

Concept Note

Draft, updated 26 September 2018

Tuvalu Vulnerability and Environmental and Social Impact Assessment

(a component of the Tuvalu Coastal Adaptation Project)

Background

The United Nations Development Programme (UNDP) is considering to engage the Pacific Community (SPC) in a project to undertake an Environmental and Social Impact Assessment (ESIA) and island vulnerability study as part of the Tuvalu Coastal Adaptation Project (TCAP).

This concept note serves as the project brief to provide a firm foundation for the project and to support the start-up process. Once the project is initiated, the project brief will be extended and refined in the Project Initiation Documentation (PID).

The purpose of the PID is to further define the project, in order to form the basis for its management and an assessment of its overall success. The PID will be the first deliverable under the project and give the direction and scope of the project and (along with the staged workplan) forms the 'contract' between the Project Manager and the Project Board. The version of the PID that was used to gain authorization for the project by the Board is preserved as the basis against which performance will later be assessed when closing the project.

Project Objectives

The Tuvalu Coastal Adaptation Project (TCAP) is a Green Climate Fund (GCF) project to reduce the vulnerability of three islands in Tuvalu to coastal inundation and erosion. This overall objective is attained through the achievement of three outputs:

TCAP Output 1	Strengthening of institutions, human resources, awareness and knowledge for resilient coastal management
TCAP Output 2 (supported by the activities of this project)	Vulnerability of key coastal infrastructure is reduced against wave induced damages in Funafuti, Nanumea and Nanumaga
TCAP Output 3	A sustainable financing mechanism established for long-term adaptation efforts

Note that the objective of this project is to undertake work to primarily support the implementation of output 2 of the TCAP. The targeted areas are Nanumea (western oceanside shore adjacent to the village), Nanumaga (western shore adjacent to the village) and Funafuti (lagoon shore of Fogafale).

The TCAP involves the construction of coastal protection infrastructure at these three locations to reduce inundation as well as reducing coastal erosion. An understanding of the local setting and

processes along these high-value coastlines is therefore critical to the development of any design solutions. This will be directly addressed by the activities proposed in this project. Secondly, this project also addresses the need for an Environmental and Social Impact Assessment (ESIA) for the TCAP along with providing finer scale hazard information for the final engineering design of the coastal protection infrastructure at the target locations. Thirdly, the project will support Tuvalu institutions and departments, through capacity building via hands-on training, to better plan for climate change and improve long-term planning of island investments by undertaking a broader coastal vulnerability and risk assessment to encompass all nine islands.

Desired Outcomes

The project will have several main components (also referred to as expected results):

<p>Result 1</p> <p>Coastal hazards on Funafuti, Nanumaga and Nanumea defined</p>	<p>This component will provide a hazard assessment at the “high value shorelines” identified by the TCAP. This will inform the engineering design of the proposed coastal protection structures. The hazard mapping will be prioritised in Fogafale first.</p>
<p>Result 2</p> <p>Environmental and social impacts of proposed coastal protection works assessed</p>	<p>The Environmental, Social and Impact Assessment (ESIA) will be conducted to minimise and mitigate environmental impacts for capital works at the identified three TACP sites. The ESIA will be prioritised in Fogafale first.</p>
<p>Result 3</p> <p>National coastal vulnerability assessed</p>	<p>A risk-based coastal hazard assessment will be carried out for village sites at all nine islands. This risk assessment will inform the development of an adaptation plan and future investments.</p>
<p>Result 4</p> <p>Project managed</p>	<p>This ensures that proven good practice in management and governance of project is applied. Stakeholders are properly represented in planning and decision-making.</p>

Components 1, 2 and 3 incorporate training modules aimed at building the national capacity for coastal monitoring, conducting ESIA processes and hazard risk assessments.

Project Scope and Exclusions

The total timeframe for the project is 24 months. This project will carry out three different kinds of studies: a coastal hazard mapping under Result 1; an ESIA under Result 2; and a risk assessment under Result 3.

