GLOBAL FUND FOR CORAL REEFS

CONCEPT NOTE

COVER PAGE

Concept Note Title: Micronesia Coral Reefs (TBC)	**Recipient Organisation(s):** The Nature Conservancy
Convening Agent: Tammy Clark, Deputy Director, Micronesia & Polynesia, TNC, tclark@TNC.ORG +61413540458 **Programme Focal Point Contact**: Trina Leberer, Director of Pacific Regional Partnerships, TNC, tlberer@tnc.org +16717885167	**Programme Location** Country/Region: Micronesia - Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI), and the Republic of Palau (ROP) **Priority Coral Reef Site(s):** Specific target sites will be refined during the full proposal preparation
Description: The Micronesia Coral Reefs programme will build on the strong regional architecture developed over the last 16 years through the Micronesia Challenge. The programme will contribute to the targets adopted under the Challenge by the three programme countries (FSM, RMI, ROP). It will accelerate the development of reef-positive business models in the region, especially in ecotourism, sustainable fisheries, sustainable aquaculture, and waste and water management sectors. In addition, it will advance science on reef resilience and coral reef restoration, identifying and protecting climate refugia and integrating heat-tolerant corals into restoration efforts. The programme will seek to expand the sustainable fisheries venture Pacific Island Tuna, an investment opportunity that, if upscaled, can generate resources for effective management of the marine ecosystems, including coral reefs. The programme is also expected to implement financial mechanisms to leverage finance for the conservation, restoration, and sustainable use of coral	**Preparatory Grant Cost (USD)[1]:** Preparatory Grant Request: USD 100k Early Estimate of Full programme Grant Needs: USD 10 million

[1] As per GFCR Executive Board decision, disbursements will be determined based on fiduciary assessment, expenditures and GFCR Secretariat's performance review.

reefs in Micronesia to support the communities' livelihoods and food security, enhancing their climate resilience. These will include an impact investment facility to support small and medium enterprises to grow sustainable blue economy business models and consolidate revenue streams; a blue economy accelerator to foster innovative reef-positive businesses; and support to secure the full capitalization of the Micronesia Challenge Endowment Fund, to ensure the Protected Areas Networks of the three countries have sustainable finance in the long-term to effectively protect coral reefs. Other mechanisms, such as water funds, conservation easements and user fees will also be explored. With the additional finance for conservation and strengthened partnerships with the private sector, the programme is expected to leverage at least an additional USD 20 million to help achieve the Micronesia Challenge targets, especially the effective management of 50% of the marine resources across the region.	**Proposed Start Date[2]:** July, 2022 **Proposed End Date:** July, 2023

[2] Programme start date will be triggered by the initial fund transfer of the GFCR Trustee

Fund-level expected results:

For the MC, TNC and partners have developed scorecards to broadly measure and track the effectiveness of protected areas in the region and marine ecosystem health. Using data collected through the MC monitoring programme (e.g., coral assemblages, benthic substrate and food fish assemblages), research showed significant variance in the extent to which MPAs preserved ecosystem conditions across the region.[3] The programme contributions to the GFCR Fund-level expected results listed below will seek to align with these scorecards and build on this baseline information. At this stage, quantitative targets were provided where possible and are based on the MC targets and TNC 10-year strategic plan for the region. In some cases where targets are specific to the GFCR programme, we provided estimates that will need to be confirmed when the full proposal is developed. It is important to highlight that baselines are available only in specific sites and the programme will monitor indicators where the interventions are supported. This is to reinforce that proxies will be used to assess the contribution of the programme to the GFCR fund-level indicators. The following are GFCR core-indicators and sub-indicators that are expected to be developed in more detail for the full programme, including:

F1. Reef fish species richness and biomass

- F1.1: No decrease in Abundance of fishes
- F1.2: No decrease in Biomass of fishes
- F1.3: No decrease in Species Richness of fishes[4]

F2. Benthic cover and composition

- F2.1: No decrease in live coral cover (caused by local drivers of degradation)
- F2.2: % decrease in macroalgal cover

F3. Integrated Local Threat Index (LTI)
A reduction in LTI on the index scale compared to the baseline[5] for the following sub-indicators for specific sites where the programme has interventions;

- F.3.1: Pollution (sediments)
- F.3.2: Fishing pressure
- F.3.3: Coastal development – tourism

F4. Proportion of coral reefs under effective protection and management

- F4.1: Improved management of 1,073,241 hectares (50% of the nearshore area) of nearshore marine ecosystems and resources (including coral reefs)
- F4.2: Effectively manage at least 50% of marine resources across Micronesia (including coral reefs)
- F4.3: Improved or recovered ecosystem condition for key habitats - aerial extent (coverage) of coral reef with improved/recovered condition in specific sites where the programme has interventions

F5. Ratio of private and market finance to GFCR Grant Fund allocations

- F5.1: Ratio of 1:2 for grant to private investment at both the programme level
- F5.2: Increased funding leveraged to coral reefs - at least USD 20 million additional funding mobilised from the private and public sectors with the support of the programme interventions

F6. Ratio of Co-financing leveraged

- F6.1: Striving for a 1:1 ratio

F7. Proportion of financing that is 'sustainable financing'

- F7.1 Validated business plan or sustainable finance plan - at least 10 business plans or sustainable finance plans for enterprises or conservation initiatives in specific sites validated by the programme to support the mobilisation of capital

- F7.2 Financial projections for available funding - a system to aggregate financial projections of the available and new financial mechanisms is in place and inform the countries about the contributions to their MPA systems
- F7.3 Estimates of financial needs for successful outcomes - all the financial mechanisms and projects in the pipeline will have financial needs estimated, comparing expected annual amount of predictable long-term funding as determined by the sustainable business or finance plan to actual spend
- F7.4 Estimates of government funding, site-based revenues, endowment returns, etc. - There has been a 10% increase in local investment into conservation, sustainable resource management, and sustainable community livelihoods; and the Micronesia Challenge Endowment Fund capitalization strategy designed with support from the GFCR to achieve its capitalization target of USD 50 million at the end of the programme

F8. Adaptive Capacity / Social Vulnerability of coastal communities

- F8.1 Adaptive Capacity - At least 15 Local Early Action Planning (LEAP) for climate adaptation planning are developed and implemented with communities

F9. Impact and occurrence of climate-induced events (e.g., coral bleaching, tropical storms)

- F9.1 Incidence of climate-induced events - all sites with conservation and restoration interventions funded by the programme will monitor the incidence of climate-induced events
- F9.2 Coral mortality after event - all sites with conservation and restoration interventions funded by the programme will monitor mortality after event if the programme is able to provide monitoring budget for this

Signature of Convening Agent:	**Signature of Co-recipient Organisation (if needed):**
Print: Organisation The Nature Conservancy Name Tammy Clark Title Deputy Director, Micronesia & Polynesia Signature DocuSigned by: [redacted] F2A7AF04229549F... Date 22 September 2022	Print: Organisation: Name: Title: Signature Date

[3] Houk et al. (2015). The Micronesia Challenge: Assessing the Relative Contribution of Stressors on Coral Reefs to Facilitate Science-to-Management Feedback. PLoS ONE. Available online: https://doi.org/10.1371/journal.pone.0130823

[4] Fishes include acanthurids, scarids, serranids, carangids, labrids, lethrinids, lutjanids, balistids, kyphosids, mullids, holocentrids, and sharks as per Houk et al. 2015

[5] A methodology for measuring the threats scale will be defined during the first year of the programme and a target for the reduction will be defined in collaboration with the GFCR M&E team.

Signature of GFCR Executive Board UN Co-Chair:

Print:
Organisation: UNDP
Name: Midori Paxton
Title: Head, Ecosystems & Biodiversity

Signature [redacted] Date 12-Oct-2022

Budget by UNDG Budget Categories

Total Preparatory Grant Costs Budget Breakdown	Convening Agent
1. Staff and other personnel	$32,788
2. Supplies, Commodities, Materials	$0
3. Equipment, Vehicles, and Furniture (including Depreciation)	$0
4. Contractual services	$50,920
5. Travel	$8,250
6. Transfers and Grants to Counterparts	$0
7. General Operating and other Direct Costs	$1,500
Total Direct Costs	**$93,458**
8. Indirect Support Costs (Max. 7%)	$6,542
TOTAL Budget	**$100,000**

FACT SHEET

Other participating entities/co-implementers and contact persons:
- Micronesia Conservation Trust – Mr. William Kostka, Executive Director, director@ourmicronesia.org
- Palau International Coral Reef Center – Dr. Yimnang Golbuu, CEO, ygolbuu@picrc.org
- Others to be confirmed (e.g., See Section 9)

Name of coral reef site or project area:
Micronesia Region (Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI), and the Republic of Palau (ROP)

Envisioned period of implementation for Full Programme (years and months):
Proposal Development: 7-month period for full proposal development (May-November 2022)
Vision for full programme: 8 years

Financing Needs:
Early Estimate of Full programme Grant Needs: USD 10 million (Budget to be refined during full proposal development)

Relevant objective/s from national/regional strategic document/s:
(See section 13 for details)
Region-wide
Micronesia Challenge 2030
Pacific Islands Managed and Protected Areas Community (PIMPAC)

FSM
National Strategic Development Plan 2004-2023
Federated States of Micronesia National Biodiversity Strategy and Action Plan (NBSAP)
Protected Area Network
Blue Prosperity Micronesia
A Blueprint for Conserving the Biodiversity of the Federated States of Micronesia
National Protected Areas Network (PAN) Policy Framework
National Adaptation Plan (NAP)

RMI
RMI and the MC Strategy Plan
Reimaanlok Framework
National Biodiversity Strategic Action Plan
The Marshall Islands Marine Resource Act of 1997
Marshall Islands Protected Areas Network Act 2015

ROP

Palau National Biodiversity Strategy and Action Plan
Palau National Marine Sanctuary (PNMS) Act 2015
Palau Protected Areas Network

SDG targets on which the progress will be accelerated (includes targets from a range of SDGs and development pillars):

Goal 14—Life Below Water. The MCT impact investment facility and the Blue Economy Accelerator will fund and support reef-positive businesses aimed at; scaling automated coral growing technologies, establishing reef brigades, and increased capacity. This programme will contribute to Target 14.1 (prevent and significantly reduce marine pollution), Target 14.2 (protect and restore marine and coastal ecosystems), Target 14.4 (sustainable fishing), Target 14.5 (conserve at least 10 percent of coastal and marine areas), and Target 14.B (support small-scale fishers). In addition, by creating a funding facility that focuses on impact investments related to reef-positive business models, this programme will also contribute to Target 14.7 (increase the economic benefit from the sustainable use of marine resources) through economically incentivising the use of sustainable practices and increasing the number of community members who are deriving livelihoods from sustainably managed natural resources.

Goal 13—Climate action. Through reef restoration and developing local early action plans to enhance local communities' resilience to climate change and shocks, this programme will contribute to Target 13.1 (strengthen resilience and adaptive capacity to climate-related hazards and natural disasters).

Goal 17—Partnership for the Goals. This programme will contribute to several targets of Goal 17. For example, by supporting the establishment of new financial mechanisms and reef-positive businesses, the programme will contribute to Target 17.1 (strengthening domestic resource mobilisation, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection); Target 17.3 (mobilise additional financial resources for developing countries from multiple sources); and Target 17.5 (adopt and implement investment promotion regimes for least developed countries). Furthermore, through scaling technology to automate the coral growing process and supporting the implementation of innovative reef-positive businesses through the Blue Economy Accelerator, this programme will support Target 17.7 (promote sustainable technologies in developing countries). Lastly, this programme will also contribute to the Micronesia Challenge and its 2030 targets, which include effectively managing 50% of marine and 30% of terrestrial resources by 2030, reducing invasive species, restoring habitats, increasing livelihood opportunities and reducing risks to communities from climate impacts in Micronesia and other partner countries. This would contribute to Target 17.16 (enhance the Global Partnership for Sustainable Development) and Target 17.17 (encourage effective partnerships).

Goal 12—Responsible Consumption and Production. This programme will contribute to Target 12.2 (achieve the sustainable management and efficient use of natural resources) through supporting sustainable fisheries and aquaculture and other businesses that are beneficial to the sustainable use of natural resources.

Goal 5—Gender Equality. This programme will contribute to Target 5.5 (ensure women's full and effective participation and equal leadership opportunities) through scaling-up livelihood opportunities that employ women. Furthermore, the MCT impact investment facility to be set up by the programme will adopt a

gender criterion in the selection of businesses to receive support, which will additionally support Target 5.A (equal rights to economic resources, property ownership and financial services).

Goal 8—Decent Work and Economic Growth—The Blue Economy Accelerator and the reef-positive businesses the programme aims to scale will contribute to several targets of Goal 8, including Target 8.2 (achieve higher levels of economic productivity through diversification, technological upgrading and innovation), Target 8.3 (promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services), and Target 8.4 (improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation). Furthermore, the development of new financial tools will contribute to Target 8.10 (strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services). By potentially using blended finance to provide capital for tourism operators who meet sustainable standards, this programme will also advance Target 8.9 (devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products). Lastly, the reef brigades that aim to develop vocational skills in young people will advance Target 8.6 (substantially reduce the proportion of youth not in employment, education or training).

Goal 15—Life on Land. By contributing to the attainment of the Micronesia Challenge 2030 target of effectively managing 30% of terrestrial resources, this programme also advances Target 15.1 (ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands.) This programme will also contribute to this Target by advancing projects that improve water quality, such as dry litter technology in piggeries.

Goal 4—Quality Education. This programme would chiefly contribute to Target 4.4 (increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship) through providing training on coral reefs restoration and recovery through the reef brigades. Furthermore, the Blue Economy Accelerator will build entrepreneurship and business capacity in emerging businesses, further achieving the target of bolstering technical and vocational skills for youth and adults.

Goal 2—Zero Hunger. By helping support and scale sustainable fisheries and aquaculture, including but not limited to the sustainable harvest of Pacific Island Tuna, the programme will contribute to several Targets in goal 2, including Target 2.3 (double the incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers) and Target 2.4 (ensure sustainable food production systems that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change).

Relevant GFCR outcomes and outputs: *Please refer to the GFCR Theory of Change and Terms of Reference available here*

- Outcome 1: Protect priority coral reef sites and climate change refugia
- Outcome 2: Transform the livelihoods of coral reef-dependent communities
- Outcome 3: Restoration and adaptation technology
- Outcome 4: Recovery of coral reef-dependent communities to major shocks

SELF-ASSESSMENT

Eligibility criteria	Yes/No
The Concept Note reflects a holistic approach to mitigating various drivers of coral reef degradation	yes
The Concept Note is based on a blended finance approach, with the goal of creating an enabling environment for private sector engagement and developing other revenue streams to sustainable finance coral reef conservation and reef-first businesses	yes
The Concept Note envisioned results are aligned with national SDG priorities	yes
The Concept Note is based on country consultations, as explained in the Concept note, and government endorsement(s) of the Concept Note is secured and demonstrated through a Letter of Endorsement. Please note, letter(s) of endorsement for the Concept Note from a relevant government entity will be needed prior to submission and most explicitly state the name of the programme.	yes
The Concept Note is based on the standard template for Concept Notes, it is complete, and it includes: - Theory of Change demonstrating contribution to GFCR Outcomes - Results-oriented partnerships. Convening Agent demonstrates the vision for diverse partnerships to achieve an integrated ecosystem approach. - Environmental and socio-economic baseline data is available and/or there is a strategy in place to collect this data - Results are measurable and a clear plan exists for monitoring and evaluation - Blended solutions (transactions) and substantive outcome-level results, and - Initial risk assessment and mitigation measures.	yes
The envisioned full programme is expected to leverage resources for coral reef conversation at scale	yes

PROPOSAL FOR PROGRAMME

1. Summary of Programme

Micronesia is a global conservation priority; it holds islands, seas and forests that span 740 million hectares (ha) of the Pacific Ocean and include some of the world's most biodiverse ecosystems. Its 1,732,200 ha of coral reefs are home to approximately 480 species of corals and 1300 species of reef fish. This is significantly larger than Micronesia's land area, which is around 234,000 ha.[6] The geographically remote islands contain habitats and species found nowhere else on Earth. These islands are home to vibrant island cultures, including eight traditional ethnic groups across the region,[7] unique to each major island grouping. The traditional culture and practices of Micronesians are greatly dependent upon the ocean including making jewellery made from shells and other materials, and fishing to sell and feed their families. Over 400,000 people's livelihoods and economics depend on functional reef systems in the region.

Although Micronesian reefs are typically in better condition than reefs in other areas due to lower human impacts, many are threatened or at risk due to anthropogenic and natural factors. Key threats to coral reefs include sedimentation from soil erosion, overfishing, coastal development and land clearing causing increased sedimentation and damage to coastal habitats, and climate impacts, including ocean warming, changing water salinity and acidity, saltwater intrusion and disruptions to rainfall patterns.

To tackle these drivers of degradation, this programme will build on the robust regional architecture developed over the past 16 years through the Micronesia Challenge (MC). The MC was launched in 2006, with support from TNC, by the Republic of Palau (ROP), the Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI), and two American territories, Guam, and the Commonwealth of Northern Mariana Islands. Their initial commitment was to effectively conserve at least 30% of the near-shore marine areas by 2020, an ambition most other countries are only now adopting to achieve by 2030. Building on substantial progress, the leaders have endorsed the next phase for the MC (MC2030), aiming to effectively manage at least 50% of their marine area out to their EEZs by 2030. It is probably the most ambitious marine conservation target adopted by any region for this decade. The MC created strong partnerships with government agencies, NGOs, academic institutions, and community groups. The private sector has been less involved in the MC. The establishment of new financial mechanisms and the mobilisation of additional resources are among the MC2030 targets, and one main strategy is to increase private finance through a pipeline of investment opportunities in the region, something this programme will contribute to. An example of a partnership with the private sector that was established in the region in the last three years is Pacific Island Tuna, which is presented below as one of the main opportunities for this programme's pipeline of projects. The facilitation of funding to support the effective management of strategic sites across the region will directly contribute to all MC2030 goals. See Figure 4 in Annex 2 for more information on the goals and achievements to date of the MC.

This programme will also build on TNC's recently completed 10-year Strategic Action Plan for the region. The programme recognises the interlinkages between the health of the environment and the well-being of people. For conservation efforts to be meaningful, they must address these discrete problems affecting

[6] In this concept note, when we use macro figures for the Micronesia region, we refer to the Micronesia Challenge jurisdictions, which include FSM, ROP, RMI, and the two American territories, Guam, and the Commonwealth of Northern Mariana Islands (CNMI). Culturally, the Micronesia region also includes Kiribati and Nauru, but these countries are not considered in the figures provided in this concept note.

[7] Palauans; Chamorros (Guam and CNMI); Yapese, Chuukese, Pohnpeians, Kosraeans (all in FSM), Marshallese and Carolinians (residing in Palau, CNMI and FSM).

communities and society at large and actively co-create solutions with communities. With community empowerment as a core enabling condition for durable conservation, TNC aims to strengthen communities' understanding of their natural resource rights, support the development of holistic and inclusive community plans, and ensure a grassroots approach to programme design, implementation and ultimately ownership. TNC adheres to principles of their *Voice, Choice and Action* (VCA) *Framework for Community-Based Conservation*, which are intended to foster meaningful participation across genders and ages, and deliver equitable outcomes.

