability in the CNMI, more local produce and organic alternatives throughout the marketplace.

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For a vibrant Commonwealth that prioritizes a balance in environmental health, urban growth, and overall community wellness.

To be resilient in the face of climate change and changing world conditions, yet adaptive to continue to grow and strive to be more self-sustaining.

A self sustaining economy not over-reliant on tourism

For everyone to make a lifestyle change. For people who tell themselves they don't want to do it for what ever reason, say I want to do it. In regards to help out each other, practicing sustainable fishing and farming, taking pride in what they do on a daily basis (no shortcuts in infrastructure buildouts), passing down tradition, work because they want to and not because its another paycheck, assist the less fortunate, looking at negative stress and turning view it as positive stress, and changing the mentality of what's in it for me and replacing it with how can I make a difference in others. Having this mindset would greatly contribute to others hopes/dreams/ideal outcomes. My vison is to help others accomplish their goals, to make it one goal.

Self-sustaining

Sustainability and Resiliency on our natural resources and infrastructure

Clearer direction with the government and growing economy

Growth in various industries

Self-sufficient and sustainable economy and income equality for those with credentials for it.

Agricultural for export and food security

Healthy happy community engaged in their environment.

I dreamed this island can be a small version of Taiwan. Diversified culture, self-sufficient of food, water even the power, we can use recycled energy like solar energy, wind energy. Set up all kinds of technology academy to training local working labor and create more local working opportunities. To Improve medical industry to attract more retirees from all around the world. Provide more opportunities for local talent and more people would like to come to the island for residence, for study, for retirement.

Moving towards a more sustainable environment throughout our environmental health, mental health, social health, workforce, and education

Food security

resilient, self sufficient

Clean, safe, healthy environment

Sustainable development that will produce environmental and economic stability for future generations by adopting the "quality over quantity" mentality.

To have better infrastructures that support the growth of a healthy environment.

for building a drag strip on saipan just like the ones in guam

Economic responsibility, cultural awareness, and self sufficiency

Self sustainable

Sustainable & efficient communities

15 thousand-capacity convention center

Redevelopment of abandoned and blighted properties

Good economy and community health growth

We have high quality and universal access to basic support services including healthcare, healthy food, potable water, and high quality education.

**Environmental Sustainability** 

Sustainable economic development for community maintaining the traditional and cultural values

Less development in Rural areas from multi-apartments/condos. Stop Rezoning Rural Areas and Stop Conditional Use in Rural Areas.

Invest in tech education for the youth and help bring blockchain technology to the CNMI

I see all of the stressors and impacts are interconnected, but they are all ultimately connected to the land. If we do not have control over our land, we have nothing.

All residents live in safety.

Sustainable economy, better education and healthcare system.

A self-sufficient and sustainable community environment promoting health, safety, and financial security.

That our economy is stable.

Lowest Povery level and unemployment rate among territories.

A self-sufficient and sustainable community environment promoting health, safety, and financial security.

Self sustainable

Economic growth that benefits the people while improving cultural and environmental preservation and conservation.

Investment on Rota supports good jobs and job training and revitalization that uses what we have instead of clearing more land and abandoning older structures that could be fixed. We will have redundant power and water systems and emergency shelters in each village that protect all people and vulnerable assets like our health center in addition to vulnerable people (sick, elderly, youth etc). Transportation is more affordable and costs of goods go down, and we are able to grow and use our own produce. We have standard zoning in place to make sure new development has the right look for the different villages and a central permitting process to help developers and the people build new and rehabilitation projects.

**Economic sustainability** 

Major export of agricultural resources that Rota is known for as well as a sustainable import of goods that are not overpriced.

Available jobs, economic sustainability

For everyone to be at peace and work together as one to get situations coming our way settled.

More businesses to help with job availability and the economy. Safer gym (the ceiling is still broken).

Island will be like city, with lots of infrastructures, universities, malls, hospitals.

More jobs available and live a healthy life style without crimes

More job opportunities and affordable cost of living.

**Economic Prosperity** 

Sustainability/Self Reliancy -- being able to survive any economic crisis by relying within, rather than being dependent on outside resources.

I hope that by 2030, the CNMI boasts industries apart from tourism. The tourism industry is not enough to sustain the CNMI's future and there need to be other ways for the Commonwealth to gain revenue.

Greatly improved infrastructure. Shift to sustainable energy sources and reduced cost of living.

Build small businesses & locally-based economy

To have more high paying job for the people

Self reliance

#### Question:

What is your vision for growth in your village or precinct during this planning period? (168 responses)

#### Response:

#### more trees

Active Community Centers as there are many families/children that do not have access to internet and need to be engaged in social activities.

I'd like to see Dan Dan grow with more shops and jobs and better beach parks. We need more entertaining things to do here and since we are near the airport maybe we could also have more fun things for visitors here too. I'd like to see like a music art teen center and maybe it could have a pavilion for concerns so we don't always have to go down to Fishing Base for Frame Tree.

Sell/lease abandoned homes, road expansion and walkways and bike paths, control boonie dog population, better zoning regulations to minimize inappropriate commercial establishments within the villages

Better roads, more village/residential focused planning efforts. Greater emphasis on business friendly government policy and regulations

Rebuilding/repair of Yutu-impacted homes and public infrastructure (especially schools), better storm-water management, implementation of sustainable land-use practices

Limit business since most properties are residential

applicable to whole island

I would like to be able to live in my village, and not need a car to get my basic needs met (walk/bike/bus to groceries, health care, school/work).

Grid tie solar with equivalent credit from CUC for Kilowatt generation flowing from Solar arrays to the grid. Not the current 'Net metering' program, which does not address larger arrays. In effect hire the array owners and pay them a check for net kilowatts generated for any given month. More people will build grid tie systems for use during peak power usage hours.

Gradual increase in social growth and healthy connections with peers, colleagues, friends, family, etc.

Safer, cleaner and well-lit streets. Chalan Kanoa has been neglected in many ways by the mayor, our representative, businessmen foreign and local. Our C.K. Community has long been taken advantage of and I would wish for foreigners or locals to no longer hike up anymore rent prizes. (Although these issues also resound throughout the island).

Better housing and public transportation

The houses affected by the typhoons of the past would be fixed

#### None

Removal and release of land of that disgusting sign for Imperial Casha. You know, lightweight stuff.

Improvement on roads and affordable housing

minimal growth

iam hoping for a new plan for saipan. we need to bring back tourist here because it is were the island gets its income.

Better roads and housing, and I just hope.. A safer place to be in..

Sidewalks and good infrastructure (coupled by clean and safe environment)

Education! Health! Indigenous Pride!

Clean up the debris left over from Super Typhoon Yutu. Still a lot of abandon warehouses with loose debris which would damage houses and cars...and even hurt people if another Typhoon hits.

To have a more residential neighborhood

Affordable housing and improved infrastructure.

Business development

Road pavement & increase of population

Fixing public infrastructure (like community recreational areas)

We could use some better infrastructure in San Vicente. We should invest in some mixed use development and build up not out to maximize our space and views.

More food gardens. Like everywhere should be a food garden, like an island food paradise. No one would ever get hungry and we would not depend so much on imports.

San Jose should have dedicated public health facilities that include veteran services and specialized economic sectors like tech and agriculture to support good paying local jobs.

Garapan is clean and beautiful and making us all money! We fix our streets and fix the flooding so it can be the Hafa Adai welcome center to CNMI. We have weekly cultural events for everyone in the Paseo and at AMP and nice stores and sidewalks with replanted trees and Hyatt area doesn't smell bad anymore and maybe less massage ladies on the streets harassing tourists.

Garapan is clean and beautiful and making us all money! We fix our streets and fix the flooding so it can be the Hafa Adai welcome center to CNMI. We have weekly cultural events for everyone in the Paseo and at AMP and nice stores and sidewalks with replanted trees and Hyatt area doesn't smell bad anymore and maybe less massage ladies on the streets harassing tourists.

Boatyard for 500 Sails secured.

Civic education, environmentally-friendly laws and enforcement of laws, higher minimum wage, government transparency, quality primary and secondary education, higher GDP, more community events, climate adaptation, no austerity

An affordable public transit that is available in the entire island.

Because NMC is in Dan Dan it would be really great to see more investment in education and especially in green technology and jobs in my village. We have such gifted young people that aren't able to get good jobs here so they can stay here so maybe if we built a technology innovation center our youth could getting the training and opportunities they need to get high paying jobs and stay here to continue to invest in our community and help CNMI grow.

clean water

A clean and supportive community with little growth.

Songsong is a tourism attraction that has local businesses with good locally grown food and showcasing the art and culture of our community.

Sustainable water, waste water, and solid waste management systems are put in place to allow for increasing growth and economic investment in San Jose.

Gualo Rai could be a commerce hub with mixed use development and walkable bike-able streets to reduce reliance on cars and make transportation accessible for everyone.

increased safety

Better security against theft.

Papagao should be a conservation area. Too many big trees have been being cut down for development and it is like that song about parking lots - we will know the value when the trees have all be cut down. We should have a legacy trees program like they do in other areas so the big old trees that have made it through wars and fire bombing can continue to flourish.

Infrastructure improvement.

My vision for growth in my village would be information outreach on sustainable practices. There is a large portion of my community that I feel are uninformed and unaware about crucial aspects of our environment and how small acts affect our island as a whole.

A paved road would be a good start.

stronger infrastructure

Wastewater improvement

Access to clean, reliable water. Investment in outdoor/recreational activities (trails, pathways, etc). Sewer

I'd like to see existing buildings refurbished plus a few new, nice buildings that can attract and keep investors and professionals.

my village would not see specific changes in this planning period... some villages should be left as rural and less developed

Safer or designated sidewalks

That there is a playground area for families to bring their kids to

See economic development/revitalization of public government housing-land on capital hill

For water to be clear of PFCs and other contaminants

Residential development required rain water catchment

See economic development/revitalization of public government housing-land on capital hill

Have safe play areas for our children.

Better use of land

That there is a playground area for families to bring their kids to

None

Less traffic and more enjoyment of outside views, people here in the CNMI underestimate the idea in projecting hope and the betterment of our islands.

Continue prioritizing beautification projects and sustainable growth initiatives

For water to be clear of PFCs and other contaminants

Smaller carbon print and sustainable housing for every family.