This project makes a distinction between a hazard assessment and a risk assessment. The hazard assessment and associated mapping seeks to estimate the likelihood or probability of the coastal hazard occurring at a high value shoreline. The risk assessment considers both the likelihood of the hazard and the consequence to the built assets as well as social or natural values. This follows the definition of risk as a product of likelihood and consequence (ISO 31000). The tolerance to a particular hazard will vary between islands or area and also needs careful consideration during the risk assessment process.

The project will also carry out an ESIA (Result 2), which follows well established and documented processes that have to meet UNDP safeguard measures as well as those regulations applicable under the Tuvalu Environmental Protection (EIA) Act.

The assessments need to be informed by robust data and information that aligns with the purpose and scale of the assessment. For example, the national coastal vulnerability assessment (Result 3) may adequately be supported by national mapping tools, expert knowledge, and qualitative community information. However, the local hazard assessments (Result 1) on Funafuti, Nanumea and Nanumaga to underpin a decision on costly coastal protection infrastructure needs additional detailed quantitative information and data. Likewise, the ESIA will need to collate data on property and boundary information; type, number and location of major assets and infrastructure; socio-economic profile of the population in the coastal areas; main businesses and facilities operating in the coastal area; and ecosystems, refuges, fauna and flora present, particularly endangered species, ecological communities and assemblages. Whilst sufficient baseline data is likely to already be available for the lagoon shore of Fogafale from previous studies and reports, these data are not readily available for all areas, and resources need to be committed to collect and analyse this information.

The national island assessment will target the collection of baselines pertinent to the identification, management and mitigation of coastal hazards on each island. Assessing risks and vulnerabilities to climate change will help to create a risk register to support identifying and planning adaptation options. It is envisaged that a risk register with risk treatment options will ultimately support funding proposals for coastal adaptation pathways to be considered and implemented across all nine islands. These results will be presented in separate island reports and integrated with the results of the Island Vulnerability Assessments (IVA) process currently being implemented separately by the Government of Tuvalu.

The scope, systems to be analysed and the scales (spatial and temporal) of the assessments are summarised in the table below.

Result	Overall scope	System under analysis	Scale of assessment
Result 1 Coastal hazards on Funafuti, Nanumaga and Nanumea defined	The hazard assessment and associated mapping will seek to estimate the likelihood or probability of the coastal hazards occurring. The hazards that will be considered include coastal inundation and coastal erosion.	High value shoreline areas and future coastal protection assets of Funafuti, Nanumaga, and Nanumea. The hazards that will be considered are erosion and inundation.	Hundreds to tens of metres with a focus on planned coastal protection works. In a temporal sense, the studies will consider coastal hazards under sea level rise projections.
Result 2 Environmental and social impacts of proposed coastal protection works assessed	The content of the ESIA report will be based on both UNDP safeguards criteria and Tuvalu's National EIA guidelines where applicable.	Environments and communities impacted by proposed protection works along high value shoreline areas on Funafuti, Nanumaga, and Nanumea	Hundreds to tens of metres. High value coastal areas considering immediate and medium term (50 years) impacts of works.
Result 3	The risk assessment considers both the likelihood of the coastal hazards (inundation and	All islands of Tuvalu with particular focus on populated areas and village locations. Erosion	Regional and national scale assessment for all islands including hundreds to tens of

National coastal vulnerability assessed	erosion) and the consequence to defined built, social or natural values.	and inundation hazards will be considered, as well as built assets and community values.	metres at the village and community level (one or two climate scenarios with a planning horizon to the end of the century).
Result 4 Project managed	Ensure that the project is managed according to well established good practices.	Major project components such as initiation, product delivery, and project closure.	Lifetime of project (24 months).

All results (with the exception of Result 4, Project Management) will have training and capacity building components built-in. These details will be unpacked and further described in the PID.

Constraints and Assumptions

The table below is a probability impact grid that shows the level of risk for some identified factors. This summary will inform a more comprehensive risk register during the project initiation process.

