Inception Workshop Report

Managing Coastal Aquifers (MCA) Project

Managing Coastal Aquifers in Selected Pacific SIDS

MCA Project

Inception Workshop 17 March 2021

Inception Report

30 March 2021

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Glossary

Acronyms and abbreviations

CO: Country Office
CTA: Chief Technical Adviser
EA: Executing Agency
EIA: Environmental Impact Assessment
FPIC: Free, Prior, and Informed Consent
GAP: Gender Action Plan
GEF: Global Environment Facility
GESI: Gender Equity and Social Inclusion
GRM: Grievance Redress Mechanism
IA: Implementing Agency
IFRC: International Federation of Red Cross
IP: Implementing Partner
IW: International Waters
M&E: Monitoring and Evaluation
MCA: Managing Coastal Aquifers
MTR: Mid Term Review
NPC: National Project Coordinator
NZ MFAT: New Zealand Ministry of Foreign Affairs and Trade
OFP: Operational Focal Point
OH&S: Operational Health and Safety
PCA: Partnership Cooperation Agreement
PIR: Project Implementation Report
PPG: Project Preparation Grant
RMI: Republic of Marshall Islands
RPA: Regional Project Administrator
RPT: Regional Project Team
RSC: Regional Steering Committee
RTA: Regional Technical Adviser
SES: Social and Environmental Safeguards
SESP: Social and Environmental Screening Procedure
SPC: The Pacific Community
TE: Terminal Evaluation
UNDP: United Nations Development Programme
UNDP-GEF: United Nations Development Programme – Global Environmental Finance

Terminology

Groundwater: Groundwater is the water present beneath Earth's surface in rock and soil pore spaces and in the fractures of rock formations.

Aquifer: An aquifer is an underground layer of water-bearing permeable rock, rock fractures or unconsolidated materials (gravel, sand, or silt).

Groundwater recharge: Groundwater recharge is a hydrologic process where water moves downward from surface water to groundwater. Recharge is the primary method through which water enters an aquifer.

Freshwater lens: In hydrology, a freshwater lens is a convex-shaped layer of fresh groundwater that floats above the denser saltwater, usually found on small coral or limestone islands and atolls. This aquifer of fresh water is recharged through precipitation that infiltrates the top layer of soil and percolates downwards until it reaches the saturated zone.

Atoll: A coral atoll is a ring-shaped coral reef, including a coral rim that encircles a lagoon partially or completely.

Drought: A drought is an event of prolonged shortages in the water supply, whether atmospheric (below-average precipitation), surface water or groundwater. A drought can last for months or years or may be declared after as few as 15 days.

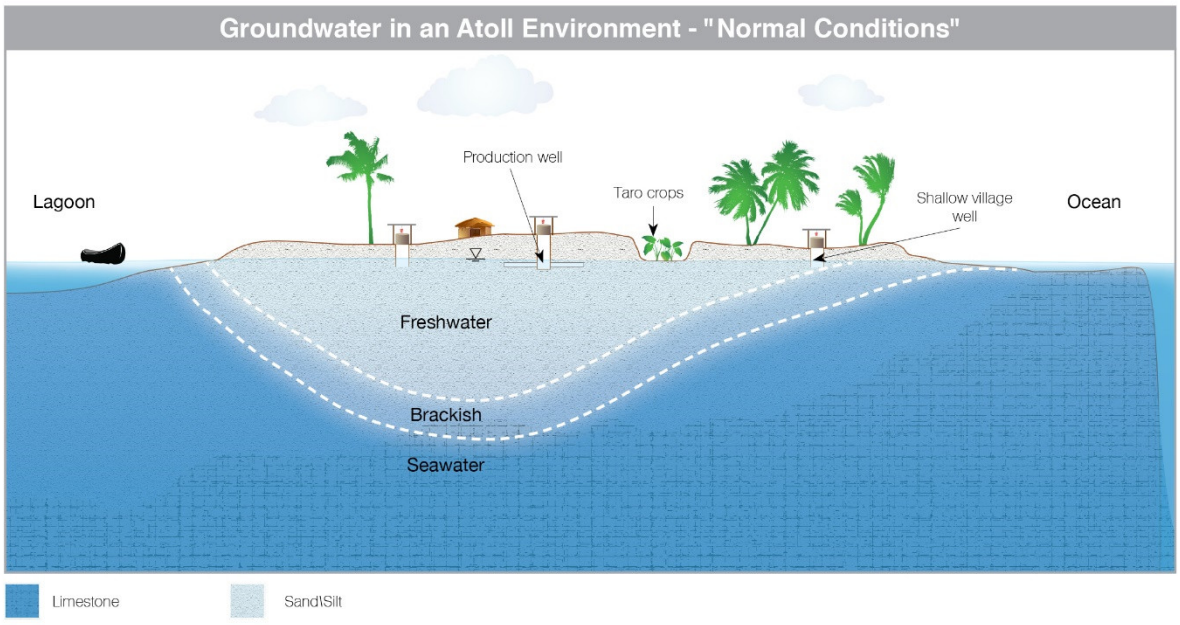
Executive Summary

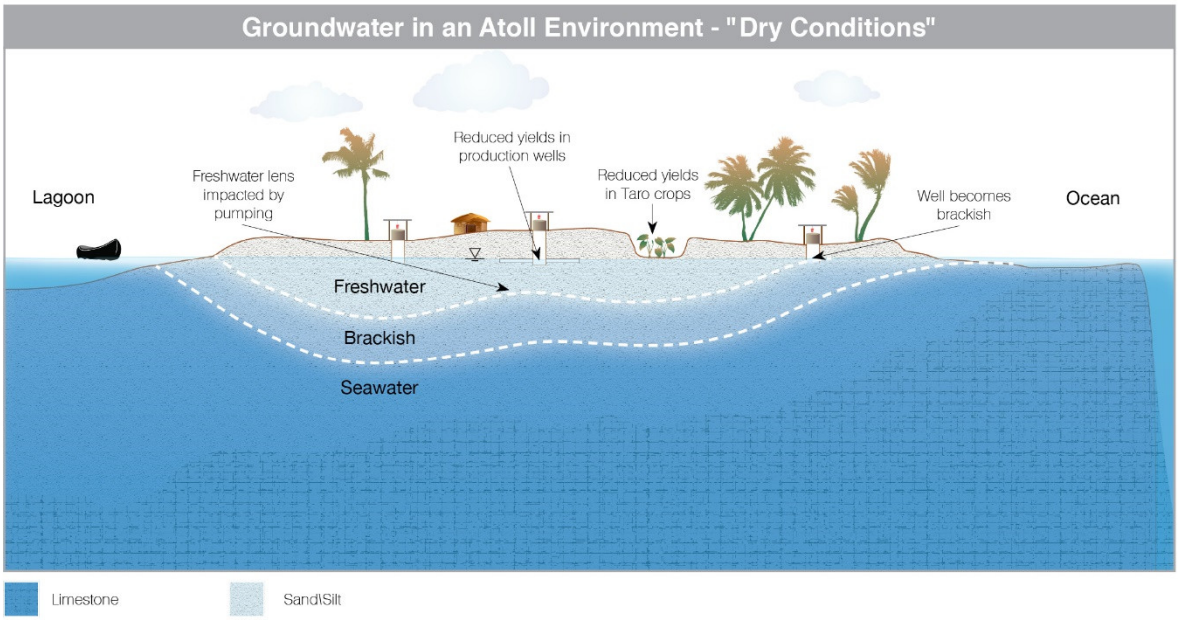
The Inception Workshop for the Managing Coastal Aquifers in Selected Pacific SIDS (MCA) project was held virtually on 17 March 2021 due to COVID19-related travel restrictions. The workshop's goal was to introduce the project and its objectives together with the anticipated results and activities; clarify roles and responsibilities; discuss and agree on ideas and decisions; reaffirm commitments and achieve a common understanding of the project amongst the SPC Project Team, the UNDP Country and Regional Offices, and all responsible stakeholders. A total of 24 participants joined the workshop with participating agencies including the Pacific Community (SPC), UNDP Pacific and Regional Office, International Federation of Red Cross, the Ministry of Natural Resources, Environment & Tourism of Palau, the Climate Change Department of Tuvalu, the Environment Protection Authority of RMI, and the Marshall Islands Conservation Society. The participants were updated on the progress since the official commencement of the project. These updates included 1) the development of an Engagement & Communication Strategy, 2) the development of project branding (for printing, merchandise, social media, templates), 3) the development of knowledge products (country briefs and MCA project briefing note), 4) the development of a project website hosted under SPC's GEM website, 5) progress on the recruitment of project personnel, 6) progress on updating the Social and Environmental Safeguards of the project and 7) progress related to various project activities. The updated regional and national 2021 budget (USD $733,734 in total) and annual workplan were presented in detail and were formally endorsed during the Regional Steering Committee meeting that followed the Inception Workshop. Updates were mainly related to COVID19-related travel restrictions inhibiting some of the originally planned project activities from taking place. The participants were introduced to the proposed activities to be conducted during 2021. The Engagement & Communication Strategy was also presented and formally endorsed during the RSC meeting.

1. Introduction

1.1 Project justification

Water security as a consequence of climate and rainfall variability, is a direct threat to the populations of RMI, Palau and Tuvalu which rely mainly on rainwater harvesting for their potable needs. Coping with droughts requires the identification of alternate and drought-resilient water sources. Fresh groundwater occurs naturally in many of the islands of these three countries, existing as a freshwater lens which floats on top of the denser seawater. These limited but important freshwater sources are very sensitive to external influences, climatic and anthropogenic, requiring informed decision making to manage and maintain their integrity.





The development challenge that this project seeks to address is the lack of knowledge and information on the status of coastal aquifers in Pacific Island Countries which hinders the development,

management, protection, and governance of these water resources, and their incorporation into applicable national water policies. Site-specific information on the aquifer locations and extents, the natural and anthropogenic sources of pollution, and the risks from other threats such as wave inundation and over-abstraction, is necessary to ensure their long-term integrity and integration in climate change adaptation strategies. This project ultimately aims at providing to the project countries, and particularly to the selected project sites, the foundation required to support improved aquifer management/governance including the increased engagement of women in island and community level water planning and decision-making processes.

1.2 Purpose of this report

The Inception Workshop is a meeting organized at the beginning of the project implementation to introduce the project and its objectives together with the anticipated results and activities; clarify roles and responsibilities; discuss and agree on ideas and decisions; reaffirm commitments and achieve a common understanding of the project amongst the Project Team, the UNDP Country and Regional Office, and all responsible stakeholders. Due to the COVID19-related travel restrictions, the workshop was held virtually.

The purpose of this report is to present the project implementation strategy and workplan and clarify how the proposed activities will contribute to the achievement of the project outputs and outcomes, as presented in the Results Framework (Annex 3). The report includes the approved annual costed workplan (Annex 4), the reviewed TOR for the Regional Steering Committee (Annex 5), the approved Communication Strategy (Annex 6), and documents the Inception workshop, held on 17 March 2021 (Annex 7).

The report is based on the discussions held between SPC, UNDP, and the project countries, during the period between the PPG validation workshop (August 2019) and the official project inception workshop (March 2021). The report documents the various revisions and amendments agreed between the project partners during this period.

2. Project overview

2.1 Goal and expected outcomes

The project goal is "to improve the understanding, use, management, and protection of coastal aquifers towards enhanced water security in the context of a changing climate". Under the current project, the countries recognize the need to further explore the potential of using groundwater resources to complement their existing water supplies and to offer increased resilience against climate variability. At the same time, they recognize the need to protect their fresh groundwater resources and improve their existing groundwater supply systems, where available. The countries have decided to achieve the project goal by addressing three main components forming a logical pathway towards increased water security.

The selected approach for the current project is based on the experiences, network, and trust built in the last decade to ensure that the project countries, and particularly the selected project sites, will obtain the foundation required to support improved development, management, and governance of coastal aquifers. The key assumptions and guiding principles to achieve this foundational level are outlined below and were identified and agreed via regional and national consultative processes during the project's conceptualization and preparation phases.

Component 1: National demonstrations to support knowledge and use of coastal aquifers for enhanced water security.

- **Outcome 1.1**: Enhanced knowledge on the status of coastal aquifers and enhanced understanding of aquifer vulnerabilities to climate changes and other factors.
- **Outcome 1.2**: Improved access to groundwater for enhanced water security.

Enhancing the knowledge and understanding of coastal aquifers: Sound understanding of coastal aquifers is the basis on which all efforts aimed at protecting and managing groundwater resources can be built. Although traditional knowledge within island communities on aquifer locations exists, visualizing the location and extent of aquifers can help island communities and local governments better understand the relationship between land use activities and potential impacts to underlying aquifers, developing them for water supply and ultimately managing these aquifers in a sustainable fashion to enhance water security and resilience against droughts. In developing understanding of coastal aquifers, the project recognizes that women and men can have different information and viewpoints, hence the importance of ensuring broad consultation and collective learning.

Improving access to groundwater: Coastal aquifers are usually only accessed through shallow hand dug household wells of variable construction quality and consideration to maintaining the integrity of the water supply. In many cases, opportunities exist for aquifer development to be done at a larger scale (community level) providing for an improved drought resilient water supply for secondary or even primary water needs. As demonstrated during previous projects, aquifer assessments can help guide the implementation of such groundwater development works to maximize the benefits and services obtained by these aquifers.

Component 2: National-based investments in human capital and tools.

- **Outcome 2.1**: Strengthened capacity and monitoring of climate and water resources at the local and national level.

Investing in human capacity: Investments in human capacity at the national and community level have been demonstrated to be critical in achieving long term sustainability of project results. National and community ownership of project interventions are the only way to ensure long term operation

and maintenance of these interventions and incorporation of demonstrated approaches (e.g. monitoring, operation, management, maintenance) into national and community governance structures and mechanisms. A strong focus will be given to the development of human capacities to provide a sustainable workforce able to harness and apply the management practices recommended through this project. In building capacity, particular attention will be given to training young women and developing technical as well as user-friendly aquifer information resources.

Investing in aquifer monitoring: Long term aquifer monitoring is required to strengthen the knowledge and understanding of coastal aquifers. The value of consistent and accurate data on water resources (precipitation, groundwater) has been demonstrated in the past through the development of forecasting and decision-making tools allowing for predictions and facilitating aquifer management. Aquifer monitoring can be strengthened and sustained in the long-term through support to existing National monitoring approaches, and appropriate participatory approaches such as citizen science approaches, to further develop and improve effective means of data collection motivated by a strong sense of ownership and responsibility.

Component 3: Local-based approaches to support the sustainable management and protection of coastal aquifers in the context of climate change.

- **Outcome 3.1**: Coordinated and inclusive approaches at the island-level for coastal aquifer management in place.
- **Outcome 3.2**: Improved and accessible knowledge systems for decision support in place.

Promoting inclusive approaches for sustainable aquifer management: The increased reliance on groundwater is resulting in more demand for sustainable aquifer management approaches in the Pacific. This project will provide evidence-based guidance on pragmatic approaches that can be practiced for centralised ground water supply systems. Inclusive approaches require the combined involvement of key government sectors (such as disaster management, water utilities, and weather services), local governments (such as island councils) as well as men and women from targeted communities who are the direct beneficiaries (through participatory management approaches).

Supporting decision making through the delivery of practical tools: Sustainable management approaches can largely benefit and be guided by numerical models and forecasting systems. The potential of such tools will be demonstrated to the project countries to solidify evidence-based decision making and enhance operational management and promote improved governance.

Component 4: Knowledge management and M&E

- **Outcome 4.1:** M&E templates and communication platforms established.

Effectively monitoring and evaluating project progress: periodical project monitoring and evaluation through a structured M&E plan is essential to both ensure and demonstrate the effective achievement of project results.

Effectively communicating the benefits of integration and lessons learned: the regional upscaling and transferability of successful interventions and lessons learned can only be guaranteed when effective communication platforms are established. It is expected that the opportunities existing through GEF communication channels will benefit countries sharing similar issues in the broader region and globally.

3. Progress during inception period

3.1 Communication and knowledge management

The MCA project was formally approved by the GEF on 9 June 2020. The three country signatures were received on 21 October 2020, marking the official commencement of the project. The Partnership Cooperation Agreement (PCA) between the Implementing Agency (UNDP) and the Executing Agency (SPC) was signed on 5 November 2020 during a formal project launch event at SPC headquarters in Suva, Fiji. Other updates related to knowledge management and communication planning include 1) the development of an Engagement & Communication Strategy, 2) the development of project branding (for printing, merchandise, social media, templates), 3) the development of knowledge products (country briefs and MCA project briefing note), 4) the development of a project website hosted under SPC's GEM website (gem.spc.int/projects/mca) with link to the IW:LEARN project website. The Engagement & Communication Strategy was formally endorsed during the Regional Steering Committee meeting following the Inception Workshop.

3.2 Project personnel

The following table presents the progress made with regards to the recruitment and appointment of project personnel.

Regional Project Team	
Chief Technical Advisor	Appointed
Regional Project Administrator	Currently using inhouse capacity – full time person to be recruited
Project Support	
Technical Advisor (2)	Appointed
Technical Support Officer	Appointed
Communication Officer	Appointed
M&E Officer	Appointed
GESI Officer	Appointed
National Project Coordinators	
Palau	Recruited
Tuvalu	Recruitment in process
RMI	Position advertised, recruitment in process

3.3 Social and Environmental Safeguards

During the inception period, progress was made with regards to the Social and Environmental Screening that was conducted during project design. Discussions between the Regional Project Team (RPT) and UNDP-GEF unit resulted in additional safeguards to be considered during project implementation. These were related to the overall project risk category, potential risks related to indigenous people (where relevant), potential risks related to traditional knowledge, the existing stakeholder engagement plan, and management of project-level grievances. The additional safeguards are presented in Chapter 5.

3.4 Project activities

Progress has been made in regard to various project activities, particularly the ones that were brought forward due to COVID-19 travel restrictions preventing other planned activities to proceed.

With regard to the activities related to monitoring, reporting, and management of water resources (project outputs 2.1.1, 2.1.3, and 3.1.1), technical equipment has been procured and standardized survey forms have been developed. Also, discussions with the International Federation of Red Cross

(IFRC) have resulted in the development of an IFRC Science to Practice project concept which will support and extend the MCA citizen science activities (output 3.1.1).

SPC has progressed the development of a community engagement training for the National Project Managers to be adopted during the initial community consultations conducted at each project site to inform and involve the communities in planned project activities, to identify key stakeholders and existing governance structures, to establish Grievance Redress Mechanisms (GRM), and to obtain Free, Prior and Inform Consent (FPIC) where required. The training workshop will be based around the "*people-centred approach*", a framework that was recently developed by the Human Rights and Social Development Division of SPC to ensure equality, access, and ownership of project interventions.

Country based operational expenditure budgets are being developed to support the recruited National Project Coordinators to assist with the introduction and community engagement of project objectives and activities at the selected sites. Information materials of the relevant project activities are being developed to assist the NPC with their stakeholder meetings.

4. Overview of the implementation process

The regional and national 2021 budget (USD $733,734 in total) and annual workplan were presented in detail to the workshop participants. Both budget and workplan were formally endorsed during the Regional Steering Committee meeting that followed the Inception Workshop. These are presented in Annex 4 of this report and the major activities by year are presented in the Chapter 4.1. The validated results framework with outcome indicators is presented in Annex 3 of this report.

4.1 Major activities by year

Year 1 (Detailed annual workplan and budget in Annex 4)

- Project inception and agreement reached on project scope and approach.
- Recruitment/appointment of regional and national project staff.
- Assignment of in-country operational expenditure budgets.
- Launch of communications and engagement activities and development of project website (Output 4.1.2).
- Development of harmonized reporting templates to facilitate reporting and monitoring of project results and training of National Project Coordinators (NPC) on the use of the developed reporting templates (Output 4.1.1).
- Procurement of technical equipment required for water resources monitoring activities (Outputs 2.1.1, 2.1.3) and citizen science activities (Output 3.1.1).
- Socio-cultural surveys conducted at project sites to identify cultural heritage and traditional knowledge that can inform project activities and to utilise existing natural resources conservation frameworks and approaches where available (Output 1.1.1).
- Training workshop for NPCs on community engagement following a "*people-centred approach*".
- Community engagement workshops conducted at project sites according to the MCA Gender Action Plan (GAP) and following SPC's "*people-centred approach*" to introduce project activities, identify key stakeholders and existing governance structures, establish Grievance Redress Mechanism (GRM) and obtain Free Prior and Informed Consent (FPIC) when necessary.
- Implementation of 1st phase citizen science activities in collaboration with IFRC (development of survey approach and training modules, delivery of first training workshop, and initial role out) (Output 3.1.1).
- First training workshop (national and local level) on water resources monitoring (Output 2.1.1).
- Initiate groundwater modelling of Laura, Majuro, RMI (Output 3.2.1).
- Inundation modelling of project sites in RMI and Tuvalu (Output 1.1.1).
- Participation to International Waters Conference 10 (Output 4.1.3).

Year 2 (indicative)

- Procurement for the development of groundwater development infrastructure (horizontal infiltration galleries) in RMI (Wotje) and Tuvalu (Nanumea) (Output 1.2.1).
- Procurement for the installation of groundwater monitoring boreholes in RMI (Wotje, possibly Delap and Laura) and Palau (Peleliu, Angaur, Kayangel) (Output 2.1.3).
- Procurement for the installation of groundwater treatment equipment in Palau (Peleliu or Angaur) (Output 1.2.2).

- Geophysical surveys and groundwater mapping in Palau, RMI, and Tuvalu (depending on COVID19 travel restrictions) (Output 1.1.1).
- First training workshop for national government agency staff to monitor land degradation (Output 2.1.2).
- Land use surveys to identify drivers of land degradation in Palau, RMI, and Tuvalu (depending on COVID19 travel restrictions) (Output 1.1.1).
- Inundation modelling of project sites in Palau (Output 1.1.1).
- Implementation of 2nd phase citizen science activities in collaboration with IFRC (water resources monitoring, annual training workshop, progress evaluation) (Output 3.1.1).
- Second training workshop (national and local level) on water resources monitoring (Output 2.1.1).

Year 3 (indicative)

- Installation of groundwater development infrastructure (horizontal infiltration galleries) in RMI (Wotje) and Tuvalu (Nanumea) (Output 1.2.1).
- Drilling of groundwater monitoring boreholes in RMI (Wotje, possibly Delap and Laura) and Palau (Peleliu, Angaur, Kayangel) (Output 2.1.3).
- Installation of groundwater treatment equipment in Palau (Peleliu or Angaur) (Output 1.2.2).
- Geophysical surveys and groundwater mapping in Palau, RMI, and Tuvalu (depending on COVID19 travel restrictions) (Output 1.1.1).
- Implementation of land management practices for coastal aquifer protection (Output 3.1.2).
- Implementation of 2nd (and potentially 3rd) phase citizen science activities in collaboration with IFRC (water resources monitoring, annual training workshop, progress evaluation) (Output 3.1.1).
- Third training workshop (national and local level) on water resources monitoring (Output 2.1.1).
- Participation to International Waters Conference 10 (Output 4.1.3).

Year 4 (indicative)

- Development of technical guidance notes to support development of aquifer management plans (Output 3.2.2).
- Implementation of land management practices for coastal aquifer protection (Output 3.1.2).
- Implementation of 3rd phase citizen science activities in collaboration with IFRC (water resources monitoring, annual training workshop, progress evaluation) (Output 3.1.1).
- Fourth training workshop (national and local level) on water resources monitoring (Output 2.1.1).
- Second training workshop for national government agency staff to monitor land degradation (Output 2.1.2).
- Development of IW experience notes (Output 4.1.3).

4.2 Project organization structure

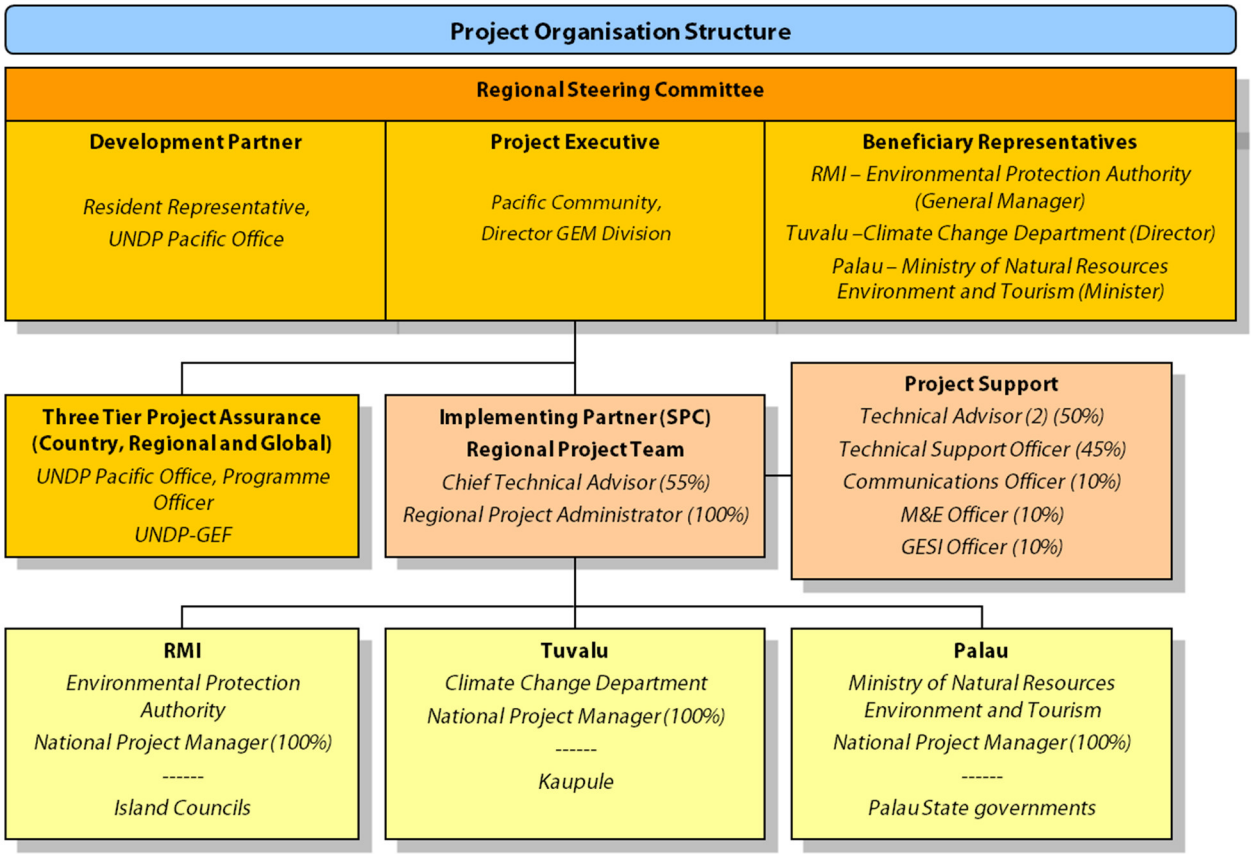
To facilitate the achievement of the goals and objectives of the MCA project a Regional Steering Committee (RSC) will be established as the primary policy-making body for the project. Full members of the RSC shall consist of 1) the Resident Representative of the project's Implementing Agency (IA), also known as Development Partner (UNDP Pacific Office), or their delegate; 2) the Divisional Director of the project's Executing Agency (EA), also known as Project Executive (SPC), or their delegate; and 3) representatives of all participating countries in the project, also known as Beneficiary

Representatives. Each country shall designate one member i.e., the Head of the National Lead Agency for the project (or their delegate).