TNC will rely on the well-established network of partnerships in Micronesia to deliver this programme's outcomes. The MC structures, for example, its Steering Committee (MCSC) and Regional Office (MCRO), will be key for this programme to work with the federal governments of the three countries and the state governments of the four FSM states. The MCRO, and national and local jurisdictional structures designed to support the MC, will help the programme strengthen and integrate resilience principles in the Protected Areas Networks (PANs) for increased effective management. The Micronesia Conservation Trust (MCT), a consolidated and trusted financial manager by the region's stakeholders and international funders, is another key partner for this programme. It will design and establish a permanent impact investment facility to support small and medium enterprises (SMEs) in the sustainable blue economy, a key operational structure of the programme. MCT is also the MC Endowment Fund (MCEF) manager and will be essential for the mobilisation of additional resources and the implementation of new financial mechanisms for the PANs. Another key operational structure of this programme will be a Blue Economy Accelerator, to be built with the Pacific Islands Small Business Development Centre (SBDC) Network, to foster innovative revenue models, especially for reef-positive businesses. Reef insurance and reef brigades will be explored as part of the programme's strategy to restore coral reefs quickly, following damage from storms, ship groundings and other acute impacts.

The programme is expected to contribute to the maintenance of reef fish species richness and biomass, as well as benthic cover and composition, in the specific sites where it identifies and finances interventions; reduce local threats, especially pollution sources (sediments), fisheries pressures and degradation caused by coastal development related to tourism; contribute to the improved management of over 1,000,000 ha of nearshore marine ecosystems and at least 50% of marine resources across Micronesia; leverage at least USD 20 million additional funding; deliver at least 10 business plans or sustainable finance plans for enterprises or conservation initiatives; implement new financial mechanisms and support a 10% increase in local investment; help the MCEF to have a strategy to achieve its capitalisation target of USD 50 million; develop and implement 15 Local Early Action Planning (LEAP) for climate adaptation planning with communities; and monitor impact and occurrence of climate-induced events in coral reefs.

It is envisioned that TNC will deploy USD 10 million from the GFCR Grant Fund in eight years, with significant co-financing from the current initiatives around the Micronesia Challenge, both at the local, national and regional levels. These resources will leverage additional finance, through revolving mechanisms (recovery of funds through concessional loans) and increased investments (pipeline development).

2. Climate resilience of coral reefs and biodiversity value of reefs in the proposed project area(s)

Reef resilience

Local knowledge of the resiliency of coral reef ecosystems to coral bleaching includes work done by TNC, leading research institutions and NGOs (Stanford University, Woods Hole Oceanographic Institutions - WHOI, Palau International Coral Reef Center - PICRC, and Marshall Islands Conservation Society - MICS), and the Micronesia Challenge (MC) Measures Working Group. TNC and partners have identified reef refugia by modelling climate projections, conducting resilience assessments in ROP, FSM, and RMI, and collecting monitoring data to inform the prioritisation of sites supported by robust M&E frameworks. TNC, with WHOI and local partners (PICRC, MICS), has just initiated a new partnership to identify 'super reefs' in the RMI and ROP, where previous data have indicated potential resilience to thermal stress and changing ocean chemistry. Once these reefs have been validated as 'super reefs', they will be priorities for protection under the GFCR.

The MC Measures Working group has developed scorecards to measure and track the effectiveness of protected areas in the region and marine ecosystem health, more broadly. Using data collected through the MC monitoring programme (e.g., coral assemblages, benthic substrate, and food fish assemblages), researchers showed significant variance in the extent to which MPAs preserved ecosystem conditions across the region. The study concluded that only 42% of major reef habitats met the ecosystem condition thresholds established by the Micronesia Challenge.[8] There have been scientific studies on the history of bleaching events in Micronesia, some of which have developed assessment surveys to gather primary data on bleaching events.[9] At a country-level, a reef resilience assessment has been carried out in FSM to identify areas where reefs were in a reasonable state, and where they could recover if disturbed.[10] The assessment in FSM showed that:

- In Yap, the west coast has the highest capacity for reef resilience;
- In Kosrae, there are areas along the eastern, western, and southern coast where the ecological capacity for reef resilience is the highest; and
- In Pohnpei, the ecological capacity map indicates that there is a moderate ecological capacity for reef resilience throughout the entire coast.

In the ROP, an assessment identified 8 sites with high resilience to stressors: Ngemelis, Turtle Cove, Kayangel, Nikko Bay, Uchelbeluu, Ngardmau Barrier, Airai Fringing, Ngerchelogn Tnger.[11] A subsequent resilience analysis in ROP based on 15 years of monitoring data showed that coral communities within the inner reefs and western outer reefs appeared to have reached a coral-dominated stable phase, in the absence of large disturbances. For example, reefs off ROP's Rock Islands withstood major heat waves in 1998 and 2010. However, In the nearby barrier reef, where the water is typically cooler, coverage dropped to 5–6%.[12]

In general, the reefs of the RMI are in good condition and have experienced minimal damage from bleaching, destructive fishing techniques, and sedimentation. Even those in the former nuclear test sites

[8] Houk et al. (2015*). The Micronesia Challenge: Assessing the Relative Contribution of Stressors on Coral Reefs to Facilitate Science-to-Management Feedback*. PLoS ONE. Available online: https://doi.org/10.1371/journal.pone.0130823

[9] Raymundo et al. (2019). *Successive bleaching events cause mass coral mortality in Guam, Micronesia*. Coral Reefs. Available online: https://link.springer.com/article/10.1007/s00338-019-01836-2

[10] The Nature Conservancy (2014). *FSM Reef Resilience Report.* Available online: https://picrc.org/picrcpage/wp-content/uploads/2016/01/Rehm_FSMReefResilience_20141.pdf

[11] McLeod et al (2012). *Integrating reef resilience and climate change vulnerability into protected area design and management in Palau and greater Micronesia.*

[12] Nature (2019). *These corals could survive climate change — and help save the world's reefs*. Available online: https://www.nature.com/articles/d41586-019-03629-7

have shown remarkable recovery.[13] However, observations on Majuro indicate bleaching events have occurred (e.g., 1998, 2003, 2006, 2014). TNC is currently working with WHOI and MICS to identify resilient reefs ('super reefs') and is planning to integrate coral genetics indicating thermal tolerance (in collaboration with Stanford University) to expand this work to additional sites in Micronesia. Maps and further analysis detailing these assessments are provided in Annex 2.

Biodiversity value

Micronesia boasts some of the highest levels of marine biodiversity in the world, largely due to its geographic isolation, biological diversity, and relatively low levels of industrialisation. Micronesia contains 7.4 million square kilometres of the Pacific Ocean, containing over 1,300 known fish species, 438 coral species, 1,400 plant species, and 85 bird species.[14] Furthermore, many of these species are endemic to Micronesia, and 66 species are recorded on the IUCN Red List. Micronesia offers a valuable opportunity for managing human impacts on marine biodiversity loss due to the relatively low levels of human populations and impact currently. Over the past 25 years, governments, NGOs, and community partners have worked closely to establish legislated and traditionally declared protected areas and supportive management policies to conserve marine ecosystems in Micronesia.

Table 1. Habitat extent and coral and fish diversity in the programme countries.

	Total Nearshore Marine Area up to 100m depth (ha)	Total Coral Reef Area (ha)[15]	Total Mangrove Area (ha)	Nearshore fish diversity (# species)	Hard Coral diversity (# species)
Micronesia	4,292,900	569,183	14,536	1,300	483
Palau	286,800	52,500	5,118	1200	425
FSM	2,212,000	317,183	9,320	1000	300
RMI	1,794,100	199,500	0	>800	240

Socio-economic value

The coral reefs in Micronesia are central to the different communities, countries and states and provide resources for food as well as economic security for the 400,000 people living in the region. The annual net benefits from coral reefs in terms of fisheries, tourism, coastal protection and biodiversity, to the Pacific as a whole is estimated at $2 billion, with approximately $800 million worth of benefits annually distributed across Micronesia.[16] Countries in Micronesia exhibit the greatest-per-capita consumption of seafood in the world, and marine resources can provide a primary or supplementary source of income and food security.[17] Depending on the island, fish and invertebrates can provide an estimated 8-28% of income.[18] Tuna fisheries specifically provide a key source of revenue in the region, and between 2013-

[13] NOAA (n.d). *Republic of the Marshall Islands.* Available online: https://www.coris.noaa.gov/portals/marshall_islands.html
[14] The Nature Conservancy (2020). *Micronesia Conservation Priorities Strategic Action Plan 2020-2030*
[15] Moritz, Vii, Lee, Tamelander, Tomassin and Planes (2018). Status and Trends of Coral Reefs of the Pacific. Global Coral Reef Monitoring Network. Available online: https://solomonislands-data.sprep.org/system/files/status-coral-reefs-pacific.pdf
[16] See http://www.micronesiachallenge.org/
[17] The Nature Conservancy (2020). Micronesia Conservation Priorities Strategic Action Plan 2020-2030
[18] Ibid.

2015 it contributed $93 million towards GDP in RMI and $29 million in FSM.[19] Palau has not traditionally had a large tuna fishery. Beyond resource-based income and jobs, there are very few jobs and livelihood opportunities across the region.

The target countries for this programme are heavily reliant on the benefits and ecosystem services from coral reefs, including storm surge protection, sustenance, and income generation through tourism and fishing exports. It is estimated that 87% of the households in Palau are linked to either commercial or subsistence fishing.[20] FSM has one of the largest and most productive fishing grounds in the region and can generate significant revenue from selling fishing licences and charging access fees, generating more than $70 million per year.[21] Similarly, RMI has been able to derive a lot of its government revenue by signing foreign fishing access agreements with several countries. The contribution of this sector to the national economy of RMI increased from 7 to 27% of GDP between the 1990s and the late 2000s.[22]

Tourism is small-scale except in Palau where the sector is a significant relating to local livelihoods, making up about 88% of total exports.[23] Palau was receiving over 100,000 visitors a year pre-Covid. In 2020 and 2021, tourism was reduced by 80% and 94% compared to 2019 levels in the country.[24]

In terms of coastal protection, there is limited data on FSM, RMI and Palau. However, a 2013 study in Guam demonstrated that coral reefs could provide $139 million a year of value to the territory. This includes over $9 million a year of coastal protection through avoided damage costs.[25] This demonstrates the value of coral reefs regarding coastal protection in the broader Micronesia region.

Geographic Scope

If approved to proceed with full proposal preparation, TNC will work closely with government partners in each of the countries to confirm the final target sites for the programme interventions. For now, an initial list of coral reef areas where resilient reefs have been identified and/or where TNC has worked with regional and local partners for decades has been put together. The table below lists these initial target areas by jurisdiction.

Table 2. Target areas where TNC and partners have been working in the programme countries.

Jurisdiction	Target Area	Total Coral Reef Area (ha)
Palau	Northern Reefs (Kayangel & Ngarchelong), Ngaremeduu Bay (Aimeliik, Ngatpang, and Ngeremlengui), Koror, Peleliu	52,500
FSM – Yap	Yap Proper	99,006

[19] Ibid.
[20] https://www.livingoceansfoundation.org/wp-content/uploads/2020/10/Palau-Final-Report.pdf
[21] https://www.norma.fm/wp-content/uploads/2021/10/FSM-NATIONAL-OCEANIC-FISHERIES-INVESTMENT-POLICY-2021-2026-final-draft-as-of-9.1.2021.pdf
[22] https://www.frontiersin.org/articles/10.3389/fmars.2019.00828/full
[23] https://oecd-development-matters.org/2020/10/21/how-can-islands-reimagine-tourism-for-green-recovery/
[24] See: https://www.unwto.org/international-tourism-and-covid-19
[25] https://www.ncei.noaa.gov/data/oceans/coris/library/NOAA/CRCP/other/other_crcp_publications/Economic_Value_US_Coral_Reefs_Summary_2013.pdf

Jurisdiction	Target Area	Total Coral Reef Area (ha)
FSM - Chuuk	Chuuk Lagoon	177,604
FSM - Pohnpei	Pohnpei Island	38,492
FSM - Kosrae	Kosrae Island	2,081
RMI	Majuro, Arno and Ebeye Atolls, Bokak & Bikar	199,500

The maps below show the MC footprint, including the three countries included in this programme (highlighting the four FSM states) and the two US protectorates of Guam and Mariana Islands. The two American territories will not receive direct investments in this programme but will benefit from the regional outcomes and two-way knowledge exchange will occur regarding reef-positive opportunities. Specific maps showing Palau, Yap, Chuuk, Pohnpei, Kosrae, and RMI can be found in Annex 2.

Figure 1. Micronesia Challenge footprint within the context of the Pacific region

Figure 2.Micronesia region showing current conservation efforts implemented by TNC and partners.

3. Local drivers of coral reef degradation and solutions in the proposed project area(s) (400 words max.)

Coral reefs in Micronesia comprise some of the most diverse and intact reefs in the world.[26] Despite this, there are several key threats to Micronesian reefs including sedimentation from upland forest degradation, overfishing, coastal development and land clearing, and climate change. Although there are nuances in localised stressors to reefs, these drivers tend to be consistent across the region.

Sedimentation from soil erosion is one of the largest threats to coral reefs in Micronesia.[27] The bulk of soil erosion in Micronesia is attributed to poor farming and land-use practices and wildland fires. This is compounded by the fact that Micronesia includes many high and steep volcanic islands with high rainfall that are vulnerable to soil erosion.[28] Sediment has been shown to smother corals in Micronesia, causing high coral mortality, especially in lower energy areas such as lagoons.[29] Not only does sedimentation lead to coral mortality, but it can block the recruitment of corals and larval settlement, contributing to decreasing coral cover in reefs and facilitating the spread of invasive and native pest marine species.[30]

Another key driver of coral degradation in Micronesia is overfishing. Overfishing in Micronesia has accelerated in response to socioeconomic drivers such as the change from subsistence to a cash economy, a lack of political will to protect critical fish habitats and spawning aggregation sites, widespread but unsustainable use of modern and more efficient fishing equipment, a lack of alternative employment opportunities beyond fishing, a growing population in the region, and a lack of an effective fisheries management regimes.[31] For example, one study found that the lack of a current policy regulating size limits and sales of fish has led to an undervalued market price and significant overfishing.[32] While traditional fisheries management systems have begun to be revived and new management systems have emerged in Micronesia, they lack proper enforcement and present low levels of compliance in many jurisdictions. For example, unregulated, illegal, and destructive fishing continue to negatively impact reef habitats. Furthermore, high values of particular marine resources, such as sea cucumbers, have incentivised unsustainable harvest levels. Overfishing was identified as the most critical threat in biologically significant marine areas in several FSM states, making its prevalence in Micronesia highly concerning for the health of coral and marine resources.[33] A study from 2015 showed that areas with a higher human population correspond with areas with lower reef populations and higher levels of reef degradation.[34] Regional monitoring data also shows that fishing pressure and a shift towards unsustainable harvesting of many reef fish species is having a negative impact on reefs. In particular, fish species that grow and reproduce slowly (such as large charismatic fish and predators) are becoming rarer

[26] Veron, J.E.N. (2000). *Corals of the World*. Australian Institute of Marine Science.
[27] Victor, Neht, Golbuu, Wolanski & Richmond (2006). *Sedimentation in mangroves and coral reefs in a wet tropical island, Pohnpei, Micronesia*. Estuarine, Coastal and Shelf Science.
[28] The Nature Conservancy (2020). *TNC Micronesia Conservation Priorities Strategic Action Plan 2020-2030*.
[29] Victor et al., 2006
[30] The Nature Conservancy, 2020
[31] Ibid
[32] Kostka & Gavitt (2006). *A threats- and needs- assessment of coastal marine areas in the states of Kosrae, Chuuk and Yap, Federated States of Micronesia*. Conservation Society of Pohnpei.
[33] The Nature Conservancy (2003). *A Blueprint for Conserving the Biodiversity of the Federated States of Micronesia*.
[34] Houk et al (2015). The Micronesia Challenge: Assessing the Relative Contribution of Stressors on Coral Reefs to Facilitate Science-to-Management Feedback. Available online: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0130823

across the region and other fish species are becoming smaller over time.[35] Although there are differences in localised drivers across the region, studies have demonstrated that fishing pressure, combined with land-based sources of pollution, predicted reef decline across Micronesia. [36]

A third key driver of coral degradation in Micronesia is coastal development. Coastal development and the associated loss of habitat can impact coral reefs in several ways. Coastal development can induce habitat conversion in biologically critical habitats adjacent to reefs such as mangroves, directly impacting species such as turtles, birds, and nursing habitats for juvenile fish.[37]. Coastal development can alter the state of the environment, through light pollution or altering coastal water circulation, which can disrupt coral reproduction or nesting of sea turtles. Coastal development in Micronesia is driven primarily through increased demand for housing and urban development.

Lastly, climate change has significant negative consequences on the health of coral reefs in Micronesia. Climate change impacts on coral reefs include ocean warming, changing water salinity and acidity, saltwater intrusion, and disruptions to rainfall patterns. Researchers have identified climate impacts as one of the main drivers of significant declines in live coral across Micronesia.[38] For example, increasing sea-surface temperatures can cause coral bleaching and increasing sea-level rise can increase coastal erosion; a recent study found that successive bleaching events caused mass coral mortality in Micronesia.[39] Coral bleaching and impacts on reef health vary from year to year and from region to region. In 1997/98 extensive coral bleaching occurred in western Micronesia, whereas a bleaching 2015/17 event impacted central and eastern Micronesia. El Niño Southern Oscillation (ENSO) and Pacific Decadal Oscillation events can exacerbate changes in sea surface and chlorophyll-a concentrations which can lead to coral bleaching and outbreaks of Crown-of-Thorns starfish (*Acanthaster planci*), a coral predator. An outbreak of Crown-of-Thorns starfish occurred during the 2015/17 ENSO.[40] Sea-level rise also threatens low lying atoll islands and coastal communities, as it exacerbates flooding from high tides and storms. TNC, with the German International Climate Initiative (IKI) developed climate projections and impacts for each of the target countries for this programme. Overall, this demonstrated the impacts that these countries will experience by 2030 and beyond, with an average increased air temperature by 0.8 °C, increased rainfall by 2.75%, sea level rise by 13 cm, increased intensity in typhoons, and increased ocean acidification by 3.5 (aragonite sat. state).[41]

[35] Gombos (2020). Micronesia Challenge Evaluation. Available online: http://themicronesiachallenge.blogspot.com/p/community.html

[36] Houk et al (2015). The Micronesia Challenge: Assessing the Relative Contribution of Stressors on Coral Reefs to Facilitate Science-to-Management Feedback. Available online: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0130823

[37] Op. cit. TNC, 2020

[38] Moritz, Vii, Lee, Tamelander, Tomassin and Planes (2018). *Status and Trends of Coral Reefs of the Pacific*. Global Coral Reef Monitoring Network. Available online: https://solomonislands-data.sprep.org/system/files/status-coral-reefs-pacific.pdf

[39] Raymundo et al. (2019). *Successive bleaching events cause mass coral mortality in Guam, Micronesia*. Coral Reefs. Available online: https://link.springer.com/article/10.1007/s00338-019-01836-2

[40] Houk, P., Yalon, A., Maxin, S. *et al.* Predicting coral-reef futures from El Niño and Pacific Decadal Oscillation events. *Sci Rep* 10, 7735 (2020). Available online: Predicting coral-reef futures from El Niño and Pacific Decadal Oscillation events | Scientific Reports (nature.com)

[41] TNC & IKI (2016). Climate Projections Summary Table

4. Thesis and theory of change of the Programme. (400 words max.)

Problem statement

In Micronesia, efforts to develop sustainable livelihoods that support the protection, restoration and effective management of coral reefs have been opportunistic and lack a clear framework. Limited access to markets, mainly due to small local populations and distance from markets, lack of technical capacity and financing, and high costs of imported goods, such as fuel, make it challenging for Micronesians to create viable businesses capable of competing in global export markets. In addition, the uptake of potential solutions has been slow due to limited market potential, insufficient financial return, a lack of adequate training in entrepreneurship, and the high level of cost and uncertainty associated with developing new livelihoods. Additionally, given current relationships with the United States and other donor countries, some have the perception that individual and community needs will be met through public funding and subsidies.