DRAFT

Risk	Likelihood	Consequence	Risk rating	Response option(s)	Responsibility
Operational: Inter-island transport schedule delays visits to outer islands and project timelines cannot be met	Likely	Moderate	Medium	Accept. The fieldwork will have to be planned around the local inter-island vessel schedule. The alternative option of chartering a vessel is very expensive and cannot be factored into the available budget.	SPC
Organisational: Project scope creep due to the shifting priorities for conceptual approach to coastal protection	Likely	Moderate	Medium	Reduce. Action is required to ensure that coastal protection options are clear and well defined. TCAP is already working on raising awareness on the project	UNDP and GoTV
Organisational: A delay in signing the contract will delay the project initiation and the overall schedule of works will be pushed back	Almost certain	Moderate	High	Accept. No mitigating measures can be put in place, other than for all parties to expedite project initiation processes.	UNDP
Organisational: Preliminary engineering drawings for coastal protection works are not available in time to determine the detailed requirements for the ESIA	Likely	Moderate	Medium	Transfer. The conceptual design is not the responsibility of the project, but are required to start certain components (e.g. Result 2, ESIA).	UNDP and GoTV
Organisational: SPC staff are not available to directly undertake all of the technical assistance activities	Almost certain	Moderate	High	Reduce. SPC advisers may not be available at short notice or for extended periods due to other commitments. Some activities will have to be completed by consultants. It will be necessary to start this process early on, e.g. write ToRs.	SPC
Organisational: SPC procurement policy procedures delay contracting consultants	Likely	Moderate	Medium	Reduce. Procurement and processing workflows have caused delays in other projects. The SPC Procurement Unit is an important stakeholder in the project and it will be necessary to engage them early on.	SPC
Data: Critical baseline datasets such as LiDAR are not available in time for the assessments	Possible	Major	High	Reduce. Other, less accurate, datasets such as the satellite derived bathymetry have to be used. The UKHO has recently derived such a dataset. GoTV will be required to make this available to SPC early on. This will increase the uncertainty in the results. Timelines may have to be adjusted to fit the availability of the LiDAR data.	SPC and GoTV

Risk	Likelihood	Consequence	Risk rating	Response option(s)	Responsibility
Safeguards: Members of the community are strongly opposed to the TCAP project and perceive impacts as unacceptable	Possible	Minor	Low	Accept. This may have unwanted impacts on the overall TCAP project, but should not prevent this project from being completed.	GoTV

Users and Stakeholders

This section outlines the main internal and external stakeholder that have an interest in the project. This will be further developed into the stakeholder engagement approach for the PID. The process of identifying and communicating effectively with those people or groups who have an interest in or influence on the project's outcome. Effective communication with key stakeholders, both internal and external to the corporate, programme management or customer organization, is essential to the project's success.

United Nations Development Programme (UNDP)				
Organisation	Title	Name	Contact	Notes
UNDP Resilience & Sustainable Development Programme	Team Leader	Mr Kevin Petrini	Kadavu House Suva. FIJI kevin.petrini@undp.org Ph: 331 2500	
TCAP Project Management Unit (Suva)	Deputy Project Manager – TCAP	Mr Jone Feresi	Kadavu House Suva. FIJI jone.feresi@undp.org Ph: 331 2121	
UNDP Consultant	Chief Technical Advisor – TCAP	Mr Arthur Webb	Kadavu House Suva. FIJI arthur.webb@undp.org Ph: 331 2121	
TCAP Country Office	Project Management Consultant	Mr Alan Resture	Partnership House Funafuti TUVALU Email: aresture@gmail.com Ph: (688) 20883	
Government of Tuvalu (GoTV)				
Organisation	Title	Name	Contact	Notes
Host Ministry, Government of Tuvalu, Office of the Prime Minister	Director for Climate Change Policy & Disaster Coordination	Ms. Pepetua E Latasi	Office of the Prime Minister Government of Tuvalu Funafuti TUVALU Ph: +688 20517 pepetua@gmail.com	Board Member
TCAP Project Board, Office of the Prime Minister	Prime Minister, Chair of the TCAP Board	Right Honorable Enele Sopoaga	Office of the Prime Minister Government of Tuvalu Funafuti TUVALU	
Partner Ministry, Survey and Coastal Mapping	Director of Lands & Survey	Mr Faatasi Malologa	Department of Lands and Survey Government of Tuvalu	