The Executing Agency (EA) through the Chief Technical Advisor (CTA) has the authority to run the project on a day-to-day basis on behalf of and within the constraints laid down by the RSC. The EA's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The EA will appoint the CTA, the Regional Project Administrator (RPA) and other project support staff.

UNDP will provide a three-tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in Country Offices and at regional and headquarters levels. Project Assurance shall be totally independent of the CTA/Project Management function. The quality assurance role supports the RSC and EA by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed.

At the local level, existing governance mechanisms will be engaged and involved in decision-making processes relevant for their project site. Island Councils in the case of RMI, Kaupule in the case of Tuvalu, and State Governments in the case of Palau form important target groups and collaboration with these groups will be valuable in ensuring successful implementation of proposed project interventions. Island communities will have the opportunity to participate in decision-making through meetings and focus-group discussions and through feedback mechanisms. At the national level, participation of relevant ministries and project implementing agencies in the RSC ensures the direct role of these target groups in governing and managing the project.



4.3 Monitoring and evaluation

The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. The current Inception Report in combination with the successful delivery of the Inception Workshop form the first mandatory GEF M&E requirement. The Inception Report will be cleared by the UNDP Country Office (CO) and the UNDP-GEF Regional Technical Adviser (RTA) and will be approved by the RSC.

The Project will provide a brief quarterly report to UNDP on activities which support the achievement of outcomes coupled with quarterly financial reporting against the agreed ATLAS Budgetary Account codes in the standard UNDP format.

A Project Implementation Report (PIR) will be developed annually covering the reporting period July (previous year) to June (current year) for each year of project implementation. The CTA will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. Input to the PIR will be provided by the CTA, the UNDP CO, and the UNDP-GEF RTA. Additional inputs by the GEF Operational Focal Points (OFP) and other stakeholders will be coordinated by the UNDP CO.

An independent mid-term review (MTR) process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration.

An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The GEF OFPs and other stakeholders will be involved and consulted during the MTR and TE processes. The final MTR and TE reports will be cleared by the UNDP CO and the UNDP-GEF RTA and will be approved by the RSC. The GEF core indicators will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE.

The project's terminal PIR along with the TE report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the RSC during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Upon request from the national executing agencies, a template was developed by UNDP in collaboration with SPC to facilitate quarterly reporting on co-financing.

5. Risk management and Social Environmental Safeguards (SES)

The Project Document identified a number of climatic, social and environmental risks that might impede the project objectives from being achieved and a number of management responses were proposed. Additional risks and countermeasures were later identified, past GEF approval, through discussions between SPC and the UNDP Global Environmental Finance (UNDP-GEF) Unit. As a result of these discussions, the project's UNDP Social and Environmental Screening Category was changed from "low" to "moderate" and a number of additional risk management measures were introduced and discussed during the Inception Workshop.

In the early stages of project implementation, a suitable project-level Grievance Redress Mechanism (GRM) will be established at the project sites to receive and address concerns about the impact of project interventions on external stakeholders. These GRMs will build on existing mechanisms already present within the local government structures and will follow the local decision-making processes through a GESI-sensitive lens to ensure participation of all groups. The establishment and communication of GRMs to the communities will be accompanied by socio-cultural surveys and community consultations to obtain Free, Prior, and Informed Consent (FPIC) on the proposed project interventions. Such FPICs will ensure that all peoples concerned have the right to freely pursue their economic, social, and cultural development and to ensure Indigenous Peoples' rights to lands, territories, and natural resources.

With respect to environmental sustainability of the project, Preliminary environmental impact assessments will be carried out to ensure that the project implementation is not (temporarily or on longer term) impacting critical habitats, endangered species or nearby biodiversity. These assessments will be conducted following the national legislation in the three project countries and more specifically the "EIA Regulations 2014" for Tuvalu, the "EIA Regulations 1994" for RMI, and the "Environmental Impact Assessment Regulations" of the Palau National Constitution. These national legislations and processes are expected to meet the UNDP SES, however such compliance with the SES will be monitored in case additional safeguards need to be addressed.

The project will follow the Pacific Waigani convention which Palau, RMI and Tuvalu have ratified, aiming at prohibiting dumping of hazardous waste and ensuring availability of adequate treatment and disposal facilities for its management. The disposal plan, which will be built in collaboration with local project stakeholders and existing waste management technical partners, will ensure all materials imported in the country required for the proposed installations will be disposed appropriately. Finally, all travel-related CO_2 emissions will be offset through appropriate compensation mechanisms.

The following table presents an overview of all risks identified with proposed management responses to be considered during project implementation.

Description	Type	Impact & Probability	Countermeasures / Management response
Logistical challenges of implementing activities in outer islands may become overwhelming	Organizational	I = 3 P = 3	It is necessary to build on lessons learnt about scheduling and logistics from previous projects; adopt flexible and back-up planning approaches such that alternatives (e.g. moving activities to a different location) can be prioritised if and when necessary.
Lack of appropriately qualified national staff available to undertake cultural surveys at project sites	Organizational	I = 3 P = 2	Outsourcing of task to consultancy may be required.

It may not be possible to establish monitoring boreholes due to difficulties of mobilizing conventional drilling rigs to remote locations.	Operational	I = 4 P = 2	Various options exist in regard to monitoring borehole construction and drill technology. Appropriate technology and construction techniques will be applied, albeit this may affect the number of monitoring bores that are able to be constructed.
Provincial and local governments may perceive infrastructural developments as being driven by central government.	Political	I = 3 P = 1	Good communications strategies through consultation with communities, local governments and landowners will help to ensure commitment to project interventions.
Absorptive capacity for knowledge transfer at the sub-national governance level may be inadequate and unsustainable.	Operational, financial	I = 4 P = 2	It is recommended to assess the absorptive capacity in the identified area before committing to any interventions; maximise opportunities to employ local staff in the activity.
Internet connectivity and mobile networks in outer island settings inadequate to support use of mobile network technologies to report on water resources monitoring.	Operational	I = 1 P = 4	Alternatives will be investigated related to saving monitoring data offline while in the field and reporting back (uploading) from a governmental office where normally internet connection is available.
Available data may be insufficient to undertake site specific numerical modelling.	Operational	I = 4 P = 1	Input parameters for numerical model development including rainfall, aquifer extents and abstraction will be collected as part of the field assessments. Where drilling can be undertaken and establishment of monitoring networks then the infrastructure will be in place for targeted and specific data collection allowing for groundwater model development. In the absence of drilling and/or geophysical results, shallow seismic reflection will be employed.
Skills for undertaking modelling may be limited.	Operational	I = 4 P = 4	To counter this, partnership with appropriate educational/ research institution with long-established expertise will be sought.
Possible lack of national and local buy-in for the development and adoption of aquifer protection management plans.	Strategic, political	I = 2 P = 2	To counter this, communication with island councils and national agencies will be developed early in the project to ensure their cooperation through demonstrated value of aquifer protection management plans. National and local governments have identified risks to groundwater and salinization potential as a major concern and addressing these risks by the project have direct benefits to the communities. This project will address these concerns at the island level.
The project involves/promotes the abstraction of groundwater	Environmental	I = 1 P = 5	The risk of over-abstraction will be mitigated through the development of technical guidance notes to ensure sustainable abstraction and management of the groundwater resource. Monitoring bores will be installed, and monitoring programs implemented to help guide abstraction rates during different climatic scenarios to reduce impacts to aquifers. Aquifer management will be strengthened through the

			development of numerical groundwater models to ensure groundwater abstraction is performed sustainably. All proposed construction for water supply and for monitoring purposes will be undertaken in accordance with country legislation requirements
The project could potentially involve temporary or permanent land loss	Political, other (social)	I = 3 P = 3	A temporary loss of land access due to restrictions may take place as a result of project development (monitoring and groundwater development infrastructure, groundwater protection planning, etc.). Land restriction during installation works would occupy a maximum area of 2,000 m^2 per horizontal gallery and a maximum area of 25 m^2 per monitoring bore. Permanent recharge area protection measures to prevent contamination of abstracted groundwater would be developed in collaboration with all beneficiaries following a GESI-sensitive consultation process. Such measures may involve demarcation fencing of the immediate catchment area surrounding the horizontal gallery (maximum of 2,000 m^2) to designate the area where polluting human activities should be avoided, or it could just involve the mapping of the protected area. Approximate locations for the installation of groundwater development infrastructure have been communicated to island and national stakeholders and island communities after the relevant groundwater investigation surveys were conducted over the course of previous projects (NZ MFAT – Atoll Water Security, GEF – Tuvalu Ridge to Reef). During these communications no objections were made and quite the opposite, stakeholders were positive for receiving the news on the presence of useful fresh groundwater supplies. In addition, preliminary consultations with communities and landowners have also been conducted during the project preparation phase. Prior to any construction activities, consultations using established island practices, as well as GESI strategies to extend the reach of consultations, will be undertaken. The consultations will specifically include the detailed proposed construction activities, and identification of the land proposed for development, and the limitations on land use activities post construction. In practice consultations will include details on the process for land clearing compensation, or other areas of compensation, as well as process for securing land use. Informed consent through the established island council processes will be sought. The project design accounts for project interventions to take place, to the extent possible, outside of human settlements in order to avoid affecting communities. Project design will make sure that loss of land access will not lead to resettlement. If concerns arise during implementation consultations, there is scope in the

			project design for alternate sites to be selected and the selection of new sites will include a GESI-sensitive participatory consultation with all stakeholders.
The project could possibly affect land tenure arrangements	Political, other (social)	I = 3 P = 2	Project sites are located within native land with well-established native land tenure arrangements in place. During the community consultations planned early during the project implementation land tenure arrangements for the proposed sites will be identified and discussed, being guided by existing national legislation and any relevant island by-laws. Land tenure arrangements will follow the "Falekaupule Act 1997", the "Crown Acquisition of Lands Act 2008", and the "Water Supply Act 1967" for Tuvalu, the "Land Acquisition Act 1986" and the "Planning and Zoning Act 1987" for RMI, and the "Trust Territory Land Planning Act" for Palau.
Is it likely that certain project interventions will be located on lands and territories claimed by indigenous people	Political, other (social)	I = 2 P = 5	Project sites are located within native land with well-established native land tenure arrangements in place. With regards to what the three project countries define as "indigenous" in their own legislation: Palau: Public Lands – Title 35 defines what land is Public or Alien but does not define indigenous but references indigenous inhabitants throughout the Act, which is indicative of essentially meaning anyone who is not considered Alien. Tuvalu: The Leadership Code Act provides a definition of indigenous as (a) person of whose ancestors at least one is known to have been an inhabitant of the country; and (b) matters derived from or relating to the culture, traditions, and customary laws of such persons; RMI: Only use of the word indigenous comes in their Historic Preservation Act in the context of oral traditions and prehistoric sites of indigenous peoples, and their Public Lands Act makes several references to traditional and customary rights over land, but no definition. It is concluded that the criteria for defining the persons concerned in the project SESP as "indigenous" are met. During this process of consultation any existing land tenure claims will be recorded. Concerns or claims raised will be addressed through the existing country legislation mechanisms. Where agreement cannot be reached, alternate sites will be identified for consideration. Given that the definition of "indigenous" is met for the persons concerned, a Free, Prior, and Informed Consent will be sought to ensure that all peoples concerned have the right to freely pursue their economic, social, and cultural development and to ensure Indigenous Peoples' rights to lands, territories and natural resources.

The project involves the utilization of natural resources (groundwater) on lands and territories claimed by indigenous people	Political, other (social)	I = 2 P = 5	Project sites are located within native land with well-established native land tenure arrangements in place. The project will promote the use of groundwater as a beneficial approach to climate change and extreme climatic events (droughts). This strategy will be beneficial for the entire communities in the outer islands. The use of groundwater from a chosen site will require a formal agreement between land holders and island council prior to development. Existing country legislation and mechanisms for development of groundwater as a water supply will be adhered to ensure safe and sustainable development of the resource in accordance with existing uses.
The proposed project interventions may be vulnerable to potential impacts of climate change and extreme climatic conditions	Operational	I = 4 P = 2	Extreme climate events may impact the implementation of some of the project components. Project interventions are an adaptation intervention to improve the resilience of the community and reduce the potential impacts of climate change and extreme climatic conditions on the community. Although rare, extreme climate events such as flooding and wave inundation may affect the implementation and operation of groundwater development and monitoring infrastructure. The inundation vulnerability mapping that is planned for each project island will guide the installation of such infrastructure towards the less prone areas within each identified groundwater resources, to minimize the risk. The technical guidance notes developed under Component 3 will provide guidance on the management of these interventions during extreme events such as land inundation and drought. Moreover, the planned construction works will follow relevant national legislation procedures (e.g. “Public Water Supply System Regulations” in Palau) and international standards (e.g. Minimum construction requirements for water bores in Australia) to ensure the quality of the installations and minimize the vulnerability to extreme climatic conditions.
The project could potentially result in increased health risks (water-borne)	Other (social)	I = 4 P = 1	As groundwater development constitutes part of the project outputs, the risk of developing and using a contaminated source may lead to water-borne diseases. Improving the quality of existing groundwater supply systems is one of the project outputs. As such, any developments of new groundwater resources will ensure the risk to groundwater supply contamination is minimized. Suitable monitoring schemes and protection will be put in place to ensure groundwater quality does not degrade. Best practice guidelines to reduce contamination risks during construction and operation will be identified and communicated through awareness raising activities. Adequate communication material and awareness campaigns will be produced

			during the water system set up so that no health-related risks is triggered.
The project could potentially pose risks related to OH&S due to physical hazards during project construction	Operational	I = 4 P = 1	As drilling of monitoring boreholes and installation of infiltration galleries are foreseen, these activities could potentially pose OH&S related risks. Strict OH&S procedures and industry best practices will be used to minimize physical hazards (incl. ISO 45001:2018 and SPC OH&S policy).
The proposed project interventions will potentially result in the generation of non-hazardous waste	Environmental	I = 1 P = 3	The installation of groundwater development and monitoring infrastructure will potentially results in the generation of non-hazardous waste, including PVC pipes. A disposal plan for the material brought onsite (PVC pipes etc) will be developed to ensure that the environmental and social impact are minimized. Disposal plans will be part of contractual arrangements with consultants undertaking the installation works.

6. Gender mainstreaming

The project will mainstream gender equity and social inclusion by ensuring women's needs and views are fully considered and incorporated at regional, national and community level. Gender transformation will be supported by ensuring women actively participate in decision-making processes, through the provision of training in non-traditional gender occupations (water technicians, monitoring officers), and by reducing women's work burden. By taking on more public roles in community/island water planning processes, this structured approach supports women's increased engagement in broader political processes over time. Social inclusion will be promoted by ensuring that youth are included in aquifer education, conservation and monitoring efforts. In this way, they will become more knowledgeable about water resource management, the impacts of climate change and how to safeguard this resource for future generations. The project will also support the inclusion of people with disabilities to ensure their rights and needs are understood and addressed while promoting disability inclusive disaster risk reduction efforts at island level and community level.

During the Local Project Appraisal Committee (LPAC) meeting held in February 2020 UNDP suggested that some of the gender indicators in the results framework may have to be reviewed during the project inception workshop. These suggestions were considered but no changes were explicitly requested through the participants during the regional inception workshop.

6.1 GESI Action Plan

The following recommendations will ensure compliance with the Gender Equality Analysis and Action Plan. These are based on literature review findings, national and community level consultation results during the project preparation phase, and best practise guidelines for effective GESI work in the Pacific Islands.

1. Provide GESI technical support to project personnel and implementing agencies with a focus on building the capacity of National Project Coordinators.

2. Ensure National Project Coordinators visit each site during inception to review findings from design consultations; confirm upcoming project activities/timeframes; agree on land use requirements and permissions; review project GESI expectations; and gather baseline data.

3. Ensure all aquifer assessments and management guidance documents are multi-disciplinary and capture the views of women, men, youth and people with disabilities.

4. Strive to ensure women, men and youth are equitably represented on project planning and monitoring committees at national, island and community level by working in collaboration with community leaders to meet established targets.

5. Work through existing mechanisms including local government structures, water, disaster or health committees and women/youth organisations rather than setting up new arrangements.

6. Ensure all land access and use issues are addressed prior to any project intervention and allow sufficient time for consultation and permission processes to occur.

7. Ensure opportunities are provided to all members of the community to participate in field activities to learn more about groundwater assessment, monitoring and conservation.

8. Keep community leaders informed of project activities, timelines and assessment results to ensure transparency and knowledge sharing.

9. Hold community meetings at a time and place convenient to all stakeholders and avoid "consultation fatigue".

10. Provide "Water for Women" learning opportunities and ensure all trainings supported by the project include equal representation of women and men.

11. Facilitate inter-island knowledge exchange visits with women and youth to share experience and best practice on water security, climate change and risk reduction.

12. Ensure people with disabilities are involved in project planning, implementation and monitoring at both national and local level.

13. Develop gender-sensitive community and student-friendly groundwater education and awareness materials in addition to technical guidance notes.

14. Ensure project monitoring and evaluation includes GESI indicators and targets.

15. Support the development of relevant water security and land use policy frameworks using a GESI lens.

16. Model gender equity in project staffing and management arrangements (including the Regional Steering Committee Board and Country Coordination bodies), develop and enforce a staff Code of Conduct.

Annex 1 – Inception Workshop Agenda

Online inception workshop - Managing Coastal Aquifers (MCA) project
Date: 17 March 2021
Fiji, Tuvalu, RMI: 12:30 – 17:00
Palau: 9:30 – 14:00
Bangkok: 7:30 – 12:00
Venue: Zoom meeting (https://spc.zoom.us/j/97010186607)

Objectives:

- To review the progress so far since project initiation
- To review the budgeted annual workplan for 2021 and discuss the major activities.
- To discuss deviations and adjustments due to COVID 19
- To present the communication strategy developed by SPC.
- To discuss eventual activities required for the project to adhere to UNDP Social and Environmental Safeguards policy.
- To review the project financial activity.

Fiji, Tuvalu, RMI	Palau	Bangkok	Item
12:30	9:30	7:30	1. Welcome, opening remarks, prayer
12:35	9:35	7:35	2. Introduction of participants and group photo
12:40	9:40	7:40	3. Remarks (UNDP)
12:45	9:45	7:45	4. Remarks (SPC)
12:50	9:50	7:50	5. Project briefing (SPC)
13:00	10:00	8:00	6. Project progress (SPC)
13:15	10:15	8:15	7. Budgeted annual workplan 2021 including COVID 19 adjustments (SPC)
13:40	10:40	8:40	8. Finance review (SPC)
14:00	11:00	9:00	9. Communication plan (SPC)
14:30	11:30	9:30	Break
15:30	12:30	10:30	10. Monitoring & Evaluation (UNDP)
15:55	12:55	10:55	11. Major activities 2021: Socio-cultural surveys, Citizen science, Community engagement, Inundation surveys (SPC)
16:20	13:20	11:20	12. Social and Environmental Safeguards Policy (UNDP)
16:50	13:50	11:50	13. Plans for next meeting
16:55	13:55	12:00	14. Closure

Annex 2 – Workshop participants list

Name	Organization, position	Project role	Email
Andrew Jones	SPC, Director Geoscience Energy Maritime Division	Project Executive	andrewj@spc.int
Rhonda Robinson	SPC, Deputy Director Disaster and Community Resilience Programme		rhondar@spc.int
Peter Sinclair	SPC, Water Resources Assessment and Monitoring Coordinator	Chief Technical Advisor	petes@spc.int
Andreas Antoniou	SPC, Hydrogeologist	Project Technical Advisor	andreasa@spc.int
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Chintan Kumar	SPC, Programme Accountant	Financial management support	chintank@spc.int
Aminisitai Loco	SPC, Senior Hydrogeologist	Project Technical Advisor	aminisitail@spc.int
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Rose Martin	SPC, Senior Human Rights Adviser	GESI support	rosem@spc.int
Martin Child	SPC, Senior Human Rights Adviser	GESI support	martinch@spc.int
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Tuvuki Ketedromo	Republic of Marshall Islands Environment Protection Authority	National project support	Ketedromo.rmiepa@gmail.com
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Carla Taylor	IFRC, Disaster Risk Management Coordinator	Project partner	Carla.taylor@ifrc.org
Stuart Bryan	IFRC		Stuartbryan76@gmail.com

Annex 3 – Validated Results Framework

This project will contribute to the following Sustainable Development Goal (s): 2, 3, 5, 6, 11, 13, 15					
This project will contribute to the following country outcome included in the UNDAF/Country Programme Document: Outcome 1: Environmental management, climate and disaster risk management. The UN will work to support an integrated approach to environmental sustainability and efforts by PICT governments and communities to adapt to climate change and reduce and manage disaster risk.					
This project will be linked to the following output of the UNDP Strategic Plan: Output 1.4.1: Solutions scaled up for sustainable management of natural resources, including sustainable commodities and green and inclusive value chains					
	Objective and Outcome Indicators	**Baseline**	**Mid-term Target**	**End of Project Target**	**Data Collection Methods and Risks/Assumptions**
Project Objective: To improve the understanding, use, management and protection of coastal aquifers towards enhanced water security in the context of a changing climate.	Mandatory indicator 1: Land area with improved aquifer management and protection (hectares).	0	0	3,615	Indicator calculated from national datasets (Census data) and SPC's Statistics for Development Division datasets (POPGIS) for areas in which project interventions will take place. **Risks:** Project activities cannot be realized in all project sites due to unforeseen reasons. **Assumptions:** Total area of all project sites will benefit by project interventions.
	Mandatory indicator 2: Number of direct project beneficiaries.	0	0	12,953 (6,480 male, 6,473 female, 3,424 children)	Indicator calculated from national datasets (Census data) and SPC's Statistics for Development Division datasets (POPGIS) for areas in which project interventions will take place. **Risks:** Project activities cannot be realized in all project sites due to unforeseen reasons. **Assumptions:** Total population of all project sites will benefit by project interventions either through increased knowledge or improved access and management of groundwater.
Component 1 / Outcome 1.1: Enhanced knowledge on the current status of coastal aquifers and enhanced	Indicator 3: Status of knowledge on the current state of coastal aquifers, measured by the completion of water	0	5	8	Relevant sites: Ailinglaplap, Delap, Laura, Jaluit, Nui, Peleliu, Angaur, Kayangel Completion of water resources assessment surveys will enhance the knowledge on the current state of coastal aquifers. Consultations will be conducted prior to and after the assessment surveys have been conducted to ensure knowledge transfer is achieved. GESI requirements

understanding of aquifer vulnerabilities to climate changes and other factors.	resources assessment surveys.				All coastal aquifer assessments are developed in consultation with women, men and youth and are inclusive of gender and social inclusion factors, cultural issues, traditional protocols and land access requirements. **Risks**: Consultations do not cover all members of the community. Consultations to be developed with GESI officer to ensure inclusivity. **Assumptions:** Beneficiaries participate in water resources assessment surveys and pre- and post-consultations
	Indicator 4: Status of knowledge on the vulnerability of coastal aquifers, measured by the completion of inundation vulnerability surveys and land use surveys	0	5	8	Relevant sites: Wotje, Ailinglaplap, Delap, Laura, Jaluit, Vaitupu, Nanumea, Nui, Kayangel Completion of inundation vulnerability surveys and land use surveys will enhance the knowledge on the vulnerability of coastal aquifers. Consultations will be conducted prior to and after the assessment surveys have been conducted to ensure knowledge transfer is achieved. GESI requirements All coastal aquifer assessments are developed in consultation with women, men and youth and are inclusive of gender and social inclusion factors, cultural issues, traditional protocols and land access requirements. **Risks:** Consultations do not cover all members of the community. Consultations to be developed with GESI officer to ensure inclusivity. **Assumptions:** Beneficiaries participate in consultations and land use surveys
Component 1 / Outcome 1.2: Improved access to groundwater for enhanced water security.	Indicator 5: Total population benefiting from improved access to groundwater through the development of new groundwater production infrastructure.	0	0	1,267: 679 male and 588 female. Total children population benefiting: 377	Relevant sites: Wotje, Nanumea Indicator calculated from national datasets (Census data) and SPC's Statistics for Development Division datasets (POPGIS) for areas in which project interventions will take place. GESI requirements Both women and men from MCAP communities are actively involved in development of ground water production galleries. Students from island schools learn about infiltration galleries and water supply development. **Risks:** No suitable land areas are made accessible for water supply infrastructure. Communities do not adopt long-term O&M ownership.

					Assumptions: Total population of the relevant sites will benefit by project interventions through improved access to and of groundwater. Communities are in agreement with and support the construction of proposed water supply infrastructure. Local government and community engaged in the development of an O&M plan.
	Indicator 6: Total population benefiting from access to improved quality water through treatment of existing reticulated water and/or through the provision of new, higher quality water.	0	0	471: 247 male and 224 female (Total population of Peleliu island that is connected to reticulated water supplies). Total children population benefiting: 106	Relevant sites: Peleliu and/or Angaur Completion of up to two water conditioning systems which will improve the water quality of reticulated ground water provided to the community. Indicator calculated from national datasets (Census data) and SPC's Statistics for Development Division datasets (POPGIS) for areas in which project interventions will take place. GESI requirements Pre- and post-intervention surveys are conducted with equal numbers of men and women and show improved quality of ground water for household needs as evidenced by reduced illness, improved taste and wider use. Consultations with landowners & community leaders reveal no issues with land use due to gallery development and access.
					Risks: Water quality improvement technologies are not maintained by the water supplier, including purchase of consumables. **Assumptions:** Total population of the relevant sites will benefit by project interventions through improved access and management of groundwater. Water supplier participates in the fitting of the water conditioning equipment, and associated training and operations.
Component 2 / Outcome 2.1: Strengthened capacity and monitoring of climate and water resources at the local and national level.	Indicator 7: Number of participants attending water resources monitoring workshops	0	30	90	Relevant sites: Wotje, Jaluit, Ailinglaplap, Laura, Delap, Vaitupu, Nanumea, Nui, Funafuti, Peleliu, Angaur, Kayangel Indicator will be measured through attendance lists for the 3 training workshops conducted over 3 consecutive years. 30 participants expected to attend 3 workshops over 3 consecutive years GESI requirements At least 50 percent of participants attending capacity development training are women. Results of training assessments are gender disaggregated.