Better infrastructure.

Clean and safe environment

Safety

Sidewalks on each street, sewer line so no septic, paved streets, 24 hour potable water

More working households

Mindset change in the youth on awareness of what is really going on and give options on what they can do to help mold the system, become environmental stewards , and become resilient to external factors

Taxing all residential units for their areas' beautification projects.

Revitalization of unused structures i.e. La Fiesta Mall, Plumeria Hotel, Mariana Resort & Spa.....

Better traffic management

Sustainable growth that is environmentally sensitive and respects local traditions. Civic pride needs to be prioritized

Safety and Security

I would like to see more parks for the children and sidewalks for safety. Restaurants would be nice too.

Reliable, convenient, and frequent public transportation island wide via light rail. More cottage industries and home.based businesses.

We are such a small community, what happens in one village impacts all villages. We live in Capitol Hill, but we visit playgrounds in SV/Dandan & San Roque (pau pau beach), etc.

Smart growth. Not growth for growth's sake.

Enforce anti-littering, reduce crime, improve the sewer system in some areas that have none for decades, subsidize septic tanks in areas where there is no sewer system, etc. Too many needs for a long time but no progress to date despite having a large number of representatives in the Legislature. Just enforce the laws and not repeat the mantra of "we are working hard, doing our best, etc."

Less blight and more opportunity for youths to be employed and or schooled in vocational education

That I can feel safe to let me kids play around the neighborhood like when I was younger and not fear that shady characters will be kidnapping/molesting/selling drugs to them. Wider roads, cleaner streets.

Improve the current infrastructure (e.g., sewer, water, and power). Expand the public sewer collection systems (Most, if not all of Dandan are on IWDS - install sewer gravity lines, force mains, and lift stations and expand Agingan WW Plant capacity), improve water quality (drill more wells) and water loss (fix all the outdated and leaking lines and valves, cut off illegal taps), and improve the distribution of power (remove wooden poles).

For residents to have access to capital to allow for financial liberty & security to make improvements in their villages & quality of life.

I would like more agricultural related infrastructure

development of better health care system and less dependency on tourism

Improved land-use and infrastructure

To unite as one community and work on resources that would help distinguish the village on its own uniqueness that would also attract as one of the showcase to visitors. Example, I took a bus tour in Canada as part of a package trip;, the driver drove us around a village with houses surrounded with beautiful flowers and landscaping. The driver's cheerful personality in entertaining his passengers was 90% of the fun while also enjoying the beautiful scenery.

Cultural-Environmental revitalizations will lead to economic sustainability

Improved infrastructure and community-events

I would like to see more gov't buildings beautified and used to the extent they were developed. Roadways maintained and no littering allowed in any areas.

Not my village: but repaired roads, especially Beach Road.

N/A

lessen crime and homelessness

Safer, more resilient buildings. Underground power lines.

more entertainment

Proper planning, land management, and enforcement of building safety codes.

Outdoor activies is the near norm for my neighbors in Capitol Hill. The Gov't housing areas 1300block and 12block have been filled with residents working out and walking. The roadway near this area is unsafe. There are no markings on the road and there are mutiple blind spots that have tall trees or large grass growing.

Zoning must stop approving "conditional use" on construction/development in Rural areas, such as, building more apartments, condos, etc.

Great to see families out enjoying nature; but don't trash it! The basketball court and playground in San Vicente (Triangle) is a great addition. I hope our community respects it and treats it well.

In my village needs a growth in permaculture gardening to be sustainable village.

Free community outreach education centers on all villages of precinct 1.

To be able to stay alive.

We should clean up the trash and keep it clean.

Rezoning of poker and gaming establishments away from residential areas.

More restaurants

I would like to see that we have a community-based farming area work people on the bus can go there in farm together as a community

Keep development to a minimum. Improve roads and utilities services. Encourage roadways and ground maintenance along roadways even if its on private property.

To have a more connected community.

To have a more connected community.

move more government agencies to Capitol Hill. Prioritize the Garapan revitalization

To promote local businesses such as agriculture and fishing sales, be resilient in the face of climate change, and strive to be healthy and continue to remain a safe and peaceful community Increase in Safety

Garapan Revitalization, locate areas with prime farming soils and pastures and zone for agriculture, identify known problematic watersheds and provide solutions and implementations, create new artificial reef habitat to support growing number of fisherman. Create an emergency plan for future pandemics or natural disasters specifically for the geographical location or at the village level. Provide technical knowledge and incentives for people to partake in subsistence farming within their property. implement ponding basins on to all residential areas and parks to assist in water runoff and aquifer recharge. Reforest degraded forest areas and ensure compliance of all the above mentioned Underground energy distribution system

Paving roads and generating revenue activities

Education

Small business/entrepreneurs

Public facilities in the village (store, firehouse/EMT, police station, basketball court, etc).

Residential and agriculture

Honest, logical, and equal communication between government and citizens

Opportunities for youth

Infrastructure can be improved, sewer system is in good condition. No abandoned house in the village. We can have our own street address.

To move towards more walkable areas for our precinct and reduce flooding for many of us who walk throughout our condensed villages of Susupe and Chalan Kanoa and a much safer, cleaner, and greener community environment

water runoff

gradual, orderly and with progress

I appreciate the smallness of my village so would be opposed to any new development other than residential single family dwellings. Sidewalks along the main roads are important for the overall safety of pedestrians, as well as control of the feral dog population.

To have a safe and clean village

to better our island and health care

Inclusion!

Resilency

more retail, service and hospitality businesses

Assignment of street addresses

Health education and welfare

It would be great to have some local fruit and veggie stands on the back side of the island to support local farmers and reduce the need to drive to Garapan and other increasingly crowded and busy areas. Regular farmers and crafts markets featuring local musicians and food vendors maybe rotating through villages would be a great way to do this and maybe COTA could provide free or low cost bus service to reduce parking demand especially at these events. It would be great if these could happen regularly at established and maintained community parks (with trash pickup and toilets!) This would support our local economy and also promote more tourism around the island.

**Effective Zoning** 

Maintenance of basic infrastructure and community access (Road and storm management issues)

Safe and resilient homes, community/ village events, support backyard agri/aqua cultures, youth involvements

Rural areas to remain environmental pristine and friendly for coming generation to enjoy as we have.

Fix the roads. Save the trees.

Protecting the environment, empowering youth esp. young women, growing our own sustainable food sources, creating jobs and economic access, increasing community wellness including mental health concerns, etc.

Community connectedness

Instead of allowing new development, find a way to utilize the abandoned buildings throughout not just the north side, but throughout the island.

Complete streets and walking groups. Community agroforestry

highway signs, bus stops for students

New and imoroved homes

Complete streets and walking groups. Community agroforestry

Resilency

Revitalization of the economy in line with preservation of local natural resources

Songsong is a redevelopment hot spot and an eco-tourist center with good local jobs that promote tourism and preserve cultural identity and our environment, featuring local markets, music, art, and other events. A training and community center that helps identify job training needs and gets the youth engaged will help local residents get good jobs and stay on Rota.

Patience and understanding

Development of parks and/or sidewalks to promote health and wellness for all.

Community recreational facility, paved roads

Educate the young minds on subsistence and nature based solutions

Better roads.

Fully completed Infrausture

Road infrastructure, more street lights, beautification around the village

More housing and infrastructure development.

**Urban Development** 

Zoning Enforcement and Issuance of citations on eye-sores. Take the ugly out in order to showcase the beauty of our islands.

Improved road lighting and safety. Improved roads and beach maintenance.

pave Tapochau Rd, limit village development to residential/small business (NO HOTELS)

To have more high paying job for the people

Clean, healthy living



Question: Do you have any other comments regarding sustainable development planning you would like the Office of Planning and Development to consider? (127 responses)

#### Response:

We need more enforcement and better permitting. All of these little developments are popping up everywhere without parking and they keep getting permitted even though there is no more room. There is no oversight and I see violations all over but we only give the casino a bad time when they make the paper for another injury. The AG should investigate all the sloppy building and lack of enforcement and maybe make an enforcement team to help make sure crimes are reported and we do something about them.

Buses for everyone with big wheels. Fix the roads please. Co-op for pesticide-free farming. More community gardens. I love the murals! More public parks and trails. Smart grid on Saipan and interconnected solar farms. CUC can set it up! :) If we make CNMI a crypto-heaven with local laws that favor crypto and blockchain companies, we may attract some business in this emerging field.

A recycling center since canned drinks are popular for all its added benefits additional income, disposal of trash, and so on.

CW issues and Green roof projects

I think the government should invest in young people and local business. We should have a full college that helps get professions trained up here so we can study and work without having to go off island. Or maybe we could have more exchange programs. It costs so much to leave island or even to get things moved here that the government should make programs to help more.

Businesses fund the majority of the CNMI government. Government planning should begin with how best to make business easier for businesses.

I really hope that renewable energy can be a priority especially in long-term development. Perhaps there can be an analysis done for the potential of different types of renewable energies for each unique village/location. Then an action plan along with an SOP to get the right contractors. It is crucial to get the right contractors because in the past, Saipan Southern High School had faulty wind-turbines constructed which had been taken down. We want to spend money wisely and in the long run mitigate and adapt to climate change.

fix Garapan hotel street

Repair existing structures such as piers and gloating docks for maritime access of locals and tourists such as outer cove and Smiling Cove with the funds already disbursed bu thr U.S. Federal government before creating more development of the undeveloped shoreline and reef. For instance the toilet at Smiling Cove has been closed for more than six years! The pump out facility on the transient dock is not operable. Where does the sewage go? I do not think the operators of the tourist boats go offshore to pump out their holding tanks 3 nautical miles seaward of the reef. The proof is the raw sewage into Smiling Cove Marina. (Who cares where it comes from! It is nasty!) Supporting this developed infrastructure with a modest fee will generate a modest surplus to continue maintenance andvoperability. Also the dive site moorings are nearly nonexistent now. Think reef impact while the tourists visit our reefs.

Not within this timeframe

Unfortunately, I do not know much about this yet and do not know the limitations or jurisdiction. I do know that our roads, and I mean all of them, need a whole lot of work done.

Imperial Pacific is really controversial.