Impact statement

This proposed programme is expected to increase financial flows for protecting, restoring and effectively managing coral reefs, and improving the livelihoods of the communities that rely on them by implementing innovative nature-based solutions and developing sustainable business models in Micronesia.

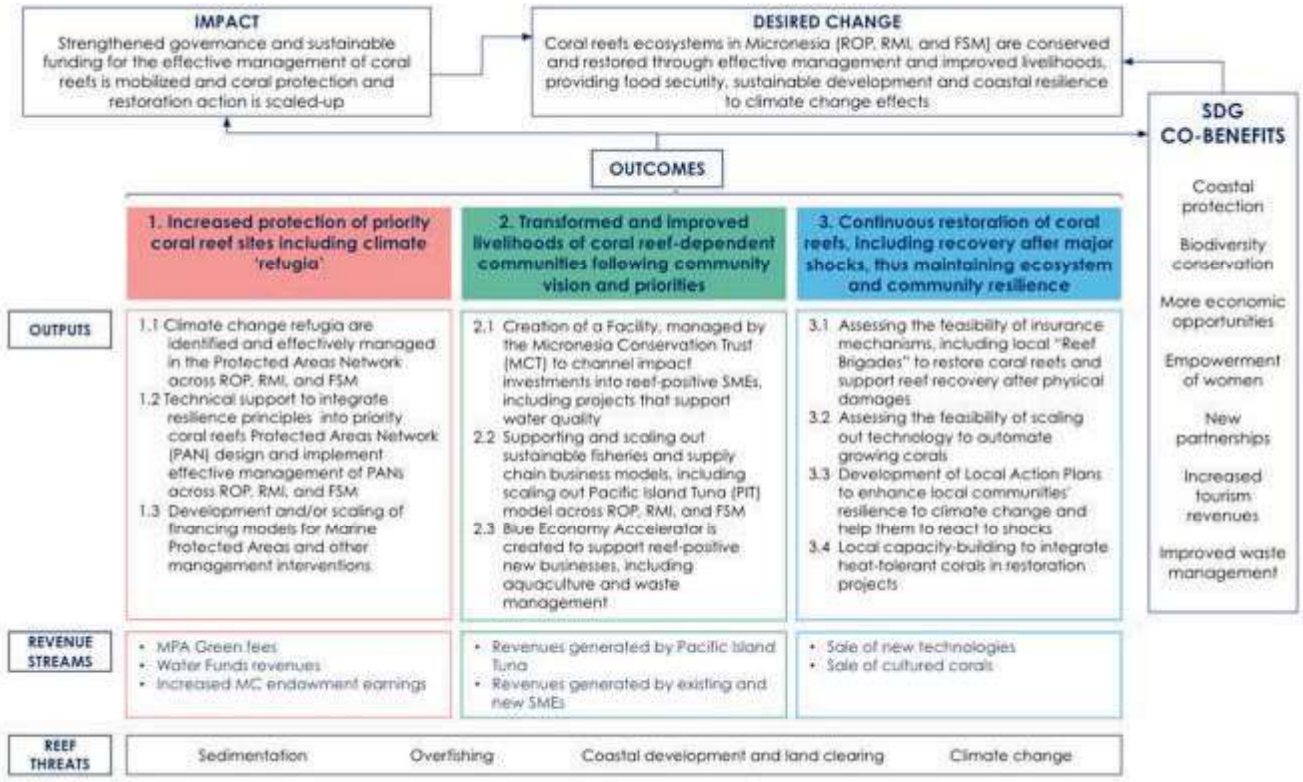
This programme will strengthen the governance around the effective management of coral reef ecosystems by mobilising sustainable funding for scaling up coral protection and restoration. This increased level of finance will contribute to a vision where coral reefs and coastal ecosystems in Micronesia are conserved and restored through effectively managed marine protected areas, the implementation of supportive policies, new enterprises and improved livelihoods, providing food security, sustainable development and climate resilience to communities and ecosystems.

To achieve this, TNC will build on the work carried out over the past 32 years advancing marine conservation with communities and governments across Micronesia. The following outcomes will be pursued:

1. Increased protection of priority coral reef sites including climate 'refugia'
2. Transformed and improved livelihoods of coral reef-dependent communities following community vision and priorities
3. Continuous restoration of coral reefs, including recovery after major shocks, thus maintaining ecosystem and community resilience

This programme will enable TNC and partners to develop financial solutions aligned with these three outcomes - protection, livelihoods, and restoration and recovery – so that financial stability for coral reef conservation is enhanced in the long term. The figure below summarises the programme's theory of change and lists the preliminary outputs:

Figure 3. Micronesia Coral Reefs programme Theory of Change



5. Operational Structure (300 words max.)

TNC is the GFCR convening agent for this programme and will provide strategic guidance, support the development of financial mechanisms, engage with recipient partner organisations and governments, source investment opportunities to the programme pipeline of interventions, ensure environmental and social safeguards are applied in all supported interventions, monitor results and provide overall programme management. TNC will host the programme management unit within the TNC Micronesia team, providing coordination across the different components of the programme and managing the day-to-day activities. It will lead the reporting process on the project progress and budget management.

The programme management unit within TNC Micronesia will be supported by TNC Global teams (such as Global Reefs) and also will engage with other TNC offices and partners hosting management units of GFCR programmes, including in The Bahamas and Indonesia (pending), to share knowledge and key lessons learned. Another key partner of the programme will be NatureVest, TNC's impact investment arm, which will provide technical guidance including sourcing and structuring investment opportunities. Key regional partners will be engaged to provide technical and advisory assistance, including universities and NGOs, as detailed in section 9.

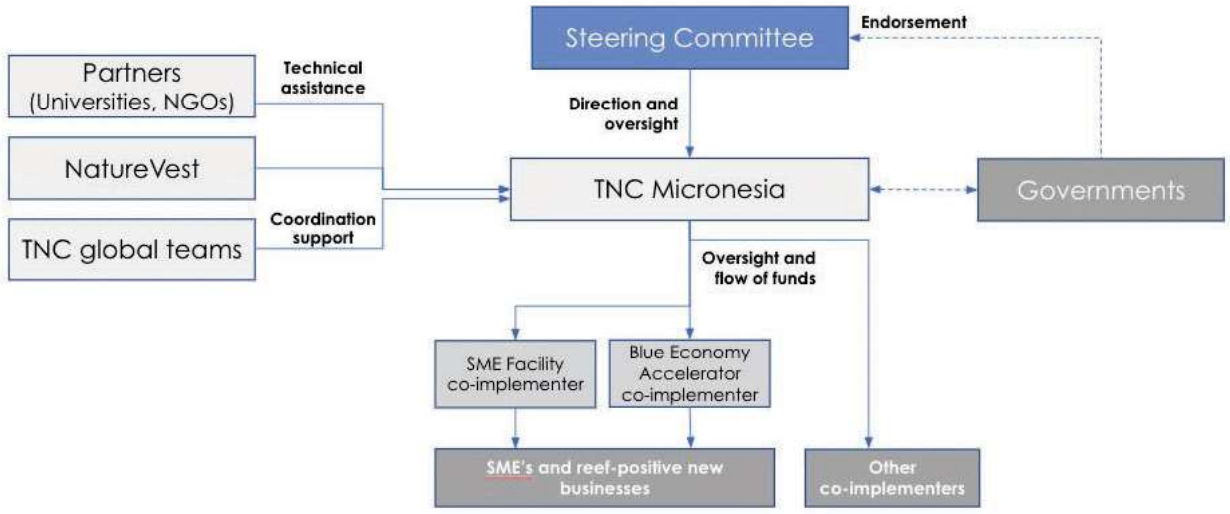
The Micronesia Conservation Trust (MCT) will be a strategic co-implementer of the programme, operating resources through a new impact investment facility to be designed and implemented as a permanent financial mechanism for sustainable blue economy SMEs, especially reef-positive business models. MCT will also provide co-financing through the current programmes it manages, especially the MC Endowment

Fund. Other recipient organisations may include the Pacific Island Tuna company, one of the main investment opportunities identified, and the Pacific Islands Small Business Development Centre (SBDC) Network. The SBDC is envisioned to be the partner to operate the Blue Economy Accelerator, an operational structure to foster innovative business models. Agreements between TNC and the confirmed recipient organisation will be developed during the full proposal preparation phase and will identify how identified risks will be managed and how conflict resolution will be carried out.

A Steering Committee will be composed during the full proposal preparation, led by TNC as the convening agent, gathering strategic local partners including the MCT. Additional local partners will be consulted during the full proposal preparation to identify their roles in the programme implementation. They may be invited to join the Steering Committee, with consideration given to potential conflicts of interest.[42] The Steering Committee will also include Government representatives. These representatives oversee the Protected Areas Network offices and will engage MPA managers in the programme implementation, a key group to achieve the programme objective, especially Outcome 1. This committee will provide the strategic direction and programme oversight throughout implementation, approving annual work plans and budgets and reviewing technical and financial reporting.

The figure below summarises the governance and operational structure envisioned for the programme.

Figure 4. Micronesia Coral Reefs programme governance and operational structure



6. What are the specific intervention(s) of the proposed Programme? (500 words max.)

To meet the overall objective of the programme to increase financial flows for protecting, restoring, and effectively managing coral reefs, and improving the livelihoods of the communities that rely on them by implementing innovative financial solutions and developing sustainable business models in Micronesia, the programme will carry out the following interventions:

[42] Direct beneficiaries of the programme should not be included in the project Steering Committee to avoid conflicts of interest.

Outcome 1 - Increased protection of priority coral reef sites including climate 'refugia'

- Output 1.1 - Climate change refugia are identified, protected, and effectively managed in the Protected Areas Networks across ROP, RMI, and FSM: TNC will achieve this output by providing marine ecological assessments to fill information gaps and help to lead the MC Measures Working Group tasked with tracking progress toward the MC2030 goals. TNC has partnered with the Palau International Coral Reef Center (PICRC), the University of Guam and local NGOs to identify reef refugia and integrate these into MPAs. TNC, in partnership with Woods Hole Oceanographic Institution (WHOI), Stanford University, and local partners (PICRC, MICS), will seek to identify 'super reefs' in new geographic areas that have demonstrated resilience to thermal stress in the RMI and ROP, based on fine-scale hydrodynamic and climate modelling and demonstration of heat stress capacity proven through genetic testing. To date, through physical and biological surveys, coral core sampling, and genetic analysis, the inner reefs of the Rock Islands Southern Lagoon (a UNESCO World Heritage site) of ROP have been identified by the partners as a 'super reef'.[43] The research team noted above will utilize GFCR funding to expand the identification of new super reefs in RMI and ROP.

- Output 1.2 - Technical support to integrate resilience principles into priority coral reef Protected Areas Network (PAN) design and to implement effective management of PANs across ROP, RMI, and FSM: The programme will collaborate with other relevant organisations, such as the Great Barrier Reef Foundation and UNESCO through the Resilient Reefs Initiative,[44] to invest in developing the technical capacity of partners, including local governments, communities, local researchers and NGOs, to provide support to the PANs with priority coral reef sites. This support will be co-financed by current regional and national projects and will focus on enabling mechanisms and processes to effectively manage protected areas, taking into consideration the assessed resilience of coral reef ecosystems. This will support the overall goal of the MC, of effective management of 50% of marine resources within the EEZs and 30% of nearshore marine resources under effective conservation. In practice, with the provision of this technical support, the programme will enable the continuous monitoring of effective management of MPAs and the tracking of other indicators required by the GFCR, such as the reduction of threats. The use of new technologies, such as f drones, is a strategy to improve monitoring and also enforcement. Another strategy is to engage local communities in these activities, creating job opportunities in community patrols, outreach and awareness building, and tourism-related jobs (mainly in Palau).

  Output 1.3 - Development and/or scaling of financing models for Marine Protected Areas and other management interventions: The programme will develop new financing mechanisms to support existing MPAs and establish new protected areas and reserves, as well as other conservation, sustainable livelihood development, restoration and management interventions. The revenue from these financing models could be invested into monitoring and enforcement, restoration of priority coral reefs in the protected areas, education and outreach. The programme also will leverage mechanisms already piloted and tested in Micronesia and in other regions and build on the MC Sustainable Finance Plan. A financing gap analysis was carried out in 2010 together with the identification of potential funding sources. This allowed the MC partnership to calculate the MCEF capitalisation target as a way to cover the remaining gap. At the time, around USD 8.8 million were needed for recurrent costs of the protected areas across the three countries

[43] WHOI (n.d). The science of super reefs: How do we find them?. Available online: https://superreefs.whoi.edu/quest-for-super-reefs/

[44] https://www.barrierreef.org/what-we-do/projects/resilient-reefs

and there was an annual funding gap of around USD 3 million to be covered by the endowment earnings.[45] Although the MCEF is still not fully capitalised, it has been providing support to cover the gap according to the priorities established by the PAN offices. The coordination with the PAN offices will be key to ensuring funding is directed to effectively manage coral reefs. With support from TNC and MCT, the MC partnership is currently updating the MC Sustainable Finance Plan to incorporate activities to achieve the new MC2030 targets, with the newly revised plan anticipated to be completed by June 2022.

One of the financial mechanisms to be explored is "water funds." TNC has successfully piloted water funds in Latin America and Africa and is exploring the viability of water funds in Pohnpei, Micronesia, where water quality has degraded due to poor land management. Water funds provide a revenue stream to improve land management, which can reduce sediment flows that impact adjacent coral reefs. The beneficiaries of improved biodiversity and ecosystem function include the tourism sector, fisheries, and recreational and livelihood uses of coral reefs. Water funds typically take two to three years to be established and require local alliances with water management authorities, upstream landowners/ users and beneficiaries that cover an added fee for the use of water with improved quality. The feasibility of this mechanism will be explored during the full proposal preparation.

Another existing financing model that can be scaled across the region is the MPA Green Fee. Collected from visitors, the Green Fee has been developed in the ROP and is managed through the Palau PAN Fund. In 2018, the fund collected USD 1.5 million, with the majority distributed among the 15 states where the protected areas are within the PAN. TNC will work with partners in FSM and RMI to explore the potential to develop a green fee to support their PANs during the proposal development stage.

Blended finance could potentially be deployed to improve the tourist experience (e.g., construction of interactive visitor centres), which may increase tourist numbers. Micronesian nations are trying to rebound from COVID-related decreases in tourism. In FSM and RMI, tourism numbers were low before the pandemic, due to their remoteness and limited infrastructure. An investment programme in the tourism potential of MPAs through a blended finance approach could be operationalised through investments in for-profit tour operators who meet sustainable tourism standards, either for start-ups or to grow existing businesses. This could be done through the impact investment facility managed by MCT (see output 2.1 below).

TNC will also explore the potential to work with local reef owners in the FSM during the proposal development stage to create marine easements through small endowments that generate annual interest income that can be used to protect coral reefs (e.g., following the example of the Helen Reef marine conservation easement established by OneReef in ROP).

Finally, TNC will develop a resource mobilisation strategy to achieve the MC Endowment Fund (MCEF) capitalisation target. The Endowment is a regionally committed and essential tool for the conservation of the marine and coastal resources in the region and its full capitalisation is necessary to ensure the permanence of marine ecosystems. The MCEF objective is to provide sustainable funding to help the countries achieve the MC targets, contributing directly to MPAs financing. The Endowment has been successful in raising funds, through national mechanisms and

[45] Being USD 1.7 million for FSM, USD 534 thousand for ROP and USD 758 for RMI.

leveraged funding streams. This funding has resulted in over 150 marine protected areas being established or strengthened, the majority of which are locally managed marine protected areas. However, there have been several challenges, including varying levels of political commitments, perceptions about bias towards FSM, where MCT's office is based, the long time period for fundraising which may have caused donor fatigue, and the perceived lack of national control over MCT-managed monies. The target size for the Endowment Fund is $55 million, with nearly $25 million raised to date[46] and an estimated $30 million funding gap.[47] TNC is working with global partners to assess the feasibility of a Project Finance for Permanence (PFP) in Micronesia, building on successful models applied in other regions. The GFCR programme would not contribute directly to the MC endowment but could be used to lay the groundwork for a PFP, which could mobilise the required resources from other funding sources.

Although blue carbon has been an important strategy to generate financial resources for marine and coastal ecosystems in other geographies, preliminary studies carried out by TNC, the Conservation Society of Pohnpei (CSP) and MCT in 2016 indicated that blue carbon projects through mangrove restoration are not commercially viable in Micronesia at this time, because the current 'carbon value' of mangrove conservation and restoration is limited and the scale of deforestation/degradation rates is limited, undermining the business case for carbon projects in the region.

Similarly, TNC has evaluated the potential of other larger-scale financial mechanisms. TNC has a robust project selection process for blue bonds that considers biodiversity, government relations enabling conditions, as well as financial enabling conditions. At present, Micronesia countries do not have the right kind of debt for a blue bond, and they do not have high levels of commercial debt. Alternative sustainable debt mechanisms (e.g., the potential to work with China on debt forgiveness; new debt issuance; low-interest loans that could support specific activities, etc.) can be further explored during the full proposal preparation phase, but at this time TNC has not found one that is a fit for the financial circumstances in the region.

Outcome 2 - Transformed and improved livelihoods of coral reef-dependent communities following community vision and priorities

- Output 2.1 - Creation of a Facility, managed by the MCT, to channel impact investments into reef-positive SMEs, including projects that improve water quality: A financing facility will be structured and operationalised to support a portfolio of reef-positive projects that are at an early stage of development or need a capital injection to be scaled-up. The facility will finance these businesses through recoverable grants or concessional loans, to a stage where they could become ready to receive investments from private sector parties. Sectors targeted include sustainable tourism, sustainable fisheries and aquaculture, wastewater/plastic-waste management, sustainable agriculture and ecosystem restoration services that reduce sedimentation and improve water quality. This facility will be managed by the MCT.

  The MCT has a proven track record in the support of biodiversity conservation and sustainable development for the people of Micronesia by providing long-term, sustained funding. MCT also

[46] The MCEF Capital as of December 2020 was USD 24.2 million.
[47] Walsh (DRAFT). Micronesia Challenge 2030 Sustainable Financing Plan.

has had experience with sustainable businesses and is well-positioned to manage the programme's impact investment facility. MCT, with support from the Green Climate Fund (GCF), is supporting climate-resilient food security for farming households across the FSM. The project is a national effort to increase the resilience of FSM's most vulnerable communities to climate change-induced food insecurity by introducing sustainable agricultural practices and developing climate-resilient agriculture supply chains that can be scaled across the region. For example, MCT is supporting a pilot project with FSM Vital Energy (Vital) called Coconut for Life to rehabilitate the copra industry to improve the livelihoods of the people of Micronesia. The project enhances the capacity for the buying, selling, exporting, manufacturing, processing, and distribution of copra and other products from coconut trees in the FSM. Whilst it would be difficult to be competitive with global markets for these agricultural commodities, projects of this type will increase food security and self-reliance in the country. New community-based revenue streams are created for the people as opportunities become available for farmers to market coconuts, providing an alternative for local communities to replace income from selling reef fish caught unsustainably.

One reef-positive sector that can be financed by the facility is regenerative aquaculture. TNC plans to support an aquaculture program in Palau to grow giant clams, a popular local species that will not only provide income to farmers, but also naturally filter and clean the surrounding waters. While some giant clams will be raised for market, TNC can also purchase some clams directly from farmers to restore wild populations. It is estimated that sustainable farming impacts could include 50 new giant clam farms, improving 450 hectares of reef habitat and restoring 45,000 giant clams to the wild.