					Risks: Personnel assigned to undertake the monitoring are not retained throughout the project or leave there after. Requiring a minimum of two participants trained per monitoring site **Assumptions:** Beneficiaries participate in training workshops. Same participants are maintained throughout the project.
	Indicator 8: Number of land degradation workshops conducted at national level in the 3 project countries	0	1	3	Workshops to transfer knowledge and build capacity in assessment techniques and image analysis to identify land degradation over time. GESI requirements At least 50 percent of participants attending capacity development training are women. Results of training assessments are gender disaggregated.
					Risks: Personnel assigned to undertake the monitoring are not retained throughout the project or leave there after. **Assumptions:** Beneficiaries participate in training workshops. Same participants are maintained throughout the project
	Indicator 9: Status of monitoring systems in place for rainfall and water resources monitoring (number of aquifers with complete monitoring systems in place, including handheld equipment)	0	4	9	Relevant sites: Wotje, Laura, Jaluit, Ailinglaplap, Delap, Nui, Peleliu, Angaur, Kayangel Measured by the complete delivery and installation of rainfall and water resources monitoring infrastructure and instrumentation (monitoring boreholes, borehole equipment, and handheld equipment) per aquifer/site. GESI requirements Both women and men from MCAP communities are involved in borehole development and monitoring. Equal number of women and men/boys and girls receive information on aquifer use and conservation.
					Risks: Long term access to sites provided. Vandalism of monitoring bores – reduced with specific measures to minimize visibility and improve security **Assumptions:** Community support needed for monitoring.

Component 3 / Outcome 3.1: Coordinated and inclusive approaches at the island-level for coastal aquifer management in place.	Indicator 10: Number of submitted water resources monitoring plans for review/adoption by the local island governance mechanism.	0	0	6	Relevant sites: Wotje, Jaluit, Ailinglaplap, Vaitupu, Nanumea, Nui Measured by the submission of water resources monitoring plans for review/adoption by the local island governance mechanism. GESI requirements Increase in the number of women involved in water planning and management forums at community and island level as evidenced by change in baseline survey data gathered during project inception.
					Risks: Local island governance does not support monitoring beyond the extent of the project. Demonstrate the value of water resource monitoring assisting with their daily water supply (quantity and quality) and water security needs. **Assumptions:** Community recognize the value that monitoring information provides to enhance operations and management of resource. Strong Local Island Council support is required. Ensure collaboration with Palau Governance project which supports strengthening of Island Council Governance.
	Indicator 11: Number of sites/aquifers with appropriate land use zoning and land restoration techniques in place for aquifer protection.	0	0	8	Relevant sites: Wotje, Delap, Laura, Peleliu, Angaur, Kayangel, Vaitupu, Nanumea Protection refers to measures (e.g. fencing and zoning) put in place to protect recharge areas long term.
					Risks: Community unwilling to introduce land use control practices. **Assumptions:** Island communities and governance structure on board with proposed land protection measures to ensure aquifer protection.
Component 3 / Outcome 3.2: Improved and accessible knowledge systems for decision support in place.	Indicator 12: Number of groundwater models developed.	0	0	1	Relevant sites: Laura Marked by the delivery of a fully functional, calibrated and validated groundwater numerical model. GESI requirements Women are consulted and actively engaged in the development of any proposed abstraction operation which may impact on water quality or quantity.

					Risks: Data needs for modelling are not sufficient or available **Assumptions:** Data sets of sufficient duration required for modelling are available from the relevant authorities or collected during this project.
	Indicator 13: Number of technical guidance notes developed supporting aquifer management plans	0	0	6	Relevant sites: Laura, Wotje, Nanumea, Peleliu, Angaur, Kayangel Marked by the delivery of one technical guidance document per island where groundwater development infrastructure was installed (or existed already) supporting aquifer management and drought response plans. Developed "fit for purpose", based on needs. GESI requirements Technical guidance notes are accompanied by user-friendly educational materials suitable for students and those with limited literacy. Technical guidance notes are developed in collaboration with women and women's organisations at community and island level and used to measure project impacts.
					Risks: Necessary datasets for the development of technical guidance notes not complete during project timeframe. Undertake monitoring at early stages. **Assumptions:** Water supply operators or resource managers are able to include the technical guidance notes into operational policies
Component 4 / Outcome 4.1: M&E templates and communication platforms established.	Indicator 14: Frequency of M&E training workshops for the national project managers	0	1	3	M&E training will be held during the regional steering committee meetings. GESI requirements All project reports are inclusive of GESI targets, indicators, outcomes, issues and lessons learned.
					Risks: Lack of support for harmonized reporting **Assumptions:** Relevant participants available to take part
	Indicator 15: Extent of which communication	0	50%	100%	• 0% (no communication plan established or implemented) • 50% (in progress development of communication plan and its implementation) • 100% (communication plan established and implemented)

	action plan is established and implemented				GESI requirements Project shares GESI approach and outcomes with regional and national stakeholders including women, youth and disabilities organisations.
					Risks: Delayed implementation of communication and visibility plan **Assumptions:** Suitable communication strategy will be developed with SPC communication experts. SPC IT provides for project websites to be hosted within its home website
	Indicator 16: Extent of knowledge sharing in international forums	0	50%	100%	IW:LEARN international conferences are held bi-annually so it is expected to attend 2 conferences by the end of the project. Contribute to other IW:LEARN activities such as project twinning and writing of experience notes, among others. • 0% (no conference) • 50% (in progress on knowledge products development and conference planning) • 100% (conference conducted with established knowledge products)
					Risks: Inability to attend international forums due to unforeseen circumstances. **Assumptions:**

Annex 4 – Approved annual work plan and budget

Component	Outcome	Output	Activity	Sub-Activity	Component/ Outcome/ Output/ Activity/ Sub-activity	Total		2021															
						Total BUDGET	2021_BUDGET	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1					**National demonstrations to support knowledge and use of coastal aquifers for enhanced water security.**	1,901,235	222,709															
	1				Enhanced knowledge on the current status of coastal aquifers and enhanced understanding of aquifer vulnerabilities to climate changes and other factors.	888,001	159,079															
		1			Multidisciplinary (technical and socio-cultural) coastal aquifer assessments completed in 8 sites/aquifers.	888,001	159,079															
			1		Activity Coordination	127,059	30,198	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			2		Project specialist/coordinator	77,623	22,623						X	X	X	X	X	X	X	X	X	X
			3		Groundwater assessments	445,632	-															
			4		Cultural surveys	83,965	83,965								X	X	X	X	X	X	X	X
			5		Inundation assessments	153,722	22,293								X	X	X	X	X	X	X	X
	2				Improved access to groundwater for enhanced water security.	1,024,129	63,630															
		1			Demonstration of improved groundwater production and water security from appropriately designed wells (infiltration galleries) in Wotje atoll, RMI (132 households served) and Nanumea island, Tuvalu (115 households served).	650,151	41,198															
			1		Activity Coordination	127,059	30,198	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			2		National project specialist/coordinator	44,000	11,000						X	X	X	X	X	X	X	X	X	X
			3		Gallery design/construct	479,092	-															
						-	-															
		2			Improved quality and palatability of reticulated groundwater supply for domestic needs, demonstrated through the adoption of appropriate water treatment technologies and water management practices, such as aeration, water conditioning, and abstraction scheduling.	373,978	22,432															
			1		Activity coordination	127,059	15,099	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			2		National project specialist	29,333	7,333						X	X	X	X	X	X	X	X	X	X
			3		water quality improvements	217,586	-															
						-	-															
2					**National-based investments in human capital and tools.**	1,568,113	221,912															
	1				Strengthened capacity and monitoring of climate and water resources at the local and national level.	1,607,043	221,912															
		1			National and local (community) capacities developed to undertake monitoring of climatic and anthropogenic impacts on water resources (RMI staff: 13, Palau staff: 6, Tuvalu staff: 11).	519,551	131,836															
			1		Activity Coordination	138,719	15,099	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			2		Short courses training	36,300	-															
			3		National project coordination	48,889	12,222						X	X	X	X	X	X	X	X	X	X
			4		Citizen science	199,322	67,681								X	X		X				
			5		Monitoring of groundwater	96,322	36,834											X				
		2			National capacities developed to undertake monitoring of land degradation to protect aquifers in 8 sites/aquifers.	206,008	42,420															
			1		Activity coordination	138,719	30,198	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			2		National project coordination	52,556	12,222						X	X	X	X	X	X	X	X	X	X
			3		land degradation - training	14,733	-															
		3			Infrastructure and instrumentation in place for the monitoring of climatic and anthropogenic impacts on water resources in 8 sites/aquifers (variables monitored: precipitation, salinity, coliform bacteria).	881,484	47,656															
			1		Activity Coordination	138,719	30,198	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			2		National project coordination	48,889	12,222						X	X	X	X	X	X	X	X	X	X
			3		Monitoring equipment	129,988	-															
			4		Training and installation of equipment	70,059	5,236											X				
			5		Monitoring and evaluation - personnel and information	-	-															
			6		Monitoring bores construction - drilling	493,830	-															

Component	Outcome	Output	Activity	Sub-Activity	Component/ Outcome/ Output/ Activity/ Sub-activity	Total		2021															
						Total BUDGET	2021_BUDGET	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
3					**Local-based approaches to support the sustainable management and protection of coastal aquifers in the context of climate change.**	929,096	160,228															
	1				Coordinated and inclusive approaches at the island-level for coastal aquifer management in place.	563,836	97,858															
		1			Demonstrated community-based participatory monitoring, reporting, and management mechanisms on water resources in place in 6 sites/aquifers.	291,033	74,311															
			1		Activity coordination	95,294	22,649	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			2		National project coordination	48,889	12,222						X	X	X	X	X	X	X	X	X	X
			3		Community engagement workshops	146,850	39,441									X	X		X	X		
		2			Improved land management for the protection of coastal aquifers through the development of community-based participatory land use zoning and land restoration techniques for 8 sites/aquifers (fencing and vegetation control).	272,803	23,546															
			1		Activity Coordination	95,294	11,324	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			2		National project coordination	48,889	12,222						X	X	X	X	X	X	X	X	X	X
			3		land degradation - training	28,520	-															
			4		land degradation equip/fencing	100,100	-															
	2				Improved and accessible knowledge systems for decision support in place.	403,459	62,371															
		1			Development of groundwater numerical models to better understand the aquifer response to climate and anthropogenic impacts on the Laura coastal aquifer, and to inform the design of sustainable groundwater abstraction schemes.	229,943	38,824															
			1		Activity Coordination	95,294	11,324							X	X	X	X	X	X	X	X	X
				1	Numerical Modelling - Laura	134,649	27,500														X	X
						-	-															
		2			Development of technical guidance notes to support development of aquifer management plans and drought response plans in 6 sites/aquifers.	173,516	23,546															
			1		Activity Coordination	95,294	11,324												X	X	X	X
			2		National project coordination	78,222	12,222												X	X	X	X
						-	-															
4					**Knowledge management and M&E**	612,555	74,392															
	1				M&E templates and communication platforms established.	612,555	74,392															
		1			Harmonized reporting templates developed based on proposed indicator sets to facilitate reporting and monitoring of project results.	298,190	36,016															
			1		Activity coordination	198,190	36,016								X	X	X					
			2		Mid term review	40,000	-															
			3		Terminal review	60,000	-															
		2			Communication and visibility plan established including the development of project website	149,912	23,947															
			1		Activity coordination	111,840	14,429	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1	website, audio visual, printing, visibility	38,072	9,518															
						-	-					X	X	X		X			X			X
		3			Allocation of at least 1% of IW funds for IW:LEARN activities, including sharing of results globally focusing on SIDS.	164,454	14,429															
			1		Activity Coordination	164,454	14,429												X	X	X	X
						-	-															
5					**Project Management**	250,357	54,494															
	1				Effective management of project	250,357	54,494															
		1			Administration	88,546	17,505				X	X	X	X	X	X	X	X	X	X	X	X
			1		Financial audits	12,000	-															
						-	-															
		2			Procurement	76,546	17,505				X	X	X	X	X	X	X	X	X	X	X	X
						-	-															
		3			Project office management/operation	85,265	19,485				X	X	X	X	X	X	X	X	X	X	X	X
						-	-															
Total of all components						**5,261,356**	**733,734**															

Table 1. Overview of the operational budget by year and by budget code

Atlas Account Code	ATLAS Budget Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Total
71200	International Consultants	-	40,000	-	60,000	**100,000**
71300	Local Consultants	-	-	-	-	**-**
71400	Contractual Services - Individuals	538,349	553,589	569,591	577,845	**2,239,374**
71600	Travel	190,609	190,609	190,608	170,612	**742,438**
72100	Contractual Services - Companies	328,555	400,928	400,927	261,776	**1,392,186**
72200	Equipment and Furniture	79,677	78,077	77,277	800	**235,831**
72400	Comms & Audio-visual Equipment	2,000	2,000	-	-	**4,000**
72500	Supplies	736	500	500	500	**2,236**
72800	Information Technology Equipment	13,334	9,044	9,044	5,544	**36,966**
73100	Rental & Maintenance-Premises	15,732	15,732	15,732	14,544	**61,740**
73300	Rental & Maintenance of IT Equipment	25,346	25,346	25,346	23,434	**99,472**
74100	Professional Services	3,000	3,000	3,000	3,000	**12,000**
74200	Audio Visual & Print Production Costs	-	-	-	-	**-**
74500	Miscellaneous Expenses	13,153	13,153	13,153	13,153	**52,612**
74700	Transport, shipping and handle	-	4,750	2,833	400	**7,983**
75700	Training, Workshops and Conferences	68,629	68,629	68,629	68,631	**274,518**
	Grand total	**1,279,120**	**1,405,357**	**1,376,640**	**1,200,239**	**5,261,356**

Table 2. Overview of year 1 budget revisions due to COVID19

Component	Original year 1 budget (USD)	Revised (COVID19) year 1 budget (USD)	Change (%)
1	470,708	222,709	-53%
2	439,912	221,912	-50%
3	171,917	160,228	-7%
4	130,302	74,392	-43%
5	66,281	54,494	-18%
Total	**1,279,120**	**733,735**	**-43%**

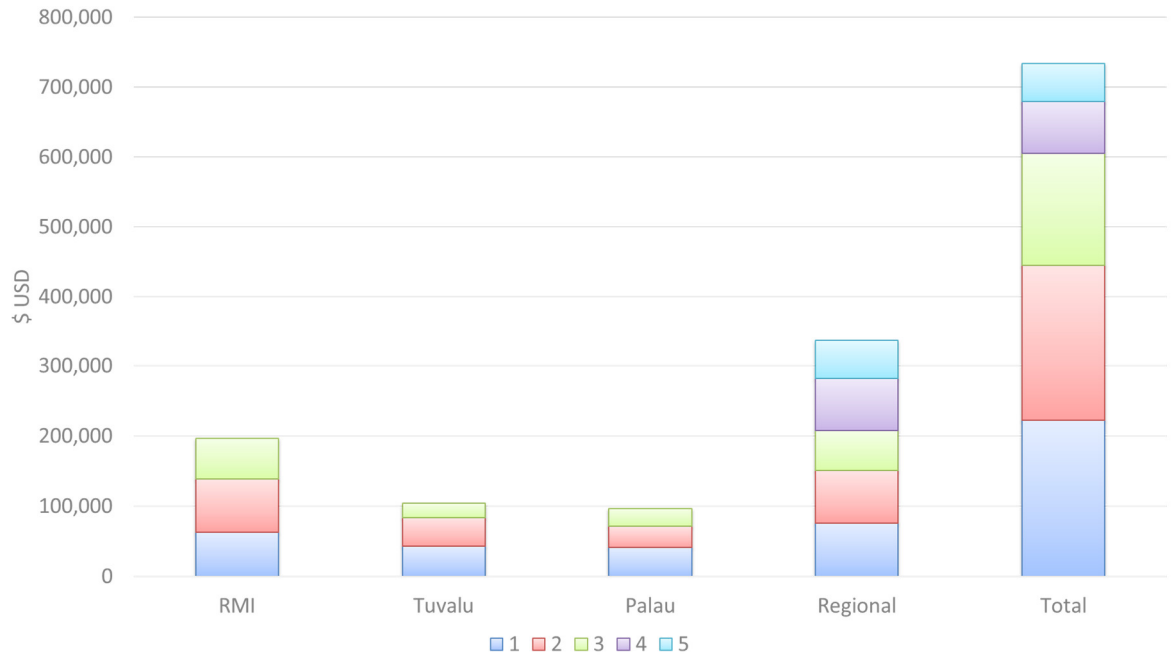


Figure 1. Year 1 budget breakdown by country and by project component

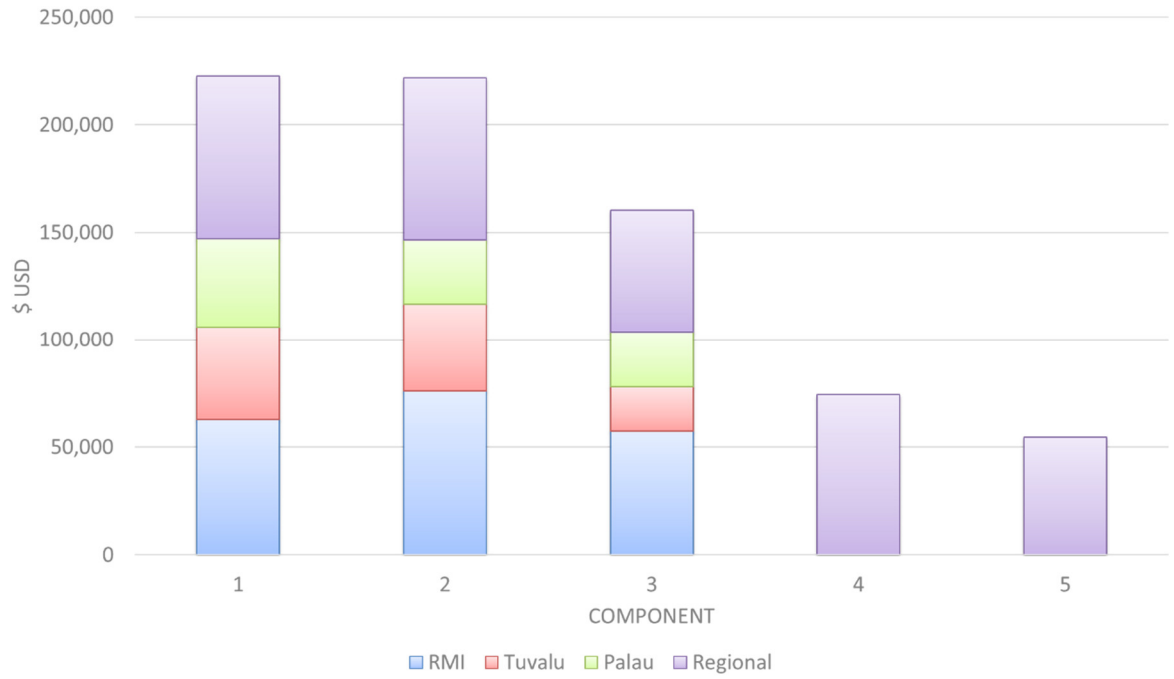


Figure 2. Year 1 budget breakdown by project component and by country

Annex 5 – TOR for the Regional Steering Committee

1. Rationale and purpose of the Regional Steering Committee

To facilitate the achievement of the goals and objectives of the UNDP/SPC project entitled "Managing Coastal Aquifers in Selected Pacific SIDS (MCA Project)", a Regional Steering Committee (RSC) will be established as the primary policy-making body for the project.

The RSC will serve as the project's decision-making body and will be responsible for making by consensus, management decisions when guidance is required by the Chief Technical Advisor (CTA), including recommendations for UNDP/Implementing Partner (IP) approval of project work plans and revisions, and addressing any project level grievances. The RSC will meet according to necessity, at least once each year. To ensure UNDP's ultimate accountability, RSC decisions should be made in accordance with standards that shall ensure management for development results, best value for money, fairness, integrity, transparency, and effective international competition. Where full consensus cannot be achieved in reaching agreement during a full meeting of the Committee, on any matter relating to project execution that has regional significance, the Secretariat shall, in consultation with the Chairperson, facilitate negotiations during the subsequent inter sessional period with a view to seeking resolution, and will report the results of these negotiations to the Committee members.

One of the first activities during full project implementation will be to reconfirm and/or reconstitute the membership of the RSC, agree on meeting procedures, and finalise Terms of Reference for the RSC.

2. The RSC shall

1. Provide strategic guidance and direction to project implementation, ensuring that the agreed deliverables are produced satisfactorily according to plans.
2. Review the project progress, assess performance, and appraise the Annual Work Plan and Budget for the following year at the proposal of the CTA.
3. Provide guidance on new project risks as raised by the IP and the CTA and agree on possible mitigation and management actions to address specific risks.
4. Agree on the IP's tolerances as required and provide ad hoc direction and advice for exceptional situations when these tolerances are exceeded.
5. Assess, advise, and approve major amendments to the project.
6. Track and monitor co-financing and ensure coordination between various donor-funded and government-funded projects and programmes.
7. Ensure coordination with various government agencies and their participation in project activities.
8. Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.
9. Appraise the Inception Workshop Report, and the annual Project Implementation Report.
10. Oversee monitoring, evaluation and reporting in line with GEF requirements.
11. Review the final project report package during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.
12. Ensure that UNDP Social and Environmental Safeguards (SES) Policy is applied throughout project implementation and address related grievances as necessary.
13. Address project issues as raised by the RPT, country partners and Beneficiary Representatives as appropriate.

14. Agree at their first meeting: a) the membership, meeting arrangements, and terms of reference of the committee; and b) such standing orders and manner of conducting business as may be considered necessary by the committee.

3. Proposed membership for the RSC

Full members of the RSC shall consist of 1) the Resident Representative of the project's Implementing Agency, also known as Development Partner (UNDP Pacific Office), or their delegate; 2) the Divisional Director of the project's Executing Agency, also known as Project Executive (SPC), or their delegate; and 3) representatives of all participating countries in the project, also known as Beneficiary Representatives. Each country shall designate one member i.e., the Head of the National Lead Agency for the project (or their delegate). National Project Coordinators may also participate as observers unless they have been delegated to the role of Beneficiary Representative for a particular RSC meeting, in which case they would have full RSC member rights. Invitation can also be extended to the GEF Operational Focal Point for RSC meetings that require their attention.

The RSC shall elect a Chairperson and a Vice-Chairperson from amongst its members with responsibility for chairing each formal meeting of the Committee and for acting as Chairperson and Vice-Chairperson of any meetings convened during the subsequent inter-sessional period. The three countries will take turns in chairing the RSC.

The RSC may agree, by consensus at the commencement of each meeting to co-opt additional experts as observers or advisors to any meeting or meetings of the Committee or part thereof, as the committee shall deem appropriate.

4. Secretariat of the RSC

The Regional Project Team (RPT), hosted in SPC, shall act as Secretariat to the meetings of the Committee. Other staff of SPC's RPT may provide Secretariat and technical support to the meetings of the RSC as required.

5. Meetings of the Committee

The RSC shall convene on an annual basis during the operational phase of the project to guide the timely execution of project activities. Ad hoc meetings may be convened by the Chairperson: when a majority of the Committee members make a request for such a meeting to the RPT; and at the request of the RPT when circumstances demand.

6. Conduct of Committee Business

The Committee shall operate and take decisions based on consensus, regarding any matter relating to project execution that has regional significance. Where full consensus cannot be achieved in reaching agreement during a full meeting of the Committee, on any matter relating to project execution that has regional significance, the Secretariat shall, in consultation with the Chairperson, facilitate negotiations during the subsequent inter sessional period with a view to seeking resolution, and will report the results of these negotiations to the Committee members

Annex 6 – Communications agreement and engagement strategy

MCA Project

Improving access to water for Pacific communities in coastal areas

Communications Agreement and Engagement Strategy

Endorsed by RSC March 2021

Funded by: gef

In partnership with: UNDP

Project Strategy

Contractual name: ***Managing Coastal Aquifers in selected Pacific SIDS***
Generic name: ***MCA Project: improving access to water for Pacific communities in coastal areas***
Shortened name: ***MCA Project***

Structure of use

The Managing Coastal Aquifers (MCA) Project is executed by the Pacific Community (SPC) in partnership with United Nations Development Programme (UNDP). This project is funded by the Global Environment Fund (GEF) and will be implemented in three countries, namely: The Republic of Palau, The Republic of the Marshall Islands and Tuvalu.

The **full contractual name** 'Managing Coastal Aquifers Project in selected Pacific SIDS' will be used for all formal publications, project reporting, presentation documents and research publications alongside project branding (approved by UNDP Team 10/03/2021) MCA Project.

In line with best-practice communications approaches to increase engagement with Pacific island members and communities, the **generic name** 'MCA Project: improving access to water for Pacific communities in coastal areas' is preferred in all social media and relevant publications for country and community levels. This will be used in local media, outreach campaigns to engage communities, relevant knowledge products focused on community engagement and communication.

Shortened name 'MCA Project' will be used for social media and hashtags where relevant to track engagement across the life of the project.

Hierarchy of branding

Programme name: **MCA Project**
Managing Coastal Aquifers (MCA) Program

Executing/Lead Agency:

Funded by:

In partnership with:

Communications roles and responsibilities

***Lead communications agency*:** The Pacific Community's Communications and Knowledge Management Team will be responsible for the development of relevant knowledge products in line with GEF and UNDP Branding guidelines and in line with the needs of the three participating countries.

***Support agencies*:** The Global Environment Facility and the UNDP Team will be responsible for initially approving / editing the developed templates in line with agreed branding guidelines and for on-going approvals for media releases.

Brand Rationale

Rationale: this brand is not a project logo but has been designed to incorporate the importance of water to communities across the Pacific.

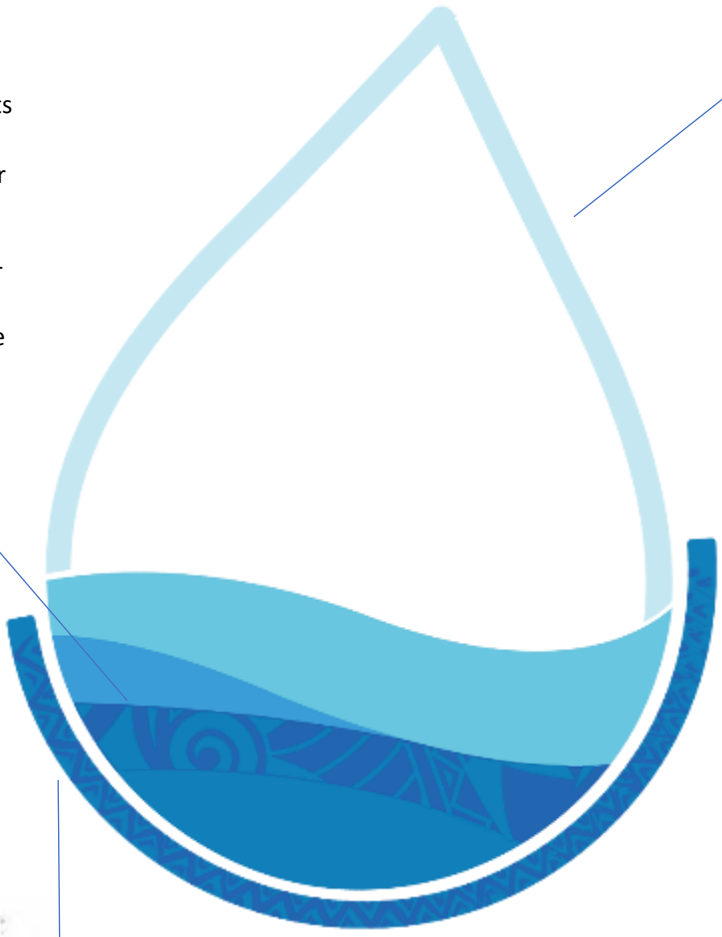
This brand identity is detailed below and incorporates traditional knowledge practices around water and sanitation across the Pacific along with community representation, freshwater and water system depiction through creative application of these elements.