			Funafuti TUVALU fmalologa@gmail.com	
Pacific Community (SPC)				
Organisation	Title	Name	Contact	Notes
SPC, Geoscience, Energy and Maritime Division	Director, Geoscience, Energy and Maritime Division	Mr Andrew Jones	SPC GEM Division Mead Road Suva, FIJI Ph: +679 338 1377 andrewj@spc.int	
SPC, Ocean and Maritime Programme	Deputy Director, Ocean and Maritime Programme, SPC	Mr Thierry Nervale	SPC Geoscience, Energy and Maritime Division Pacific Community Lotus Building Nabua, Suva FIJI Ph: +679 3370 733 thierryn@spc.int	Board Member
SPC, Ocean and Maritime Programme	Manager, Ocean Affairs	Mr Jens Kruger	SPC Geoscience, Energy and Maritime Division Pacific Community Lotus Building Nabua, Suva FIJI Ph: +679 3370 733 jensk@spc.int	Project Manager
SPC, Georesources and Energy Programme	Deputy Director Georesources and Energy	Mr Akuila Tawake	SPC Geoscience, Energy and Maritime Division Pacific Community Lotus Building Nabua, Suva FIJI Ph: +679 3370 733 akuilat@spc.int	
SPC, Regional Rights Resource Team (RRRT)	Director Human Rights Resource Programme (RRRT)	Mr Miles Young	SPC RRRT Nabua Ph: +679 337 9294 milesy@spc.int	
SPC, Climate Change and Environmental Sustainability Programme (CCES)	Director, Climate Change and Environmental Sustainability Programme (CCES)	Ms Sylvie Goyet	SPC Noumea New Caledonia sylvieg@spc.int	
SPC, Social Development Programme (Gender, Culture & Youth)	Director, Social Development Programme (Gender, Culture & Youth)	Ms Kuiniselani Toelupe Tago - Elisara	SPC Lotus Building Nabua, Suva FIJI Ph: +679 3370 733 Kuiniselanit@spc.int	

Product Description

This section defines what the project must deliver in order to gain acceptance. The below table will be refined during the initiating a project process when the detailed project plan is created as part of the PID.

Result	Activity	Outputs
1. Coastal hazards along high value shorelines in Nanumaga, Nanumea, and more broadly on Fogafale (Funafuti) defined	1.1 Establish the context and scope 1.2 Analyse regional variabilities in climatology and island type setting 1.3 Collect and analyse local variations in terrain and geomorphology 1.4 Understand contemporary processes 1.5 Generate coastal hazard information products 1.6 Inform coastal protection design work 1.7 Train staff in monitoring and hazard assessments	Note that the outputs are largely based on PRIF (2016) and Barnes (2017): <ul style="list-style-type: none"> • Description of the intervention sites • Analysis of historical imagery • Conceptual sediment budget • Definition of datum and coordinate system definition including vertical levels • Baselines of topography and shallow water bathymetry (using available or remotely derived products) • Report on ground conditions • Water level assessment including mean water levels, tides, storm surge, inter-annual fluctuations, and sea level rise • Wave setup and runup estimates • Concept-level design for water levels and wave height • Final report for each site • Training workshops on monitoring and assessments, computers and materials
2. Environmental and social impacts of proposed coastal protection works assessed	2.1 Detail requirements for works 2.2 Predict nature and magnitude of likely impacts 2.3 Outline mitigation measures and options 2.4 Consult local community 2.5 Assess risk of identified impacts 2.6 If critical risks are found discuss alternatives 2.7 Demonstrate compliance with government legislation	Note that the outputs are based on Tuvalu (2014): <ul style="list-style-type: none"> • Summary of the development proposal and its consequences • Description and details of the development proposal • Review of the environmental impacts and any practical alternatives • Description of the affected environment • Analysis of the environmental consequences • Assessment of impacts on the area's physical locality and amenity (including visual quality), its historic and cultural resources, and the design of the built environment • Assessment of social impacts on the local population and its uses of the land