Through the GFCR programme, the MCT impact investment facility will be a permanent structure that will provide capital for sustainable blue economy SMEs, especially the ones with reef-positive business models, to grow and consolidate their revenue streams. The programme will also design a sustainability and fundraising strategy for the facility together with MCT, so it continues to support new and existing enterprises after the end of the programme. At this stage, MCT is fully engaged in the programme and ready to provide a letter of intention.

- Output 2.2 - Supporting and scaling out sustainable fisheries and supply chain business models, including scaling out Pacific Island Tuna (PIT) model across ROP, RMI, and FSM: TNC will build on the experience of supporting sustainable fisheries models across Micronesia. TNC has launched a ground-breaking partnership with the RMI to transform the global canned tuna supply chain. PIT, a TNC-RMI joint venture company, supplies sustainable canned tuna to Walmart stores across the United States. This partnership will positively impact the health of our oceans, as well as the communities and customers that depend on it.

  The model, developed in collaboration with Bain & Company, includes strict sourcing standards that match robust social and environmental sustainability commitments with best-in-class verification. Not only will Pacific Island Tuna provide Walmart customers with a sustainable option that is affordably priced, but it also offers economic benefits to Pacific Islanders. It is envisioned that at least 40% of the company's net profit distributions will directly support community-based conservation and climate resilience projects, including the development and management of MPAs and coral reef restoration actions. The other 60% of profits will be returned to Pacific Island governments. In addition to the RMI, Pacific Islands Tuna is designed to include additional

countries, specifically Parties to the Nauru Agreement (FSM, Kiribati, Nauru, Palau, Papua New Guinea, Solomon Islands, and Tuvalu).

The feasibility of supporting and scaling out this model to ROP and FSM, as well as to other countries beyond the focus of this programme, will be explored and potentially included in the programme pipeline as an investment opportunity to be developed. Additional funding is needed to finance the different steps of this expansion. Activities could include feasibility studies to determine if these will be set up as new ventures, or joint ventures of the existing PIT, market testing to establish the infrastructure for the supply chain and the identification of additional buyers, research on other products (i.e., different fish species) that could be scaled out and diversify the existing model. TNC will also explore new innovation models, such as tech platform-based 'seafood market organising tools/companies' for domestic and export markets, which can benefit PIT. These tools/companies can drive efficient market connections between buyers and sellers and enhance sustainability and effective fisheries management.

- Output 2.3 – Blue Economy Accelerator is created to support reef-positive new businesses, including aquaculture and waste management: With the Pacific Islands Small Business Development Center (SBDC) Network and its local SBDCs (in Yap, Chuuk, Pohnpei, Kosrae, and in Palau), TNC will explore the potential to design and launch a Blue Economy Accelerator to support reef-positive small businesses. Priority sectors will include sustainable tourism, sustainable fisheries and aquaculture, wastewater/plastic-waste management, sustainable agriculture, and ecosystem restoration services.

  The Blue Economy Accelerator is a complementary effort to the MCT impact investment facility and will work together on pipeline development (Output 2.1). While the Accelerator will help new business models to be structured, supported and launched, the impact investment facility will provide capital for them to grow and consolidate their revenue streams. Initial conversations have been carried out with SBDC before the concept note phase (for another proposal TNC was developing) and there was interest in collaborating. SBDC needs technical expertise to assess reef-positive businesses with rigorous criteria for project selection. The collaboration between TNC and SBDC will be further explored during the full proposal development stage when an MoU can be developed and signed. Equally, a collaboration between MCT and SBDC will be important for pipeline development and will be discussed in the full proposal preparation phase.

  TNC is working with partners to pilot innovative business models that could be supported, such as restorative aquaculture projects that include clam farms and mangrove crabs to improve food security and support critical ecosystems. Other examples that TNC has not worked with yet in Micronesia are circular economy products (e.g., items made from banana leaf paper and betel nut palm fibres), that have the potential to tap into local and regional markets.

  The Blue Economy Accelerator will build on the work of TNC and local development banks to improve business and financial skills, and ensure benefits are distributed equitably across communities, including amongst marginalised sub-groups such as women and youth. Criteria to select supported business models will include gender aspects, as well as intersectional aspects such as age.

Finally, the programme will also support the design of a financing strategy for the Blue Economy Accelerator together with the SBDC Network, to support reef-positive innovative businesses after the GFCR programme has ended. This could be done through an alliance of partners in the financing and philanthropic sectors and through remuneration mechanisms by investors for pipeline development.

Although at this stage both the impact investment facility and the Blue Economy Accelerator are targeting SMEs, TNC will explore the possibility of identifying larger projects (e.g., infrastructure) that can reduce drivers of degradation and can be an investment opportunity. During the full proposal preparation, consultations with the governments will be carried out to assess their priorities in this sense.

Outcome 3 - Continuous restoration of coral reefs, including recovery after major shocks, thus maintaining ecosystem and community resilience

- Output 3.1 – Assessing the feasibility of insurance mechanisms, including local "Reef Brigades" to restore coral reefs and support reef recovery after physical damages: TNC will carry out a study on the potential of an insurance mechanism in Palau. This will include exploring the possibility of a parametric insurance policy that triggers the payment according to a certain wind speed. Preliminary studies in Palau have indicated that future tropical cyclones will bring stronger winds, storm surges, and greater precipitation amounts.[48] As part of this mechanism, TNC will seek to establish and scale the 'reef brigade' model in Micronesia, which has been successfully developed in other countries with TNC support.

  The reef brigades are groups formed by divers (from dive shops and tour operators), MPA managers and local community members, including fishers, that are trained to restore the coral reefs on a continuous basis following major shocks. They are trained and supported to keep coral nurseries and maintain the reefs, in a way they have conditions to provide a rapid response aimed at recovering the coral reefs after major shocks, such as typhoons and hurricanes. The reef brigades can provide a source of income if reef restoration can be developed into a revenue-generating business.

  Besides the reef brigades, the reef insurance mechanism needs a financial mechanism to receive the payment and distribute it to brigades, as well as to mobilise the resources to pay the premium annually. It is envisioned that MCT or the Palau PAN Fund can play this role. Funding sources to maintain the reef brigades will be explored during the full proposal preparation and could include the tourism sector in Palau (hotels), shipping companies and local governments, who benefit from the coastal protection service provided by coral reefs. TNC has collaborated to explore the feasibility of insurance mechanisms in Palau, for example, a broader ecotourism insurance mechanism to protect the economy from future shocks to the ecotourism industry.[49] Overall there is a favourable enabling environment for coral reef restoration in Palau (as outlined in more detail below).

[48] Grecni et al (2020). Climate Change in Palau: Indicators and Considerations for Key Sectors. Report for the Pacific Islands Regional Climate Assessment. Available online: https://reliefweb.int/sites/reliefweb.int/files/resources/climate-change-in-palau-pirca-2020-low-res.pdf

[49] TNC (2022). Blue Economy Business Plan for Palau.

- Output 3.2 - Assessing the feasibility of scaling technology to automate growing corals: This programme will build on TNC's 20+ years of leading coral restoration work (in Florida and the Caribbean) and our experience bringing together coral restoration practitioners, ornamental coral growers, engineers, software developers, and hydroponics experts. TNC is working with these stakeholders to develop innovative technologies to automate the processes of growing and outplanting corals. To increase the efficiency and reduce the cost of outplanting nursery-raised corals, TNC is collaborating with start-ups that are developing new solutions. One example is the company Coral Vita, supported by TNC under the GFCR-funded BahamaReefs Programme. Coral Vita is growing corals on an in-land farm and testing new technologies, such as 3D printing, to accelerate and scale-up the process. Other solutions, such as the use of robots, combined with semi-automated onshore coral nurseries, may result in a significant reduction in coral restoration costs. TNC will use grant resources of this programme to explore the feasibility of restoration technologies in Micronesia, building on the knowledge and lessons learned from TNC's coral reef restoration programs across the Caribbean, Coral Vita and other coral restoration programmes (such as the Reef Rescue Network coordinated by PIMS also in The Bahamas), and identify local partners to build business models around them. If feasible, a coral growing and outplanting facility could be established to generate revenues through the selling of cultured corals and the selling of the technology. If a coral facility is identified as commercially feasible, it could be supported by the Blue Economy Accelerator and receive further support to expand through the MCT impact investment facility.

- Output 3.3 - Development of Local Early Action Plans to enhance local communities' resilience to climate change and help them to react to shocks: Local communities will be supported to develop site-based management plans and Local Early Action Plans (LEAPs) for climate adaptation. TNC has worked with partners including the MCT and the Pacific Islands Managed and Protected Areas Community (PIMPAC) to support communities, and especially women's groups, to develop LEAPs to enhance their resilience to climate change and other major shocks. Key actions identified in these plans focus on effectively managing coastal ecosystems for biodiversity and safeguarding the services they provide such as wave attenuation, as well as developing sustainable livelihoods for income and food security to help them recover from catastrophic events. Specific enterprises identified and included in the LEAPs may benefit from the Blue Economy Accelerator support.

- Output 3.4 - Local capacity-building to integrate heat-tolerant corals in restoration projects: Building on the work in Output 1.1 to identify super reefs and heat-tolerant corals, TNC will explore the potential to integrate heat resistant corals into restoration projects in Micronesia. This output will build on the results of Output 3.1 and Output 3.2, as the heat-tolerant corals can be integrated into the work implemented by the reef brigades and can benefit from the new technologies in coral growing and outplanting. Partners for this work include WHOI, Stanford, MICS, and PICRC, as well as other TNC teams leading coral restoration.

In terms of the enabling environment for restoration in the region, TNC will continue to engage with national and local governments. The Micronesia Challenge has specific 2030 targets relating to the restoration of habitats including coral reefs. The 2015 Palau Climate Change Policy sets out a series of interventions for climate change adaptation, including indicators increasing the total area of coral reefs

and launching coral replanting in viable coastal areas that have been affected by bleaching.[50] In the Marshall Islands, there is a strong policy environment for community-led protection and restoration of coral reefs through the *Reimaanlok* framework, promoting a community-led approach to effectively managing 50% of its coastal resources by 2030. The RMI National Environment Management Strategy 2017–2022 is a mechanism to assist the government in restoring the natural environment, where increasing coral cover is an identified Action Area.[51] FSM is in the process of developing a NAP,[52] which is expected to include EbA as the main approach, benefiting coral reef protection and restoration. In addition, the FSM Strategic Development Plan 2004-2023 set a target for FSM to have a net gain in the area and health of coral reefs. Outside of the target countries for this programme, in 2018 CNMI passed the Coral Reef Protection Act Public Law to protect coral reefs by recovery of monetary damages from vessel groundings and anchor injuries, destructive fishing, and impacts on threatened species. A similar law could be developed in the target countries for this programme. The Guam Green Growth (G3) initiative has included the MC2030 targets in their SDGs dashboard.[53]

It is still early to estimate the expected leveraging ratio per intervention, but it is anticipated that the MCT impact investment facility and the Blue Economy Accelerator can leverage resources through increased revenues for the supported businesses; recovery of concessional loans offered to the enterprises; and private investments in the form of debt or equity via some of the more developed business models (such as Pacific Island Tuna). TNC expects that the Micronesia Coral Reefs programme will leverage at least a ratio of 2:1 for the resources provided by the GFCR grant window. The MC evaluation conservatively estimated that the initiative could leverage over USD 60 million in grants beyond the endowment investments. It is a strong indication that the GFCR programme has the potential of achieving the expected leverage ratio.

The business models that this programme will support have the potential to address local drivers of reef degradation by applying the GFCR Investment Principles in Micronesia including coastal development, overfishing, tourism impacts, and land-based sources of pollution, such as sedimentation from deforestation of upland forests. Sustainable financing will be available for the implementation of protected areas management plans, fisheries management plans, and local early action plans for climate adaptation designed to address local drivers of coral reef degradation and maintenance, recovery and / or restoration of ecosystems. Table 3 below summarises the priority sectors of this programme and the drivers of degradation it will address:

Table 3. Micronesia Coral Reefs programme priority sectors and drivers of degradation addressed

Priority Sectors	Drivers of degradation addressed
Sustainable fisheries	Overharvesting and unsustainable fishing practices
Sustainable agriculture	Sedimentation

[50] Government of Palau (2015). Palau Climate Change Policy. Available online: https://chm.cbd.int/api/v2013/documents/6A6546C6-0283-0455-5974-30F4B8A2F29E/attachments/212144/Climate%20Change%20-%20PalauCCPolicy_LowResolution.pdf

[51] https://www.sprep.org/publications/the-republic-of-the-marshall-islands-national-environment-management-strategy-nems-2017-2022-0

[52] https://www.forumsec.org/wp-content/uploads/2019/09/Federated-States-of-Micronesia-Climate-Change-and-Disaster-Risk-Finance-Assessment.pdf

[53] https://g3-action-govguamgis.hub.arcgis.com/

Waste and plastics management	Pollution and waste
Sustainable aquaculture/mariculture	Overharvesting
Ecotourism	Coastal development

7. What are the expected results of the proposed Programme? (400 words max.)

This programme's interventions are expected to contribute to the following expected results and targets:

- Coastal ecosystems under improved management – 1,073,241 hectares with improved management.[54]
- Community fisheries showing positive trends in recovery - increased sustainable fisheries management in at least 15 community fisheries
- Sedimentation threats reduced - percentage of increase in vegetation cover in areas identified as soil erosion targets (target to be determined after areas identification)
- Improved or recovered ecosystem condition for key habitats – 1,073,241 ha of mangrove, coral reef, seagrass habitat with improved/recovered condition
- People empowered by exercising rights to management and co-management - 14,000 people (at least 50% are youth and women) empowered by exercising rights to management and co-management
- More inclusive and transparent decision-making processes - At least 15 community institutions or multi-stakeholder platforms with more inclusive and transparent decision-making processes (at least 50% of people participating in process are women and youth)
- More secure access to clean water and nutritious, locally sourced food - 6,900 people with more secure access to clean water and 2,700 people with more secure access to nutritious, locally-sourced food (at least 50% are youth and women)
- People benefitting from sustainable livelihood opportunities that contribute to community development - 900 people (at least 50% are youth and women) with increased access to sustainable livelihood opportunity that contribute to community development
- Increased and sustained human resource capacity for management - at least 150 people (at least 50% are youth and women) in partner organisations with sustained and increased human resource capacity to support community-led conservation and resource management
- Increased local investment in conservation, sustainable resource management, and sustainable community livelihoods - en
-

In addition, TNC will measure the following output-level indicators, which will be refined during the full proposal preparation and have targets defined:

- Increased funding directed to MPAs and other reserves - additional amount in USD mobilised through the programme per year directed to the management of MPAs and other reserves
- Identification and effective management of climate refugia - number of hectares of identified climate refugia with supported actions of protection or improved management

[54] The MC Measures working group has carried out regular monitoring at MPAs. MPA management effectiveness was also evaluated using the Micronesia Protected Area Management Effectiveness (MPAME) tool, which will be used to track improved management in this programme.

- Improved support to reef-positive SMEs - number of SMEs supported by the MCTF impact investment facility; amount in USD dedicated to support SMEs; percentage of SMEs supported that achieve sustainable revenue generation and investment-ready status
- More sustainable fisheries and supply chain business models - number of enterprises supported to adopt sustainable business models, including scaling out Pacific Island Tuna model
- Expanded blue economy sectors - number of innovative enterprises in blue economy sectors, including regenerative aquaculture and waste management, accelerated to launch or scale-up operations
- Strengthened capacity to restore coral reefs and support reef recovery - number of reef brigades formed and trained
- Developed coral restoration technologies - number of initiatives tested targeting new technologies to automate the processes of growing and outplanting coral and reduce coral restoration costs; and to build climate resilience into restoration (through heat-resistant corals)
- Increased funding leveraged to coral reefs - amount in USD mobilised from the private and public sectors through the programme interventions

It is important to note that the populations of the three nations are primarily indigenous. Communities across FSM, RMI and ROP still retain access and rights over their coastal marine ecosystem under various constitutional, regulatory and traditional frameworks. There is a complex system of national, state and/or municipal government authority and regulations intermixed with traditional leadership, governance and resource management systems.

TNC's approach in the region has a strong focus of working with communities with inclusion strategies and targets, as shown in the targets above for women and youth. Though there has been an increasing emphasis throughout the region on women's needs and perspectives, overall women's voices are heard less than men's and women are frequently not included in decision-making related to territory and land management. This programme will follow TNC's Gender Action Plan and gender policies will be applied to the financial instruments created (e.g., the impact investment facility will use MCT gender policy for the selection of projects). There have been important efforts by TNC aiming to empower Micronesian women. TNC helped establish the Women Leaders' Forum within the Coral Triangle Initiative (CTI) on Coral Reefs, Fisheries and Food Security, which provides a peer-learning network for women who are playing key leadership roles in sustaining the marine resources; recognise the achievement of grassroots women leaders; and serve as a platform to build the capacity of women to take leadership roles in preserving and sustaining the region's unique marine and coastal resources. Additionally, TNC has established a Women in Climate Network in Micronesia and most of the developed Local Early Action Planning (LEAPs) are run by women. This programme will build on the opportunities for women and youth empowerment.

Noting that the GFCR Results Framework is being refined by UNEP, the indicators for the programme will be refined during the programme proposal development phase, as well as their contribution to the GFCR Fund-level indicators will be detailed.

8. Regional Approach (400 words max.)

The rich marine biodiversity of Micronesia is critical in supporting diverse cultures that stretch back thousands of years. These diverse cultures share a strong tradition of conservation and sustainable management of marine and coastal resources, with stories handed down about the need to take care of

nature. The common bond with the sea as the core of their culture is a factor that helped the Micronesian countries to embrace collective efforts, such as the Micronesia Challenge. For the last 16 years, the MC has created and engaged with several regional structures and initiatives. This programme will build on these already-established regional networks, creating financial mechanisms and financing initiatives that benefit the regional commitments.

Around the MC structures, this programme will work with the PAN offices to coordinate efforts on MPA management; the MC Measures Working Group for monitoring ecological and social indicators; the MCT, MCSC and the MCRO for designing a capitalisation strategy for the MC Endowment Fund. It will also work with the Pacific Islands Managed and Protected Areas Community (PIMPAC) and the Reef Resilience Network (RRN), to advance knowledge on coral reefs conservation and restoration. The programme will also capitalise on the results of the Micronesians in Island Conservation (MIC) Peer Learning Network, which helped develop the organisational-effectiveness capacity of several NGOs in the region, including the Marshall Islands Conservation Society (MICS), the Yap Community Action Program (YapCAP), the Kosrae Conservation and Safety Organisation (KCSO), and the Micronesian Islands Nature Alliance (MINA). These institutions are already TNC partners and key stakeholders of the programme.

TNC will continue to leverage these relationships, initiatives, and lessons learned to work on a regional approach for this programme. The financial solutions and instruments developed under this programme are expected to benefit the three countries included in this programme. Selection criteria and procedures to define the projects to receive funding will aim for equitable distribution of resources across the countries, considering environmental, social and economic factors as well. In the long-term, these mechanisms can be expanded and offered to projects and enterprises in the two US protectorates, Guam and the Northern Mariana Islands, expanding the regional benefit and increasing the possibility of testing innovative reef-positive models. . A stakeholder engagement action plan and a communication and visibility strategy will be developed during the full proposal preparation and will take into consideration the existing regional efforts and stakeholders. The stakeholder engagement action plan will include the identification of main regional actors and platforms that focus on coral reefs conservation and need to be engaged in the implementation of the programme; their interests and influence on the programme's outputs; their potential roles; and how to engage them and keep them collaborating for the expected results.