Summary

A visual image that is symbolic of the Pacific, it's land, people, culture and traditions. It brings the past into the future and binds them together.

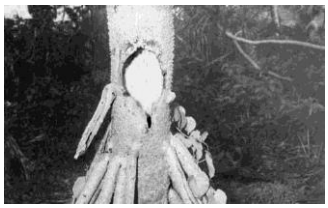
The layered blue represents freshwater, salt water and the process of groundwater generally

Motif design in dark blue – They represent the communities accessing safe and clean drinking water now and, in the future, (approved SPC motif branding).



Traditional water collection methods of cutting a hole in a pandanus tree are representing by the light blue line. This showcases the rainwater harvesting and water cycle broadly in Pacific countries and represents the traditional knowledge and resilience already existent in Pacific cultures for thousands of years.

Image below shows this in the Marshall Islands. The hole was cut as the tree was young so it would increase in size as it grew.



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WOODEN KUMETE AND PALM-LEAF GUTTER FOR CATCHING RAIN-WATER.

Kumete- Used throughout the Pacific to capture rainwater. **kumete** (wooden kava bowl). This is represented by the traditional practices of capturing water using wooden 'kumetes' as seen in the attached image. This dark blue 'kumete' or kava bowl represents the fragility of water resources in our Pacific region and also connects traditional knowledge and understanding that has been a part of our culture for thousands of years.

Process agreed

Printed materials: All printed materials will be printed with environmentally friendly paper where possible in line with GEF branding and visibility guidelines here

For approved templates *and branding structure*: to ensure this process is clear and easy to implement at country level the development of this agreement and templates to support consistent implementation of required branding have been developed (refer Annex A). These templates have been consulted with Pacific members and will be provided to participating countries through support by the lead agency, SPC.

Reproduction of already approved branding structure and templated materials such as banners, promotional products, factsheets, social media and other templates already consulted will not need prior approval for continued use from our partners at UNDP or GEF. These can be reproduced as per the requirements of country partners and implementing teams.

Media releases: The development of media releases will need approval before release for large project announcements or relevant media activities throughout the life of the project. Project boilerplate to be included on each press release as agreed (please see ANNEX A for boilerplate).

Publications: This will be supported by the SPC Publications Team for layout and editing. Branding guidelines will be followed as per this agreement and in line with all three partner and donor branding structure. No further approvals by GEF or UNDP will be required for printing of materials as long as the agreed branding structure is followed. Legal disclaimer as noted by GEF will be included in all publications (page 21 here) and boilerplate on all back pages as per agreement here (page 22).

Promotional products: All printing or ordering of promotional products will not require approval by UNDP and/or GEF communications teams if branding guidelines are followed as per this agreement and the approach of all countries and implementing, executing and donor parties. Please note however there is limited budget for this resource therefore this will not be a dominant action of the strategy.

Website / webpage: SPC's GEM Divisional website has developed relevant project websites to support long-term knowledge management across Pacific countries and across SPC's platforms.

MCA Project site is here (as discussed and approved in RSC March 2021). This link will continue to develop and will include relevant project information. A catalogue of publications will also be developed and linked to the site along with any news, visibility content and other briefing information relevant for the MCA Project. This approach maintains knowledge management as all documents are then stored in the broader SPC network for longevity without risking the loss of information on externally hosted sites.

Social media: Social media will be led by individual parties where appropriate with relevant tags to GEF and each partner as per below. SPC will use its own regional platforms to drive content and messaging. Social media content, due to the nature and best-practice approaches, will not require any pre-approval by GEF and/or UNDP however partners will be tagged appropriately in all posts utilising the below account tags:

SPC Social Media Pages include:

Facebook	@Pacific Community
Twitter	@SPC_CPS
Instagram:	@spc_cps
LinkedIn:	@Pacific-Community-SPC

GEF Social Media

Twitter	@theGEF
Facebook	Global Environment Facility
Instagram	Global Environment Facility
LinkedIn	GEFSecretariat

UNDP

Facebook	@UNDP_Pacific	LinkedIn
Twitter	@UNDP or @undp_Pacific	@UNDP Pacific Office in Fiji
Instagram	@undp_pacific	

Project branding structure
(refer Annex A for structure)

Project name: MCA Project (refer use of shortened name)

Managing Coastal Aquifers Project

Logo Structure

Country Logos to be dominate with SPC as lead agency

GEF and UNDP in line with both brand agreements and approved today as the correct approach noted below (10/03/2021 UNDP/SPC communications meeting for MCA Project)

Hierarchy of branding

1. **Top line**: Country Logo top left and SPC logo top right (lead agency)

Footer *and* Bottom Line (middle centre): Funded by: GEF Logo | In partnership with: UNDP

Funded by: ***In partnership with:***

GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Note: The motif used outlines the connection to water but is not a specific project logo as approved by RSC and UNDP partners.

Agency Logos and Branding Guidelines for reference

- GEF Logos here
- GEF Brand Guidelines here
- UNDP brand guidelines here
- Pacific Community Brand Guidelines and use here

Agreement

For products where comment and approvals are required throughout the life of the project the following timelines are supported by all parties to ensure timely delivery of communications materials.

Product	SPC	UNDP	GEF
Media release	Develop draft based on best-timing and impact-based content. Send to Knowledge Communications Analyst in in Comms or Team Leader UNDP for comment.	48 hour turn around for comments for press releases Provide comment as per spokesperson agreed	48 hour turn around for comments for press releases Provide comment as per spokesperson agreed
Templates	SPC to develop and train country partners on use of templates to support consistent branding. Approval of these templates done within first 6 months of project. These will be the templates for the duration of project	Review and approve templates at beginning of project for use across life of project – *approved 10/03/2021*	Review and approve templates at beginning of project for use across life of project - *approved 10/03/2021*
Social media	All agencies to lead their own social media but tag respective partners in posts in line with GEF branding and organisational branding. No prior approval for social media required by partners and/or GEF secretariat.		
Promotional products and environmental sustainability	Due to the remote nature of many of the atoll and island nations in the Pacific, promotional products will be developed that provide some use and reduce the risk of pollution or landfill in these countries. Environmentally friendly products and paper will be used at all times based on this. Approval of branding structure as per this agreement will be used on promotional items and will not need specific approval each time a new product is ordered as long as it remains in line with this agreement.		

Agreement Approved

This agreement can be changed with consultation of all partners through the Regional Steering Committee Process.

Endorsed on 17th March 2021 at the inaugural Regional Steering Committee.
Chair: Palau
Approved: As noted in the RSC meeting minutes attached (Agenda Item 3 states: *"The proposed communication plan was approved by the Steering Committee."*

Please note: UNDP raised a question around the embedding of the webpage into the GEM website however once the explanation of knowledge management and ensuring the life of the content from the project in SPC digital library and other platforms UNDP expressed approval and understanding of this but advised the link (here) should be reflected on the IW:Learn platform and a link to IW:Learn is to be reflected on the MCA Project Page. This has been duly noted and attended to.

Approved by SPC GEM Division, Team Leader Communications
Lisa Kingsberry 10/03/2021

_____
Team Leader GEM Communications

Approved by UNDP Knowledge Communications Analyst
Emily Moli 10/03/2021

_____
UNDP Communications

Engagement and Advocacy Strategy
MCA Project

This document is a living document and subject to change in terms of the action plan based on the implementation of the project. The branding agreement, approach and any changes to this will be fully consulted but this provides a strong, evidence-based approach to supporting effective implementation of the MCA Project alongside Members and partners.

Purpose of project

To understand the potential groundwater options for communities in three atoll nations (Palau, RMI and Tuvalu) through informed scientific and technical approaches whilst supporting capacity building in country to monitor, manage and protect these water sources.

To support three Pacific countries to better respond to drought through improved access to groundwater systems.

Develop up the skills in the outer islands to showcase community led water management. Supporting this through improved relationship and understanding between national response teams and lead agency with communities is critical.

Expected Results of MCA Project

- Component 1: national demonstrations to support knowledge and use of coastal aquifers for enhanced water security. This includes technical and socio-cultural assessments, demonstrations of improved water supply from appropriately designed wells in RMI and Tuvalu, and improved groundwater quality in Palau.
- Component 2: National Based investments in human capital to undertake monitoring of climatic and anthropogenic impacts on water resources including land degradation understanding and infrastructure/instrumentation management and installation.
- Component 3: Local-based approaches to support the sustainable management and protection of coastal aquifers in the context of climate change. This includes the trialling of participatory monitoring approaches (citizen science), the development of groundwater models and of technical guidance notes to support development of aquifer management plans and drought response plans in 6 sites.
- Component 4: Knowledge management an M&E including
    - Harmonized reporting templates developed based on proposed indicator sets to facilitate reporting of project results
    - Communications and visibility plan established including the development of a project website
    - Allocation of at least 1% of IW funds for IW: Learn activities including sharing of results globally focusing on SIDS

Purpose of this strategy – *overall objectives of communications actions and approach to drive effective outcomes.*

The purpose of this strategy is to support consistent and effective implementation of the required objectives of the MCA Project through best-practice and informed communications strategies.

The development of evidence-based knowledge products to support effective implementation both at country and regional levels is key to the strategy.

Success in comms and KM is seen as an **increased application of groundwater for improved water security and improved management of that resource** which will be implemented by the project team with informed knowledge products and approaches to drive this project outcome. Awareness, recognition, application and use of ground water in atoll and low-lying island countries.

Key messages

- More than 45% of Pacific peoples lack access to basic drinking water facilities. Accelerating access to water for communities is an urgent priority for the lives and livelihoods of Pacific people particularly when facing on-going disasters such as drought.
- The MCA Project is building upon world-class scientific and technical knowledge and applying more than 50 years of Pacific expertise to locate, monitor and install groundwater supply infrastructure for communities.
- Access to water is a critical need for health, educational access, for early-childhood development and for the longer-term sustainability of communities and nations. The MCA Project is using best-practice science and technical information to ensure communities can access safe and clean drinking water now and into the future.

Key stakeholder mapping

Palau **Critical Stakeholders**	**RMI** **Critical Stakeholders**	**Tuvalu** **Critical Stakeholders**
• Min. of Natural resources, Environment and Tourism (MNRET) • Palau Public Utilities • Palau Environmental Quality Protection Board • Communities (landowners) • Ground water users in Peleliu, Angaur, and Kayangel States.	• GEF Focal Point: Climate Change Directorate, Ministry of Environment (CDD) • Lead agency: RMI Environment Protection Authority (RMI EPA) • Majuro Water and Sewage Company • IOM Int. office for Migration • Councils, landholders, communities and groundwater users in Delap, Laura, Wotje, Jaluit and Ailinglaplap	• GEF Focal Department of Environment under the Ministry of Foreign Affairs and Trade (DOE) • Lead Climate Change and Policy Unit under the Min. of Finance • Public Works Tuvalu • Dept. of Lands and Survey • Dept. of Rural Development • Councils, land holders and communities in Funafuti, Vaitupu, Nanumea, and Nui

Palau **Keep informed or engaged in project activities**	RMI **Keep informed or engaged in project activities**	Tuvalu **Keep informed or engaged in project activities**
• National weather service • National Emergency Management Office • Palau Red Cross • Min. of Community & Cultural Affairs • IOM Int. Org for Migration	• Min. of Culture and Internal Affairs • College of Marshall Islands • Marshal Islands Conservation Society • Women United Together Marshall Islands • National Disaster Management Office • Economic, Policy Planning and Statistics Office • Weather Service Office • RMI Red Cross	• Tuvalu MET Service • Tuvalu Red Cross Society • Disabled Persons Assoc. • Gender Affairs Department • Dept of Agriculture • Tuvalu Fisheries Dept • UN Joint Presence Tuvalu

Approach / main activities

Phase one: 0 – 6 months

- Develop awareness materials and project information for engagement with Members, stakeholders and communities on key work to be achieved and engagement
- Develop project brand including visibility templates, PowerPoint template, factsheet template, banners, project design, reporting template
- Develop project website under www.gem.spc.int website before inception meeting
- Complete baseline survey with inception partners (survey link for steering committee)
- Train project teams in basic communications actions for collection of relevant information (dependent upon access to technology to support this work)
- Review existing materials developed by previous projects to determine best approaches (this could be broader than MCA Project if needed for broader WASH support work)
- Development of a country briefing template for regular updates that can be sent to Lead and GEF agency along with key partners

Phase two: 6-24 months

- Coordinate the development of knowledge products focused on each of the three countries for both public works teams (manuals and guides) and communities in understanding and engaging with community management of groundwater systems (rain gauges, water quality etc – citizen science modelling)
- Development of effective, evidence-based impact stories through best-practice communication to support MEL outcomes
- IW Learn support in terms of template and potentially written pieces based on approaches

Phase three: 24-36 months

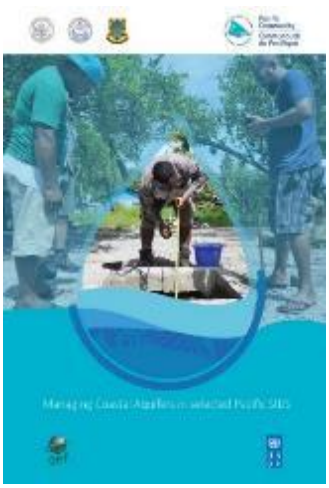
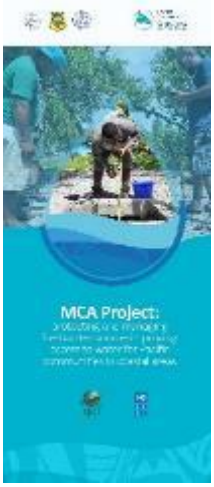
- Impact based content showcasing success
- Feed up content to MEL process within SPC for Members


Pacific
Community
Communauté
du Pacifique

ANNEX A

Design Templates and workplan approved

Branded Templates to be used for the life of the project including logo structure approved

Brand Kit (ATTACHED Powerpoint)	
Tote Bag	
Water Bottle	
Factsheet and Banner **Pull-Up Banner** **Factsheets**	 

Project team uniform/tshirt • Country and SPC logo on front • GEF right sleeve • UNDP right sleeve • MCA Project on back	
Boiler Plate for MCA Project	The Managing Coastal Acquifers (MCA) project works alongside Palau, Tuvalu and the Republic of the Marshall Islands to locate, maintain and manage access to freshwater resources for Pacific peoples. The Managing Coastal Acquifers (MCA) Project is implemented by Pacific Community (SPC), the peak scientific & technical agency of the Pacific region. The project is funded by the Global Environment Fund (GEF) in partnership with United Nations Development Fund (UNDP). More here and here.

ANNEX B

Country Briefing Information (already prepared for launch)

Country Brief – Republic of Palau

Managing Coastal Aquifers Project (MCAP) in Selected Pacific SIDS

Budget: USD 5.26 million
Donor: Global Environment Facility (GEF)
Implementing agency: United Nations Development Programme (UNDP)
Executing agency: Pacific Community (SPC), Geoscience Energy Maritime Division **(GEM)**
Project countries: Republic of Marshall Islands, Republic of Palau, Tuvalu
Implementation period: 2020-2024

Key talking points

- Palau is regularly challenged by droughts. In 2016 Palau declared a state of emergency due to the severe drought conditions affecting the country. Water rationing was introduced with residents only able to use taps for six hours a day (Drought Report, Republic of Palau, 2016).
- Other risks that our communities face is when salt water or typhoon damage the freshwater lenses we have. This has occurred in Peleliu and in Kayangel which reduces the access to freshwater for communities even more.
- During drought and post disasters like typhoons that cause waves to intrude our freshwater lenses – our communities need access to fresh and clean drinking water. This work is hoping to provide that through informed water security understanding and management.
- In a changing climate it is increasingly important that we get this right and the scientific approach combined with the Pacific knowledge the SPC have will genuinely help our communities understand, manage and access safe water into the future.

BACKGROUND INFORMATION

- Project sites: Peleliu, Kayangel, Angaur.
- Saltwater intrusion has been observed in the island of Peleliu, where one of the country's main freshwater lens aquifers exists. This resulted in the shutdown of several wells located close to the shoreline.
- In 2013, the freshwater lens aquifer of Kayangel suffered extended salinization due to Super Typhoon Haiyan passing within 11 km of the island. The levels of groundwater salinity increased due to this wave overtopping event to prohibitive levels for potable purposes.

- Major project activities in Palau:
    - Groundwater assessment surveys to identify new locations for expansion of the existing groundwater supply system (Peleliu, Angaur, and Kayangel).
    - Installation of groundwater treatment infrastructure to improve the quality of the existing drinking water supply (Peleliu and/or Angaur).
    - Drilling of monitoring bores to improve groundwater management (Peleliu, Angaur, Kayangel).
    - Capacity building of governmental staff in monitoring of land degradation and water resources (rainfall, groundwater quantity/quality).
    - Development of technical guidance notes to support groundwater management.
    - Inclusion and active participation of women, youth, and other vulnerable groups in decision-making processes and groundwater education, conservation and monitoring efforts.
- Key stakeholders:
    - GEF Operational Focal Point and Lead Agency: Ministry of Natural Resources, Environment, and Tourism (MNRET).

Detailed briefing information

Regional context

SIDS rely on small coastal aquifers for their water supply needs. These coastal aquifers consist of thin and fragile freshwater lenses that float on top of the underlying denser seawater and rely on rainfall for their recharge. These freshwater lenses are at higher risk of water quality deterioration from threats such as saltwater intrusion, over-abstraction, wave-overtopping during storm surges, coastal erosion, and inappropriate land-use activities. Climate change exacerbates these long-running threats through increased climate variability and extreme weather conditions. The fragility of coastal groundwater systems necessitates careful management and protection to ensure their long-term integrity and their role in climate change adaptation strategies and improved water security.

National context

Climate and rainfall variability are direct threats to the population of the Republic of Palau which relies mainly on rainwater harvesting for their potable needs. Reticulated water supply in Palau covers 97% of all households (43% of all households on Kayangel island). Even though treated and desalinated groundwater is reticulated to all households on Kayangel, Angaur, and Peleliu islands, rainwater remains the preferred source of drinking and cooking purposes for 100%, 50% and 96% of all households on the three islands, respectively. This indicates that groundwater is not always perceived as good quality water from the communities living on these islands. Coping with droughts involves the identification and adoption of alternate and drought-resilient water sources. Fresh groundwater occurs naturally on the islands of Palau, existing as a freshwater lens which floats on top of the denser seawater. These limited but important freshwater sources are very sensitive to external influences requiring informed decision making to manage and maintain their integrity. Site-specific information on the aquifer locations and extents, the natural and anthropogenic sources of pollution, identification of the risks from wave inundation and over-abstraction, and demonstration of infrastructure and management approaches to sustainably develop these valuable freshwater sources, is necessary to achieve sustainable coastal aquifer protection and development.

Palau is regularly challenged by droughts which in many instances have major negative impacts on the health and livelihoods of communities, the workloads of women and children, the level of community and household harmony and the wellbeing of the most vulnerable members of society. In 2016 Palau

declared a state of emergency due to the severe drought conditions affecting the country. Water rationing was introduced with residents only able to use taps for six hours a day (Drought Report, Republic of Palau, 2016). It is estimated that 4% of the national land area of Palau and 9% of the total population are affected by saltwater intrusion of aquifers (IWRM hot spot analysis, 2007). Saltwater intrusion has been observed in the island of Peleliu, where one of the country's main freshwater lens aquifers exists. This resulted in the shutdown of several wells located close to the shoreline. In 2013, the freshwater lens aquifer of Kayangel suffered extended salinization due to Super Typhoon Haiyan passing within 11 km of the island. The levels of groundwater salinity increased due to this wave overtopping event to prohibitive levels for potable purposes. Bacteriological contamination from septic tanks has also been identified as a threat in the islands of Kayangel, Peleliu and Angaur (IWRM hot spot analysis, 2007).

Project background

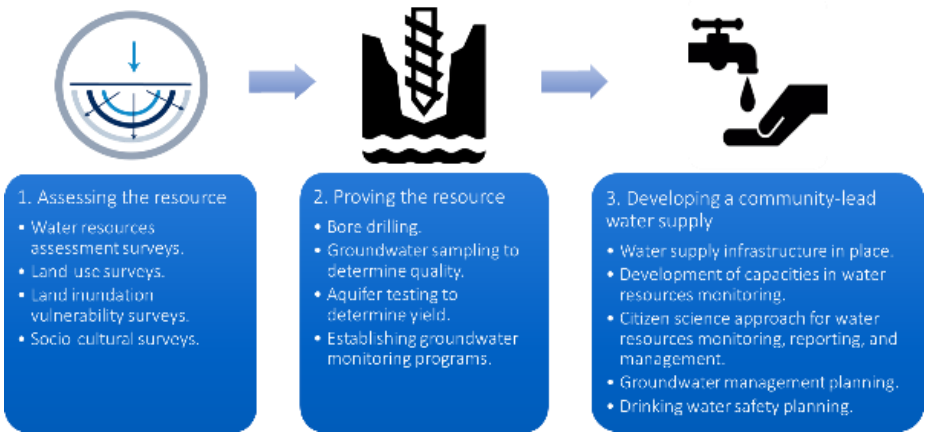
In June 2018, the Project Identification Form for the proposed project "*Managing Coastal Aquifers in Selected Pacific SIDS*" was approved by the GEF Secretariat to proceed with the project design phase. Two years later and after a series of national design meetings, community consultations, and two regional workshops, the project was approved for full implementation for a duration of 4 years. $5.26 million have been allocated by the GEF (*International Waters* and *Land Degradation* focal areas) to finance the proposed activities in the three project countries, the Republic of Marshall Islands, the Republic of Palau, and Tuvalu.

Objectives and approach

The project aims at improving the understanding, use, management and protection of coastal aquifers towards enhanced water security in the context of a changing climate. More specifically it aims at:

1) identifying the extent, threats and development potential of fresh groundwater resources,
2) increasing awareness on groundwater as a water security supply source,
3) providing options for improved access to groundwater,
4) improving groundwater protection and management, within Pacific Small Island Developing States.

Improved understanding and management of groundwater resources is premised on the establishment of monitoring systems to allow for spatiotemporal monitoring of the resource and developing core datasets and information to guide decision making. In Palau, the development of groundwater is limited, requiring a multi-disciplinary assessment to evaluate the location, current state, and exploitation potential of aquifers, followed by the design of monitoring systems. Recognising that water security is an issue relevant to multiple sectors and actors, the project will also focus on strengthening and developing new partnerships with government and non-government organisations at the local, national and regional levels.



Relevance to national and regional development priorities

The development challenge that the project seeks to address is well reflected in the national development priorities of Palau including the "Palau 2020 National Master Development Plan", the 2001 "Management Action Plan for Palau", the "Updated Belau Watershed Alliance Action Plan 2018", Drought Report" drafted in 2016 and the "Water Use and Conservation Policy" signed by the President in 2017 in response to the 2016 drought, the "Palau Climate Change Policy" of 2015, and the 2011 "National Water Policy".

The development challenge which the project seeks to address is aligned with the Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management (FRDP 2017-2030) which provides high-level strategic guidance to different stakeholder groups on how to enhance resilience to climate change and disasters, in ways that contribute to and are embedded in sustainable development. With regards to Sustainable Development Goals, the development challenge is well reflected under Goal 6 and particularly under Target 6.1 on achieving equitable access to safe and affordable drinking water, Target 6.3 on improving water quality, Target 6.4 on improving water-use efficiency, and Target 6.5 on strengthening integrated water resources management. Interlinkages with other goals exist as the proposed work is expected to contribute to enhancing food security (SDG 2), ensuring healthy lives and promoting well-being (SDG 3), protecting terrestrial ecosystems (SDG 15), make cities and human settlements inclusive, safe, resilient and sustainable (SDG 11), take urgent action to combat climate change and its impacts (SDG 13) and ensuring gender equality and women empowerment (SDG 5).

Stakeholders

GEF Operational Focal Point • Ministry of Natural Resources, Environment, and Tourism (MNRET)
Lead agency • Ministry of Natural Resources, Environment, and Tourism (MNRET)
Other participating agencies • Palau Public Utilities Corporation (PPUC) • Palau Environmental Quality Protection Board (EQPB) • National Weather Service (NWS) • National Emergency Management Office (NEMO) • Palau Red Cross Society (PRCS) • Ministry of Community & Cultural Affairs (MCCA) • International Organization for Migration (IOM)
Direct project beneficiaries • State governments, land holders, communities and groundwater users of Peleliu, Angaur and Kayangel states

Project sites

Site	Reason for site prioritisation
Peleliu	High population, upcoming development area.
Kayangel	Existing ground water supply and water quality issues, vulnerability to wave overtopping events.
Angaur	High reliance on groundwater.

Implementation risks associated with COVID-19

SPC has a culture of fostering long standing, meaningful and beneficial relationships with Member countries to provide scientific and technical support, and surge capacity to countries in the implementation of projects and their development goals. Current travel restrictions require the application of increased remote and consultative support and guidance; technical, financial, and logistical. SPC will draw upon these established relationships and intimate knowledge and experience of the environment and systems to adopt strategies which promote countries to progress implementation.

In mitigating COVID-19 risks, regular and close consultations will need to occur between SPC, country governments, GEF and UNDP, and a degree of flexibility built into the sequencing and timing of project activities. There will also be a need to, wherever feasible, fully harness local expertise and explore alternative modalities to deliver the technical input and oversight needed to deliver project activities.

Contact

For more information please contact Mr. Peter Sinclair, Water Resources Assessment and Monitoring Coordinator, Geoscience Energy Maritime Division, Pacific Community, at peters2@spc.int.

Country Brief – Republic of Marshall Islands

Managing Coastal Aquifers Project (MCAP) in Selected Pacific SIDS

Project budget: USD 5.26 million

Donor: Global Environment Facility (GEF)

Implementing agency: United Nations Development Programme (UNDP)

Executing agency: Pacific Community (SPC), Geoscience Energy Maritime Division **(GEM)**

Project countries: Republic of Marshall Islands, Republic of Palau, Tuvalu

Implementation period: 2020-2024

Key talking points for RMI

The RMI is regularly challenged by droughts. In 2016 a state of emergency was declared by the President of the RMI due to the severe drought conditions affecting the country.

This reality is one that is faced by our communities in RMI with 79% of the country relying on rainwater to access their drinking water needs.

This project is creating practical solutions for our island communities especially those in more remote areas particularly Laura, Delap, Wotje, Ailinglaplap, Jaluit.

The scientific and technical work behind this project will install assess where our groundwater resources are with our communities, develop water management plans so the resource is protected for future generations and ultimately provide access to water supply for communities next time there's a serious drought.