		<ul style="list-style-type: none"> • Assessment of the implications of the use of potential environmental pollutants • Review of options proposed to mitigate adverse environmental impacts • Description of any unavoidable adverse environmental impacts • Analysis of the cost and benefits • List of all persons who prepared the EIA, their qualifications, and organisations and persons who were consulted.
3. National coastal vulnerability assessed	<p>3.1 Establish the context and scope</p> <p>3.2 Identify existing risk (past and current)</p> <p>3.3 Identify future climate change risks and opportunities</p> <p>3.4 Analyse and evaluate risks</p> <p>3.5 Support a national synthesis report on long term adaptation strategies</p>	<p>Note that the outputs are based on NCCARF (2016):</p> <ul style="list-style-type: none"> • Stakeholder communication approach • Asset and value register • Hazard likelihoods and occurrences of the areas • Investigation on how existing risk can increase under future climates • Identify consequences and rating scales • Establish risk register and identify priorities • Final report for each island • Contribution to national synthesis report
4. Project managed	<p>4.1 Initiate project</p> <p>4.2 Manage product delivery</p> <p>4.3 Close project</p>	<p>The outputs will be aligned to the PRINCE2 project management framework (AXELOS, 2017):</p> <ul style="list-style-type: none"> • Baseline management products. These define aspects of the project, and are subject to change control. • Records. These are dynamic and maintain information regarding project progress • Reports. Reports are management products providing a snapshot of the status of certain aspects of the project.

Project Approach

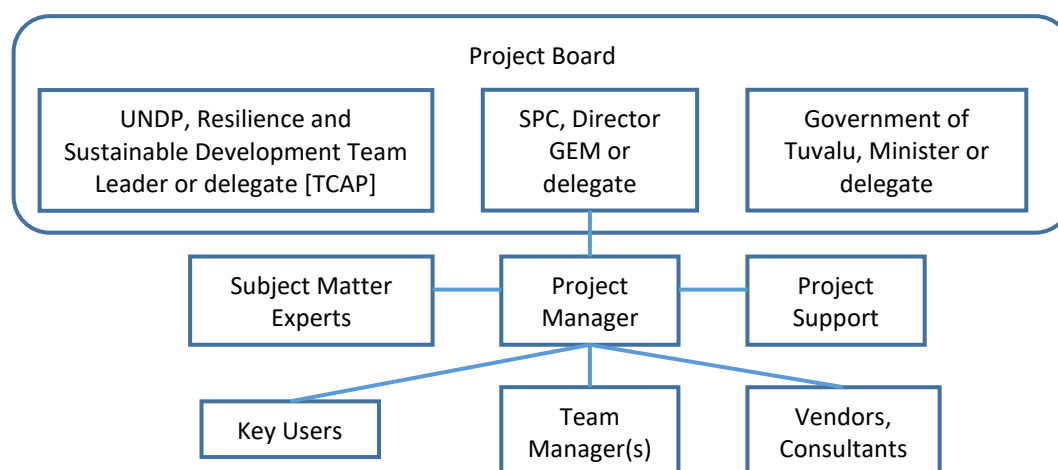
This section defines the choice of solutions that will be used to deliver the project products. The project will endeavour to follow published and established good practices that can be readily applied in the context of a Pacific Small Island Developing State. The approaches are summarised against the Result areas in the table below.