N/a

Fix our roads and stop letting Chinese lease lands to rent rooms for unreasonable prices.

Nο

There is nothing wrong with doing your job and helping the community. Not everything is about self gain, look where that left Raffy boy.

None

Dont reopen the paseo to vehicle traffic. thats a terrible idea. a parking garage and making more one way streets and walking areas in Garapan would be a better idea

Continue to focus on attracting multiple visitor markets to ensure that our eggs are not all in one basket.. Can use room inventory (hotels/airbnbs) to keep tourism sustainable... There will be a sweet-spot whereby visitor arrivals are at the level we need to sustain a healthy economy.

look at "Sports Tourism" as a major destination enhancement. The CNMI should have state of art sporting facilities for local and international competition. All good for our local people...physical fitness, and diversification of economic base

Thank you for doing this, and good luck!

Recreational district

Wetlands are "no net loss"! Compensation is the last choice in the mitigation hierarchy, and therefore wetlands should only be compensated for in the most extreme/necessary situations (i.e. for public good, NOT private enterprise).

No

Recycling of waste to sustainable energy

I think the Office should address the short-term vacation rentals here on the island (because residents are affected by it) and work on how renewable energy could be implemented in the future for future development.

We need to offer diverse opportunities for people's work and play so that people want to stay and invest in CNMI. The government should make it easier not harder to do that.

Please consider sea level rise, drought, and heatwaves. Utilize solar power.

Government often moves discouragingly slow for worthwhile change.

More community events, please and thank you!

The CNMI government should involve the community more in planning. Too often we find out about meetings the day they are held or after the fact and there are very few ways for people to get involved especially if they work during government hours. I would like to see more surveys and online meetings especially as we reopen our Covid impacted economy.

sewer

We need to look at ways to keep the educated youth engaged here on island.

There should be a way to support lower costs of goods and services on Rota - everything here is so expensive it makes it really hard to make a living.

The streets have gotten really bad over the years. We need to plan for sidewalks and bike lanes and enforce stopping at crosswalks - not everyone has a car and we shouldn't all need cars to be able to safely get to places to shop and work. It would be really nice if Saipan could plan for sidewalks and bike lanes as we expand our roads systems. Also DPW should work with CUC so they don't fix a road and then have the utility come in and put a hole in it. The government should coordinate better in general but this is especially true for our utilities.

No comment as if now.

Quality over quantity for every approach.

I would like to hear more about what OPD does. I understand there have been projects ongoing and that the wheel has been rolling with this office; however, I am a college student and I had easy access to this information. The bulk of the community does not even know that this office exists, let alone their objective.

CNMI needs to embrace cryptocurrency like Bitcoin and promote the economic advantages of living here to attract wealthy people who will contribute to the economy. The tax code here already makes it an attractive place for people with large holdings in cryptocurrency. Encouraging local banks and government agencies to adopt blockchain technology and promote education, acceptance, and use of cryptocurrency will bring economic and governance advantages that can put us in position to be part of the global financial revolution that is currently unfolding.

Thanks to recent ruling by the Federal Comptroller of the Currency, Banks can now custody and trade in Bitcoin and other cryptocurrencies. CNMI should encourage FHB and BoH to onboard crypto as well as Bank of Saipan and Bank of Guam.

n/a

Be realistic in terms of culture and people

Thank you for creating this survey!!

Government's role is to provide the platform for opportunities to blossom and grow - stick to infrastructure improvements. Zoning is a critical law and something needs to be done about blight to encourage gentrification. Education and physical health is the basis of all - when you have these everything else can follow.

A way to supply cleaner water

Not at the moment

Please consider watching the Ted Talk "A healthy economy should be designed to thrive, not grow" by Kate Raworth.

Better zoning and commerce control for foreign owned small business (eg too many foreign-owned Mom & Pop Establishment or small business incubator mentoring for higher percentage of locally owned small business)

We need potable water and reliable public transportation

solar energy

Better zoning and commerce control for foreign owned small business (eg too many foreign-owned Mom & Pop Establishment or small business incubator mentoring for higher percentage of locally owned small business)

Discourage government from dealing with shady investors. Treat our island literally as your house, where you protect it on all sides.

Read Blue Zones book Cmni would Have

excellent blue zone potential

Not at the moment

No

Yes. Please take away Imperial Pacific. Not a good source for our CNMI.

Increased emphasis on Indigenous-based practices and approaches as a link to increased positive public health outcomes.

We need potable water and reliable public transportation

Please have certified professionals develop a plan and a budget, get the people of the CNMI involved and then begin the changes necessary and stick to proven methods that have proof in the data from regions that are similar to our own. Always keep in mind the WHY - will it benefit the people of CNMI? make all citizens involve and ask for inputs

When does Development become over Development? When and how can we stop polluting the ocean with runoff that has human and animal feces?

no

We need to get out of the "reactionary" mode we have been in and really start to think long term in our planning efforts. All of us have taken part in so many trainings and seminars and conferences that have resulted in true innovation on making our islands sustainable and yet we never get to the implementation stage.

There is no higher priority than the health of our residents. We need to institutionalize physical activity and organized sports.

Energy Infrastructure - a very critical economic engine yet grossly disregarded

Build more sustainable communities. No poverty/zero hunger. Better hospital and quality education. Sidewalks island-wide for safety.

Use of submerged lands and coastal properties for local aquaculture.

Also please lets have ALL taxpayer funded offices and agencies maintain .gov.mp websites for public to access information such as DPW, PSS, DFW, OPD, etc. Including names and current contact info of dept officers and key staff.

Security and traffic cameras in public areas streaming live on the web. Improve marina safety for tour operators.

Not at this time.

Food security, public health infrastructure, encourage our students to enter fields in economics, science, sociology, etc., so that they can be our consultants and advisors, limit growth that degrades our environment and our cultures.

There is no need to continue looking for outside investment and or outside labor when we can start investing in our people; and the same goes for imports when we can marshal and direct certain government agencies such as the School Lunch Program, Feeding of Prison inmates, and others needing food services to start procuring locally produced and or grown produce. Start with "sweet potato"; and then move on to others incrementally as to not shock the system.

Fix, clean up, and remove blight from the villages. Get rid of Article 12;; Stop Taxing inputs to farming and fishing such as fertilizers and seeds and others associated to making these two industries less expensive; Give every business the opportunity to not pay any form of taxes at all in their infancy stage for say the next 20 years.

Are you guys in charge of fixing the roads? I think beach road needs to be redeveloped starting from San Antonio PakPak beach all the way down to Kristo Rai in Garapan--the road itself plus to put in a walking pathway all throughout the island. Also the narrow two-way road that leads to NMC that goes through the Fina-sisu village passing the Fina Sisu Apartments. Can you guys see if there are investor willing to connect the islands to each other all the way to Guam using an underground tunnel system? It might encourage tourism. Maybe.

The CNMI just needs to get on our feet - make realistic goals and achieve them. No more pie in the sky dreams.

Please have a variety of means to boost the economy

cultural/environmental/economic disaster for the CNMI.

first health care is critically needed (and there could be means to address and improve with collaboration with healthcare companies for example) and most importantly there ought to be better economic development plan on power and infrastructure as a core to enable support for development Don't go chasing waterfalls; please stick to the rivers and the lakes that you're used to.

We are looking for a sustainable economic opportunity for the CNMI people. This could only occur through well planned, managed, and executed economic development. A legislation is needed to coordinate between government agencies to achieve the targeted planning/investment priorities. Example, various licenses, permission and permits, to simplify and expedite planned development and to ensure uniform and comprehensive enforcement of the permitting and licensing requirements. Alarmed for the CNMI with the military build-up/weapons-testing. This could be a

Need to require strict bonds for all developments. Also need to have impact fees assessed for all roads, solid waste, water systems, sewer systems, and any other impacts to the islands people for all new developments. Credits can be given for using existing infrastructure or improvements to communities.

N/A

Not at this time.

there are many resources for sustainable development available from the FAO

I would encourage the use of Informational Graphics and Charts for local farmers to use as a resource at their farms. Local farmers can do presentations and demonstrations for community members who visit their farms. Resources for the info. graphics and charts can reference Agricultural research studies from the Northern Marianas College CREES Program and the University of Guam Cooperative Extension & Outreach Program.

No more development in Rural areas.

Development = Quality. NOT quantity. Tourists will not come here once there is too much development; they do not want to see old abandoned buildings that we see now. Tourist sites need to be strategically maintained and perhaps even regulated. For example, there is NO reason for buses to

go to Grotto. Yes, it is a beautiful site, but it is not a place for tourists to get off a bus and walk down stairs and walk back up. It is not that type of visit.

Develop fishing, agriculture industry.

The CNMI government is overmanned, and most lack knowledge of their position.

i don't like see speed test in covid 19

I want Police to catch a thief.

Although Covid-19 has put a halt on any economic/tourism activities, now is the time for the administration/government sector to make major improvements to the existing infrastructure (i.e. hotels, apartment buildings, roads, inter-island transportation, tourist sites, navigational aids for tourists, ports of entries (airport & seaport), and cultural recreational sites.

No I don't

We are doing well but could be better. We are a still many years behind our Guamanian counter part.

good job!

Renewable energy for all, free healthcare, free education beyond high school

Aquaculture and Agriculture

Exportation of goods

consider CBD production for export

No

Cultural revival is key

Tourist area like Garapan public parking space plan; city beautification plan; Safety is also important for tourists.

Start planning for sustainable use of our ocean resources

The issue of blighted/abandoned buildings and iillegal trash/dump sites is one that needs to be undertaken before any beautification or revitalization projects, with Garapan as the starting point. Driving throughout any village reveals entire lots full of junk and trash creating not just eye sores but health and safety hazards.

Additionally, universal trash collection, or at the very least sub-station transfer stations located in each village, should be a priority. In addition, the landfill won't last forever, and we have limited spatial capacity to continue to bury our waste. A new industry could be created by a sustainable recycling program that could convert plastic bottles to usable products, such as resuable bags, which is just one small example of the products that are currently being manufactured out of recycled plastic. This could be an industry centered here with the concept that raw materials for production would be imported from Guam and Micronesia for production and then the export of finished products.

No, but it is about time somebody starts doing something like this for our island community and i would just like to say good job and thank you to all that are involved.