9. Coalition of Partners (300 words max.)

TNC has identified the following key potential partners for the programme implementation:

Governments of FSM, RMI and ROP: National and state-level natural resource management agencies with mandates to manage resources and who can provide financial and personnel support to assist with management activities. We will also engage with agencies representing other sectors such as finance and education. Key ministries and agencies include:

- ROP: Ministry of Agriculture, Fisheries and Environment (MAFE); Office of Climate Change, Ministry of Finance; Palau PAN Office
- FSM: Department of Environment, Climate Change and Emergency Management (DECEM); Department of Resources and Development (DRD)

- RMI: Office of Environmental Planning and Policy Coordination (OEPPC); Marshall Islands Marine Resources Authority (MIMRA); Republic of the Marshall Islands Environmental Protection Authority (RMIEPA)

Micronesia Conservation Trust (MCT): MCT supports biodiversity conservation and sustainable development for the people of Micronesia by providing long-term, sustained funding. MCT works with diverse partners to mobilise funding from public and private sources and manages the MC endowment of around USD 25 million. MCT will be a key partner to develop the PFP approach for the achievement of the MC endowment capitalisation target, as well as the development and operation of the impact investment facility. MCT is envisioned to be a co-implementer of this programme.

MC structures: The MCSC, MCRO and MC Measures Working Group will be important partners. The MCSC, comprised of country and territory focal points designated by the Presidents and Governors as well as representatives from TNC and MCT, will help strengthen linkages with the MC leaders to ensure continued political support, MCRO will help link the programme actions to the MC targets and efforts, including the design of a capitalisation strategy for the MC endowment, managed by the MCT. The MC Measures Working Group includes local NGOs and has been collecting baseline data that will be adopted by the programme where adequate. This group may play an important role in the implementation of M&E activities for the programme.

Palau International Coral Reef Center (PICRC): ROP's leading research and aquarium institution with a mission to guide efforts supporting coral reef stewardship through research and its applications for the people of ROP, Micronesia, and the world. Their vision is people empowered with science and knowledge for effective marine conservation and management. Their work is locally and internationally relevant and contributes to better informed decision-making regarding the management and conservation of our marine resources. PICRC will be a strategic partner in the climate refugia identification and in the progress of coral restoration technologies, including the capacity building needed to integrate heat-tolerant corals into restoration efforts. It may also implement a part of the M&E efforts.

Palau PAN Fund: A non-profit organisation established to manage the funds obtained from donations and arrival fees to support the PAN in Palau. In addition, the PAN Fund is mandated to seek outside funding sources for States' conservation and sustainable development efforts. The Palau PAN Fund may be a co-financer of specific activities of this programme to be implemented in Palau's reefs.

Pacific Island Tuna (PIT): An RMI-TNC joint venture, incorporated in RMI as a service-at-cost cooperative LLC with membership open to all Micronesia nations. PIT's mission is to revolutionise the tuna fishing industry through new, higher environmental and social sustainability and verification standards to catalyse market and supply chain transformation. The PIT model will be an important part of the programme's initial pipeline, with the objective of expanding it or replicating it in FSM and ROP.

National Development Banks: the FSM Development Bank, the National Development Bank of Palau, and Marshall Islands Development Bank should be engaged in the programme full proposal preparation. They may be an important source of financing to sustainable blue economy business models that are proven to be reef-positive. They may be engaged as supporters of the MCT impact investment facility and the Blue Economy Accelerator. This possibility will be assessed during the full proposal preparation.

Conservation NGOs that support capacity building/MPA management: There are several TNC partners in the region that may play a technical assistance or capacity building role in the programme's activities. These can include the Palau Conservation Society, the Ebiil Society, the Conservation Society of Pohnpei, the Kosrae Conservation and Safety Organisation, the Chuuk Conservation Society, the Chuuk Women's Council, the Yap Community Action Program, the Oneisomw Environmental Conservation Management Association, the Women United Together Marshall Islands, the Marshall Islands Conservation Society and the Tamil Resource Conservation Trust. The specific engagement possibilities for each of these partners will be assessed during the full proposal preparation process. As mentioned above, they are part of the MC Measures Working Group and can contribute to implement part of the M&E of the programme.

Academic and research institutions: There are academic and research institutions working with TNC in Micronesia that will be instrumental to support this programme's outcomes, especially those collaborating in the identification of climate refugia, development of restoration technologies and the integration of heat-tolerant corals. The University of Guam, the College of Micronesia, Stanford University, Woods Hole Oceanographic Institution, and the Palau International Coral Reef Center are critical. They will be consulted during the full proposal process, and it is envisioned that they will be approached regarding the M&E component of this programme.

10. Leadership and Implementation of the Programme (300 words max.)

TNC has been a leader and key catalyst of coral reef conservation across the region. After the massive coral bleaching event in 1997-98, TNC worked with government officials in Palau to pass a resolution to establish a system of marine protected areas nationwide to save the country's marine resources. TNC was instrumental in working with the governments of Micronesia to develop ambitious marine conservation targets through the MC. Since 2006, in partnership with local communities, other NGOs, governments and donors, TNC has advanced the MC through financial investments and has leveraged additional finance (at least another USD 15 million raised since 2006) to support the MC.

TNC has also facilitated learning exchanges between the governments of ROP, FSM and RMI to share lessons learned on developing legislation to support PANs and sustainable finance mechanisms. With TNC support, the FSM has recently passed a national protected areas framework policy to support the coordination and implementation of protected areas at the state level. With the exception of Yap (regulation still being developed), Chuuk, Kosrae, and Pohnpei have also passed legislative frameworks that support the implementation of protected areas networks at the community level. The RMI passed a Protected Area Network Act that supports coordination, implementation and financing of protected areas, and is currently operationalizing their PAN Office. TNC continues to work closely with these governments to design and implement these legislative frameworks by providing technical support, foundational science to inform PAN design and implementation, and guidance on marine management and sustainable financing.

In addition, TNC has developed market-based models to help finance conservation around the world. NatureVest, TNC's impact investment arm, brings investment development capacity to projects and has been instrumental in mobilising finance for blue economy business models. Globally, TNC has developed the leading industry guidance for Impact Investment in the aquaculture sector and has developed a partnership with Hatch-Blue to launch the world's first conservation-oriented aquaculture investment fund. Globally, TNC is developing blue carbon market projects that will generate carbon offsets. TNC is also developing reef insurance mechanisms in different geographies, which will accelerate these mechanisms globally. This investment development capacity will be key for this programme to implement

its financial instruments. TNC is also the GFCR convening agent for the BahamaReefs Programme in The Bahamas and is submitting a Concept Note to be approved as a GFCR Convening Agent for a programme in Indonesia (KORALESTARI programme) with its local partner YKAN. This will allow for an exchange of experiences and knowledge sharing between the implementation teams, accelerating the learning process on reef-positive finance across these geographies.

11. Expected period of implementation (300 words max.)

It is expected that the project will be implemented over a span of eight years, from 2023 until the end of 2030. It is anticipated that the first year will set the foundation for the program's instruments to be operational, including the implementation of its governance bodies, the design and launch of the MCT impact investment facility and the Blue Economy Accelerator, which will be important milestones. The design of these instruments will include their continuation strategies with a resource mobilisation plan that allows them to keep operating after the GFCR project ends. Initial support will be provided to projects included in the initial pipeline, another important milestone. Also in the programme's first year, it is expected that TNC will carry out site prioritisation and baseline assessments to complete the Results Framework. An opportunity that is envisioned to be developed since the start of the programme is the potential investment in the Pacific Island Tuna venture. During the full proposal preparation TNC will assess the level of maturity and investment needs of PIT, to confirm that this can be a 'quick-win' for the programme pipeline.

During the second year of the programme implementation, the programme will provide direct support to new and existing blue economy enterprises through the MCT facility and through the Blue Economy Accelerator. The programme will follow the progress of these project portfolios to identify future investment opportunities. A detailed quarterly timeline will be developed for the first four years during the full proposal preparation. The continuation strategies for the MCT impact investment facility and the Blue Economy Accelerator, as well as the PFP for the MC endowment, are key pillars of the exit strategy of this programme, which will be refined in the full proposal development.

12. Cost, co-financing and leverage potential of the Programme (300 words max.)

TNC expects to receive USD 10 million from the GFCR Grant Window for the regional programme in Micronesia. A detailed budget and financing strategy will be developed during the full proposal preparation, to outline the use of the resources that will be allocated to the planned outputs. Noting that this total amount should be disbursed through grants and non-grant mechanisms, TNC will develop criteria and operational procedures to recover part of the resources, providing continuity to the financial instruments implemented. The MCT impact investment facility, for example, should deploy concessional finance to the selected businesses, recovering investments in the medium term. TNC envisions that at least USD 20 million can be leveraged through the programme's interventions, but this figure will be refined during the full proposal preparation. During the full proposal preparation, TNC will also work with the GFCR Equity Fund manager to establish a formal collaboration and design an interactive process to identify and assess potential investment opportunities in Micronesia. At this stage, the opportunity with Pacific Island Tuna is envisioned as a potential opportunity for the Equity Fund, but this possibility will be further explored during the full proposal preparation. Another sector that is of interest to the Equity Fund and to the countries, especially in the Marshall Islands, is infrastructure for waste management. Potential projects in this area will be scoped during the full proposal preparation as a way to leverage investments from the GFCR Equity Fund.

There are important funding sources operating in the region that will provide co-financing to some of this programme's interventions. These are:

- The MC endowment of approximately USD 25 million (expected to grow during the programme implementation). If the MCEF achieves its capitalisation target of USD 55 million, it could provide an estimate of USD 2.75 million annually, in average[55]
- Palau PAN Fund green fees – an average of nearly USD 1.8 million annual revenue from 2016-2019 (pre-pandemic); and nearly USD 630,000 for 2020 (2021 revenue is not yet available). If the tourism sector recovers to pre-pandemic levels, this mechanism could generate around USD 14.4 million during the programme implementation[56]
- MCT GCF proposal in the pipeline "Ecosystem-based Adaptation (EbA) for Reducing Community Vulnerability to Climate Change in Micronesia" for a projected total of USD 9.7 million (under implementation since 2019 and expected to be completed in 2026)
- Pacific Island Tuna – with a projected contribution of around USD 1 million annually (possibly to be replicated in the other islands)
- Anonymous private philanthropy estimated in a total of USD 500,000

There are other national and regional programmes under implementation that focus on improving climate resilience through ecosystem-based adaptation efforts. TNC will look for synergies with these projects during the full proposal preparation, to increase the cost sharing possibilities for this programme. Projects with potential synergies may include the GCF-funded projects 'Climate change adaptation solutions for Local Authorities in the FSM', implemented by the Pacific Community, and 'Addressing Climate Vulnerability in the Water Sector (ACWA) in the Marshall Islands', implemented by UNDP. UNDP is also the implementing agency of the GEF-funded project 'Securing Climate-Resilient Sustainable Land Management and Progress Towards Land Degradation Neutrality', to be executed by the government of FSM. Another regional project is the GEF-funded 'Pacific I2I Regional Project: Ocean Health for Ocean Wealth - The Voyage to a Blue Economy for the Blue Pacific Continent', which includes the three countries of this GFCR programme and other 11 countries. It is implemented by UNEP and the Asian Development Bank with resources from International Waters and executed by SPREP. It will finance some demonstrative blue economy projects to generate proof of concepts, which can be in the programme countries. Another International Waters project is specifically implemented in the three programme countries, which is the 'Strengthening and Enabling the Micronesia Challenge 2030', implemented by WWF-US and executed by a consortium of partners including Micronesia Challenge Regional Office (MCRO), Stanford Center for Ocean Solutions (COS), Micronesia Conservation Trust (MCT), Marshall Islands Marine Resources Authority (MIMRA RMI), Department of Resources and Development - R&D (FSM), and Ministry of Natural Resources, Environment & Tourism (MNRET Palau). This project expected to be completed in 2024 will strengthen the MC structures and may contribute to a PFP envisioned by this programme in support of the MC endowment. Other multilateral funded projects will be identified during the full proposal preparation and potential synergies will be explored with the local executing entities.

13. Regional conservation ambition (300 words max.)

Region-wide

[55] Considering a 5% annual return on investments, which is considered possible under normal conditions.
[56] Considering USD 1.8 million annually for 8 years.

- **Micronesia Challenge 2030:** The MC is a robust architecture to achieve the region's joint conservation ambitions. Since 2006, with support from TNC and other partners, five Micronesia jurisdictions—Palau, the Federated States of Micronesia, the Marshall Islands, Guam and the Northern Mariana Islands—pursue the MC goals, which currently aim to effectively manage at least 50% of their marine area out to their EEZs by 2030. TNC has continued to support governments and communities in the region to achieve conservation outcomes under the MC. So far, over USD 25 million have been secured as the MC endowment and another USD 60 million leveraged in sinking resources for on the ground implementation, resulting in over 150 MPAs established or strengthened, the majority of which are locally managed marine protected areas (LMMAs). This programme will seek to align with the MC 2030 commitments and targets, and TNC will work with governments and communities to achieve this.[57] The financial mechanisms for MPAs financing and the capitalisation strategy for the MC endowment fund (Outcome 1) are the programme outputs more directly related to the MC 2030. The outputs under Outcome 2 (livelihoods) and Outcome 3 (restoration and recovery) will also contribute to the MC 2030, by supporting the targets related to sustainable livelihoods, climate change resilience, habitat restoration and fisheries management.
- **Pacific Islands Managed and Protected Areas Community (PIMPAC):** TNC has championed the capacity building of marine managers across Micronesia and globally through support for the PIMPAC. PIMPAC was piloted by the US National Oceanic and Atmospheric Administration (NOAA) to identify and address challenges faced by MPA managers in Micronesia, Hawaii, and American Samoa, including limitations in human and financial resources, isolation from one another restricting knowledge sharing, and building on traditional management approaches while adapting to modern technology and practices. PIMPAC was designed to address these challenges and support capacity development. TNC has been a key partner for PIMPAC since its inception in 2005, providing technical assistance and thought leadership on the toolkits and training for managers across Micronesia.[58] All the programme outputs under Outcome 1 related to MPA management will benefit from PIMPAC to coordinate with MPA managers. Restoration work and technologies planned under Outcome 3 will also require additional capacity and coordination with the MPA managers.

FSM

In the FSM, TNC-led with partners, an ecoregional assessment was conducted to identify areas of high biodiversity and rapid ecological assessments were conducted for near-shore marine habitats in each FSM State. A resilience assessment was conducted for the FSM, to identify areas of high resilience to inform the design of MPAs in each state. The country's conservation ambitions are detailed in the following policies and initiatives:

- **National Strategic Development Plan 2004-2023**: a 20-year plan to ensure that all sectors in FSM are part of the financing arrangements with the US. Strategic goal 1 is to mainstream environmental considerations, including climate change, in national policy and planning as well as economic development activities.[59] This programme can help to mainstream climate-resilience

[57] The Nature Conservancy (2020). *Micronesia Conservation Priorities Strategic Action Plan 2020-2030*

[58] Ibid.

[59] Pacific Community and the Pacific Islands Forum Secretariat (2019). *Federated States of Micronesia Climate Change and Disaster Risk Finance Assessment*. Available online: https://www.forumsec.org/wp-content/uploads/2019/09/Federated-States-of-Micronesia-Climate-Change-and-Disaster-Risk-Finance-Assessment.pdf

into the business (Outcome 2) and financial models (Outcome 1), as well as with partners, communities (Outcome 3) and other organisations that it will engage with.

- **Federated States of Micronesia National Biodiversity Strategy and Action Plan (NBSAP)**, including the four state plans: The NBSAP was developed initially in 2002 and sought to develop more diverse and rich ecosystems that met the needs of humans while allowing natural ecosystems and functions to flourish. A 2018 revision (NBSAP 2018-2023) maintained the overall goal of the plan.[60] The NBSAP was instrumental in establishing some of the enabling mechanisms and policies that this programme will build off for its work. Notably, the NBSAP helped to establish the MCT in 2002, the MC in 2006, and a ban on commercial fishing in the 12nm zone contiguous to the territorial sea in 2017. The MCT could be a co-implementer of the programme and manage the financing facility (as part of Outcome 2).
- **Protected Area Network:** Pohnpei, Chuuk and Kosrae have all developed individual frameworks for contributing to achieving FSM's commitment under the Micronesia Challenge. The regulation is still being developed in Yap.[61] The programme will look to strengthen the Protected Areas Networks (through Outcome 1).
- **Blue Prosperity Micronesia**: a partnership between the FSM Government and the Blue Prosperity Coalition to support the sustainable growth of marine resources in the FSM. The Blue Prosperity Coalition could be a key stakeholder to engage, they have also been carrying out blue economy consultations in FSM which could help inform some of the work of this programme.[62] In particular this could feed into Outcome 2 and the identification of reef-positive businesses and SMEs.
- **A Blueprint for Conserving the Biodiversity of the Federated States of Micronesia:** Developed by TNC, it provides a guide for improving biodiversity and resource management, including coral reefs in FSM. This helped to identify some of the key threats to coral reefs in the region.[63]
- **National Protected Areas Network (PAN) Policy Framework:** The FSM Government recently developed this framework to support the coordination and implementation of protected areas at the state level.[64] This framework will be critical for and could be strengthened through the work of this programme (Outcome 1).
- **National Adaptation Plan (NAP):** FSM is in the process of developing a NAP,[65] which is expected to include EbA as a main approach, benefiting coral reefs. The INDC of the FSM (2015) states that although adaptation is key for the country, the adaptation plan would be developed in the NAP.

RMI

In the RMI, stakeholders developed "*Reimaanlok*: A National Conservation Area Plan for the Marshall Islands 2007-2012 which outlined a process for engaging with local communities to identify conservation areas and develop conservation management plans.[66] In 2019, the Marshall Islands Marine Resources Authority (MIMRA), with support from TNC, conducted the country's first ecological assessment of Bikar and Bokak, which serves as baseline data for future resource management decisions.[67] TNC has also

[60] https://fsm-data.sprep.org/dataset/fsm-national-and-states-biodiversity-strategy-and-action-plan-nbsap

[61] The Nature Conservancy (2020). *Micronesia Conservation Priorities Strategic Action Plan 2020-2030*

[62] https://www.waittinstitute.org/fsm

[63] https://fsm-data.sprep.org/dataset/blueprint-conserving-biodiversity-fsm

[64] The Nature Conservancy (2020). *Micronesia Conservation Priorities Strategic Action Plan 2020-2030*

[65] https://www.forumsec.org/wp-content/uploads/2019/09/Federated-States-of-Micronesia-Climate-Change-and-Disaster-Risk-Finance-Assessment.pdf

[66] https://www.hindawi.com/journals/jmb/2011/273034/

[67] http://www.rmimimra.com/index.php/component/content/article/9-coastal/24-a-reimaanlok-film-bikar-bokak-expedition-trailer

worked with MIMRA and Woods Hole Oceanographic Institution to identify climate resilient reefs (see section 2). The RMI conservation ambitions are presented in the following policies and initiatives:

- **RMI and the MC Strategy Plan:** RMIs framework for contributing to achieving FSM's commitment under the Micronesia Challenge[68]
- **Reimaanlok Framework:** A RMI national planning process that coordinates all natural resource agencies for community-level implementation.
- **National Biodiversity Strategic Action Plan:** RMI's current NBSAP contains 16 goals and 46 actions. Currently, the Marshall Islands have met their protected area coverage targets under the CBD Aichi Target 11, but they still need significant strengthening of marine resource management both within and outside of protected areas. Something that this programme will be able to address directly through Outcome 1.
- **The Marshall Islands Marine Resource Act of 1997:** Established the Marshall Islands Marine Resources Authority (MIMRA), which is responsible for managing all marine resources within the fishery waters, which includes inshore areas and the EEZ.
- **Marshall Islands Protected Areas Network Act 2015:** To create the Protected Areas Network for the purposes of conservation and management of natural resources in the Marshall Islands. This supports the coordination, implementation and financing of protected areas.