Result 1 Coastal hazards on Funafuti,	The approach will follow the framework for hazard mapping outlined by Barnes (2017), and that for coastal protections works in PRIF (2017):
---	---

Nanumaga and Nanumea defined	Barnes, M. 2017. How to Choose an Appropriate Coastal Hazard Mapping Spatial Scale. Report prepared by BMT WBM for CoastAdapt. National Climate Change Adaptation Research Facility, Gold Coast. PRIF, 2017. Guidance for coastal protection works in Pacific island countries. Pacific Infrastructure Facility, 96p.
Result 2 Environmental and social impacts of proposed coastal protection works assessed	The approach will follow the requirements of the government of Tuvalu (2014) and also align to the UNEP safeguards for projects of this type. Tuvalu, 2014. Tuvalu Environmental Protection (Environmental Impact Assessment) Regulations 2014, 22p. UNDP's Social and Environmental Standards (source: http://www.undp.org/content/undp/en/home/librarypage/operations1/undp-social-and-environmental-standards.html)
Result 3 National coastal vulnerability assessed	This will follow a risk-based coastal management framework similar to standards like the AS/NZS-ISO31000:2009 (Standards Australia and Standards New Zealand 2009) and AS5334 (Standards Australia 2013). More specifically, the approach will follow the second-pass risk assessment of NCCARF (2016): NCCARF, 2016. Guidance on undertaking a second-pass risk assessment. CoastAdapt, National Climate Change Adaptation Research Facility, Gold Coast.
Result 4 Project managed	The project management approach will be aligned to the PRINCE2 framework: AXELOS, 2017. Managing Successful Projects with PRINCE2. pp.413.

Project Management Team Structure

The diagram below outlines the project team structure.



Role Descriptions

The Project Board comprises the following three primary stakeholders:

Sponsor (Executive)	UNDP endorses the objectives and ensures that the project provides value for money. The role of the executive is vested in one individual, so that there is a single point of accountability for the project.
Senior User	The Government of Tuvalu will use the products after the project is completed and to gain the expected benefits. The senior user is responsible for specifying the needs of those who will use the project's products and for monitoring that the solutions and applications will meet those needs in terms of quality, functionality and ease of use.
Senior Supplier	SPC will provide the resources and expertise (internal or external) required by the project. This role is accountable for the quality of products delivered and is responsible for the technical integrity of the project.

Other members of the project management team are as follows:

Project Manager	This is the single focus for day-to-day management of the project. This person has the authority to run the project on behalf of the project board within the constraints laid down by the project board. The project manager also delegates responsibility for the managing product delivery process to the team manager(s).
Team Manager	The team manager's primary responsibility is to ensure production of those products allocated by the project manager. The team manager reports to, and takes direction from, the project manager. The project manager uses work packages to allocate work to team managers or team members. Work packages can be used formally or informally depending on the needs of the project.
Project Support	Project support is the responsibility of the project manager. If required, the project manager can delegate some of this work to a project support role: this may include providing administrative services or advice and guidance on the use of project management tools. It could also provide specialist functions to a project such as planning or risk management.

Result	Activity	Months																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	2.5 Demonstrate compliance with government legislation							3																	
2. Environmental and social impacts of proposed coastal protection works assessed - Nanumea	2.1 Detail requirements for works																								
	2.2 Consult local community																								
	2.3 Predict nature and magnitude of likely impacts																								
	2.4 Assess risk of identified impacts																								
	2.5 Demonstrate compliance with government legislation																								
2. Environmental and social impacts of proposed coastal protection works assessed - Nanumanga	2.1 Detail requirements for works																								
	2.2 Consult local community																								
	2.3 Predict nature and magnitude of likely impacts																								
	2.4 Assess risk of identified impacts																								
	2.5 Demonstrate compliance with government legislation																								
3. National coastal vulnerability assessed	3.1 Establish the context and scope																								