Consider new concepts tied to the advancement in culture, changes I technology, assessment of individual needs.

No

I really liked the public Task force meetings - I learned a lot and hope you do more of that.

None

Active financial involvement and planning of various projects selected to ensure optimization of available funds and their usage.

Promoting local culture in new and redevelopment projects; Youth involvements; business involvements

I would like to suggest that The CNMI government look into ways that blockchain technology and cryptocurrency can help benefit the local people, businesses, and government. Here are a few ideas to consider.

Benefiting the People

Crypto Businesses create high paying jobs, buy/rent buildings, and invest in tech and infrastructure. Employees in the crypto industry often work remotely. Many will move to the CNMI to enjoy the better quality of life and crypto regulations.

High income earners buy from local businesses, import goods, and invest in schools and healthcare for their families

Crypto Earners are Crypto Spenders, supporting crypto friendly destinations Crypto users love to attend conferences and check out new crypto tourism destinations.

#### **Business**

Local startups developing cutting edge technology means CNMI businesses have first access. Increased attention and participation from outside venture capital firms presents opportunities for existing CNMI businesses.

Existing businesses in industries such as hospitality, construction, telecom, and professional services will all see increased demand from well-capitalized startups locating in CNMI

Demand for improved infrastructure allows the existing business community to collectively benefit from inevitable improvements spurred by a new, profitable industry.

Demand for commercial and residential space will increase with an influx of well-capitalized startups.

#### **Government Benefits**

Increased Hotel Tax revenue from crypto tourists and conference goers Increased BGRT revenue from relocated crypto businesses Increased Income Tax revenue from crypto employees and investors Increased Customs Duties on the goods they import

By embracing the opportunities cryptocurrency and the valuable networks and communities that are forming around this emerging technology, the CNMI can position itself on the cutting edge of 21st century financial technology.

Let us invest in our youth with programs that teach and empower them to learn about blockchain technology.

Let us encourage crypto-friendly regulations and business practices to bring exciting new opportunities to the CNMI.

Let us explore together ways that blockchain technology can help enrich the lives of the people of the CNMI.

Let us take the time to learn about the many advantages and risks involved with cryptocurrency so that the People of The Marianas can make wise decisions. We can lead the way as the Crypto Capital of the Pacific.

Thank you.

Militarism poses a major threat to sustainable developments goals both in terms of degradation of the land and cultural practices. We must connect sustainable development goals with our ability to exercise our rights as indigenous Chamorro and Refaluwasch people. In addition, cultural revitalization should go hand in hand with sustainable development. I always hear people in the community lamenting the loss of language/culture and it would be great to see more resources geared towards the revitalization and preservation of our cultures.

Please focus on address inequities and analyzing their relationship to all the issues we are facing. The current plans are surface fixes and don't seem to really address sustainable change.

No thank you.

listing of ongoing or planned/pending infrastructure developments (including new business or construction projects).

Connectivity in outreach and action between government organizations and local people.

Right now a lot of crops are being sold off island but it is hard to get for residents. It would be great if we had a farmers market maybe in each village even where residents and visitors could buy local produce and maybe locals could get a local discount so it is more affordable for residents? The cost of living is so high that anything we can do to bring down costs will help a lot. This is also true for construction where lots of materials cost much more after shipping. If there are other materials that could be used to meet building requirements and help reduce construction costs that would be good to know about.

No

expansion of Rota Airport and Seaport,

Need to remind the public that sustainable development is accomplished by the idea that there is a need for sustainability. There is a difference from just hearing about it preaching it but does not take ownership or sees its value.

No

More place for kidsnti be pyshically activie

Clean drinking water, roads, buildings

When planning a project act on it not to dream on it in order to fulfilled the quality services/project being planned for the betterment of the community.

Yes

Create zoned tourist districts.

Perhaps a better relationship with the military that goes beyond more money? The military has a plethora of resources at its disposal, and if we could use some of its talent to develop our economy, then we could technically gain more sustainable assistance. Ex: Troops training students how to code. We have the resources and potential to produce unlimited and reliable energy for the entire CNMI. We must take the initiative to develop these solutions and vastly improve our infrastructure in order to boost our quality of life.

To have the communities be more aware of any plans your office will develop

## Appendix IV – Wellness Indicators – Additional Indicators and Goals for SDG 3

The following table outlines indicators and targets for specific health data that is being tracked by CHCC. Highlighted indicators are still in development. These goals and metrics will be revised as appropriate by CHCC and included in regular updates to the CNMI's CSDP to support planning and implementation efforts towards cross-cutting community health and well-being sustainability objectives.

## Sustainable Development Goal 3: Ensure healthy lives and promote well-being for all at all ages

SDG Target	NUMBER	INDICATORS	DRAFT CNMI Target
By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	3.1.1	Maternal mortality ratio	By 2030, continue to maintain a maternal mortality ratio of less than 1 per 100,000 live births.
	3.1.2	Proportion of births attended by skilled health professional	By 2030, continue to maintain a proportion of births attended by a skilled health professional at no less than 99%
	3.1.3	Antenatal Coverage	[Healthy Islands Monitoring Framework - "Women aged 15-49 years with a live birth in a given time period who received antenatal care, four times or more"]
By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	3.2.1	Under-five mortality rate (per 1,000 live births)	By 2030, continue to maintain deaths of newborns and children under 5 years of age to less than 1 per 1,000 live births.
	3.2.2	Neonatal mortality rate (per 1,000 live births)	By 2030, reduce neonatal mortality rate to 1 per 1,000 live births.
	3.2.3	Low Birthweight	[Healthy Islands Monitoring Framework - "Number of live-born infants with weight less than 2500 grams at birth"]
	3.2.4	Breastfeeding	[Health Islands Monitoring Framework - "Infants aged 0-5 months who are fed exclusively with breast milk"] WIC data? Data from clinics at 6-month well-child visit?

By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	3.3.1	HIV infections rate (per 1,000)	By 2030, reduce the number of new HIV infections per 1,000 uninfected population, by sex, age and key populations to 0.
	3.3.2	Tuberculosis incidence rate (per 100,000)	By 2030, reduce the incidence of tuberculosis per 100,000 from 90.4 to 75.
	3.3.3	Tuberculosis Case Identification	By 2030, 95% of patient population are tested using Xpert MTB/RIF as the initial diagnostic test.
	3.3.4	Tuberculosis intervention and treatment	By 2030, 95% of culture positive TB cases receive a complete drug susceptibility examination within 60 days of MTB confirmation.
	3.3.5	Malaria incidence rate (N/A) (per 1,000)	By 2030, maintain a malaria incidence rate of 0 per 1,000.
	3.3.6	Hepatitis B incidence rate (per 1,000)	By 2030, reduce the Hepatitis B incidence rate per 1,000 to 40.
	3.3.7	Number of people requiring interventions against neglected tropical diseases	By 2030, maintain a number of zero people requiring interventions against neglected tropical diseases.
By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	3.4.1	Mortality rate (per 100,000) between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases	By 2030, reduce the mortality rate per 100,000 between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases to 14110.
	3.4.2	Suicide mortality	By 2030, reduce the suicide mortality rate per 100,000 from 15.4 to 14
	3.4.3	High School Aged Youth Suicide Attempts	By 2030, reduce the percentage of high school students who actually attempted suicide in the past year by 10% of the rate reported in 2019.
	3.4.4	Diabetes prevalence	By 2030, show no increase in diabetes prevalence among adults.

	3.4.5	Hypertension	By 2030, show no increase in hypertension prevalence among adults.
	3.4.6	Cervical Cancer Screening	[Healthy Islands Monitoring Framework - "Percentage of women aged 30-49 years who report ever having been screening for cervical cancer"]
	3.4.7	Lower extremity amputation among patients with diabetes	Might need to only be of the CHCC patient population
	3.4.8	Childhood/adolescent obesity	May need to help PSS incorporate weight in their BHS - NMC has been asking PSS to do this for a long time.
Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	3.5.1	Coverage of evidence-based treatment interventions (pharmacological, psychosocial, and rehabilitation and aftercare services) for substance use disorders	By 2030, the CNMI will have evidence-based treatment interventions across the continuum of care for substance use disorders.  Partnership between the CHCC, the Substance Abuse, Addictions, and Rehabilitation (SAAR) Program under the Office of the Governor, Drug Court Program under the CNMI Superior Court, and other treatment and support facilities and organizations will work toward achievement of this goal.
	3.5.2	Harmful use of alcohol to include underage drinking, binge drinking, and alcohol-related at-risk behaviors (drinking and driving)	By 2030, reduce alcohol use by high schoolers by 15%
	3.5.3		By 2030, reduce binge drinking among adults by 15%
	3.5.4		By 2030, reduce binge drinking by high schoolers by 15%
	3.5.5		By 2030, reduce drinking and driving by 15%
By 2020, halve the number of global deaths and injuries from road traffic accidents	3.6.1	Death rate due to road traffic injuries	By 2030, reduce the death rate due to road traffic injuries per 100,000 to 4.

By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7.1	Percent of health facilities reliably offering a range of methods, encompassing 4 categories of contraceptive methods: short term; long acting reversible; permanent; and emergency contraception.	By 2030, ensured that at least 75% of outpatient primary healthcare facilities in the CNMI reliably offer a range of methods, encompassing 4 categories of contraceptive methods: short term; long active reversible; permanent; and emergency contraception.
	3.7.2	Adolescent birth rate (aged 10-14 years, aged 15-19 years)  • aged 10-14	By 2030, reduce the adolescent birth rate per 1,000 (ages 10 to 19) to 6.
		• aged 15-19	
Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	3.8.1	Proportion of CNMI adults who have visited a medical provider for a general physical exam in the last year.	By 2030, increase the proportion of adults who have visited a medical provider for a general physical exam in the last year to 45%
	3.8.2	Proportion of population with large household expenditure on health as a share of total household expenditure or income	By 2030, reduce household expenditure on health to <15% of total income.
	3.8.3	Prevalence of dental caries in school aged children	By 2030, decrease the prevalence of dental caries in school aged children by 20%
	3.8.4	Percentage of adults who have received a dental exam in the past year	By 2030, increase the percentage of adults who have received a dental exam in the past year to 32%
	3.8.5	Percentage of children who have received a dental exam in the past year	By 2030, increase the proportion of children who have received a dental exam in the past year.
By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1	Mortality rate attributed to household and ambient air pollution	By 2030, continue to maintain a mortality rate attributed to household and ambient air pollution of fewer than 1 per 100,000.