Palau

TNC has worked with local partners and communities in Palau to develop protected areas management plans and supported the development of the Palau Protected Areas Network, a national framework for achieving the goals of the MC. TNC has led several reef resilience assessments to inform priority areas for protection based on resilience. Relevant national policies and commitments in Palau include:

- **Palau National Biodiversity Strategy and Action Plan:** A framework for strategic policy interventions to promote long-term cultural, economic and environmental sustainability through protection of biodiversity. Coral reefs are identified as a high priority species for conservation as part of Goal 2 of the Plan (Maintain healthy populations of key species and their habitats).
- **Palau National Marine Sanctuary (PNMS) Act 2015:** The Palau National Marine Sanctuary Act established one of the world's largest ocean protected areas. The sanctuary will fully protect about 80% of the nation's maritime territory, banning commercial fishing from the sanctuary. As part of PNMS they are seeking to develop a domestic pelagic fishery and potentially shift pressure from coral reefs.
- **Palau Protected Areas Network:** A national framework for achieving the goals of the MC. This programme could work with the Palau Protected Areas Network Office and the Palau Bureau of Marine Resources to influence all 286,800 hectares of nearshore marine areas through regulatory and management planning efforts related to fisheries, protected areas management, aquaculture, and ridge to reef planning.

14. Risk Assessment (300 words max.)

There are some risks identified by TNC that may affect the implementation of this programme. The geographic location of the countries is a significant challenge that imposes some risks. Specifically, the remoteness of the islands and the lack of infrastructure impose the risk of limited access to markets. In addition, the islands are extremely vulnerable to climate impacts. Climate change effects and other natural disasters, including pandemics such as COVID-19, represent a risk as they can cause loss of coral

[68] https://rmi-data.sprep.org/resource/rmi-and-micronesian-challenge

reefs (e.g., from bleaching), assets and disruption to livelihood and daily activities, especially if disaster prevention measures are not in place. To mitigate this risk, TNC is developing the LEAPs and prioritising the identification of 'super reefs', best positioned to survive climate impacts.

One additional risk that must be anticipated is the lack of community support/interest/participation. In the initial stages, it is essential to build community interest and involvement in planning. This can be done through targeted communication efforts and integrating the cultural values of the region into the programme's activities.

Government cycles are always a risk for long-term conservation programmes, but the MC has faced 17 leader changes since its creation and was embraced by all of them. In addition to the MC, the governments in the region have gathered through different intergovernmental structures, including the Micronesian Presidents' Summit and Parties to the Nauru Agreement. Among the region's nations disagreements are rare and the political issues or risks are more probable in relation to external players. However, external players are also seen as key players to support the regional conservation agenda. The coordination of enforcement efforts among the Micronesian countries is still a challenge and closer ties with the United States could improve this area.

Finally, there is the risk of the supported initiatives not attracting sufficient financial resources to be scaled-up in a way they are self-sustainable. To address this risk, TNC will keep the focus on partnerships development throughout the programme implementation to encourage investors and funders to follow the progress of the programme pipeline.

15. Preparatory Grant Activities (250 words max.)

The preparatory grant workplan and budget are presented in the Excel GFCR template attached to this concept note. It has one outcome which is: the full proposal of a comprehensive, multi-year programme for advancing coral reef conservation and restoration in Micronesia is developed. To achieve this outcome, there are four main blocks of activities, organised under the following outputs:

- Output 1.1: The programme's governance and operational structure are defined
    - Activity 1.1.1: Convene meetings with the regional partners and the main institutions in the three countries - this activity is planned but it will depend on the travel restrictions in place at the time of the consultations. Currently, travel is not possible to the islands due to the Covid pandemic. If the in-person consultations by the TNC team are not possible, the budget for this activity will be used to cover some time for a local partner to consult the stakeholder on each island.
    - Activity 1.1.2: Define and describe programme's governance and operational structure
- Output 1.2: A pipeline of interventions that benefit coral reefs is developed
    - Activity 1.2.1: Identify and detail the initial pipeline of projects that have a revenue stream and are reef-positive
    - Activity 1.2.2: Develop implementation plans for the projects in the pipeline
- Output 1.3: The programme's financing strategy is elaborated
    - Activity 1.3.1: Allocate GFCR grant financing to the different outcomes and identify co-financing
    - Activity 1.3.2: Design the programme's commercial investment strategy
- Output 1.4: The programme's implementation plan is specified
    - Activity 1.4.1: Refine coral reef areas and provide a final Theory of Change

- Activity 1.4.2: Define implementation details and timeline
- Activity 1.4.3: Formulate programme management strategies and costs
- Activity 1.4.4: Assess risks of programme implementation plan and elaborate a risk mitigation plan

16. Overview of Full Programme Costs (300 words max.)

The budget for the programme implementation will be developed during the full proposal preparation. The table below presents a rough estimate for some major areas of investment:

Category	**Amount (USD)**	**Description**
Baseline studies and M&E	1,000,000	Identification of reef refugia, application of management effectiveness measurement tools, monitoring of programme indicators and development of restoration technologies
Pipeline projects	7,500,000	Development of financing mechanisms for MPAs, design, launch and operation of facilities supporting SMEs and sustainable blue economy companies
Programme development/ Operations	1,500,000	Regional coordination, stakeholder engagement, financial and technical reporting, programme governance, communication and visibility
TOTAL	10,000,000	
Expected Programme leverage ratio of grants to investment capital	1:2	To be confirmed during the full proposal preparation
Expected Programme leverage ratio of grants to revenue generation	1:2	To be confirmed during the full proposal preparation

ANNEX 1: TECHNICAL REVIEW CRITERIA FOR CONCEPT NOTES

Category	Criteria	Weight in category	Weight of total
1. Mandatory criteria	1.1 Submission is appropriate, complete and follows guidelines outlined in Concept Note template and the budget and workplan template such as includes inclusion of maps, Theory of Change figure, etc.	Pass/Fail	
	1.2 Concept is aligned with national priorities and demonstrated by a government letter of support for the programme	Pass/Fail	
	1.3 Vision for programme timeframe is aligned with GFCR expectations (3-10 years)	Pass/Fail	
	1.4 Concept Note demonstrates blended finance approach to increasing the resilience of priority coral reef ecosystems and associated communities	Pass/Fail	
2. Relevance	2.1 Alignment to the GFCR Theory of Change and integrated ecosystem approach.	x/15	65%
	2.2 Blended finance approach is viable and applied to generate revenue streams, leverage investment capital, and achieve financial sustainability. This criterion includes leverage ambition.	x/10	
	2.3 Selected Priority Sites satisfy the following criteria: climate refugia, biodiversity value; socio-economic value; potential for revenue streams; impact potential	x/10	
	2.4 Convening Agent role is well reflected through appropriate and diverse partnerships, government relationships, ability to plan coordination.	x/10	
	2.5 Coral reef resilience and associated socio-economic impacts are project priorities and demonstrate ambition for scaled and sustained impact. Further, programme aims to address issues of gender and social inclusion.	x/10	
	2.6 Needed enabling conditions are identified and reflected within the programme activities	x/10	

3. Delivery and operations	3.1 Governance arrangement are appropriate, efficient, and inclusive of stakeholders.	X/10	35%
	3.2 Partners' Capacities (technical capacities and/or abilities) to implement a holistic approach towards conservation, community and private sector engagement objectives	X/10	
	3.3 Risks and mitigation factors delineated	X/10	
	3.4 Envisioned full programme cost adequacy (cost-efficiency and appropriateness). Scoring is lightly weighted due to need for further pipeline scoping during proposal development.	X/5	

ANNEX 2: ADDITIONAL BASELINE DATA

Please provide any site-specific documents of baseline studies on coral reef ecosystem health, resiliency to climate change and baseline data on socio-economic context.

TNC Micronesia Program 10-year Plan and the Micronesia Challenge 2030

The Nature Conservancy (TNC) has worked to advance marine conservation with communities in Micronesia for over 20 years. Since 2006, we have supported governments and communities in the region to achieve conservation outcomes under the framework of the Micronesia Challenge. TNC Micronesia 10 year plan theory of change is based on the fundamental belief that Micronesian people are critical leaders in the pursuit of lasting solutions for sustainable conservation and development that address the most pressing challenges. Their rights to and relationship with their lands and the ocean, and traditional knowledge of their natural resource use and management practices put them front and centre in ensuring sustainable management of their natural resources for the future of Micronesia and its people. TNC plays a supporting role in bringing science, building technical capacity and financial resources to create enabling conditions to sustain management. There are complex cultural, socio-economic, and political landscape dynamics across Micronesia, such as unclear tenure and access/management rights, external development pressure, and policies that are influenced by foreign nations such as access to fisheries. TNC Theory of Change Diagram is presented below.

The Micronesia Challenge (MC) is a commitment by the Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI), the Republic of Palau, Guam, and the Commonwealth of the Northern Marianas Islands (CNMI) to preserve the natural resources that are crucial to the survival of Pacific traditions, cultures and livelihoods. The overall goal of the MC is to effectively conserve at least 30% of the nearshore marine resources and 20% of the terrestrial resources across Micronesia. This ambitious challenge far exceeded the goals set by international conventions and treaties at the time of the challenge. The MC was declared in 2006 and had an original target date of 2020. At the 24th Micronesia Island Forum in August 2019, the Leaders recognised both the success of the MC to date and also the challenges faced by the jurisdictions and region. The Presidents and Governors of all five MC jurisdictions and the Governors of the four states of FSM released a joint communique that officially launched MC 2030, which will build upon the accomplishments of the MC but will update targets to align

with the United Nations 2030 Sustainable Development Goals. The new MC2030 targets are summarised in the figure below and now explicitly include sustainable livelihoods, climate change resilience, and fisheries management.