This means communities will have access to safe, clean and resilient water supply which is critical for our lives and livelihoods.

The project aims at improving the understanding, use, management and protection of coastal aquifers towards enhanced water security in the context of a changing climate.

Background Information (a lot of this isn't overly relevant for the audience at the launch but relevant for the country reps)

Project sites: Laura, Delap, Wotje, Ailinglaplap, Jaluit.

Major project activities in RMI:

Groundwater surveys to assess the groundwater development potential in Delap, Ailinglaplap, Jaluit.

Installation of groundwater infiltration gallery in Wotje atoll to deliver fresh groundwater to the community for emergency drought supply.

Drilling of monitoring bores to improve groundwater management (Wotje, Delap).

Development of technical guidance notes to support groundwater management.

Development of groundwater numerical model (Laura) to assist with groundwater management.

Capacity building of community staff in outer islands in water resources monitoring.

Implementation of citizen-science approaches in outer islands to assist in monitoring, reporting, and management of water resources.

Inclusion and active participation of women, youth, and other vulnerable groups in decision-making processes and groundwater education, conservation and monitoring efforts.

Key stakeholders:

GEF Operational Focal Point: Climate Change Directorate (CCD), Ministry of Environment.

Lead agency: RMI Environment Protection Authority (RMI EPA).

Detailed briefing information

Regional context

SIDS rely on small coastal aquifers for their water supply needs. These coastal aquifers consist of thin and fragile freshwater lenses that float on top of the underlying denser seawater and rely on rainfall for their recharge. These freshwater lenses are at higher risk of water quality deterioration from threats such as saltwater intrusion, over-abstraction, wave-overtopping during storm surges, coastal erosion, and inappropriate land-use activities. Climate change exacerbates these long-running threats through increased climate variability and extreme weather conditions. The fragility of coastal groundwater systems necessitates careful management and protection to ensure their long-term integrity and their role in climate change adaptation strategies and improved water security.

National context

Climate and rainfall variability are direct threats to the population of the Republic of the Marshall Islands which relies mainly on rainwater harvesting for their potable and secondary needs. In the Marshall Islands, drinking water supply is covered by rainwater for 79% of all households while groundwater (reticulated or not) is only used by 9% of all households.

Coping with droughts involves the identification and adoption of alternate and drought-resilient water sources. Fresh groundwater occurs naturally on the atolls of RMI, existing as a freshwater lens which floats on top of the denser seawater. These limited but important freshwater sources are very sensitive to external influences requiring informed decision making to manage and maintain their integrity.

Site-specific information on the aquifer locations and extents, the natural and anthropogenic sources of pollution, identification of the risks from wave inundation and over-abstraction, and demonstration of infrastructure and management approaches to sustainably develop these valuable freshwater sources, is necessary to achieve sustainable coastal aquifer protection and development.

The RMI is regularly challenged by droughts which in many instances have major negative impacts on the health and livelihoods of communities, the workloads of women and children, the level of community and household harmony and the wellbeing of the most vulnerable members of society. In 2016 a state of emergency was declared by the President of the RMI due to the severe drought conditions affecting the country. Assistance was sought from SPC by the RMI government to help determine the impact of pumping on the fresh groundwater lens, and to provide advice on the management and operational options available to RMI, during drought. Groundwater contamination in RMI has been observed in Laura and Delap area (Majuro atoll) where groundwater has been recognized as an important water source, particularly during periods of low rainfall. Contamination in Laura has been observed in the shallower monitoring boreholes and private wells, predominantly in the form of E. coli bacteria. In Delap, the fresh groundwater has been found contaminated and unsuitable for potable purposes, but several industrial users rely on it for secondary water needs.

Project background

In June 2018, the Project Identification Form for the proposed project "*Managing Coastal Aquifers in Selected Pacific SIDS*" was approved by the GEF Secretariat to proceed with the project design phase. Two years later and after a series of national design meetings, community consultations, and two regional workshops, the project was approved for full implementation for a duration of 4 years. $5.26 million have been allocated by the GEF (*International Waters* and *Land Degradation* focal areas) to finance the proposed activities in the three project countries, the Republic of Marshall Islands, the Republic of Palau, and Tuvalu.

Objectives and approach

The project aims at improving the understanding, use, management and protection of coastal aquifers towards enhanced water security in the context of a changing climate. It will aim to achieve this objective and to address the identified root causes through four integrated components

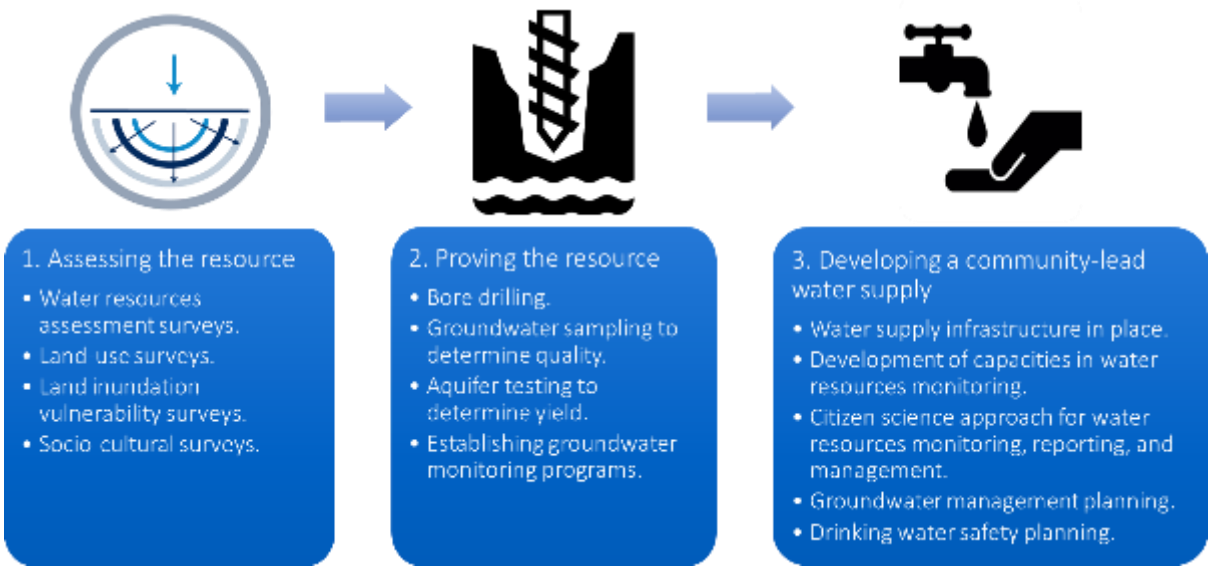
identifying the extent, threats and development potential of fresh groundwater resources,

increasing awareness on groundwater as a water security supply source,

providing options for improved access to groundwater,

improving groundwater protection and management, within Pacific Small Island Developing States.

Improved understanding and management of groundwater resources is premised on the establishment of monitoring systems to allow for spatiotemporal monitoring of the resource and developing core datasets and information to guide decision making. In RMI, the development of groundwater is limited, requiring a multi-disciplinary assessment to evaluate the location, current state, and exploitation potential of aquifers, followed by the design of monitoring systems. Recognising that water security is an issue relevant to multiple sectors and actors, the project will also focus on strengthening and developing new partnerships with government and non-government organisations at the local, national and regional levels.



Relevance to national and regional development priorities

The development challenge that the project seeks to address is well reflected in the national development priorities of RMI including the "National Strategic Plan (NSP) 2015-2017", the 2011 "National Climate Change Policy Framework", the "Post Disaster Needs Assessment of the 2015-2016 Drought", the RMI "National Water and Sanitation Policy and Proposed Action Plan" drafted in 2014, and the "National Gender Mainstreaming Policy of the Marshall Islands".

The development challenge which the project seeks to address is aligned with the Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management (FRDP 2017-2030) which provides high-level strategic guidance to different stakeholder groups on how to enhance resilience to climate change and disasters, in ways that contribute to and are embedded in sustainable development. With regards to Sustainable Development Goals, the development challenge is well reflected under Goal 6 and particularly under Target 6.1 on achieving equitable access to safe and affordable drinking water, Target 6.3 on improving water quality,

Target 6.4 on improving water-use efficiency, and Target 6.5 on strengthening integrated water resources management. Interlinkages with other goals exist as the proposed work is expected to contribute to enhancing food security (SDG 2), ensuring healthy lives and promoting well-being (SDG 3), protecting terrestrial ecosystems (SDG 15), make cities and human settlements inclusive, safe, resilient and sustainable (SDG 11), take urgent action to combat climate change and its impacts (SDG 13) and ensuring gender equality and women empowerment (SDG 5).

Stakeholders

GEF Operational Focal Point Climate Change Directorate (CCD), Ministry of Environment
Lead agency RMI Environment Protection Authority (RMI EPA)
Other participating agencies Majuro Water and Sewage Company (MWSC) International Organization for Migration (IOM) Ministry of Culture and Internal Affairs (MoCIA) Weather Service Office (WSO) Marshall Islands Red Cross Society (MIRCS) College of Marshall Islands (CMI) Marshall Islands Conservation Society (MICS) National Disaster Management Office (NDMO) Women United Together Marshall Islands (WUTMI) Economic Policy, Planning and Statistics Office (EPPSO)
Direct project beneficiaries Councils, land holders, communities and groundwater users of Delap, Laura, Wotje, Jaluit and Ailinglaplap

Project sites

Site	Reason for site prioritisation
Laura Delap Wotje Jaluit Ailinglaplap	National groundwater supply of great importance. Urban aquifer of unknown extent – assessment of the potential use of fresh groundwater. Known groundwater resource with high development potential, presence of boarding school. Unknown development potential, presence of boarding school. High priority for water security need, high population.

Implementation risks associated with COVID-19

SPC has a culture of fostering long standing, meaningful and beneficial relationships with Member countries to provide scientific and technical support, and surge capacity to countries in the implementation of projects and their development goals. Current travel restrictions require the application of increased remote and consultative support and guidance; technical, financial, and logistical. SPC will draw upon these established relationships and intimate knowledge and experience of the environment and systems to adopt strategies which promote countries to progress implementation.

In mitigating COVID-19 risks, regular and close consultations will need to occur between SPC, country governments, GEF and UNDP, and a degree of flexibility built into the sequencing and timing of project activities. There will also be a need to, wherever feasible, fully harness local expertise and explore alternative modalities to deliver the technical input and oversight needed to deliver project activities.

Contact

For more information please contact Mr. Peter Sinclair, Water Resources Assessment and Monitoring Coordinator, Geoscience Energy Maritime Division, Pacific Community, at peters2@spc.int.

Country Brief – Tuvalu

Managing Coastal Aquifers Project (MCAP) in Selected Pacific SIDS

Budget: USD 5.26 million

Donor: Global Environment Facility (GEF)

Implementing agency: United Nations Development Programme (UNDP)

Executing agency: Pacific Community (SPC), Geoscience Energy Maritime Division **(GEM)**

Project countries: Republic of Marshall Islands, Republic of Palau, Tuvalu

Implementation period: 2020-2024

Key talking points

Climate and rainfall variability are direct threats to the population of Tuvalu which relies mainly on rainwater harvesting for their potable and secondary needs. In 2011, the Government of Tuvalu declared a state of emergency due to drought. This followed the declaration of national crises on two atolls (the capital Funafuti and the southern island of Nukulaelae) requiring emergency measures to provide enough safe water for the populations living on these two islands.

Coping with droughts involves the identification and adoption of alternate and drought-resilient water sources, such as groundwater which is finding the shallow freshwater lenses that exist under our islands that can benefit our communities in times of need. That is what this project is helping us realise – especially for our outer island communities which is critical for our resilience into the future.

The project aims at improving the understanding, use, management and protection of these freshwater lenses known as coastal aquifers to provide water security for our people – especially in the face of a changing climate.

In recent years our communities facing drought needed water shipped in on boats and carried up the beach as without water, there is no life. This is one of the single greatest challenges we face in these hard drought times and this project is genuinely combining our traditional knowledge of water sources on our islands with the best technology and science to genuinely create practical solutions for the people of Tuvalu

Background Information

Project sites: Nanumea, Nui, Vaitupu, Funafuti.

Major project activities in Tuvalu:

Groundwater surveys to assess the groundwater development potential in Nui.

Installation of groundwater infiltration gallery in Nanumea atoll to deliver fresh groundwater to the community for emergency drought supply.

Development of technical guidance notes to support groundwater management.

Capacity building of community staff in outer islands in water resources monitoring.

Implementation of citizen-science approaches in outer islands to assist in monitoring, reporting, and management of water resources.

Inclusion and active participation of women, youth, and other vulnerable groups in decision-making processes and groundwater education, conservation and monitoring efforts.

Key stakeholders:

GEF Operational Focal Point: Department of Environment under the Ministry of Foreign Affairs, Trade, Tourism, Environment (DOE).

Lead agency: Climate Change and Policy Unit under Ministry of Finance (CCPU).

Detailed briefing information

Regional context

SIDS rely on small coastal aquifers for their water supply needs. These coastal aquifers consist of thin and fragile freshwater lenses that float on top of the underlying denser seawater and rely on rainfall for their recharge. These freshwater lenses are at higher risk of water quality deterioration from threats such as saltwater intrusion, over-abstraction, wave-overtopping during storm surges, coastal erosion, and inappropriate land-use activities. Climate change exacerbates these long-running threats through increased climate variability and extreme weather conditions. The fragility of coastal groundwater systems necessitates careful management and protection to ensure their long-term integrity and their role in climate change adaptation strategies and improved water security.

National context

Climate and rainfall variability are direct threats to the population of Tuvalu which relies mainly on rainwater harvesting for their potable and secondary needs. In Tuvalu, all islands rely, to varying degrees at varying times, on well water for non-potable use (washing, bathing, toilet-flushing, livestock). Reliance on well water generally increases during the drier periods. Coping with droughts involves the identification and adoption of alternate and drought-resilient water sources. Fresh groundwater occurs naturally on the atolls of Tuvalu, existing as a freshwater lens which floats on top of the denser seawater. These limited but important freshwater sources are very sensitive to external influences requiring informed decision making to manage and maintain their integrity. Site-specific information on the aquifer locations and extents, the natural and anthropogenic sources of pollution, identification of the risks from wave inundation and over-abstraction, and demonstration of infrastructure and management approaches to sustainably develop these valuable freshwater sources, is necessary to achieve sustainable coastal aquifer protection and development.

Tuvalu is regularly challenged by droughts which in many instances have major negative impacts on the health and livelihoods of communities, the workloads of women and children, the level of community and household harmony and the wellbeing of the most vulnerable members of society. In 2011, the

Government of Tuvalu declared a state of emergency due to drought. This followed the declaration of national crises on two atolls (the capital Funafuti and the southern island of Nukulaelae) requiring emergency measures to provide enough safe water for the populations living on these two islands. In Funafuti, the capital of Tuvalu, groundwater is exposed to natural and anthropogenic contamination, including salinity, leaving the population solely dependent on rainwater for potable purposes. Variations in precipitation patterns, however, can make rainwater access unreliable. The Government of Tuvalu recommends that groundwater in Fongafale, Funafuti should only be used for secondary purposes, as it is contaminated by leaking septic tanks, animal waste, heavy metals, and saltwater intrusion. As the islet of Fongafale in Funafuti atoll consists mainly of coarse-grained sediments, the potential for the development of a freshwater lens is reduced and pollutants can more easily percolate in the shallow and permeable groundwater system.

Project background

In June 2018, the Project Identification Form for the proposed project "*Managing Coastal Aquifers in Selected Pacific SIDS*" was approved by the GEF Secretariat to proceed with the project design phase. Two years later and after a series of national design meetings, community consultations, and two regional workshops, the project was approved for full implementation for a duration of 4 years. $5.26 million have been allocated by the GEF (*International Waters* and *Land Degradation* focal areas) to finance the proposed activities in the three project countries, the Republic of Marshall Islands, the Republic of Palau, and Tuvalu.

Objectives and approach

The project aims at improving the understanding, use, management and protection of coastal aquifers towards enhanced water security in the context of a changing climate. It will aim to achieve this objective and to address the identified root causes through four integrated components

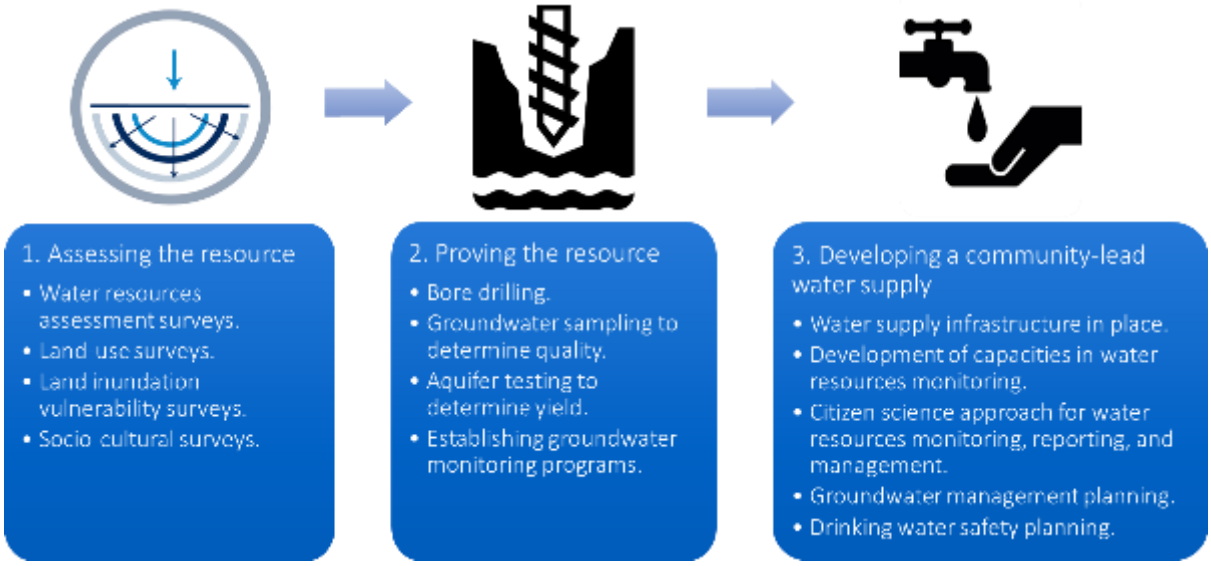
identifying the extent, threats and development potential of fresh groundwater resources,

increasing awareness on groundwater as a water security supply source,

providing options for improved access to groundwater,

improving groundwater protection and management, within Pacific Small Island Developing States.

Improved understanding and management of groundwater resources is premised on the establishment of monitoring systems to allow for spatiotemporal monitoring of the resource and developing core datasets and information to guide decision making. In Tuvalu, the development of groundwater is limited, requiring a multi-disciplinary assessment to evaluate the location, current state, and exploitation potential of aquifers, followed by the design of monitoring systems. Recognising that water security is an issue relevant to multiple sectors and actors, the project will also focus on strengthening and developing new partnerships with government and non-government organisations at the local, national and regional levels.



Relevance to national and regional development priorities

The development challenge that the project seeks to address is well reflected in the national development priorities of RMI including the "National Strategy for Sustainable Development 2016 to 2020 (Te Kakeega III)", the 2007 "National Adaptation Programme of Action", the "Sustainable and Integrated Water and Sanitation Policy 2012-2021", and the "Tuvalu Climate Change Policy TE KANIVA 2012-2021".

The development challenge which the project seeks to address is aligned with the Framework for Resilient Development in the Pacific: An Integrated Approach to Address Climate Change and Disaster Risk Management (FRDP 2017-2030) which provides high-level strategic guidance to different stakeholder groups on how to enhance resilience to climate change and disasters, in ways that contribute to and are embedded in sustainable development. With regards to Sustainable Development Goals, the development challenge is well reflected under Goal 6 and particularly under Target 6.1 on achieving equitable access to safe and affordable drinking water, Target 6.3 on improving water quality, Target 6.4 on improving water-use efficiency, and Target 6.5 on strengthening integrated water resources management. Interlinkages with other goals exist as the proposed work is expected to contribute to enhancing food security (SDG 2), ensuring healthy lives and promoting well-being (SDG 3), protecting terrestrial ecosystems (SDG 15), make cities and human settlements inclusive, safe, resilient and sustainable (SDG 11), take urgent action to combat climate change and its impacts (SDG 13) and ensuring gender equality and women empowerment (SDG 5).

Stakeholders

GEF Operational Focal Point Department of Environment under the Ministry of Foreign Affairs, Trade, Tourism, Environment (DOE)
Lead agency Climate Change and Policy Unit under Ministry of Finance (CCPU)

Other participating agencies Public Works Department (PWD) Department of Lands and Surveys (TDLS) Department of Rural Development (DRD) Tuvalu Meteorological Service (TMS) Tuvalu Red Cross Society (TRCS) Disabled Persons Association (Fusi Alofa) Gender Affairs Department (GAD) Department of Agriculture (DOA) Tuvalu Fisheries Department (TFD) UN Joint Presence-Tuvalu
Direct project beneficiaries Councils, land holders, communities and groundwater users of Funafuti, Vaitupu/Nanumea, and Nui.

Project sites

Site	Reason for site prioritisation
Nanumea	Known groundwater resource underdeveloped, high vulnerability to droughts.
Nui	Reliance on groundwater, unknown development potential, vulnerability to droughts and wave overtopping events.
Funafuti	Large population, high vulnerability to droughts.
Vaitupu	Reliance to groundwater, presence of boarding high school

Implementation risks associated with COVID-19

SPC has a culture of fostering long standing, meaningful and beneficial relationships with Member countries to provide scientific and technical support, and surge capacity to countries in the implementation of projects and their development goals. Current travel restrictions require the application of increased remote and consultative support and guidance; technical, financial, and logistical. SPC will draw upon these established relationships and intimate knowledge and experience of the environment and systems to adopt strategies which promote countries to progress implementation.

In mitigating COVID-19 risks, regular and close consultations will need to occur between SPC, country governments, GEF and UNDP, and a degree of flexibility built into the sequencing and timing of project activities. There will also be a need to, wherever feasible, fully harness local expertise and explore alternative modalities to deliver the technical input and oversight needed to deliver project activities.

Contact

For more information please contact Mr. Peter Sinclair, Water Resources Assessment and Monitoring Coordinator, Geoscience Energy Maritime Division, Pacific Community, at peters2@spc.int.

Annex 7 – Workshop presentations

Project objectives

Pacific Community
Communauté du Pacifique

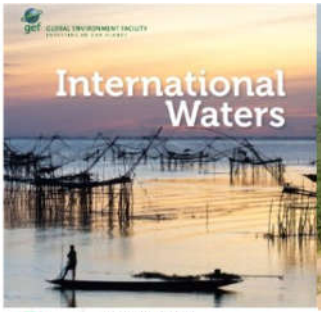
The project aims at improving the understanding, use, management and protection of coastal aquifers towards enhanced water security in the context of a changing climate.

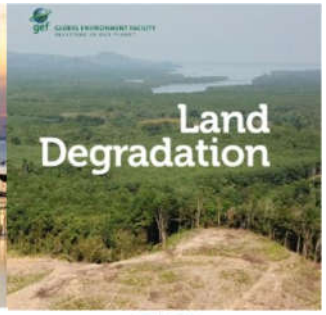
- identifying the extent, threats, and development potential of fresh groundwater resources,
- increasing awareness on groundwater as a water security supply source,
- providing options for improved access to groundwater,
- improving groundwater protection and management.

gef UNDP

General information

- Funded by Global Environment Facility (GEF) – Project Cycle 6
- $5.2 million (International Waters + Land Degradation)
- 3 countries (Palau, RMI, Tuvalu)
- 4 years implementation (Oct 2020 – Oct 2024)
- Country signatures 21 Oct 2020
- Implementation period ends June 2024





Project preparation phase 2019 - National design meetings

Project launch – November 2020

National GEF focal points and lead agencies

Department of Environment, Ministry of Foreign Affairs, Trade, Tourism, Environment (DOE)

Climate Change Department, Ministry of Finance (CCD)

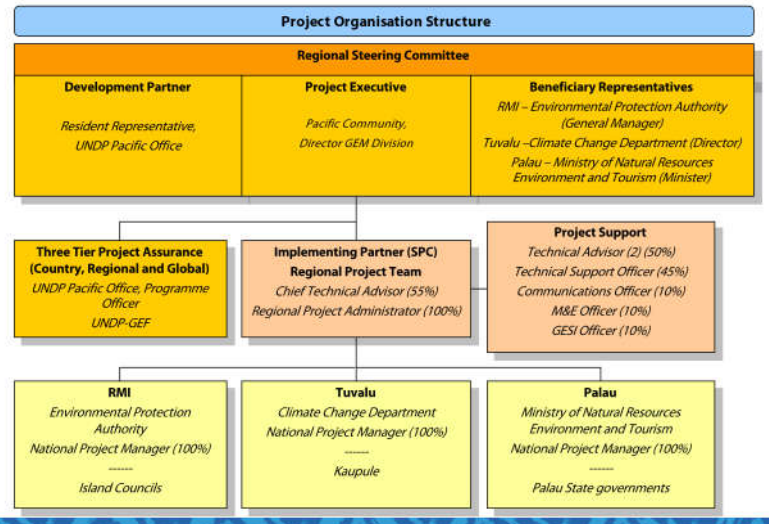
RMI Climate Change Directorate (CCD)- (former Office of Environment Planning and Policy Coordination)

RMI Environment Protection Authority (RMI EPA)

Ministry of Natural Resources, Environment, and Tourism (MNRET)

Ministry of Natural Resources, Environment, and Tourism (MNRET)

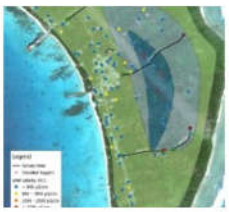
Project management arrangements and structure



3-staged approach

…towards improved water security

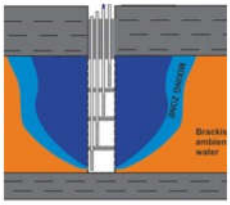
Component 1. Knowledge and use of coastal aquifers for enhanced water security

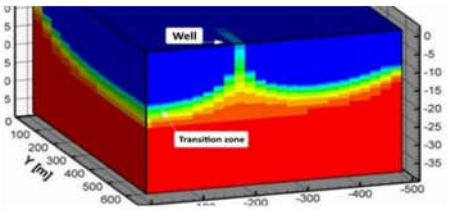

- Field surveys
- Well surveys
- Socio-cultural surveys
- Groundwater mapping
- Groundwater development
- Groundwater treatment


Component 2. Investments in human capital and tools to support resilience to climate change

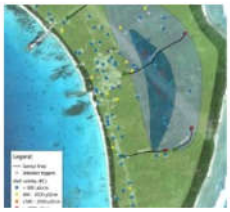

- Borehole drilling
- Monitoring boreholes
- Capacity building
- Groundwater monitoring
- Water quality monitoring
- Rainfall monitoring