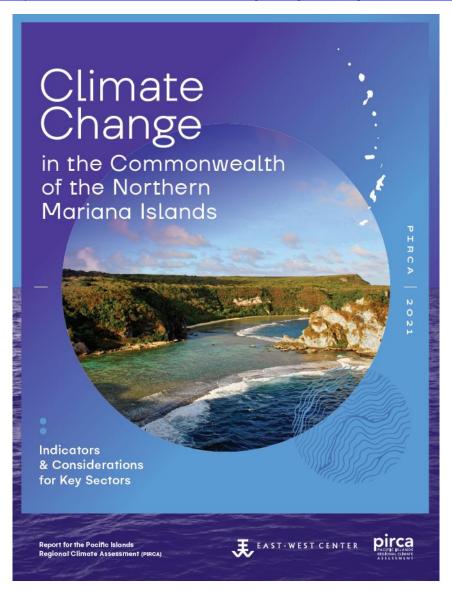
	3.9.2	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene	By 2030, continue to maintain a mortality rate attributed to unsafe ware, unsafe sanitation, and lack of hygiene of fewer than 1 per 100,000.
	3.9.3	Mortality rate attributed to unintentional poisoning	By 2030, continue to maintain a mortality rate attributed to unintentional poisoning of fewer than 1 per 100,000.
Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	3.a.1	Age-standardized prevalence of current tobacco use among persons in high school	By 2030, reduce the prevalence of current cigarette, cigar, or smokeless tobacco, or electronic vapor products use among persons in high school to 20%
Support coverage of all recommended vaccinations for communicable and noncommunicable diseases.	3.b.1	Proportion of the target population covered by all vaccines included in their national programme	By 2030, increase vaccine coverage of DTAP 3 by 10%
	3.b.2		By 2030, increase vaccine coverage of PCV 3 by 10%
	3.b.3		By 2030, increase vaccine coverage of MMR2 by 5%
	3.b.4		By 2030, increase vaccine coverage of HPV by 5%
Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	3.c.1	Health worker density and distribution	By 2030, reduce the Health Professional Shortage Area (HPSA) score for primary care from 16 to 13.
	3.c.2		By 2030, reduce the Health Professional Shortage Area (HPSA) score for dental health from 26 to 21

	3.c.3		By 2030, reduce the Health Professional Shortage Area (HPSA) score for mental health from 19 to 16
	3.c.4		By 2030, increase the Medically Underserved Area and Medically Underserved Population (MUA/P) Score 46.7 to 55.
	3.c.5	Local public expenditure on health	By 2030, increase CNMI government expenditure on health from 10% to 17%
Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	3.d.1	International Health Regulations (IHR) capacity and health emergency preparedness	Percentage of attributes of 13 core capacities that have been attained at a specific point in time. The 13 core capacities are: (1) National legislation, policy and financing; (2) Coordination and National Focal Point communications; (3) Surveillance; (4) Response; (5) Preparedness; (6) Risk communication; (7) Human resources; (8) Laboratory; (9) Points of entry; (10) Zoonotic events; (11) Food safety; (12) Chemical events; and (13) Radionuclear emergencies.

# Appendix V – 2021 Climate Change Assessment and Policy Recommendations for CNMI

The following recommendations are excerpts from the 2021 PIRCA Climate Change Assessment for CNMI, which was supported by OPD and planning partners. These policy recommendations support "Smart, Safe Growth" mainstreaming across sectors including those highlighted here to support alignment with long-term sustainability goals.

You can learn more about the report and view the full document at: <a href="https://opd.gov.mp/news/announcements/climate-change-brings-challenges-for-the-cnmi/">https://opd.gov.mp/news/announcements/climate-change-brings-challenges-for-the-cnmi/</a>



## Managing Climate Risks in the Face of Uncertainty

Climate change impacts are often difficult to predict, leading to uncertainties in the timing, magnitude, or type of impacts. Resource managers are responding with various risk management approaches that can be used to plan for uncertainty. Risk management typically involves identifying, evaluating, and prioritizing current and future climate-related risks and vulnerabilities (even those with uncertainties that are difficult to characterize with confidence), and assigning effort and resources toward actions to reduce those risks (USGCRP 2018, Ch. 28, KM 3). Future economic and social conditions are considered alongside climate risks. Often risk management allows for monitoring and adjusting strategies to risks and vulnerabilities as they evolve. Addressing equity, economics, and social well-being are important parts of effective climate risk management efforts (Fatorić and Seekamp 2017).

Two such approaches, that can be used either separately or together, are: (i) scenario planning, which involves the creation of several potential scenarios that might develop in the future, based upon a set of variables or projections; and (ii) adaptive management, in which

resource managers monitor, evaluate, and adapt management practices to changing environmental conditions, such as rising sea levels and temperatures. Scenarios are used to assess risks over a range of plausible futures that include socioeconomic and other trends in addition to climate. Adaptive management approaches can benefit from technical analysis of hazards, as in critical infrastructure vulnerability assessment.

In some cases, comprehensive risk management helps to avoid adaptation actions that address only one climate stressor, such as sea level rise, while ignoring other current or future climate impacts. Maladaptation arises when actions intended to address climate risks result in increased vulnerability. For example, if a city builds new infrastructure designed to minimize the impacts from sea level rise, and the sea level rise turns out to be higher than expected, the infrastructure can actually contribute to flooding if stormwater and sewer systems are unable to handle the rising water. To avoid maladaptation, policymakers and managers can consider a range of future scenarios and projected impacts over the lifetime of a project and communicate across sectors when designing solutions.

## What Do Extreme Weather and Climate Change Mean for CNMI Families, Households, and Vulnerable Populations?

Climate change is anticipated to disrupt many aspects of life. More intense extreme weather events, declining water quantity and quality, increased risk of wildfire, poor air quality, and the transmission of disease all threaten the health and well-being of families and communities (USGCRP 2018, Summary of Findings).

Additionally, climate-related risks to energy and food production and to the global economy are projected to cause large shifts in prices and availability of goods, potentially leading to price shocks and food insecurity (USGCRP 2018, Ch. 16, KM 1 and 3).

#### ▶ Effects of Extreme Weather & Climate Change on CNMI Families

Although climate change is expected to affect all people in the CNMI, some populations are disproportionately vulnerable. Social, economic, and geographic factors shape people's exposure to climate-related impacts and how they are able to respond. A social vulnerability index created for Saipan shows how social and economic factors affect vulnerability at the village level (Fig. 15; Greene and Skeele 2014).

Those who are already vulnerable, including children, older adults, low-income communities, those facing discrimination, and people with disabilities, are at greater risk from extreme weather and climate events, in part because they are often excluded in planning processes (USGCRP 2018, Ch. 14, KM 2, Ch. 15, KM 1–3, and Ch. 28, Introduction). Vulnerable populations will likely be affected in many ways, including:

- Children have a higher rate of heat stroke and heat-related illness than adults and will be increasingly affected as hot days become more frequent (USGCRP 2016; EPA 2016).
- Older adults and persons with disabilities are more vulnerable to extreme events, such as storms, that cause power outages or require evacuation. Emergency response plans specifically accommodating these groups can lessen the risks (USGCRP 2016; EPA 2016).
- Some of the first to be exposed to the effects of heat and extreme weather are people who work outdoors, including tourism and construction workers, fisher people, farmers, and other outdoor laborers (USGCRP 2016; Schulte and Chun 2009).

- People who live in small, isolated communities experience higher risks to health and safety during extreme weather events and the aftermath. Also, people who live, work, go to school, or otherwise spend time in locations with high exposure, such as coastal and other flood-prone areas, are more directly affected by weather extremes (USGCRP 2016).
- In the face of stronger storms, people living in houses constructed of wood, tin, and other non-reinforced materials are more vulnerable than those who live or can shelter in reinforced structures.

Certain populations may also be affected more than others by actions to address the causes and impacts of climate change, if these actions are not implemented in ways that consider existing inequalities (USGCRP 2018, Ch. 11, KM 4, and Ch. 28, KM 4). Management and emergency response plans that include specific accommodations for more vulnerable groups can help to address inequalities and save lives.

Global action to significantly cut greenhouse gas emissions can reduce climate-related risks. For example, the health-related impacts and costs across the United States are projected to be 50% lower under a lower warming scenario (RCP4.5) than a higher warming scenario (RCP8.5) (USGCRP 2018).

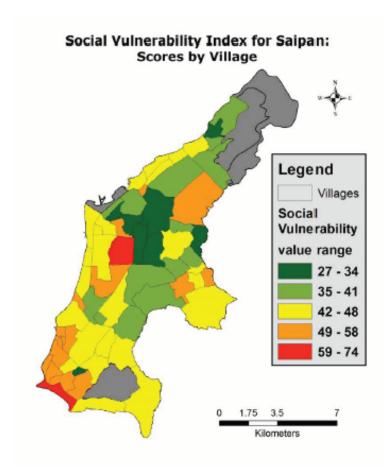


Figure 15. Map of social vulnerability score by village. A social vulnerability Index was built for the Island of Salpan using 22 socioeconomic variables. Economic and educational features contribute to a population's sensitivity to climate-related hazards and the ability to adapt to them. Higher scores Indicate greater vulnerability. The socioeconomic variables for the index and map were selected based on the findings of Heinz Center 2000, Heinz Center 2002, and Wongbusarakum and Loper 2011. Source: Figure reproduced from Greene and Skeele 2014.

## What Do Extreme Weather and Climate Change Mean for Key Sectors in the CNMI?

The PIRCA suggests the following considerations for managers working in key sectors based on an up-to-date review of published literature on climate science, climate-related risks in the Pacific Islands, and risk management approaches.