Figure 5. TNC Micronesia Program 10-year Plan Theory of Change

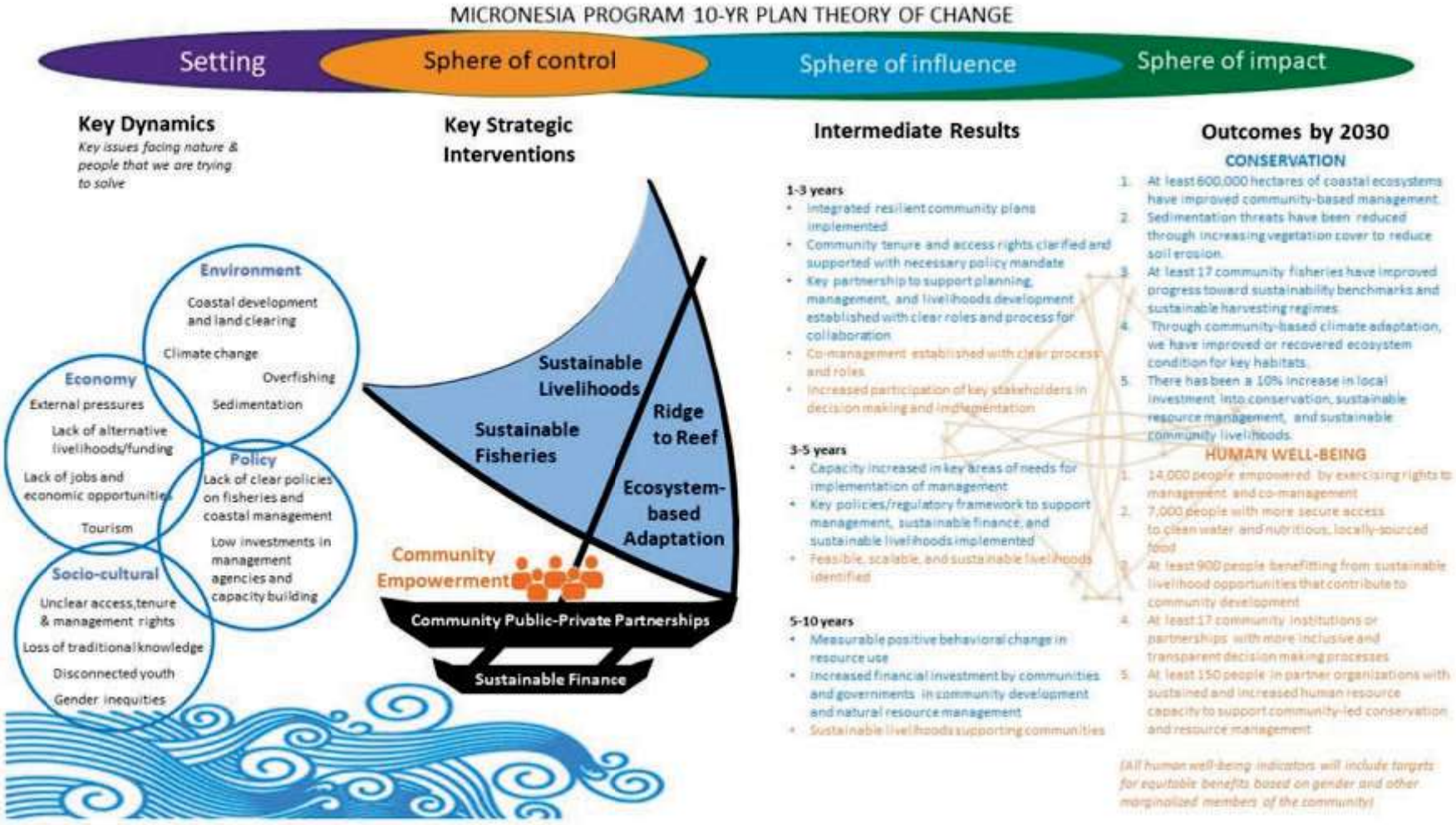


Figure 6. Micronesia Challenge 2030 achievements and goals

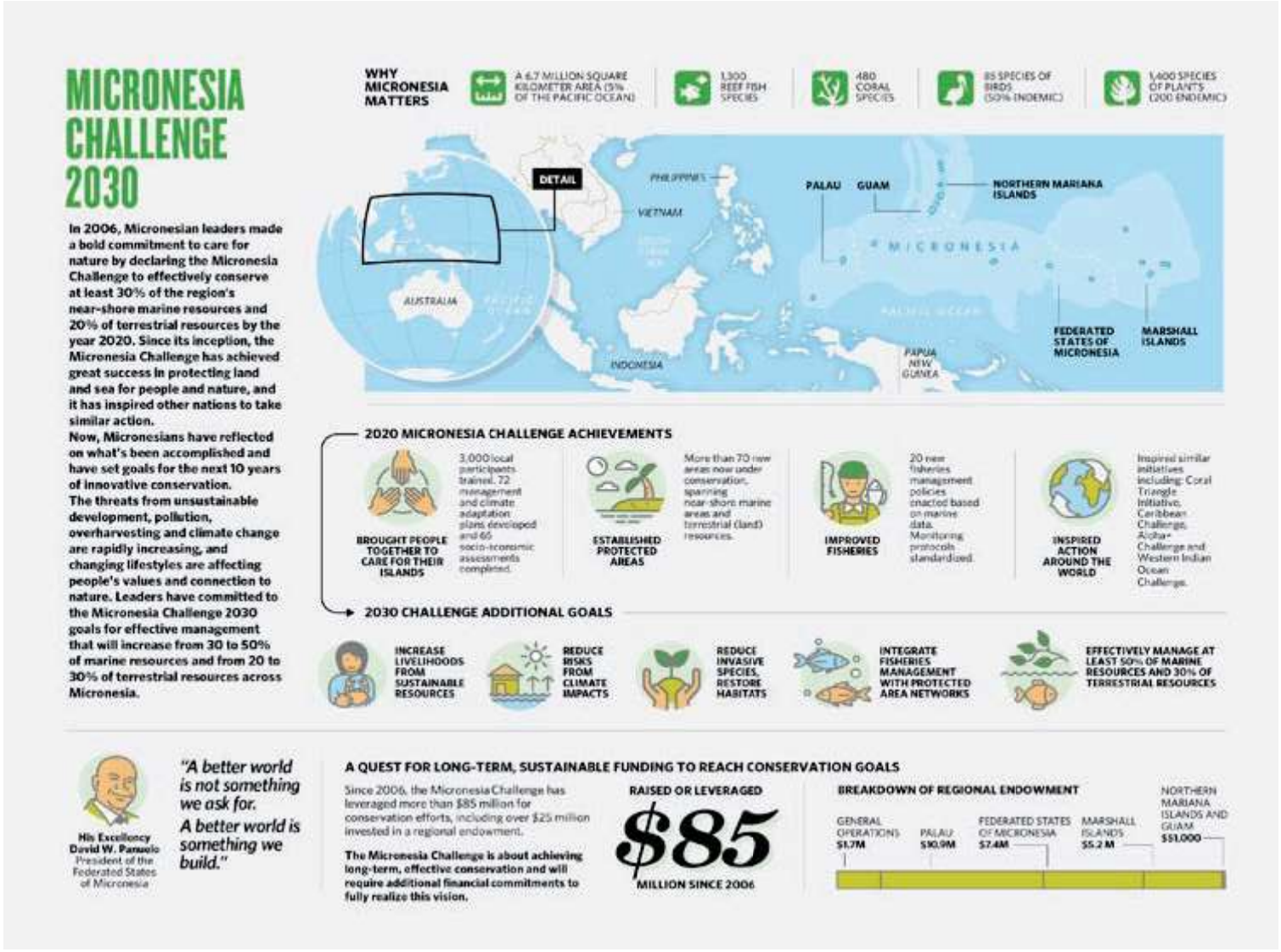


Figure 7. Map of Federated States of Micronesia

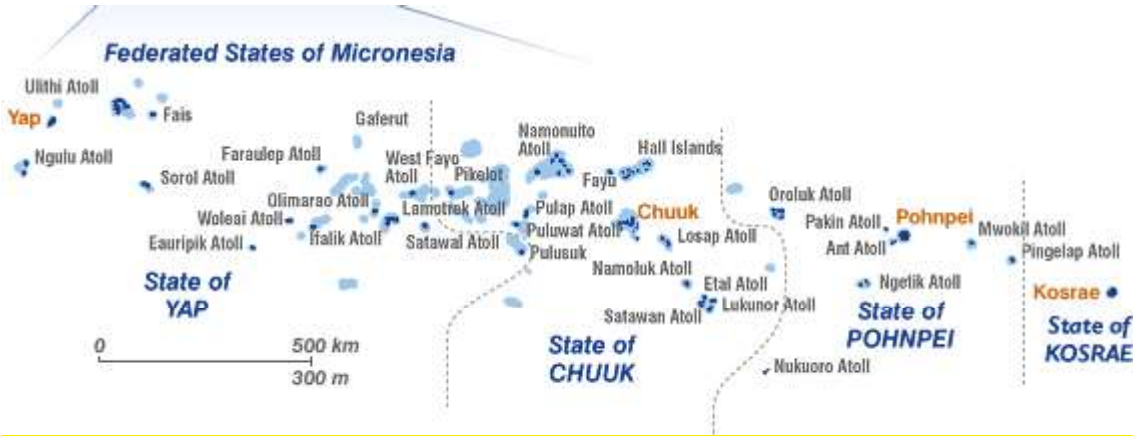


Figure 8. Map of Protected Areas and habitat types in Yap Main Island

Figure 9. Map of Protected Areas and habitat types in Chuuk Lagoon

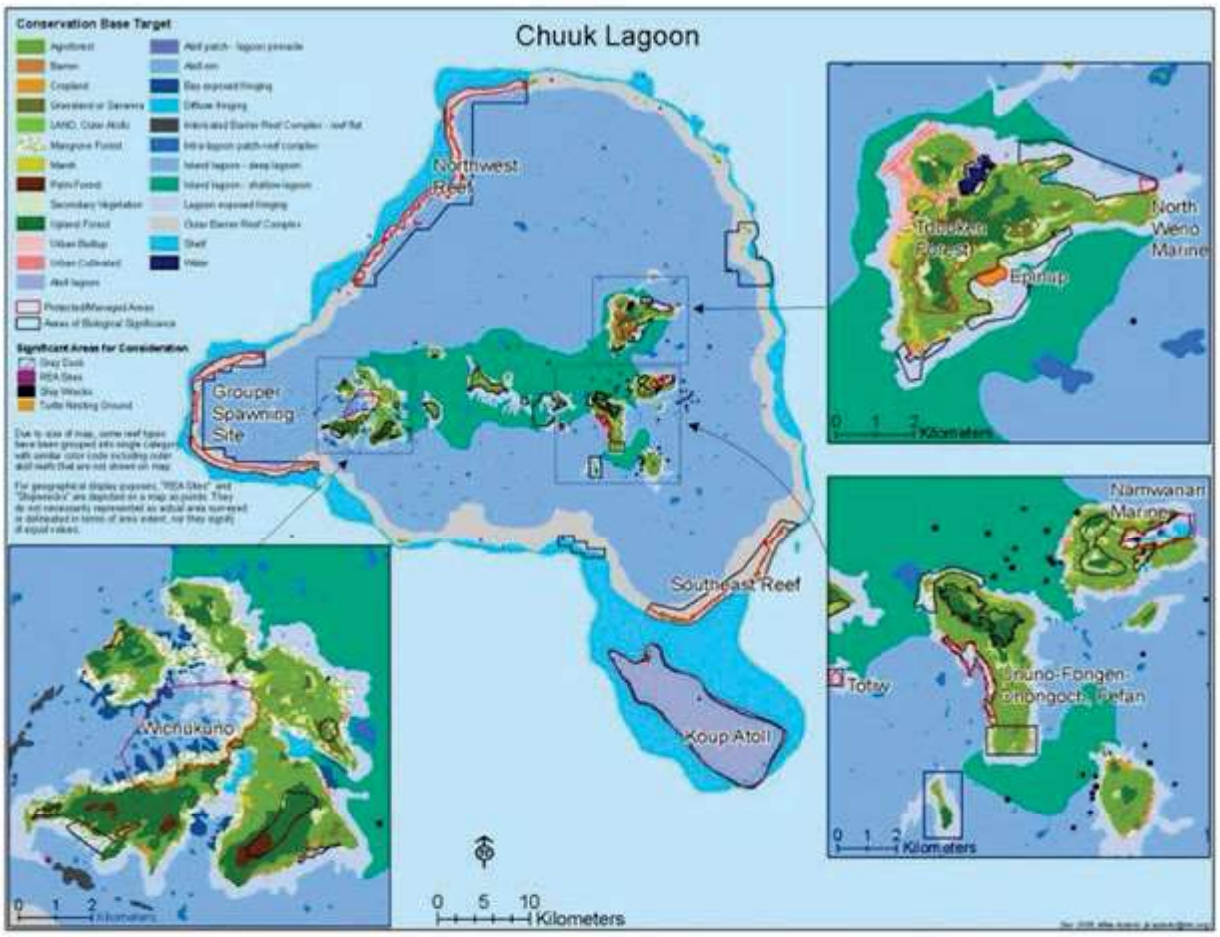


Figure 10. Map of Protected Areas and habitat types in Pohnpei

Figure 11. Map of Protected Areas and habitat types in Kosrae

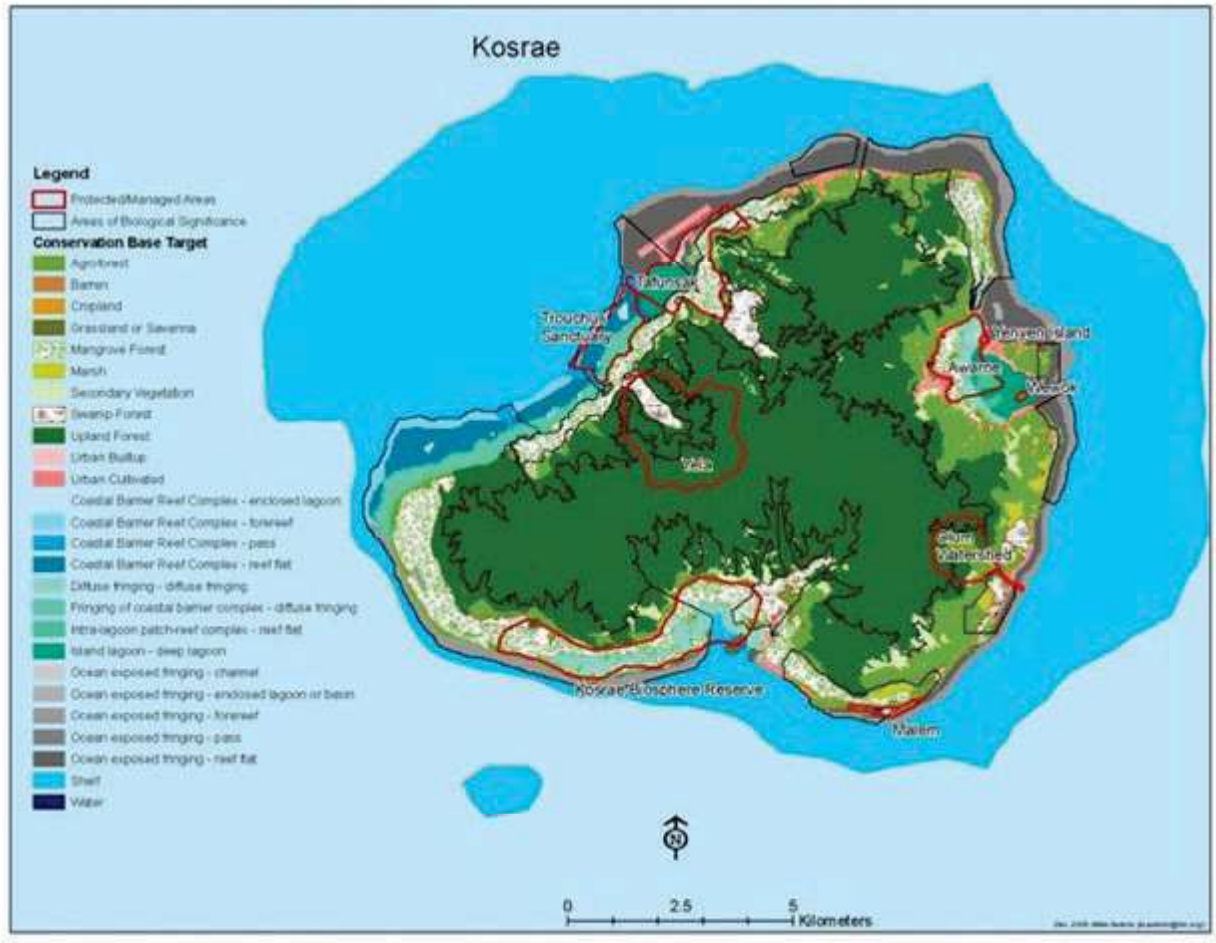


Figure 12. Map of Protected Areas and habitat types in Palau

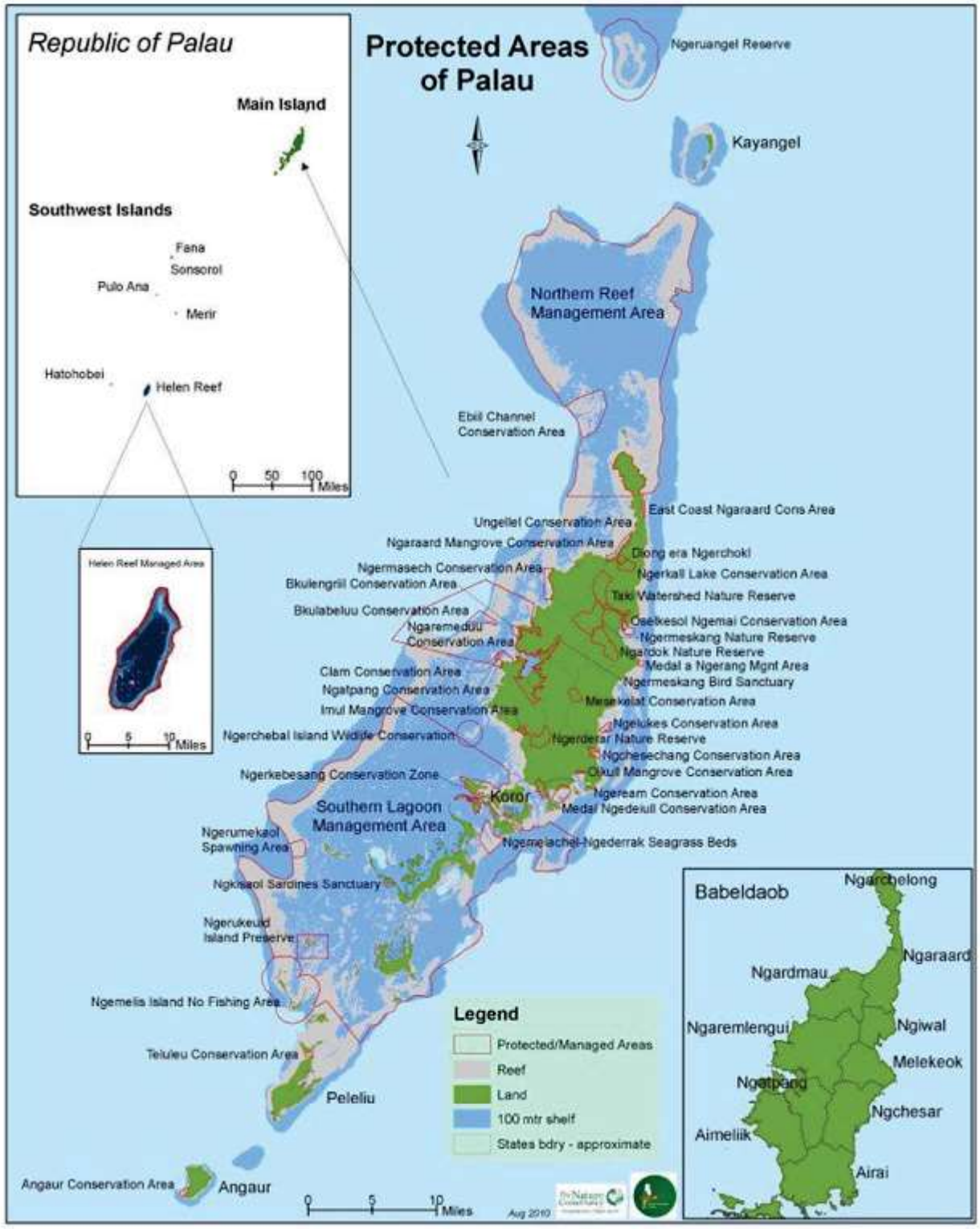
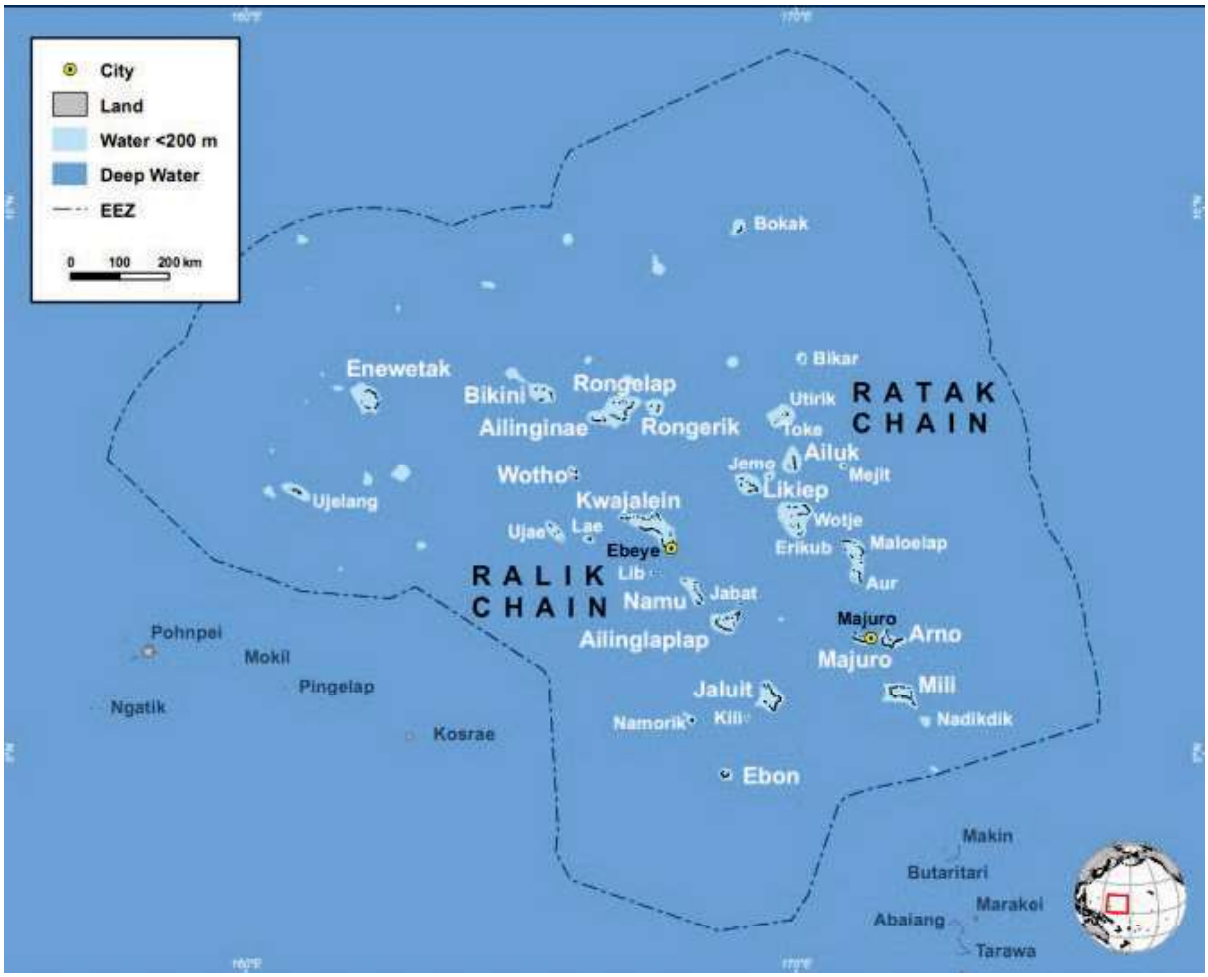


Figure 13. Map of the Marshall Islands[69]



[69] During the full proposal preparation, TNC will develop a set of maps with a closer view of the Marshall Islands target areas and the main ecosystems (following the maps available for the other two countries): the Majuro, Arno and Ebeye Atolls, Bokak & Bikar. At this moment, such maps are not available for RMI.

Reef Resilience assessment

A TNC Reef Resilience Assessment was carried out in 2014, this used raw data collected from fish surveys to determine the coral cover percentage and a survey of coral diseases, these two indexes were then combined into an ecological capacity map (as shown in Figures 14, 15, and 16 below). While these surveys and assessments are useful, these ecological capacities cannot be equated directly with resilience, because understanding whether a reef is resilient or not requires information of reefs over time (i.e., time-series data). However, they are useful for identifying the state of the reef and allocating resources to specific areas.