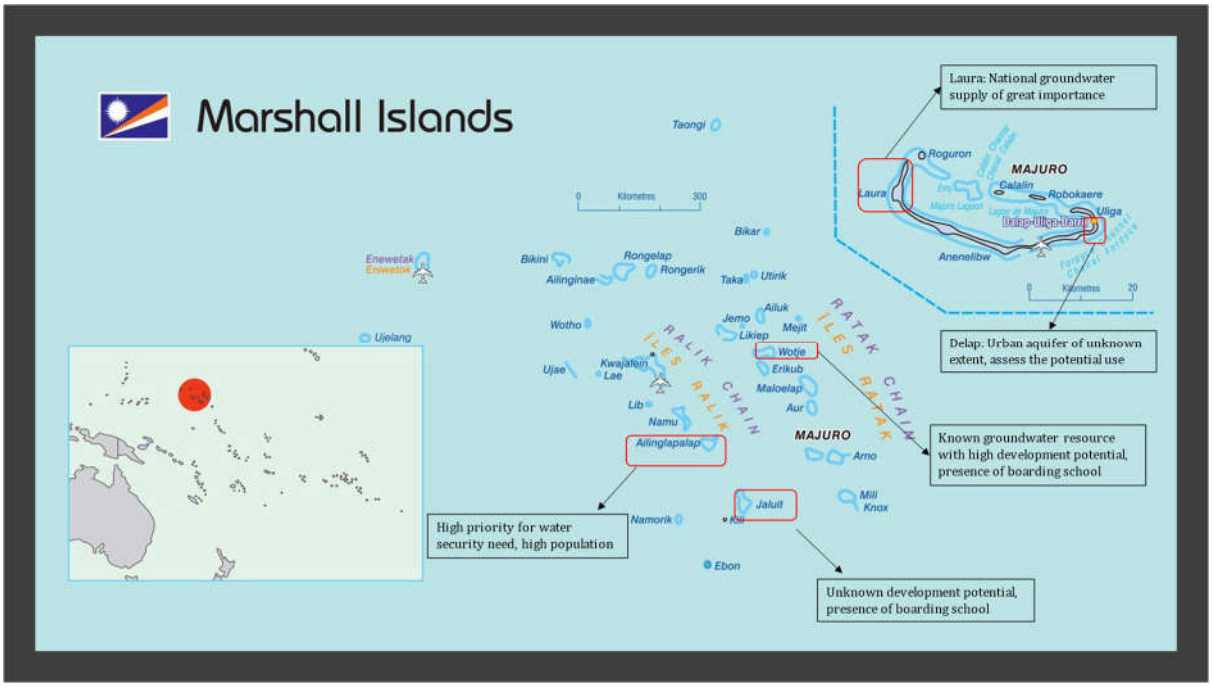


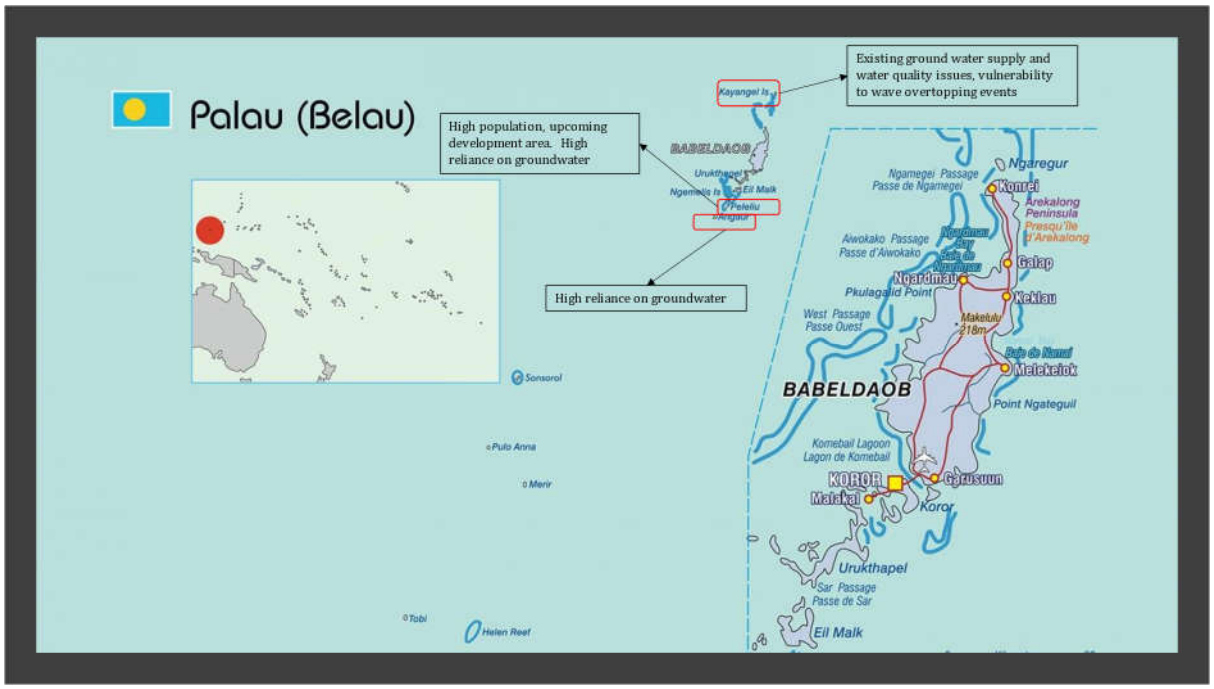

Component 3. Local based approaches to support the sustainable management and protectionof coastal aquifers

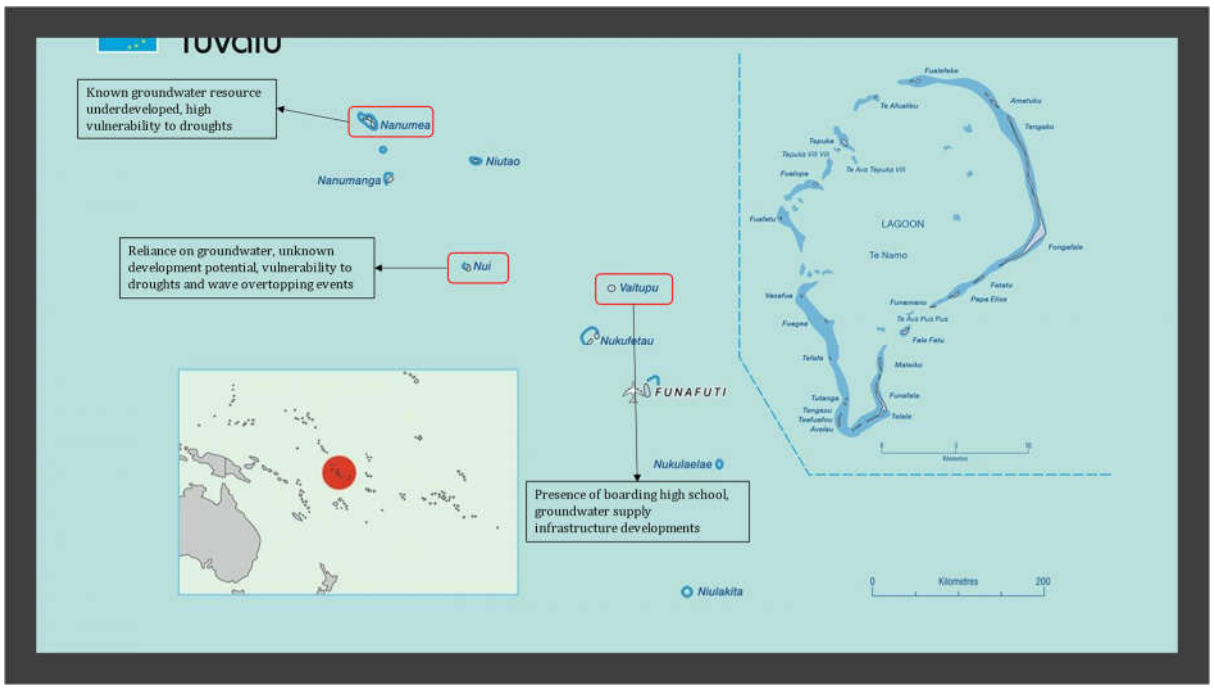


- Knowledge products
- Citizen science
- Groundwater modeling
- Aquifer management






Palau (Belau)
Existing ground water supply and water quality issues, vulnerability to wave overtopping events
High population, upcoming development area. High reliance on groundwater
High reliance on groundwater
Kayangel Is
BABELDAOB
Urukthapel I.
Ngemelis Is
Eil Malk
Peleliu
Angaur
Sonsorol
Pulo Anna
Merir
Tobi
Helen Reef
Ngaregur
Ngamegei Passage
Passe de Ngamegei
Koror
Arekalong Peninsula
Presqu'île d'Arekalong
Aiwokako Passage
Passe d'Aiwokako
Galap
Ngardmau
Pkulagalid Point
Keklau
West Passage
Passe Ouest
Makelulu
218m
Baie de Koror
Meleketok
BABELDAOB
Point Ngateguil
Koremail Lagoon
Lagon de Koremail
KOROR
Malakal
Gakusuun
Koror
Urukthapel
Sar Passage
Passe de Sar
Eil Malk


Tuvalu
Known groundwater resource underdeveloped, high vulnerability to droughts
Nanumea
Niutao
Nanumanga
Reliance on groundwater, unknown development potential, vulnerability to droughts and wave overtopping events
Nui
Vaitupu
Nukufetau
FUNAFUTI
Nukulaelae
Niulakita
Presence of boarding high school, groundwater supply infrastructure developments
LAGOON
Te Namo
Kilometres
0
200

Major events and progress to date

Pacific Community
Communauté du Pacifique

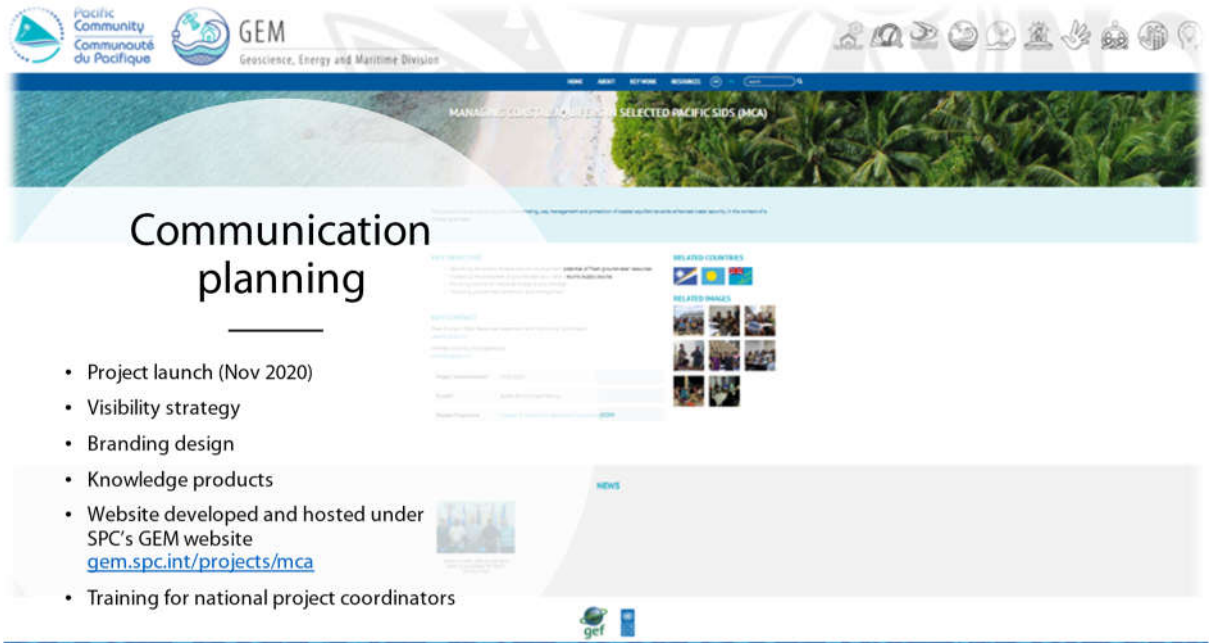
- 9 Jun 2020 — GEF approval
- 21 Oct 2020 — Country signatures
- 5 Nov 2020 — Project launch
- 17 Mar 2021 — Inception workshop
- 18 Mar 2021 — 1st RSC meeting

- UNDP comments on SESP
- Partnership Cooperation Agreement
- Recruitment of National Project Coordinators
- Communication planning
- Community engagement planning
- Citizen science planning

Project staff status

- Regional project team
  - Chief Technical Advisor – appointed
  - Regional Project Administrator – currently using inhouse capacity
- Project support
  - Technical Advisor (2) – appointed
  - Technical Support Officer – appointed
  - Comms Officer – appointed
  - M&E Officer – appointed
  - GESI Officer - appointed
- National Project Coordinators
  - RMI: SPC recruitment – position advertised
  - Tuvalu: DGA signed – recruitment in process
  - Palau: DGA signed – recruitment complete

Communication planning



- Project launch (Nov 2020)
- Visibility strategy
- Branding design
- Knowledge products
- Website developed and hosted under SPC's GEM website gem.spc.int/projects/mca
- Training for national project coordinators

Community engagement workshops (all countries)

Objective

Inform and involve communities in planned project activities

Activities

- Community engagement training for NPCs
- Community workshops (people-centred approach)
- Identify key stakeholders and existing governance structures
- Establish Grievance Redress Mechanisms
- Obtain Free, Prior and Inform Consent

Citizen science (RMI, Tuvalu)

Objective

Participatory activities related to monitoring, reporting, and management of water resources

Activities

- IFRC Science to Practice project concept
- Procurement of technical equipment
- Development of standardized survey forms
- Development of training module for citizen scientists
- Recruitment of citizen scientists
- Training of citizen scientists

IFRC

KoBoToolbox

gef UNDP

Workplan changes due to COVID19

- **Activities deferred to a later time**
  - Water resources assessment surveys
  - Land use surveys
- **Activities originally planned that can proceed**
  - Socio-cultural surveys
  - Community engagement workshops
  - Citizen science
  - Purchase of equipment
  - Preparation of major procurements
- **Activities brought forward**
  - Inundation modelling
  - Groundwater modelling

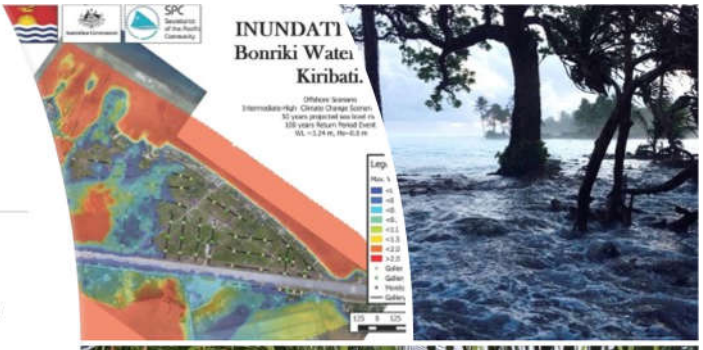
Land inundation surveys (all countries)

Objective

Identify areas which are prone to flooding from inundation events for improved protection of developed groundwater resources.

Activities

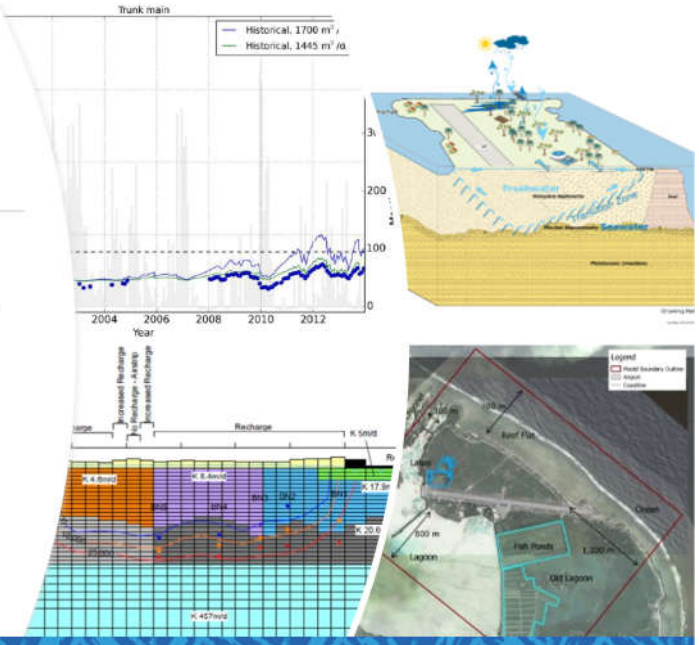
Terms of Referencefor consultancy drafted



Groundwater modelling (RMI)

Objectives

- Demonstration tool of advanced aquifer management
- Optimization of abstraction schemes, particularly useful to improve groundwater sustainability during droughts



Prodoc budget

Atlas Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total
71200	International Consultants	-	40,000	-	60,000	100,000
71300	Local Consultants	-	-	-	-	-
71400	Contractual Services - Individ	538,349	553,589	569,591	577,845	2,239,374
71600	Travel	190,609	190,609	190,608	170,612	742,438
72100	Contractual Services -Companies	328,555	400,928	400,927	261,776	1,392,186
72200	Equipment and Furniture	79,677	78,077	77,277	800	235,831
72400	Communic & Audio Visual Equip	2,000	2,000	-	-	4,000
72500	Supplies	736	500	500	500	2,236
72800	Information Technology Equipmt	13,334	9,044	9,044	5,544	36,966
73100	Rental & Maintenance -Premises	15,732	15,732	15,732	14,544	61,740
73300	Rental & Maint of Info Tech Eq	25,346	25,346	25,346	23,434	99,472
74100	Professional Services	3,000	3,000	3,000	3,000	12,000
74200	Audio Visual&Print Prod Costs	-	-	-	-	-
74500	Miscellaneous Expenses	13,153	13,153	13,153	13,153	52,612
74700	Transport, Shipping and handle	-	4,750	2,833	400	7,983
75700	Training, Workshops and Confer	68,629	68,629	68,629	68,631	274,518
	Grand total	1,279,120	1,405,357	1,376,640	1,200,239	5,261,356

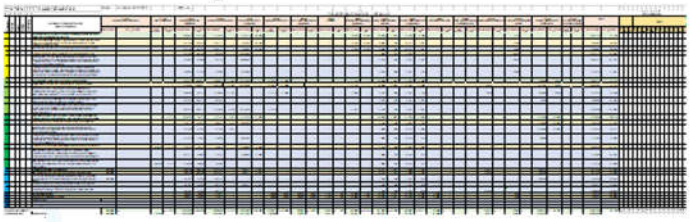
COVID-19 Project Implications

2021 CYWP (preliminary budget)

COVID-19 travel restrictions in 2020 and 2021

- Assume – no international travel in 2021.
- Critical role for National Project Coordinators and lead agency – initiate on ground activities.
- SPC Regional Project Team to provide online training and guidance to support implementation activities.
- Greater focus on communicating the project objectives, and the inclusion of the community in water resource management.
- Online workshops to include; project introduction, project administration/finance, community engagement approaches and tools, citizen science trainings, monitoring techniques.

2021 Budget – Global



Summary	Original Yr1 Budget USD	Revised Yr1 Budget USD	% Difference
Component 1 – Surveys, water supply	$470,708	$222,709	47%
Component 2 – Instrumentation	$439,912	$221,912	50%
Component 3 – Citizen science	$171,917	$160,228	93%
Component 4 – Knowledge mngmnt	$130,302	$74,392	57%
Component 5 – Project mngmnt	$66,281	$54,494	82%
2021 Budget – Revised (Covid 19)	**$1,279,120**	**$733,735**	57%

Palau implemented activities 2021

Activity	National Project Coordinator	Travel	Contractual services - companies	Equipment	ICT	Workshops	Total Budget	Total Disbursed Budget
Project Coordination	$ 44,000				$ 1,430		$ 45,430	$ 44,000
Citizen Science								
Community Engagement		$ 2,992				$ 7,920	$ 10,912	$ 10,912
Cultural Surveys			$ 25,189				$ 25,189	$ 25,189
Inundation assessments							$ -	$ -
Monitoring		$ 5,236		$ 9,983			$ 15,219	$ 5,236
TOTAL	$ 44,000	$ 8,228	$ 25,189	$ 9,983	$ 1,430	$ 7,920	$ 96,750	$ 85,337

- Note all budgets are inclusive of SPC management fee 10%

RMI implemented activities 2021

Activity	National Project Coordinator	Travel	Contractual services - companies	Equipment	ICT	Workshops	Total Budget	Total Disbursed Budget
Project Coordination	$ 33,000				$ 1,430		$ 34,430	
Citizen Science		$ 10,217				$ 1,720	$ 11,937	$ 11,937
Community Engagement		$ 2,624				$ 16,335	$ 18,959	$ 18,959
Cultural Surveys			$ 41,982	$ 26,290			$ 68,272	$ 41,982
Inundation assessments	$ 8,360						$ 8,360	$ -
Numerical Modelling			$ 27,500				$ 27,500	
Monitoring		$ 3,403		$ 22,000		$ 1,448	$ 26,851	$ 4,851
TOTAL	$ 41,360	$ 16,243	$ 69,482	$ 48,290	$ 1,430	$ 19,503	$ 196,308	$ 77,729

- Note all budgets are inclusive of SPC management fee 10%

Tuvalu implemented activities 2021

Activity	National Project Coordinator	Travel	Contractual services - companies	Equipment	ICT	Workshops	Total Budget	Total Disbursed Budget
Project Coordination	$ 33,000				$ 1,430		$ 34,430	$ 33,000
Citizen Science		$ 8,539				$ 1,720	$ 10,259	$ 10,259
Community Engagement		$ 2,145				$ 7,425	$ 9,570	$ 9,570
Cultural Surveys			$ 16,793	$ 19,195			$ 35,988	$ 16,793
Inundation assessments	$ 13,933						$ 13,933	$ -
Numerical Modelling							$ -	
Monitoring							$ -	$ -
TOTAL	$ 46,933	$ 10,684	$ 16,793	$ 19,195	$ 1,430	$ 9,145	$ 104,180	$ 69,622

- Note all budgets are inclusive of SPC management fee 10%

Regional implemented activities 2021

Activity	Contractual Services - Individual	Travel	Contractual Services - Companies	Equipment	Audio visual	Supplies	ICT equipment	Rental Facilities	Rental ICT	Workshops	Total Budget
Project Coordination	$ 267,007										$ 267,007
Project office operations				$ 1,600	$ 1,000	$ 559	$ 2,625	$ 12,485	$ 20,115	$ 21,588	$ 59,972
Website visibility products			$ 9,518								$ 9,518
TOTAL	$ 267,007	$ -	$ 9,518	$ 1,600	$ 1,000	$ 559	$ 2,625	$ 12,485	$ 20,115	$ 21,588	$ 336,497

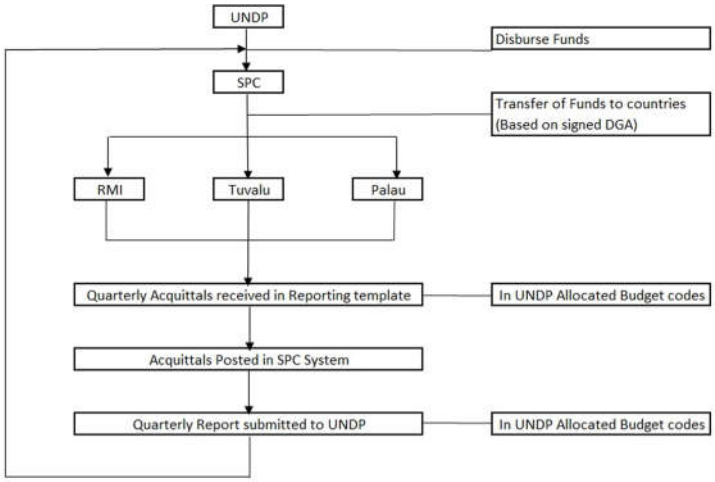
- Note all budgets are inclusive of SPC management fee 10%

MCA project implemented activities 2021

Activity	Contractual Services - Individual	Travel	Contractual Services - Companies	Equipment	Audio visual	Supplies	ICT equipment	Rental Facilities	Rental ICT	Workshops	Total Budget
Project Coordination	$ 377,007						$ 4,290				$ 381,297
Project office operations	$ -	$ -	$ -	$ 1,600	$ 1,000	$ 559	$ 2,625	$ 12,485	$ 20,115	$ 21,588	$ 59,972
Website visibility products	$ -	$ -	$ 9,518	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 9,518
Citizen Science	$ -	$ 18,756	$ -	$ -			$ -			$ 3,440	$ 22,196
Community Engagement	$ -	$ 7,761	$ -	$ -			$ -			$ 31,680	$ 39,441
Cultural Surveys	$ -	$ -	$ 83,965	$ 45,485			$ -			$ -	$ 129,450
Inundation assessments	$ 22,293	$ -	$ -	$ -			$ -			$ -	$ 22,293
Numerical Modelling	$ -	$ -	$ 27,500	$ -			$ -			$ -	$ 27,500
Monitoring	$ -	$ 8,639	$ -	$ 31,983			$ -			$ 1,448	$ 42,070
TOTAL	$ 399,300	$ 35,155	$ 120,983	$ 79,068	$ 1,000	$ 559	$ 6,915	$ 12,485	$ 20,115	$ 58,156	$ 733,735

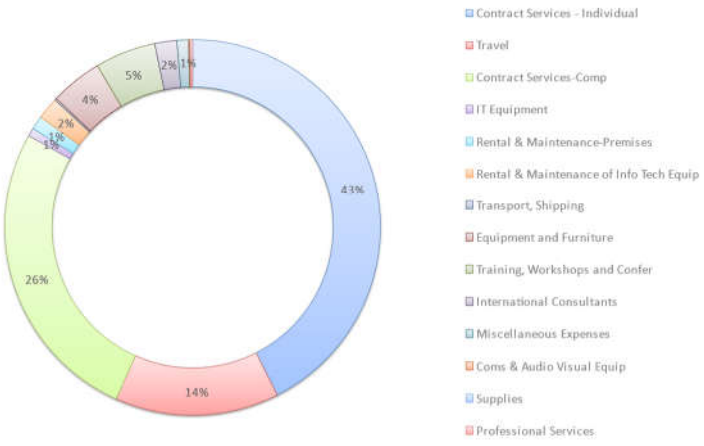
- Note all budgets are inclusive of SPC management fee 10%

Financial process

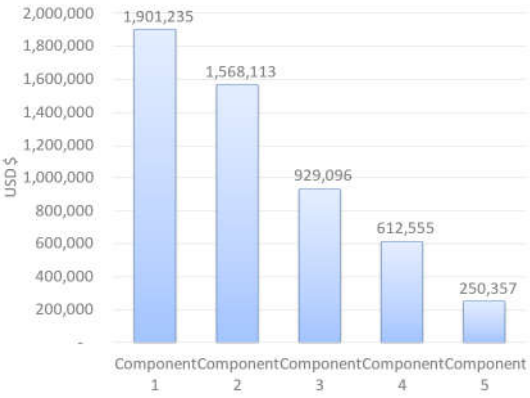


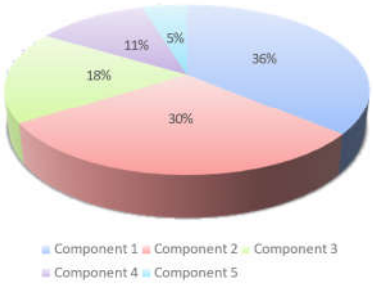
4-year budget breakdown by country

4-year budget breakdown by budget code (%)