#### If you are a water or utilities manager...

Expect hotter conditions to increase water demand and decrease available fresh water. The majority of Saipan's public water supply comes from groundwater aquifers and is pumped from shallow wells. The population and agricultural sector on Tinian and Rota rely on particularly vulnerable freshwater sources, with Tinian using

shallow wells to draw from the top of a freshwater lens aquifer, and Rota relying entirely on discharge from cave springs perched at a high elevation (Stafford et al. 2002; CNMI OPD 2020). Rising temperatures are expected to increase evapotranspiration, affecting both the amount of fresh water available and the



#### ▶ Effects of Extreme Weather & Climate Change on Key Sectors

demand for water (Keener et al. 2018; Zhang et al. 2016; Wang et al. 2016). The increased rate of water evaporation from soils, plants, wetlands, lakes, and streams means less water will likely be available to replenish the groundwater aquifers of the Northern Marianas. At the same time, rising temperatures and aging, leaky water infrastructure increase the demand for water. Understanding potential impacts to island-specific water budgets (amount coming in and out of the system) can help water managers plan for sustainability and identify solutions such as increasing conservation measures, as well as storage and recharge mechanisms.

- Monitor salinity levels in aquifers, and plan for reduced recharge. As on other small oceanic islands, Saipan, Tinian, and Rota have freshwater aguifers (called the freshwater lens) that are underlain by salt water. For Saipan and Tinian those freshwater aquifers are the source for household use and drinking water. The combined effects of increased pumping, more frequent drought, and sea level rise could turn an island's underground water supply salty. If the freshwater lens is not replenished, ocean water can begin to contaminate wells, as it did most wells on Saipan during the 1998 El Nino drought (Carruth 2003). Water conservation, particularly during dry spells, may be necessary more often in the future.
- Consider proactive strategies to mitigate the impacts of drought, sea level rise, and stronger typhoons. In the water management sector, making changes in pumping depth or withdrawal rates for areas of the aquifer that may experience salinity problems could reduce the vulnerability of water resources. Infrastructure age and disrepair make failure or service inter-

- ruptions resulting from extreme weather more likely (ASCE 2017). Loss of revenue from leaks, theft, and improper billing directly impacts sector managers' abilities to implement adaptive actions. Updating infrastructure and reducing this loss can help to lessen the need for pumping, increase revenue, and improve adaptive capacity. Additionally, comprehensive plans for public works and utilities can maximize effectiveness by considering and incorporating trends in climate indicators and future projections.
- Hardening measures to protect electrical, water, wastewater, and other infrastructure can improve reliability, resilience, and energy and water security. Electrical supply outages during major storms with high wind speeds cause cascading impacts on critical sectors. Considering both extreme weather and climate change in the reconstruction of electrical and other infrastructure can help to avoid future costs and limit outages. Possible measures include reinforcing assets that are vulnerable to wind damage, adding redundancies and microgrids capable of isolating for local self-sufficiency during outages, and relocating certain assets (USGCRP 2018, Ch. 14). For example, Saipan's power plant and electrical infrastructure are concentrated in a FEMA flood zone and within the zone exposed under the CNMI Coastal Management Program's sea level rise planning scenario. Resilience could be improved through a combination of measures. Evaluating vulnerabilities, planning for long-term asset management, and outreach and communications to raise public awareness are priorities to support the sustainability of CNMI water systems (CNMI OPD 2020).



Monitor the El Niño-Southern Oscillation (ENSO) and its effects on rainfall. Rainfall amounts vary greatly from year to year in the Northern Mariana Islands as a result of ENSO. The climatic response to El Niño produces a period of above normal precipitation, often delivered in extreme precipitation

events, followed by a period of drought (Fig. 16). A strong El Niño can cause severe drought. Seasonal forecasts can help water managers to prepare for potential water shortages during drought years and help in planning maintenance and upgrades.

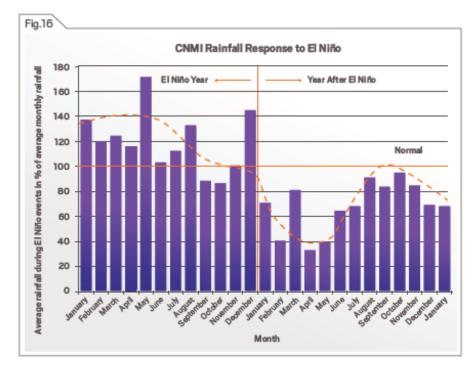


Figure 16. Average rainfall in the Commonwealth of the Northern Mariana Islands during El Niño events, shown as the percent of average monthly rainfall. Source: PEAC Center 2015.

#### If you work in public health or disaster management...

 Account for the consequences of climate change at multiple levels across the health sector. Climate change and extreme events are anticipated to affect individuals and communities, and also affect healthcare facilities and public infrastructure. When they overlap with disease outbreaks, weather extremes can disrupt the public health sector's response and negatively impact health outcomes, as during the COVID-19 pandemic (Salas et al. 2020). Adaptation actions at multiple scales are needed to prepare for and manage health risks in a changing climate (USGCRP 2018, Ch. 14, KM3).



- ▶ Effects of Extreme Weather & Climate Change on Key Sectors
- Prepare for more frequent extreme heat events that are expected to increase heat-related illness and death. Even small increases in average air temperatures can increase extremes and in some places are observed to result in illness and death. Some groups have a higher risk of becoming ill or dying due to extreme heat, including people with chronic illnesses, older adults, and children (Sarofim et al. 2016). Plans to address extreme heat should consider vulnerable populations. To assess the risks of rising air temperatures and other climatic changes on local health, the US Centers for Disease Control and Prevention developed the "Building Resilience Against Climate Effects" (BRACE) framework (CDC 2019), which could be used to inform local climate and health strategies (Marinucci et al. 2014).
- Plan for increased wildfires, already frequent and extensive in the CNMI. Human activities cause (intentionally and unintentionally) nearly all wildfire ignitions in the CNMI (CNMI OPD 2020). The potential for wildfire greatly increases in hot and dry weather because wildfires ignite more easily and spread faster under those conditions. Drought events can significantly increase the area burned by wildfire, even on very wet islands like Saipan (Trauernicht 2017). In spring 2019, the CNMI experienced a post-El Niño drought and rampant wildfires that threatened homes and caused at least one temporary school closure (Bautista 2019). Similarly, wildfires were witnessed on Tinian and Rota during recent droughts. Wildfire has consequences for health beyond the direct threat to safety around fire. Fine particles produced by fires pollute the air and create a respiratory health hazard (Fann et al. 2016).
- Expect water supply impacts and more frequent floods. Heavy rains have periodically caused flooding in parts of the CNMI. In August 2018, several heavy downpours caused flash flooding that closed roads, caused silt and mud to erode, and affected residents and tourists who were caught off guard by the sudden flooding, particularly in Garapan (Bautista 2018). Similar floods are expected to become more frequent, and flooding is expected to intensify in a warmer future climate. In addition to direct health risks, heavy rainfall and flooding are linked to increased levels of pathogens in drinking water and can increase waterborne disease, such as diarrheal illness (Bell et al. 2016; Brunkard et al. 2011).
- Expect stronger tropical cyclones. Although they may occur less frequently in the future, the tropical cyclones that do affect the Mariana Islands are expected to bring stronger winds and greater rainfall amounts. Coral reefs protect the shoreline by weakening wave energy. Projected sea level rise and a decline in coral cover can reduce the protection of the shoreline from waves and storm surge. Injuries, fatalities, and mental health impacts are associated with strong storms. Super Typhoon Yutu in October 2018 was one of the strongest storms in recorded history to strike the Marianas and it destroyed 3,000 houses and caused more than 130 injuries. Health risks increase after a storm when infrastructure and housing are damaged, and electricity, sanitation, safe food and water supplies, communication, and transportation are disrupted.
- Prepare for disaster response and recovery from stronger storms. Government and non-governmental organizations can increase adaptive capacity, for example by

#### Effects of Extreme Weather & Climate Change on Key Sectors 4



Electric and communications infrastructure downed and damaged by Typhoon Yutu. Photo by FEMA, 2018, courtesy of CNMI Office of Planning and Development.

providing early warning systems, evacuation assistance, and disaster relief (McIver et al. 2016; Bell et al. 2016). To protect infrastructure, engineers and government policymakers can account for the risk of future changes in extreme weather when planning and designing infrastructure (including buildings, communication and energy systems, transportation, and water and wastewater systems) and when rebuilding after disasters (Olsen 2015). Many local governments and communities exposed to strong storms have developed pre-disaster recovery plans (Schwab 2014; FEMA 2017). Pre-planning for disaster recovery can help communities to seize opportunities and funds to improve resilience to future

- disasters during the recovery and rebuilding phase (FEMA 2017). Without an organized community planning process ready to implement after a disaster, recovery may occur but is likely to be uneven, slow, and inefficient (FEMA 2017).
- Prepare for more food insecurity in CNMI households. Disruption of food supply and production systems is a key risk in the health sector. Currently most food consumed in the Northern Mariana Islands is imported and the local commercial agriculture sector is small (USDA 2009). This situation increases local vulnerability to food insecurity because climate change is likely to drive up the prices of imported foods (USGCRP 2018, Ch. 16 and 17).



#### Effects of Extreme Weather & Climate Change on Key Sectors

Dry periods affect existing cattle ranching on Tinian, which suffers declines in drought years (Polhemus 2017). Increasing storm intensities may also threaten food supply by disrupting operations at harbors and ports within the CNMI and other ports internationally. Additionally, more intense tropical cyclones combined with a projected decline in coral reef health threaten local food subsistence and market fisheries. On the other hand, future projections for waves and winds suggest areas along windward coasts may be less hazardous and more accessible for fishing in the future (Storlazzi et al. 2015). Sufficient and nutritious food available to CNMI populations is essential to supporting human health.

Monitor emerging research on the climate's effects on diseases. Dengue and other mosquitoborne pathogens have increased as global health threats in recent years (Beard et al. 2016). Globally, future warming and rainfall changes will likely increase the suitable habitat for pathogens and vectors, thereby increasing the risk of outbreaks of dengue fever, malaria, diarrhea, salmonellosis, and other diseases (Mora et al. 2018; Trtanj et al. 2016). Climate-related extreme events, including heatwaves, typhoons, droughts, and wildfires, can also affect the response to disease outbreaks, adding challenges for the public to limit disease spread and for healthcare facilities to provide needed care (Salas et al. 2020). Community-level adaptation measures can limit human vulnerability to disease (Beard et al. 2016; Radke et al. 2012; Reiter et al. 2003). For example, the Commonwealth Healthcare Corporation's efforts to map and track vectorborne disease can increase preparedness and the ability to respond to outbreaks should they occur.