Figure 14. Ecological Capacity assessment for Yap

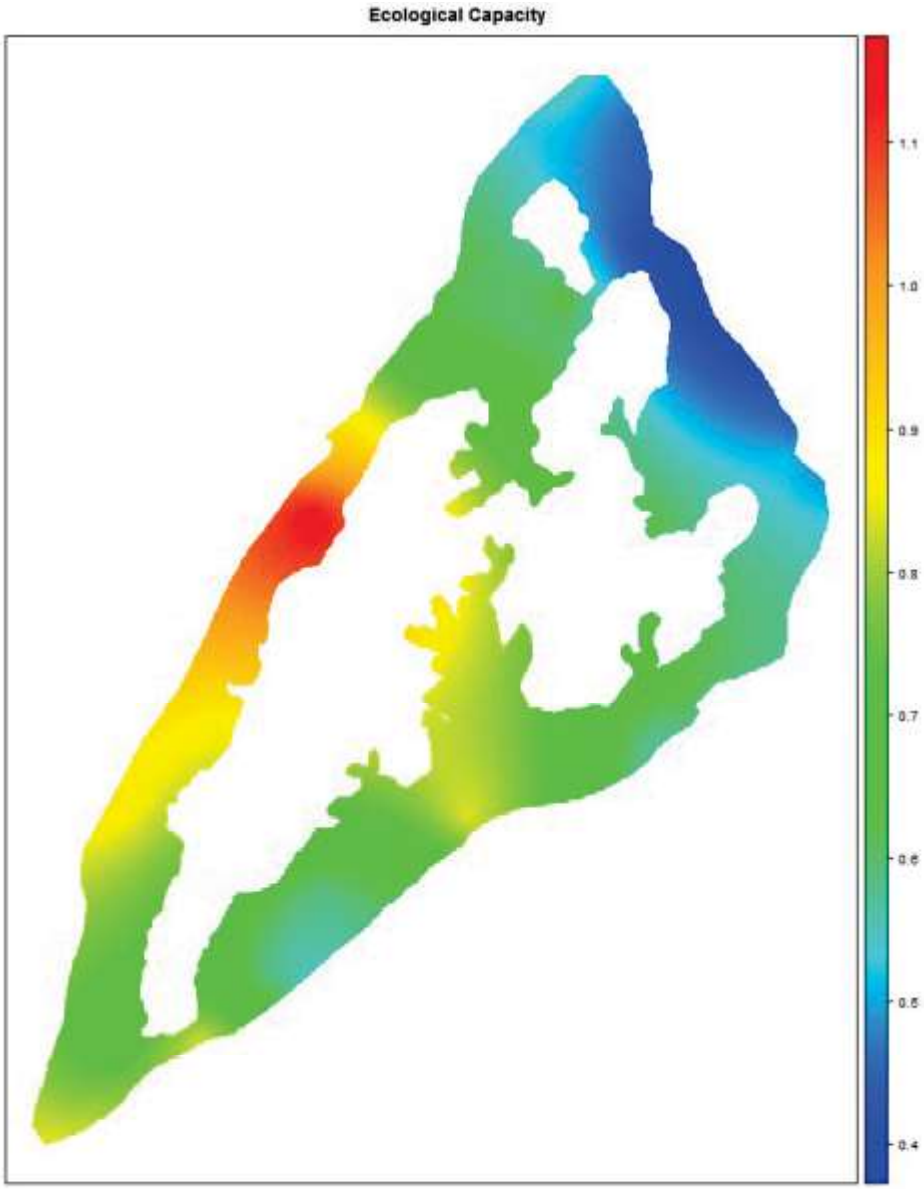


Figure 15. Ecological Capacity Assessment for Kosrae

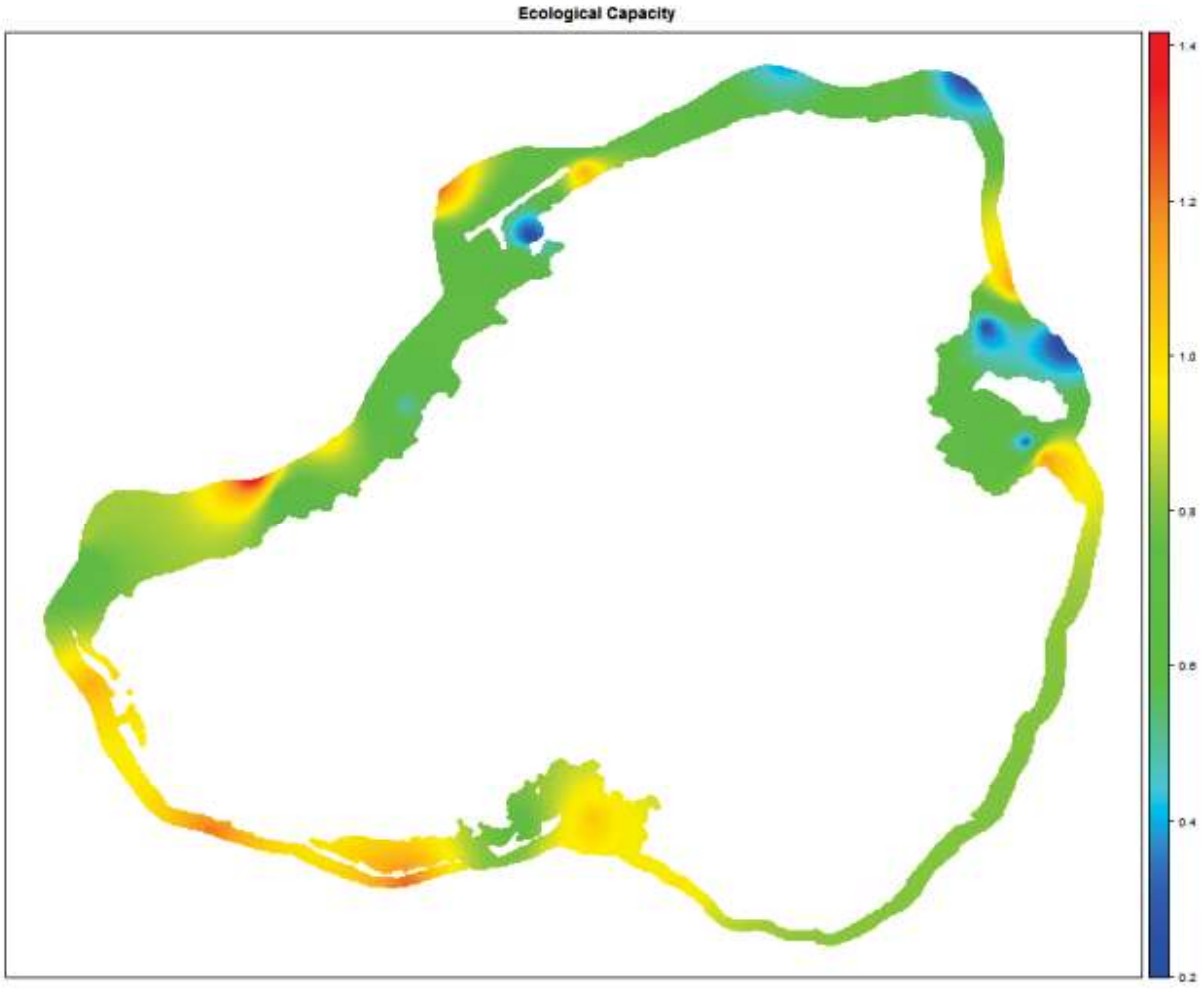
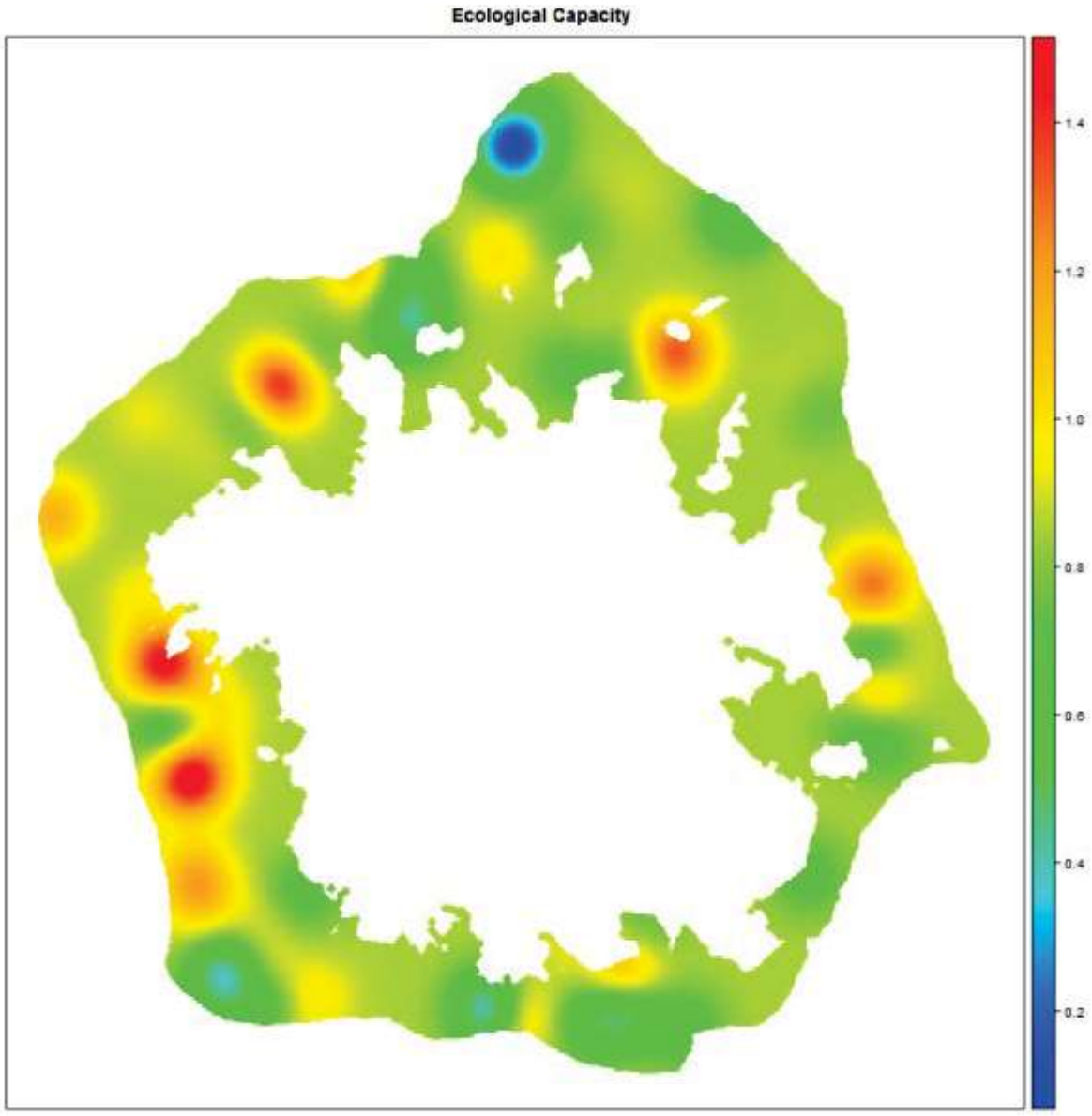


Figure 16. Ecological Capacity Assessment for Pohnpei



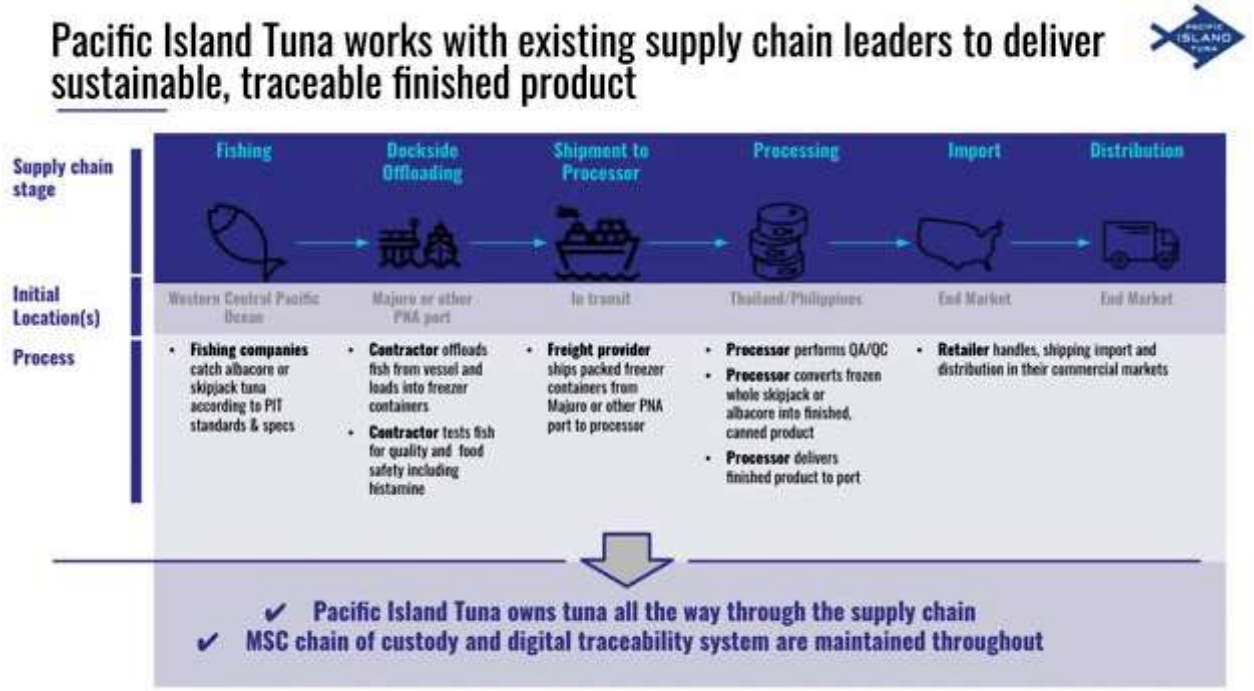
A 2012 resilience assessment was carried out for reef sites across Palau within existing and proposed MPAs by using established resilience protocols and historical data and bleaching records. Figure 7 below illustrates rankings for combined anthropogenic stressors and disease. These are determined by the average of the five stressors: coral disease, nutrient input, sedimentation, anthropogenic physical impacts, and fishing pressure.

Figure 17. Palau Resilience rank for combined deep and shallow habitats related to stressors caused by human activities and coral disease

Site Names	Resilience rank (deep & shallow combined)	Anthropogenic stress/disease rank
Airai Fringing	High	Very high
Kayangel1	High	Low
Ngardmau barrier	High	Low
Ngemelis	High	Very low
Ngerchelong Tnger	High	High
Nikko Bay1	High	Medium
Turtle Cove	High	Very low
Uchelbeluu	High	Medium
Aimeliik	Medium	Medium
Aimeliik Patch	Medium	Medium
Bkul a Chesmiich	Medium	Very low
Denges Channel	Medium	Medium
Kayangel2	Medium	Low
Keltal Tebechel	Medium	Low
Lighthouse	Medium	High
Melekeok	Medium	Very high
Ngardmau inside	Medium	High
Ngaremlengui Barrier	Medium	High
Ngaremlengui Fringing	Medium	Medium
Ngebard Barrier	Medium	Very low
Ngerchelong lengel	Medium	Medium
Ngerchong	Medium	Medium
Ngerdiluches	Medium	Medium
Ngermeduu	Medium	Very high
Ngkesol Barrier	Medium	Medium
Nikko Bay2	Medium	Medium
Siaes	Medium	Medium
Taoch 1	Medium	Medium
Taoch 2	Medium	Low
Toachel Ngebard	Medium	Low
Airai Patch	Low	Very low
Masao Reef	Low	Medium
Ngaremlengui Patch	Low	High
Ngelukes	Low	High
Ngerdiluches Patch	Low	Medium

ANNEX 3: BUSINESS MODELS AND FINANCIAL INSTRUMENTS

Figure 18. Pacific Island Tuna value chain



ANNEX 4: Accountability, financial management, and public disclosure

[TEXT IS FIXED DO NOT CHANGE]

The Programme will be using a pass-through fund management modality where UN Multi-Partner Trust Fund Office will act as the Administrative Agent (AA) under which the funds will be channelled for the Programme through the AA.

The convening agent and recipient organizations shall assume full programmatic and financial accountability for the funds disbursed to them by the Administrative Agent of the Global Fund for Coral Reefs (Multi-Partner Trust Fund Office). Such funds will be administered by each recipient organizations, Fund, and Programme in accordance with its own regulations, rules, directives and procedures. Each recipient organizations shall establish a separate ledger account for the receipt and administration of the funds disbursed to it by the Administrative Agent.

Indirect costs of the Recipient Organizations recovered through programme support costs will be 7%. All other costs incurred by each entity in carrying out the activities for which it is responsible under the Fund will be recovered as direct costs. The project management cost should not exceed 18%.

Funding by the GFCR will be provided on an annual basis, upon successful performance of the programme.

Procedures on financial transfers, extensions, financial and operational closure, and related administrative issues are stipulated in the Operational Guidance of the GFCR.

Partners must comply with GFCR Fund brand guidelines, which includes information on donor visibility requirements.

Each recipient organization will take appropriate measures to publicize the GFCR and give due credit to the other partners. All related publicity material, official notices, reports and publications, provided to the press or Fund beneficiaries, will acknowledge the role of the host Government, donors, partners, the Administrative Agent, and any other relevant entities. In particular, the Administrative Agent will include and ensure due recognition of the role of each recipient organization and partners in all external communications related to the GFCR.

ANNEX 5: Project Administrative Arrangement for Recipient Organizations

On behalf of the Recipient Organizations, and in accordance with the UNDG-approved "Protocol on the Administrative Agent for Multi Donor Trust Funds and Joint Programmes, and One UN funds" (2008), the MPTF Office as the AA of the GFCR will:

- Disburse funds to each of the Recipient Organizations in accordance with instructions from the GFCR Global Team. The AA will normally make each disbursement within fifteen (15) business days after having received instructions from the GFCR Global Team along with the relevant Submission form and Project document signed by all participants concerned;
- Consolidate the financial statements (Annual and Final), based on submissions provided to the AA by Recipient Organizations and provide the GFCR annual consolidated progress reports to the donors and the GFCR Global Team;
- Proceed with the operational and financial closure of the project in the MPTF Office system once the completion is completed by the Recipient Organizations. A project will be considered as operationally closed upon submission of a joint final narrative report. In order for the MPTF Office to financially close a project, each RO must refund unspent balance of over 250 USD, indirect cost (GMS) should not exceed 7% and submission of a certified final financial statement by the recipient organizations' headquarters);
- Disburse funds to any RO for any costs extension that the GFCR Global Team may decide in accordance with the GFCR rules & regulations.

Accountability, transparency and reporting of the Recipient Organization:

Each Recipient Organization will establish a separate ledger account under its financial regulations and rules for the receipt and administration of the funds disbursed to it by the Administrative Agent from the Fund Account. That separate ledger account will be administered by each Recipient Organization in accordance with its own regulations, rules, policies and procedures, including those relating to interest

The Recipient Organization will assume full programmatic and financial accountability for the funds disbursed to them by the Administrative Agent. Such funds will be administered by each recipient in accordance with its own regulations, rules, directives and procedures.

The Recipient Organization will have full responsibility for ensuring that the Activity is implemented in accordance with the signed Project Document;

In the event of a financial review, audit or evaluation recommended by the Executive Board, the cost of such activity should be included in the project budget;

Ensure compliance with the Financing Agreement and relevant applicable clauses in the Fund MOU.

Reporting:

Each Receipt Organisation will provide the Administrative Agent and the Fund Secretariat with:

Type of report	Due when	Submitted by
Bi-annual project progress report	15 June	Convening Agent on behalf of all implementing or recipient organizations and in consultation with/ quality assurance by the GFCR Global Team, where they exist
Annual project progress report	15 November	Convening Agent on behalf of all implementing and recipient organizations and in consultation with/ quality assurance by the GFCR Global Team, where they exist
End of project report covering entire project duration	Within three months from the operational project closure (it can be submitted instead of an annual report if timing coincides)	Convening Agent on behalf of all implementing or recipient organizations and in consultation with/ quality assurance by the GFCR Global Team, where they exist
Annual progress report, which may contain a request for additional GFCR allocation if the context requires it	15 December	Convening Agent on behalf of all implementing or recipient organizations and in consultation with/ quality assurance by the GFCR Global Team

For the preparatory grant financing, the full programme document will be considered as the annual reports. The GFCR Global team might request a summary of the preparatory activities.

Financial Reports and timeline

The financial reporting requirements for the below follow the 8 UNDG budget categories.

Timeline	Event
28 February	Annual reporting – Report **Q4 expenses** (Jan. to Dec. of previous year)
30 April	Report **Q1 expenses** (January to March)
31 July	Report **Q2 expenses** (March to June)
31 October	Report **Q3 expenses** (January to September)
Certified final financial report to be provided at the quarter following the project financial closure	

Unspent Balance exceeding USD 250 at the closure of the project would have to been refunded and a notification sent to the Administrative Agent, no later than three months (31 March) of the year following the completion of the activities.

Ownership of Equipment, Supplies and Other Property

Matters relating to the transfer of ownership by the Recipient Organization will be determined in accordance with applicable policies and procedures defined by the Fund.

Public Disclosure

The Fund Secretariat and Administrative Agent will ensure that operations of the GFCR are publicly disclosed on the GFCR website (https://globalfundcoralreefs.org) and the Administrative Agent website (http:www.mptf.undp.org)

Final Project Audit for recipient organization projects (Not Applicable to Preparatory Grant)

An independent project audit will be requested by the end of the project (For multi-year projects the GFCR Executive Board might request add. audit reports). The audit report needs to be attached to the final narrative project report. The cost of such activity must be included in the project budget.

Special Provisions regarding Financing of Terrorism

Consistent with UN Security Council Resolutions relating to terrorism, including UN Security Council Resolution 1373 (2001) and 1267 (1999) and related resolutions, the Participants are firmly committed to the international fight against terrorism, and in particular, against the financing of terrorism. Similarly, all

Recipient Organizations recognize their obligation to comply with any applicable sanctions imposed by the UN Security Council. Each of the Recipient Organizations will use all reasonable efforts to ensure that the funds transferred to it in accordance with this agreement are not used to provide support or assistance to individuals or entities associated with terrorism as designated by any UN Security Council sanctions regime. If, during the term of this agreement, a Recipient Organization determines that there are credible allegations that funds transferred to it in accordance with this agreement have been used to provide support or assistance to individuals or entities associated with terrorism as designated by any UN Security Council sanctions regime it will as soon as it becomes aware of it inform the head of Fund Secretariat, the Administrative Agent and the donor(s) and, in consultation with the donors as appropriate, determine an appropriate response.

ANNEX 6: Provisions Related to the Prevention of and Response to Sexual Harassment (SH) and Sexual Exploitation and Abuse (SEA) involving Implementing Partners (IPs)

1. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.
    a. In the implementation of the activities under this Project Document, **the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").**
    b. Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, **the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH").** SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

2. A) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties (with respect to their activities) that they, **have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action.** These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

ii. Offer employees and associated personnel training on prevention and response to SH and SEA, **where the Implementing Partner and its sub-parties have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP**;

iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties have been informed or have otherwise become aware, and status thereof;

iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

2. B) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.