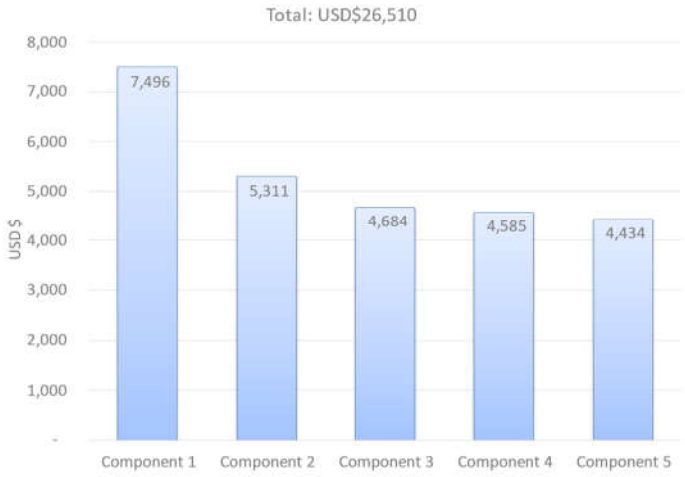


4-year budget breakdown by project component

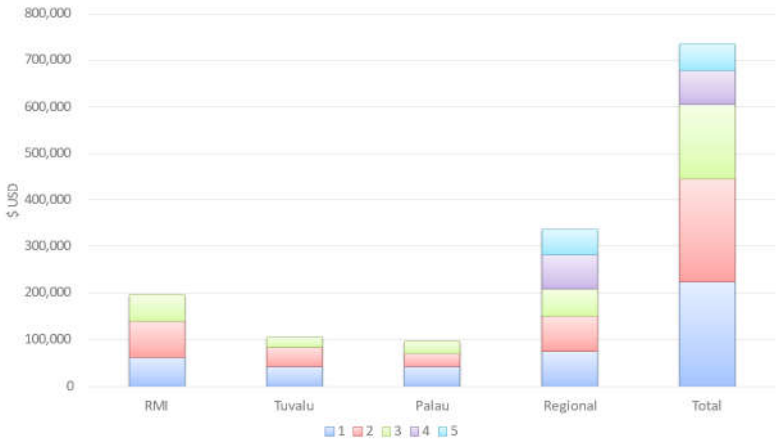




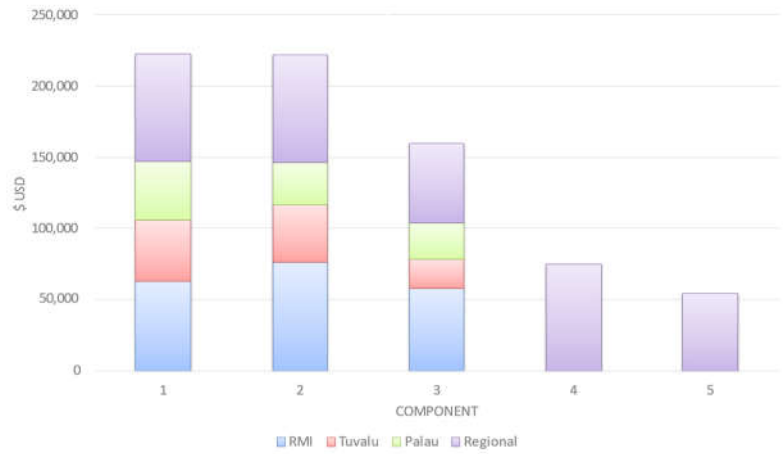
Oct-Dec 2020 expenditures



2021 budget breakdown by country and by project component



2021 budget breakdown by country and by project component





Pacific Community
Communauté du Pacifique

Engagement & Communications Strategy DRAFT

Lisa Kingsberry, Team Leader GEM Division
Joseph Hing, Digital Engagement GEM Division

Funded by: gef
In partnership with: UNDP

Objectives

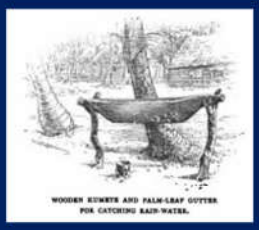
Pacific Community
Communauté du Pacifique

- Identity and brand development
- Communications & Engagement Approach / Rationale
- Country logo preference discussion
- Channels of communication (survey)

gef UNDP

MCA BRAND

A BRAND that is symbolic of the Pacific, it's land, the precious resources, people, culture and traditions. It brings the past into the future and binds them together.



Kumete (wooden kava bowl), Various cultures within the Pacific Islands have similar respect for the kava bowl. Small factors may change among cultures, like the name of it or how many legs it has. But overall, it adds significant value to the process of drinking and sharing kava. Some used the Kumete to collect rain-water and can be metaphor for a vessel holding the ground water. It symbolises the land projecting the aquifers for the people.

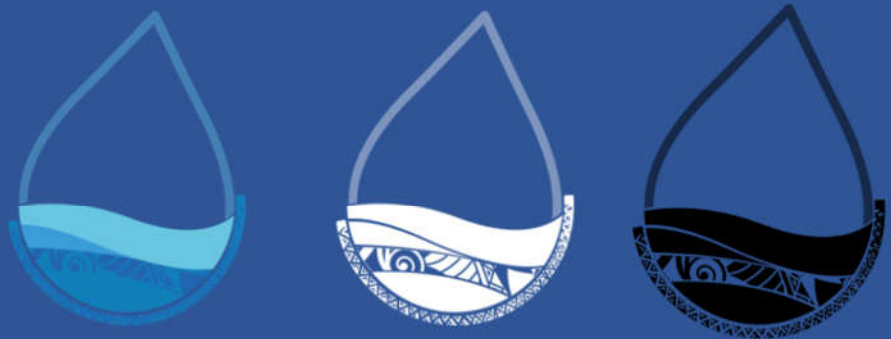
Pandandus Trees - People all around the Marshall Islands had methods of harvesting fresh water "The palm tree method is called in the Ralik Chain 'mammak and in the Ratak Chain it's known as 'emmak." The harvester uses a very young palm tree of the type that will have a slope to its trunk and carves out a hole in the tree's base. As the tree grows, the hole gets larger. When it rains, the water drizzles down the tree and into the hole.

This sort of gives a second layer to the symbol whereby its collecting the fresh water enclosing signifying ow precious this resources is for the coastal communities

Pacific Motif - This signifiers the connection to the communities, the people who are accessing the freshwater supply.

Groundwater - The different Colours Signify the various layers and boundary between the water tables

MCA BRAND | Colours



Full-Colour

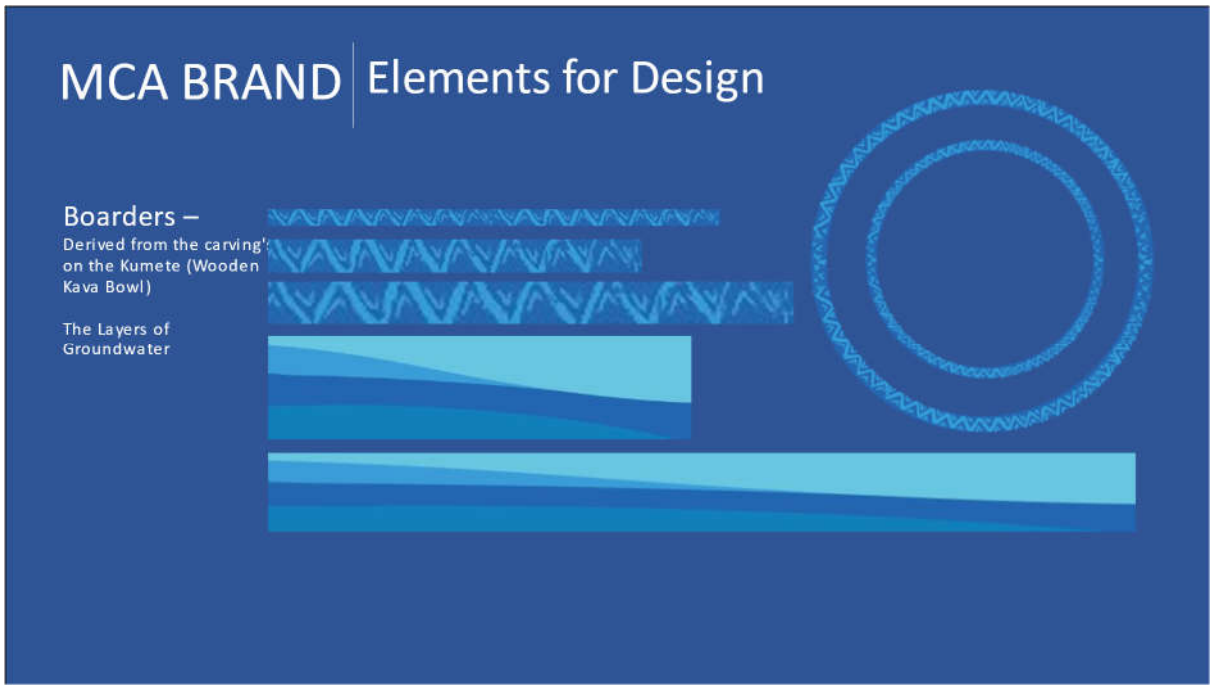
#69c6e1 #3b9dd7 #2265b1 #117fb9

White

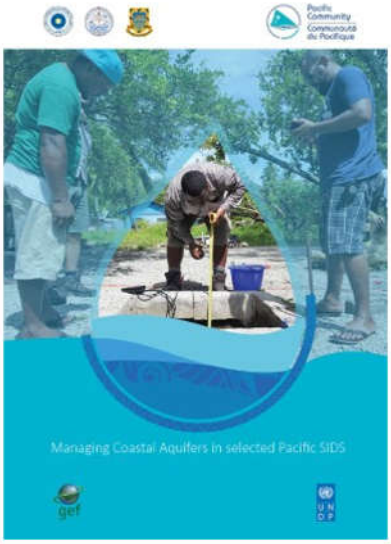
#ffffff

Black

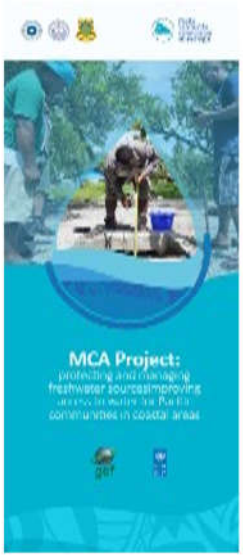
#000000


MCA BRAND
Elements for Design
Boarders –
Derived from the carving's on the Kumete (Wooden Kava Bowl)
The Layers of Groundwater


MCA BRAND
For Print



Report Cover
Factsheets



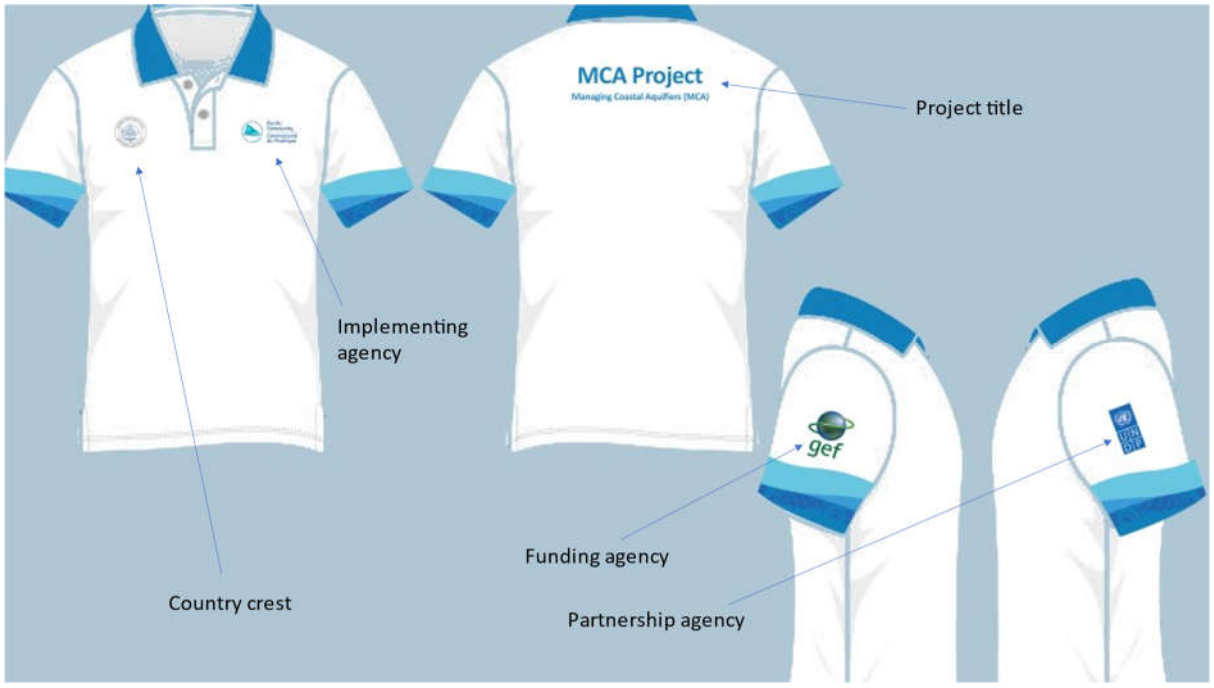
Pull-Up Banner

MCA Project Brand

For Merchandise


MCA Project:
MCA Project:


MCA Project
gef
FRONT

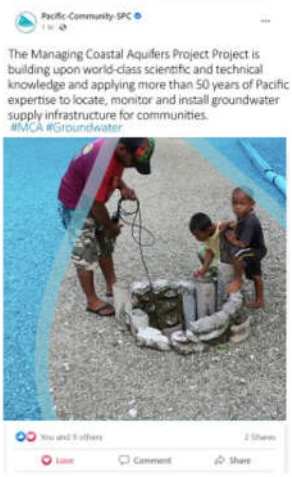

MCA Project
Managing Coastal Aquifers (MCA)
Project title
Implementing agency
gef
Funding agency
Country crest
Partnership agency

MCA BRAND

For Social Media

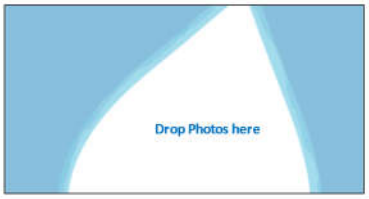
Twitter Posts

Facebook Posts



Facebook CANVA Frames

Twitter CANVA Frames



MCA BRAND

PowerPoint Template

Engagement & Communications Strategy

Phase one: 0-6 months

- Training in communications, engagement and tools useful for project implementation in the field (to be determined)
- Develop project website
- Finalise brand / agreement
- Develop two page project brief, templates social media, PowerPoint template, brand structure etc

Phase Two: 6-24 months

- IW Learn Lessons / Lessons Learned
- Coordinate effective materials, where appropriate, for community and stakeholder engagement
- Capture evidence based outcome and story content that supports MEL reporting

Phase Three: 24-36 months

- Impact based content showcasing success and outcomes
- Feed up MEL process to Members, donors, partners, communities

Monitoring & Evaluation of UNDP-GEF Supported Projects

Inception Workshop for the Managing Coastal Aquifer Project (MCAP)

Wednesday 17 March, 2021

Project Background

- **IGO Implementation** – using Nationally Implemented guidelines (NIM) :

- **Secretariat of the Pacific Community** - responsible for the management and delivery of programme activities, achieving project outputs & progress toward results and proper use of resources

- SPC procedures and guidelines apply as long as they do not contravene with Financial Regulations and Rules of UNDP.

- UNDP – role of monitoring and oversight

- Project Life: 4 years (July 2020 – July 2024)

- Project Budget: GEF USD 5,261,356 & Co Financing : USD 19,604,797

- Project Document Signed: 21, October 2020 **(clock starts ticking)**

In the context of the GEF-UNDP projects, tools for monitoring are

- **the logframe (Strategic Results Framework – SRF)**
- **For this GEF 6 project – Core Indicators**
- **the M&E plan included in the project document**
- **the reporting tools**

UNDP-GEF reporting requirements in the project cycle

1) Inception Workshop
2) Quarterly Monitoring Reports
3) Regional Steering Committee Meetings
4) Periodic Monitoring
5) Audit
6) Action Plans – gender, lessons learnt
7) Project Review (APR)/Project Implementation Review (PIR)
8) Midterm Review
9) Terminal Evaluation
10) Core Indicators

Reporting requirements

Inception Workshop and Report

- Within 3 months after start of project implementation
- Allows for updating of the project to accommodate significant physical and political environment after submission
- Allows for review of indicators and targets, particularly the setting of baselines
- Inception Report due within one month of inception workshop

Quarterly Operational Reports (QOR)

- Monitor details of performance and management
- Progress made will be monitored in the UNDP Enhanced Results Based Management (ERBM) platform.
- Needs to be linked to annual reporting
- Identify Risks and adaptative management
- Monitoring of environmental and social risks, and corresponding management plans as relevant

Reporting requirements

Regional Steering Committee Meetings

- Annual **Meetings -highest level of decision making**
- **Reporting on project progress against the targets** to assess performance,
- **Presentation and approval of Annual Work Plans and Budgets**
- **Attends to Issues requiring high level decision making**
- **Provide strategic support /direction and recommendations for the project**
- **Advise on major and minor amendments to the project within parameters set by UNDP**
- **Managing conflicts**

Periodic Monitoring

- **Site Visits - assess first hand project progress (reporting versus reality). Has changed since Corvid 19**

Audits

- **At least once in project life (delivery of minimum US$150,000)**
- **Threshold of USD$4500,000 delivery in a year**

Reporting requirements

- Stakeholder Action Plan- annually
- Gender Action Plan -annually
- Lessons learned and knowledge generation - annually
- Monitoring of environmental and social risks, and corresponding management plans as relevant – ongoing
- Addressing environmental and social grievances

Project Implementation Review (PIR)

All FSPs and MSPs must complete a PIR annually for each year of implementation

- The **1st PIR** is due after one year of implementation

  → *July – June*
- The **terminal PIR** serves as the final project report (usually done before TE)
- PIRs represent key input to the MTR and TE processes!

What are to be report/evaluated in the PIR

1. **Progress: ratings. Encourage GEF OFP to rate progress as well - Toward development objective (DO) = objective + outcome level, cumulative**
2. **Risk: critical risk in ATLAS + progress ratings = GEF risk system (high, moderate, low)**
3. **Evaluation: how the project address recommendations of MTR and TE, co-financing received**
4. **Partnerships: lessons learned working with indigenous communities, NGOs, private Sector, Small Grants Programme**
5. **Gender: how is it addressed in project implementation**

MIDTERM REVIEW

- An Independent review
- **Mandatory** for all GEF-financed **full-sized projects** (FSPs)
- Primarily a **monitoring tool** designed to identify progress, challenges and outline **corrective/remedial actions** to ensure that a project is on track . *Report on co-financing. Update core indicators.*
- Addresses both UNDP & GEF requirements
- MTR – September, 2022
- Update GEF Focal Area Tracking Tools: (IW & BD)
- MTR process should be initiated after the completion of the 2 nd APR/PIR, regardless of the length of the project

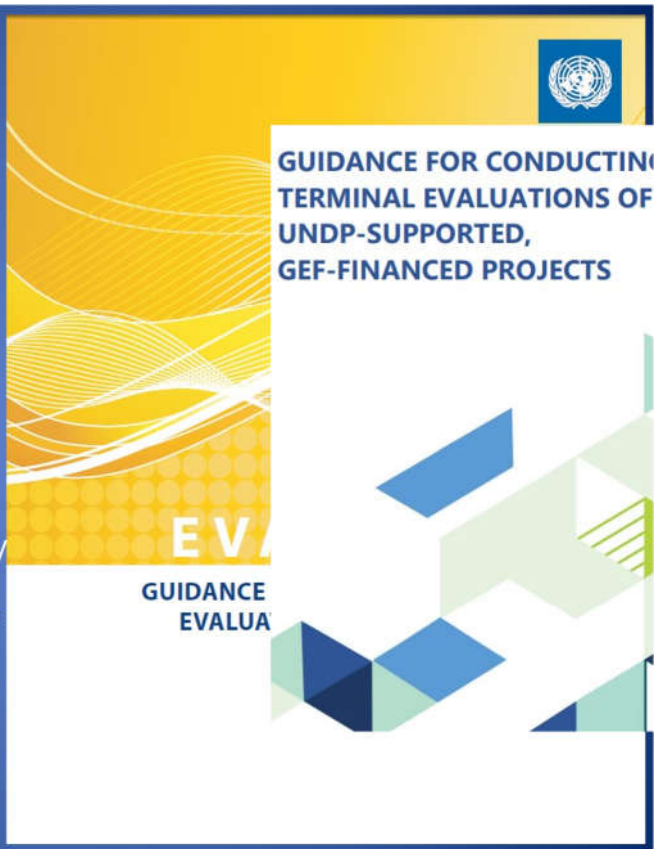
GUIDANCE FOR CONDUCTING MIDTERM REVIEWS OF UNDP-SUPPORTED, GEF-FINANCED PROJECTS

Purpose of MTE and TE

1) Assess the efficiency and effectiveness of a project in achieving its intended results. (i.e. how is/was the project managed?)
2) Assess the relevance and sustainability of outputs/outcomes. (i.e. did the project achieve what it was supposed to achieve?)
3) Provides evidence-based information that is independent, credible, reliable and useful. (i.e. serious process!)
4) Key to managing for results and reinforcing accountability for results.
5) Key for learning and sharing knowledge to improve project design.

Terminal Evaluations of UNDP-supported GEF-financed Projects

http://web.undp.org/evaluation/guideline/documents/GEF/TE_GuidanceforUNDP-supportedGEF-financedProjects.pdf



The TE Process

- All projects must undertake an **independent** TE
- Cost of TE charged to the project budget
- Look for evaluators 3 – 4 months before start of TE process
- TE **must** be undertaken during the period 6 months before operational closure; ideally 3 months*before* operational closure
- TE report MUST be translated into English or will not be accepted by GEF!
- TE - 2020

M&E RESOURCES

UNDP Evaluation Office
http://web.undp.org/evaluation/

GEF Evaluation Office
http://www.thegef.org/gef/eo_office

Reporting Requirements

- **Core Indicators** -measure progress in achieving the impacts and outcomes established at the portfolio level under the focal areas
- **Applied three times**: at CEO endorsement, at project mid -term, and at project completion.

- **International Waters (IW) -2**: Balance Competing Water-uses in the Management of Surface & Groundwater; **Program 3**: Advance Conjunctive Management of Surface& Groundwater Systems

- **Land Degradation (LD)-3**: Integrated Landscapes: Reduce pressures on natural resources from competing land uses in the wider landscape; **Program 4:** Scaling-up sustainable land management

Objectives of UNDP's Social and Environmental Standards (SES)

i. **Strengthen the social and environmental outcomes of programmes and projects**

ii. **Avoid adverse impacts to people and the environment**

iii. **Minimize, mitigate, and manage adverse impacts where avoidance is not possible**

iv. **Strengthen capacities for managing social and environmental risks**

v. **Ensure full and effective stakeholder engagement**

"Social and environmental sustainability are cornerstones of human development and poverty reduction."
- UNDP SES, page 4

15

Social and Environmental Standards (SES)

When?

The SESP is conducted:

a) During project design process

b) On the final UNDP Project Document

c) During implementation, as needed

Who?