#### Visioning Sustainability— Building Back Better, Safer, and Smarter in the CNMI

Experiencing two 100-year super typhoons within a three-year period has prompted dialogues about how to reduce risks to people, the economy, and the environment. Since the landfall of typhoons Soudelor and Yutu, planning partners under the CNMI's Office of the Governor worked to develop the Guidance Manual for Smart, Safe Growth with support from the US Federal Emergency Management Agency and US Environmental Protection Agency's Region IX Pacific Islands Office, "Safe, Smart Growth" (SSG) is a set of development strategies that aims to ensure the growth of communities with thriving economies and healthy environments that are resilient to natural disasters. SSG uses a concept of "comprehensive planning" that emerges from the intersection of three key areas of practice—hazard mitigation, climate impact adaptation, and smart growth each associated with its own policy guidance and best practices, Combining elements of these best practices can help to identify opportunities to successfully implement SSG principles in planning and development. Adopting policies that anticipate plausible scenarios for projected climate change conditions is a primary focus of this effort. By assessing and planning for future risks through incorporation of smart growth, hazard mitigation, and adaptive management principles, the CNMI is working to invest in critical infrastructure and address resource needs to ensure communities can continue to grow while withstanding current and future weather events and natural hazards with minimal physical damage or disruption.

> By Erin M. Derrington, Lead Planner, CNMI Office of Planning and Development



#### If you are involved in recreation or tourism...

Anticipate that coral reefs and marine ecosystems may support fewer tourism opportunities in the future. Visitors and residents of the Northern Mariana Islands enjoy significant economic, cultural, and recreational benefits (particularly snorkeling and fishing) from coral reefs. Coral reefs and marine protected areas play a central role in the tourism industry (van Beukering et al. 2006; Spalding et al. 2017). For instance, Mañagaha Island and the surrounding lagoon attract a significant number of visitors and are managed so as to limit degradation from human use and to preserve fish diversity and coral habitat. The value of coral reefs and interconnected seagrass habitats to the tourism industry was estimated at \$73.6 million, or 5.6% of GDP (Eastern Research Group, 2019). In the next few decades, more frequent coral bleaching events and ocean acidification will combine with other stressors to threaten coral reefs. By 2040 or earlier, severe coral bleaching is projected to occur across the CNMI annually, potentially resulting in widespread coral mortality (van Hooidonk et al. 2016). There could be negative impacts on the CNMI's tourism brand as coral reefs decline. Also, significant ecological loss is anticipated, with consequences for recreational and culturally important practices and challenges for the sustainability of certain activities such as seasonal traditional fishing. With the intent to preserve these practices and aid the tourism economy, managers are undertaking coral propagation and restoration on high-value reefs. The first pilot projects for structure-building coral propagation (coral nurseries) are being implemented in the Saipan Lagoon in the vicinity of Mañagaha Island.



Mañagaha Island, a National Historical Site, Marine Conservation Area, and popular tourism site. Photo by Ai Arno, 2009; Attribution 2.0 Generic (CCBY 2.0) license.

Worsening coastal erosion can increase the need for management and conservation measures. Beach loss and seasonal sand migrations are already apparent. One area identified as experiencing erosion and vulnerable to sea level rise is Mañagaha Island, a National Historical Site, Marine Conservation Area, and popular tourism site off the west coast of Saipan (Fletcher et al. 2007; Greene and Skeele 2014). Sea level rise will accelerate existing erosion problems on the small island. There are concerns about Mañagaha being entirely eroded as the health of the barrier reef protecting it declines. Other hot spots for recreation (swimming, diving, snorkeling, etc.) on Saipan, such as Micro Beach and the collapsed Sugar Dock, have erosion issues that are costly to manage. Certain erosioncontrol structures (such as seawalls) installed on chronically eroding beaches typically have the unintended consequence of exacerbating shoreline erosion and beach loss on unprotected neighboring property. The protection or restoration of natural habitats (for example, reefs, beaches, and living shorelines) can mitigate erosion and improve the resilience of coastal communities. Such actions can protect the integrity of



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- natural features that are valued for tourism and recreation (USGCRP 2018, Ch.8).
- Water quality at beaches and shoreline areas is expected to decline. In addition to beach loss and seasonal sand migrations, bacterial and sediment pollution following heavy rainfall periodically causes visitors and residents to avoid beaches and shores. Poor water quality following extreme precipitation events also compromises traditional shorebased fishing activities, particularly talaya (cast net) methods used to harvest culturally significant species. Water quality is expected to be impaired more severely and frequently in the future as storm drain systems and on-site sewage disposal systems are compromised by intense rainfall and sea level rise.
- Cleanup and recovery after storms is costly for tourism and temporarily occupies the workforce for coastal management and tourism sectors. Tourism is vital to the CNMI economy. Incomes sharply decline

from events that disrupt tourism, as during the COVID-19 pandemic. Following major typhoons and storms, the tourism sector must spend resources and time on recovery. Visitors are deterred and arrivals decrease significantly, leading to lost revenues. Debris and pollution necessitate area closures after a strong storm. Members of the coastal and ecosystem management workforce, on which tourism relies, are involved in recovery and rebuilding efforts. Coastal managers and tourism professionals can work with local government and communities to develop pre-disaster recovery plans (Schwab 2014; FEMA 2017). Such plans can ensure the affected community is prepared to undertake recovery and rebuilding that is more resilient to disasters (including typhoons) and climate change (for example, see: Guidance Manual for Smart, Safe Growth, CNMI 2018).



Destruction inside the Francisco C. Ada Saipan International Airport after Typhoon Yutu passed over the island. Photo by FEMA, 2018, courtesy of CNMI Office of Planning and Development.

#### If you manage ecosystems and biodiversity...

- Monitor and prepare for changes in temperature, rainfall, and storminess that promote the spread of invasive species and reduce the ability of habitats to support protected species. The waters of the Northern Mariana Islands contain some of the most pristine marine ecosystems in the United States (Paulay 2003). Unprecedented changes in air temperatures, along with intensifying rainfall and erosion, bring new threats to the fringing reefs, seagrass beds, estuaries, and open ocean ecosystems and the species they support. On land, deforestation and invasive plants and animals threaten what little remains of native limestone forest ecosystems (now mainly located on highland conservation lands and on steep slopes at lower elevations). Wetlands and forests are known for high plant and animal species diversity. and the CNMI is home to about 20 unique bird species, two bat species, and several threatened reptile species found nowhere in the world outside of the Marianas (Liske-Clark 2015). New and potentially invasive species are arriving more frequently than in the past. Unprecedented changes in air temperatures, along with intensifying drought, rainfall, and erosion, bring additional challenges for native species conservation (Keener et al. 2018; Goulding et al. 2016). Temperature rise, for example, can constrict island species' ranges or result in complete habitat loss for rare species with limited geographic distributions and small population sizes (Raxworthy et al. 2008).
- Prepare for elevated wildfire risk and soil loss, which threaten CNMI forests and coral reefs. Following a wildfire, burned areas are prone to the spread and establish-

- ment of invasive grasses (Minton 2006). Grasslands readily replace forests that are affected by wildfires. Grasslands burn easily, so this replacement of vegetation type heightens the fire risk. Forests protect soil from erosion, while grasslands are not as effective at preventing soil loss. Sediment runoff from burned lands and grasslands contaminates nearshore ocean waters, with the potential to impact reefs. As dry periods increase, fire risk rises, so these stresses on CNMI terrestrial and marine ecosystems are expected to increase in the future.
- Promote measures that protect and enhance biodiversity and ecosystem services as a critical way to support communities in adapting to climate change. Natural resources underpin the sustenance and resiliency of Pacific Island communities (Barnett and Campbell 2010). For example, mangrove forests provide storm protection and building materials, and are productive estuaries relied on for food (Victor et al. 2004). Historically threatened by clearing and cutting, mangroves are now stressed due to sea level rise (Gilman et al. 2008; Gilman et al. 2006). The remaining mangroves in the CNMI, limited to a few small patches along the Saipan Lagoon, are particularly vulnerable to sea level rise, and are adjacent to critical juvenile fish habitat, including a puppery for the endangered scalloped hammerhead shark. Restoring mangrove forests and preserving nearby spaces to accommodate estuarine wetland migration can help to protect communities against storm surge and coastal inundation, enabling them to adapt, while also providing secondary benefits such as maintenance of fisheries (Hills et al. 2013).



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Salpan's Achugao Watershed in April 2019, days after a large wildfire tore through the area. Photo by Robbie Greene, 2019.

#### If you are involved in fisheries or managing ocean resources...

- Expect declining coral reef health. Watershed conservation measures can protect refugia for coral populations. Ocean warming and acidification will likely combine with other stressors, such as fluctuating sea levels, fishing pressure, and pollution, to threaten nearshore and open-ocean ecosystems and the livelihoods they support. The total economic value of coral reefs and seagrass in the CNMI (including all goods and services that reefs provide, the value to tourism, and the cultural and social value) is estimated at \$114.8 million per year (in 2018 USD), or 8.6% of GDP (Eastern Research Group 2019). Across the Central and Western Pacific, widespread severe coral bleaching is projected to occur annually before 2050 (van Hooidonk et al. 2016). In some locations in the CNMI, annual severe bleaching is projected to begin before 2035.
- Near-annual bleaching events from 2013 through 2017 resulted in mass mortality of branching corals around the Saipan Lagoon, and significant loss of coral cover throughout the southern archipelago (Maynard et al. 2019).
- Expect reduced available catch for subsistence and commercial fishing.
   Climate change and ocean acidification are expected to produce declines in coral reef fish of 20% by 2050 in tropical Pacific Island countries and territories (Bell et al. 2013). Rapidly changing conditions also affect open ocean fisheries, and declines in maximum potential catch of more than 50% are projected under a business-as-usual scenario by 2100 for most of the islands in the Central and Western Pacific including the CNMI (Asch et al. 2018; Bell et al. 2013).