- UNDP conducts SESP during project design process
- Project team manages risks during project implementation; identifies and manages any new risks

M & E

- Any quality concerns raised through M & E activities must be addressed by UNDP and SPC
- UNDP Pacific Office responsible for complying with all UNDP Project level M & E requirements
- M & E plan – page 45- 46 (**Mandatory GEF M&E Requirements and M&E Budget)**

Socio-cultural Surveys

Allow the identification of a ll cultural heritage (both tangible and intangible), their values/significance, in relation to water resources use and management and the planned project activities

Identify indigenous people and provide socio-economic, political and historical context as well as the traditional knowledge and beliefs, customs, laws, institutions and worldviews around land, territories and natural resources management

Utilise existing natural resources conservation frameworks and approaches to:

- engage government authorities and other key stakeholders,
- engage community members through focus group discussions with special considerations to cultural heritage, gender equity, vulnerable and marginalised indigenous people
- document record community-specific or island-specific linkages between cultural heritage and traditional knowledge with a focus on both water resources management (historically and for the future) and the potential impacts of project activities


MICS
Marshall Islands Conservation Society
The Reimaanlok Process
Dua Rudolph
dua@atollconservation.org
www.atollconservation.org


The Reimaanlok Process
"Eight-step approach aiming to establish a management plan fully owned, led and endorsed by local communities based on their needs, values and cultural heritage"
Initiated in early 2000

Coastal Management Advisory Counci (CMAC)

- Cross-sectoral **working group** all with a common interest in the conservation, development and management of coastal and marine resources

- Functions as an **advisory and coordination body** to ensure the coordination and collaboration to achieve national efforts in conservation

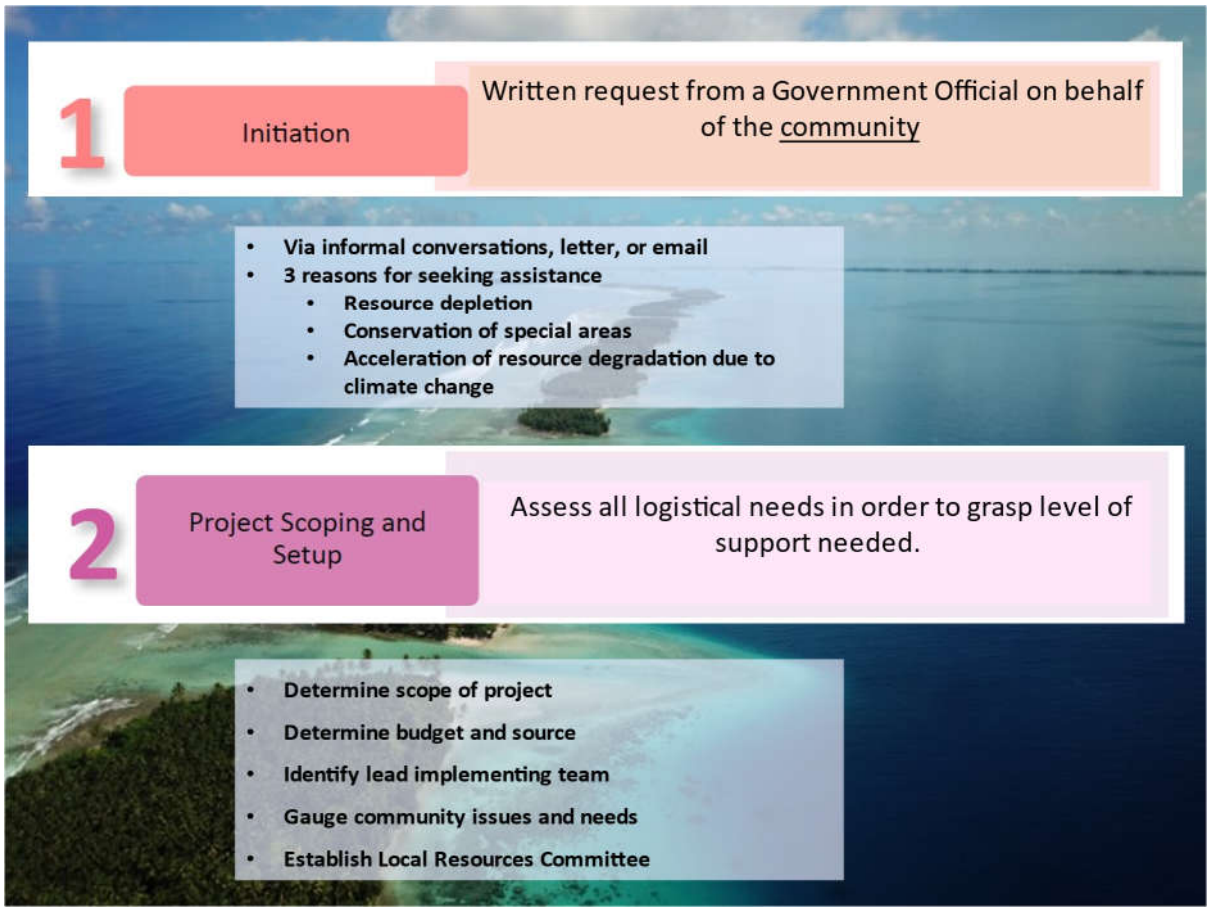
Coastal Management Advisory Counci (CMAC)

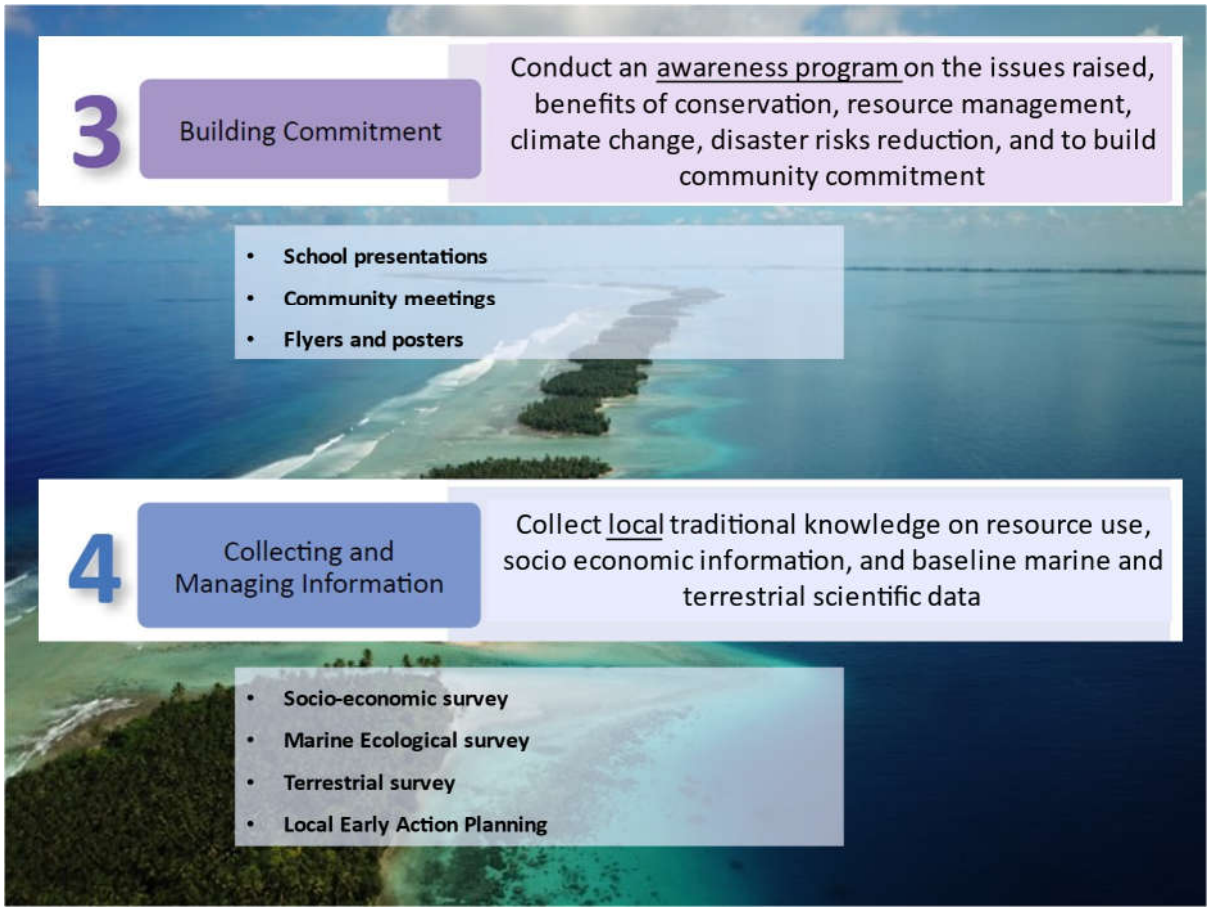
Government Agencies
Marshall Islands Marine Resources Authority
RMI Environmental Protection Authority
Ministry of Resources and Development
Climate Change Directorate
Ministry of Internal Affairs

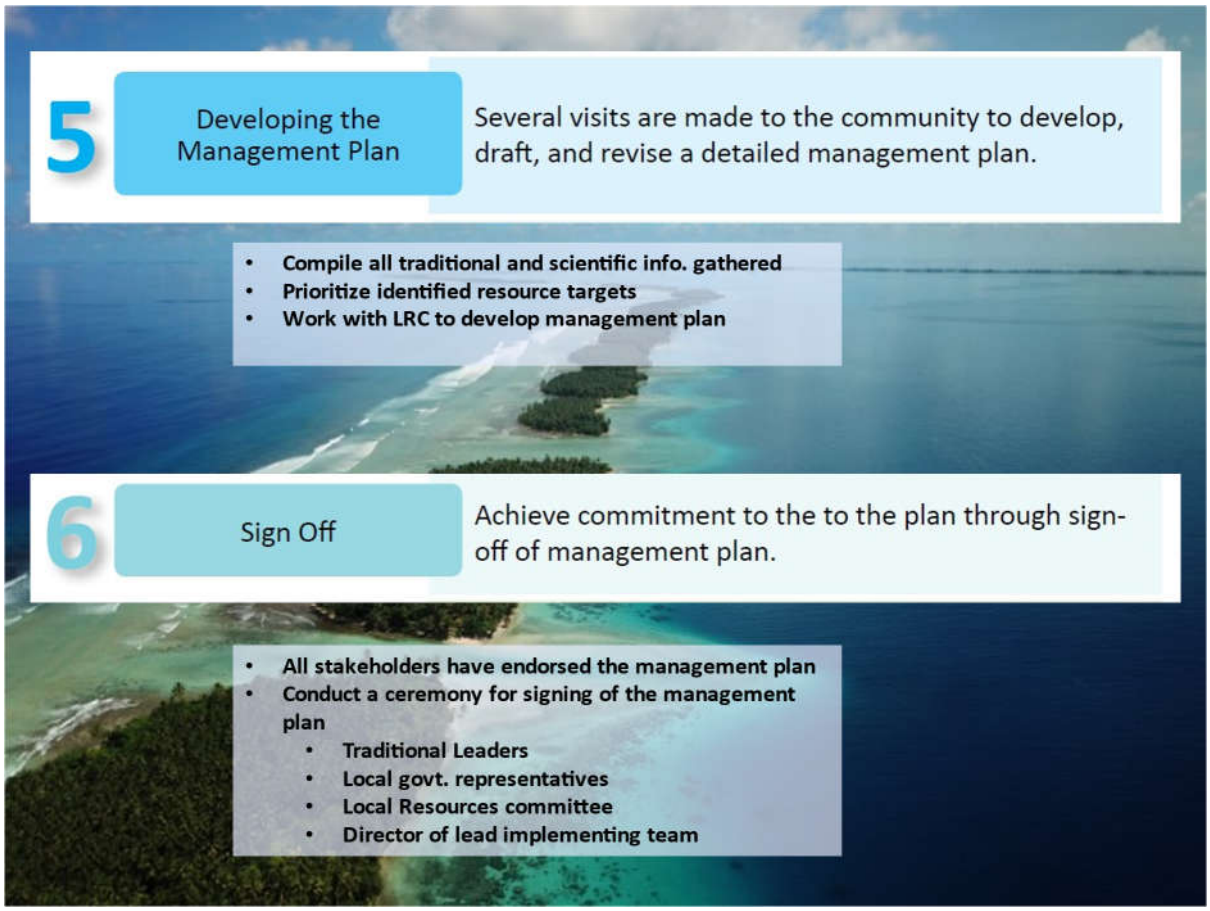
Civil Societies (NGOs)
Marshall Islands Conservation Society
Women United Together Marshall Islands
RMI Red Cross

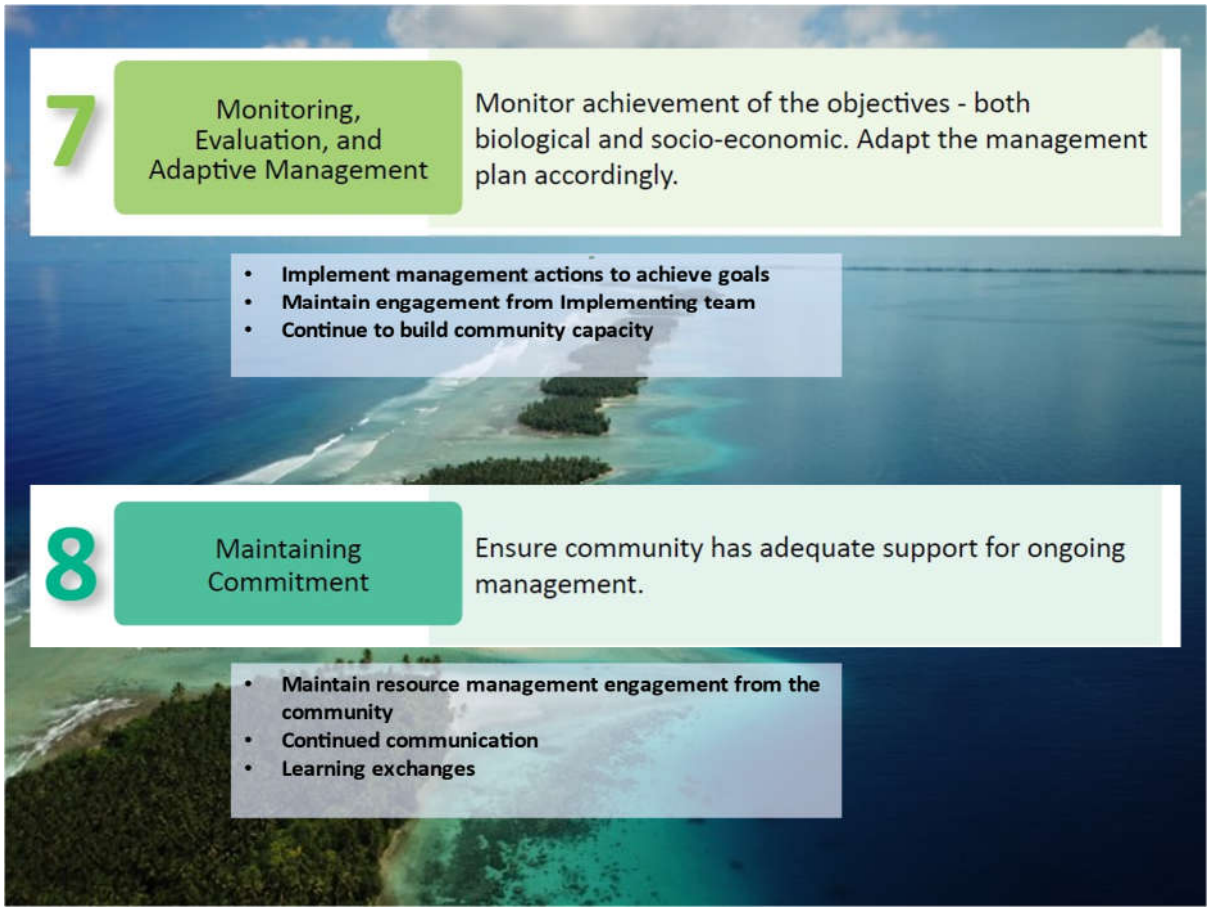
Academic Institutions
University of the South Pacific
College of the Marshall Islands

Others
International Organization for Migration

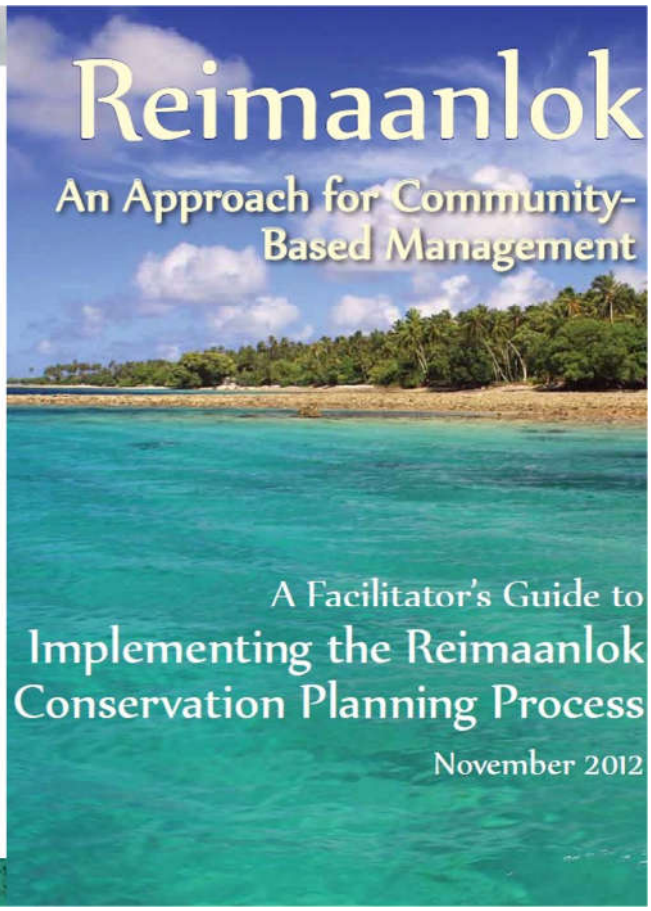

1
Initiation
Written request from a Government Official on behalf of the community
Via informal conversations, letter, or email
3 reasons for seeking assistance
Resource depletion
Conservation of special areas
Acceleration of resource degradation due to climate change
2
Project Scoping and Setup
Assess all logistical needs in order to grasp level of support needed.
Determine scope of project
Determine budget and source
Identify lead implementing team
Gauge community issues and needs
Establish Local Resources Committee


3
Building Commitment
Conduct an awareness program on the issues raised, benefits of conservation, resource management, climate change, disaster risks reduction, and to build community commitment
School presentations
Community meetings
Flyers and posters
4
Collecting and Managing Information
Collect local traditional knowledge on resource use, socio economic information, and baseline marine and terrestrial scientific data
Socio-economic survey
Marine Ecological survey
Terrestrial survey
Local Early Action Planning


5
Developing the Management Plan
Several visits are made to the community to develop, draft, and revise a detailed management plan.
• Compile all traditional and scientific info. gathered
• Prioritize identified resource targets
• Work with LRC to develop management plan
6
Sign Off
Achieve commitment to the to the plan through sign-off of management plan.
• All stakeholders have endorsed the management plan
• Conduct a ceremony for signing of the management plan
• Traditional Leaders
• Local govt. representatives
• Local Resources committee
• Director of lead implementing team


7
Monitoring, Evaluation, and Adaptive Management
Monitor achievement of the objectives - both biological and socio-economic. Adapt the management plan accordingly.
• Implement management actions to achieve goals
• Maintain engagement from Implementing team
• Continue to build community capacity
8
Maintaining Commitment
Ensure community has adequate support for ongoing management.
• Maintain resource management engagement from the community
• Continued communication
• Learning exchanges

- Compiled into a **Facilitator's Guide**
- **Each step** has goals – activities – guidelines tools to be used
- Variable timeframe
- Dynamic/adaptable document
- Replicable



MICS
Marshall Islands Conservation Society

Thank You

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gef UNDP

Why citizen science

- Remoteness of island communities
- Collecting and communicating information on impacts (natural/anthropogenic) to water sources is often difficult
- Driven by outer island communities through training and technology
- Citizen scientists become first responders providing information to
  - Improve and coordinate national/international response
  - Assist governments with general water resource status
- Community engagement will improve
  - water resources management capacity and
  - resilience to climate variability

IFRC

Objective of MCA citizen science

Build capacity and resources within the communities of the outer islands to collect, communicate, and comprehend information on the status of their water sources, for improved water resource management, and assessment of impacts.

IFRC

IFRC and MCA project collaboration

- IFRC Project "Science to Practice: citizen contributions to collection and use of data in response to a changing climate"
  - Timeframe: June 2021- June 2022 (12 months)
  - Focus: Regional with a focus on countries at risk of excess and/or shortage of rainfall, including Tuvalu, Palau, Marshall Islands, and Federated States of Micronesia with other National Societies to be included as needed/interested.
  - Funding for component: 160K AUD
- MCA Project
  - Timeframe: June 2021- June 2024 (36 months)
  - Focus: Tuvalu, Marshall Islands
  - Funding for component: 195K USD
- Potential synergies to extend and strengthen the concept

IFRC

MCA citizen science approach

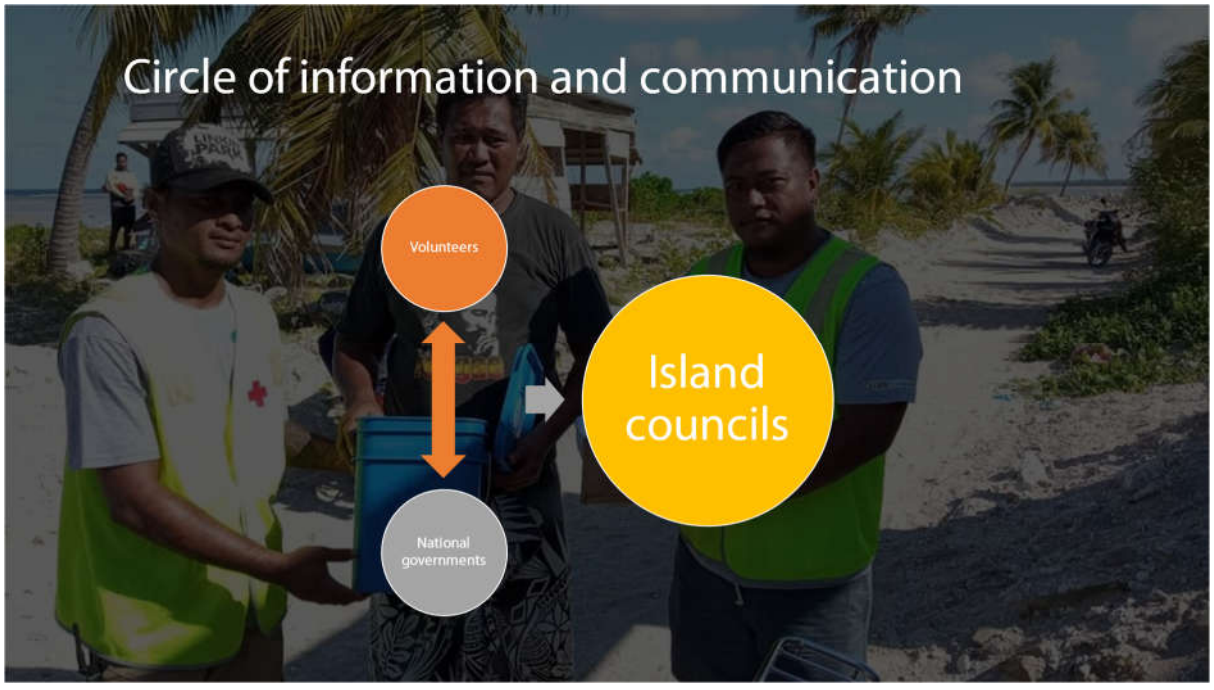
PEOPLE
Government/community water technicians supported by RC volunteers and youth

TECHNOLOGY
Camera and GPS enabled smart phones, preloaded with standardized questionnaire templates.
Basic water testing instruments

TRAINING
Annual training of trainers and volunteers

– Data collection by survey teams at each project site (monthly or as required).
– Data sent real-time to centralized platform.
– Volunteers can view their own measurements as well as from other islands/countries.
– Broad understanding on climate and water system is developed.
– Improved water management.

IFRC



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Indicative timeline of activities

Pacific Community
Communauté du Pacifique

Year 1

- Procurement of technical equipment
- Development of survey forms
- Development of training modules
- Recruitment of citizen scientists
- Annual training workshop
- Initial role out

Year 2

- Quarterly monitoring of selected rain tanks and household wells
- Rainfall monitoring
- Annual training workshop
- Progress evaluation

Year 3

- Quarterly monitoring of newly installed infiltration galleries and monitoring bores
- Annual training workshop
- Progress evaluation and long-term sustainability of activities

IFRC

Pacific Community
Communauté du Pacifique

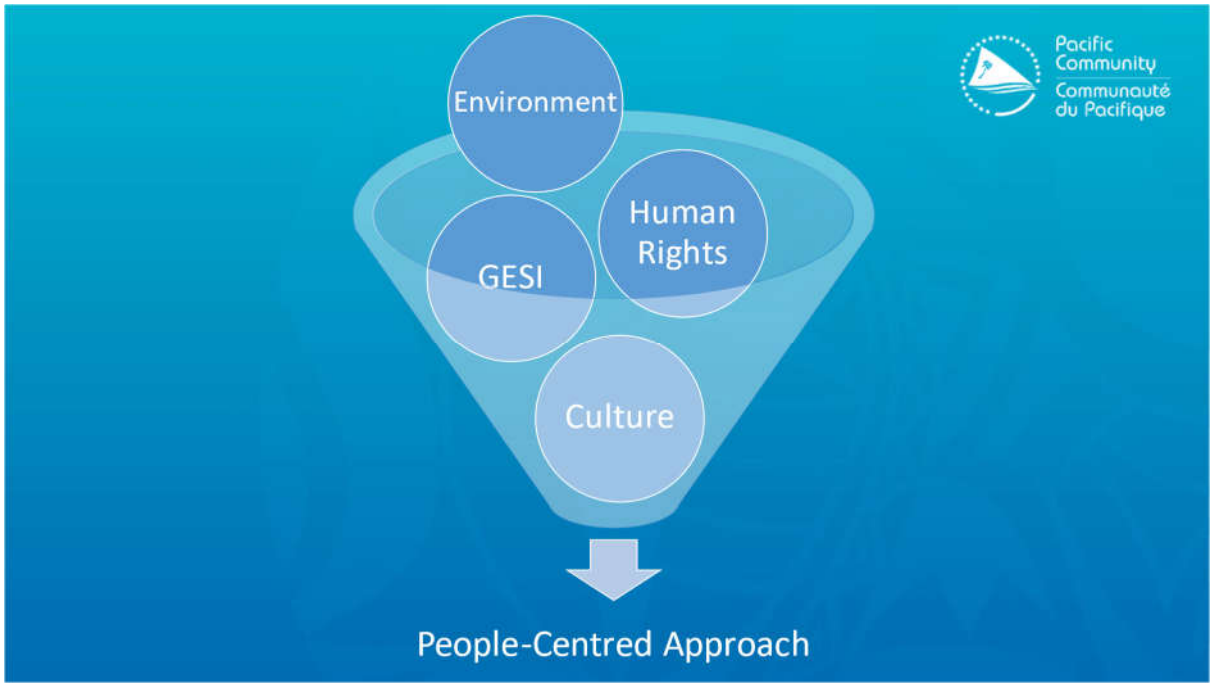
Introduction to a People-Centred Approach

gef UNDP

A People-Centred Approach:

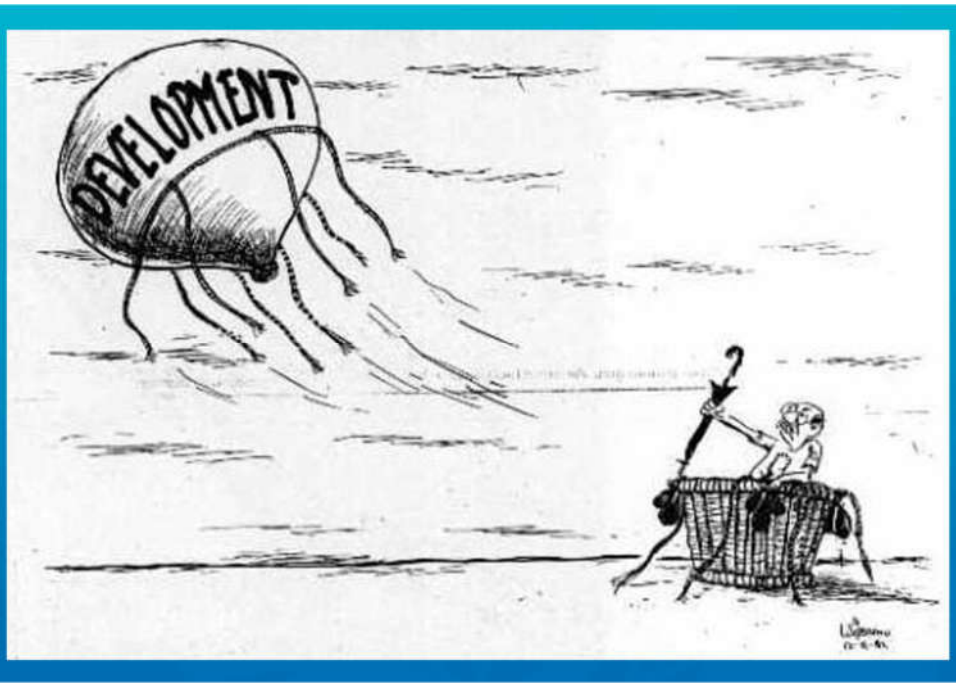
- Respects and protects human rights;
- Is gender responsive and socially inclusive;
- Environmentally responsible and sustainable; and
- Respects culture.

Pacific Community
Communauté du Pacifique



The key points

- Put people at the centre;
- Ensure equality, access and ownership;
- Do no harm; and
- Leave no one behind.



The Social and Environmental Responsibility Policy

- Mandates SPC to use a People-Centred Approach
- The SER Policy is "the what" – a People-Centred Approach is "the how".

PLANET

P - Participation

L - Link to rights

A - Accountability

N - Non-discrimination

E - Empowerment

T – Transforming social norms