#### If you are a coastal resources manager...

- Prepare for more frequent coastal flooding and increased erosion to affect coastal properties and infrastructure. Both sea level rise and more frequent and intense heavy rainfall events are likely to produce flooding in coastal and urban areas. (See Fig. 17 for the possible extent of flooding in southern Garapan.) The majority of the CNMI population and infrastructure is located in Saipan's low-lying western coastal plain, including the seaport, the hub of Garapan, and coastal villages (Greene and Skeele 2014). Because several main roads throughout the CNMI already experience inland flooding and erosion, sea level rise threatens to cut off access to critical services. Sea level rise will increase tidal (full moon) flooding that can affect homes, businesses, and infrastructure. When strong winds from the west or typhoons produce wave energy that hits Saipan's west coast and sandy beaches, the result can be damaging erosion (loss of land due to waves, currents, tides, and wind-driven water) in areas such as American Memorial Park, Micro Beach, Mañagaha Island, and Kilili Beach Park (Greene and Skeele 2014). On Rota, the village of Songsong and the roadway between the village, the airport, and Rota Resort experience coastal erosion (BECQ) DCRM 2015). Seawalls and other structures intended to reduce erosion have often caused beach loss and worsened erosion on unprotected neighboring property. Restoring natural shorelines and ecosystems provides alternatives to hard structure approaches
- and can improve the resilience of coastal communities. This approach combined with built features can provide cost savings from avoided flood damages (Arkema et al. 2013; Spalding et al. 2014).
- Expect stronger typhoons and storm surges. Combined with continued accelerations in sea level rise, storm surge associated with tropical cyclones has the potential to destroy built and natural infrastructure at the coast and severely disrupt communities. Maintaining and restoring the health of the coral reefs has the potential to greatly reduce coastal damage due to storm events. Additionally, critical infrastructure such as roads, utilities, airports, and hospitals can be relocated or "climate-proofed" (see Needs for Research and Information section, p. 45; Olsen 2015).
- Monitor new scientific understanding of the timing and magnitude of future global sea level rise as it continues to improve. Regular updates of management plans and engineering codes may be increasingly important as new information about sea level rise and shorter-term climate variability becomes available. Understanding the effects of ENSO on regional water levels and weather can enable appropriate adaptation actions (Fig. 16). Planning that considers a combination of seasonal extremes, storm surge, and long-term sea level rise (Fig. 18) can assist the development of more adaptive regulations (for example, shoreline setbacks) (USACE 2014).



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Fig. 17. Satellite image of southern Garapan with an overlay showing the extent of possible future coastal flooding from a combination of an extreme seal evel event and long-term seal evel rise. The map illustrates the scale of potential flooding, not the exact location, and does not account for erosion, subsidence, or future construction. Water levels are shown as they would appear in 2070 with seal evel rise under a high warming ("business-as-usual") scenario and with a "100-year" high seasonal seal evel event. Planning for structures with an expected 50-year or greater lifespan might consider such a scenario. Source: Figure courtesy of Robbie Greene and CNMI BECQ.

#### If you are a cultural resources steward...

- Coastal historical and cultural sites will likely be affected by erosion, storm surge, and coastal inundation from sea level rise. Although it is not known how climate change will specifically affect individual archeological and cultural sites in the Northern Mariana Islands, coastal areas are likely to be affected by erosion, storm surge, and coastal inundation from sea level rise. For example, American Memorial Park is situated on a low-lying sandy area, which already experiences coastal erosion and shifting position of the shoreline (Greene and Skeele 2014). Figure 18 makes visible the potential scale of flooding in American Memorial Park from sea level rise of 4 feet. Numerous pre-contact cultural sites are situated along shoreline areas and as sea levels rise these sites may become increasingly hard to study, access, or maintain. Many jurisdictions are already discussing what management actions can
- meet community goals for resource stewardship given challenging future conditions (pers. commun., Erin Derrington, 2019). The CNMI Historic Preservation Office is supporting such efforts through planning updates and sharing of "potential sensitivity" maps to enable early issue identification in project scoping.
- Climate change exacerbates challenges to the continued availability of cultural foods and culturally significant plants and animals. Changes in environmental conditions, such as warming oceans, reduced streamflow, saltwater intrusion, and long periods of drought, threaten the ongoing cultivation and availability of traditional foods such as fish and other seafood, edible seaweed, and coconut (Keener et al. 2018). Certain medicinal plants may also be threatened if outcompeted by invasive vegetation.

#### If you are involved in agroforestry and farming...

- Expect climate change to worsen impacts on agriculture and agroforest production. CNMI commercial cattle ranches and farms producing coconuts, breadfruit, tomatoes, and other local produce account for approximately \$1.6 million annually, or just 0.1% of GDP (USDA 2020). Subsistence food production is the predominant agricultural activity. Farms and agroforests are already exposed to impacts from flooding, drought, high winds and storms, diseases and pests, soil erosion, and clearing for development. Major typhoons damage or destroy tree crops, delay fruiting and flowering, and affect pollinator species. In southern Saipan, trees such as mangoes
- did not produce fruit during the normal fruiting season in the year after Typhoon Yutu struck. Climate change will likely exacerbate these impacts for some crops and locations. Changing rainfall and higher temperatures, for example, are expected to increase pest and disease problems in staple crops such as bananas and taro (Taylor et al. 2016). Resilience to climate change is expected to require changes in farming methods and cultivars (Bell and Taylor 2015).
- Plan for warmer weather and shifting rainfall patterns. Rising temperatures will increase evapotranspiration, affecting the

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Fig. 18. American Memorial Park and Garapan with 4 feet of sea level rise. Areas that are hydrologically connected to the ocean (according to the digital elevation model used) are shown in shades of blue. Low-lying areas on land that are not directly linked to the ocean are shown in green. The map illustrates the scale of potential flooding, not the exact location, and does not account for erosion, subsidence, or future construction. Water levels are shown as they would appear during the highest high tides (excludes wind-driven tides). Source: NOA A Sea Level Rise Viewer v3.0.0, https://coast.noaa.gov/digitalcoast/tools/sir.html.

amount of water crops require. Therefore, hotter weather could increase drought stress on farming and ranching regardless of any future changes in rainfall in the dry season. Severe drought following strong El Niño events will present challenges for livestock, as both food and water supply may become periodically scarce. The 1998 drought that brought widespread hardship and mortality to Tinian's cattle highlighted the need to plan for additional capture and storage of rainfall prior to dry seasons (BECQ DCRM 2015).

• Monitor research and development of farming methods that improve food security and ecosystem resilience. With a gradual shift away from agroforestry, the food production systems in the Pacific Islands have become more vulnerable (Taylor et al. 2016). Traditional farming systems have demonstrated the ability to enhance resilience to external shocks and help to bolster food security (McGregor et al. 2009).



### If you are involved in finance or economic development...

- Expect economic disruptions and increased costs from necessary disaster prevention, cleanup, recovery, and operation of essential services during disasters. Climate changes-both gradual and abrupt-disrupt the flow of goods and services that form the backbone of economies (Houser et al. 2015). They also stress or damage natural ecosystems, such as coral reefs, that supply goods and services. The revenue lost during extreme events can extend recovery time. An increased frequency of "shocks" (in the form of extreme events) means that the time it takes for essential services that underpin the economy to recover may exceed the time between events. A series of shocks creates compounding impacts and prolonged recovery times (Keener et al. 2018). This was experienced with Typhoon Yutu striking just three years after Typhoon Soudelor when recovery from the first storm was still underway.
- challenges for local businesses. Climate change is expected to increasingly affect trade and economies internationally beyond the CNMI and the United States. Import and export price fluctuations and unanticipated second- or third-order consequences (on supply chains and customers) can disrupt local businesses (Smith et al. 2018; Goldstein et al. 2019). To reduce risk, businesses can proactively research and prepare for the impacts of climate change on their customers, employees, communities, supply chain, and business model (Goldstein et al. 2019).
- Monitor and research innovative insurance mechanisms. The risks posed by climate change are often too great for companies, individuals, and local governments to cover on their own. Countries with greater insurance coverage across sectors are found to experience better GDP growth after weather-related catastrophes (Melecky and Raddatz 2011). There are an array of options to manage climate-related risks, such as weatherindexed insurance products and risk transfer-for-adaptation programs. Some cities and states have bought catastrophe bonds or parametric insurance policies. For example, the government of Quintana Roo, Mexico, purchased a parametric policy that would provide up to \$3.8 million to repair hurricane damage to their coral reef (Gonzalez 2019). This kind of policy provides a fast payout to quickly address impacts from a triggering event. The government could consider similar mechanisms for protecting the CNMI's significant ecological resources.



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#### If you are an educator or education decision-maker...

- Expect greater public health threats to students. Children are especially vulnerable to heat-related illness, including dehydration, heat stress, fever, and exacerbated respiratory problems. The increasing frequency and intensity of hot days, as well as stronger storms, could result in health impacts for students (Sarofim et al. 2016). The experience of destructive typhoons and other extreme events affect children's mental health acutely. Providing mental health services and on-site health professionals at schools can help students to understand and cope with trauma and loss.
- Prepare for stronger typhoons and storm surges, and consider options for schools and educational facilities at the coastline. Schools in the path of major storms and in low-lying coastal areas are exposed to high winds, erosion, flooding, or a combination of these, causing temporary school closures and the need for repairs or rebuilding.

- Locating and designing buildings to accommodate high winds, storm surge, and sea level rise can avoid costs and protect students.
- Anticipate compound risks from climaterelated events and other crises. As the COVID-19 pandemic has demonstrated, the multiple challenges faced by the education system can exacerbate one another and lengthen recovery time. The structural destruction to schools from typhoons in recent years, temporary shuttering of schools during the pandemic, and impacts of the economic crisis have lasting consequences for students, their families, and educators. Coordination and cooperation across sectors of government can help prevent potential conflicts in emergency response, take advantage of co-benefits, and help to ensure continuity of basic services, including education (Phillips et al. 2020).



Due to extensive storm damage from Typhoon Yutu, Hopwood Middle School moved to temporary canvas tent classrooms set up on the campus of Koblerville Elementary School on Salpan. Power outages following the relocation made it difficult for students to work in extreme heat in the tent classrooms (Bautista 2019). Photo by Zena Grecni, 2019.