Result	Activity	Months																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
4. Project managed	3.2 Identify existing risk (past and current)																								
	3.3 Identify future climate change risks and opportunities																								
	3.4 Analyse and evaluate risks																								
	3.5 Support a national synthesis report on long term adaptation strategies																								
	4.1 Initiate project																								
4.2 Manage product delivery																									
4.3 Close project																									

Budget

Costs by Category	Total cost (USD)
Technical Assistance / Human Resources	503,100
Field Travel costs <i>(including Mobilisation and Equipment costs)</i>	174,200
Workshops & Trainings	124,300
Consultants	194,900
Operational costs <i>(including FCR ICT and Facilities)</i>	88,300
Communication & Publication	14,300
Total Direct costs	1,099,100
Corporate project management fee <i>(10% of direct costs)</i>	109,900
TOTAL COSTS	\$ 1,209,000

Costs by Results	Total cost (USD)
Result 1: Coastal hazards on Funafuti, Nanumaga and Nanumea defined	201,074
Result 2: Environmental and social impacts of proposed coastal protection works assessed	497,167
Result 3: National coastal vulnerability assessed. (Includes the training components)	294,908
Result 4: Project managed (salaries only)	105,951
Corporate project management fee <i>(10% of direct costs)</i>	109,900
TOTAL COSTS	\$ 1,209,000

Payment Schedule

	Milestone	Schedule (months from signing)	Disbursement amount (USD)	Percentage (% of total)
1	Sign Contract	0	0	0
2	Submit detailed work plan and implementation schedule.	1	120,900	10

3	Submission of complete EISA for Funafuti works.	7	241,800	20
4	Submission of complete EISA for Nanumea infrastructure works.	10	120,900	10
5	Submission of complete EISA for Nanumaga infrastructure works.	13	120,900	10
6	National coastal vulnerability assessment process - data collection component complete.	16	120,900	10
7	Training of staff in monitoring and hazard risk assessment delivered	19	120,900	10
8	National coastal vulnerability assessment process - submission of 9 island reports. And National synthesis report draft.	22	241,800	20
9	Submission of all data products to Tuvaluan Govt. and UNDP and evidence data are also archived appropriately by SPC. Submission of final copies of all reports.	24	120,900	10
	Total amount		1,209,000	100

The milestones outlined here are not intended to be indicative of the full range of works and interaction with TCAP during the course of this contract. These milestones are major product outputs that trigger disbursements. The milestones numbered 2-9 are also referred to in the work schedule above.

References

The following documents were reviewed in the preparation of this concept note:

A concept brief and summary of objectives of output 2 provided by the Suva UNDP office, February 2018, 6p.

AXELOS, 2017. Managing Successful Projects with PRINCE2. pp.413. (source: www.axelos.com)

Barnes, M. 2017. How to Choose an Appropriate Coastal Hazard Mapping Spatial Scale. Report prepared by BMT WBM for CoastAdapt. National Climate Change Adaptation Research Facility, Gold Coast. (source: coastadapt.com.au)

UNDP, 2014. Social and Environmental Standards (SES). UNDP, pp.60. source: <http://www.undp.org/content/undp/en/home/librarypage/operations1/undp-social-and-environmental-standards.html>

PRIF, 2017. Guidance for coastal protection works in Pacific island countries. Pacific Infrastructure Facility, 96p. Source: www.wrc.unsw.edu.au/news/guidance-for-coastal-protection-works-in-pacific-island-countries

SPREP, 2016. Strengthening environmental impact assessment: guidelines for Pacific Island countries and territories. Apia, Samoa, 64p.

Tuvalu Coastal Adaptation Project, Social and Environmental Screening Template. Annex VI (a), Green Climate Fund Funding Proposal, 14p.

Tuvalu Coastal Adaptation Project, Environmental and Social Management Plan. Annex VI (b), Green Climate Fund Funding Proposal, 31p.

Tuvalu, 2014. Tuvalu Environmental Protection (Environmental Impact Assessment) Regulations 2014, 22p. Source: https://tuvalu-legislation.tv/cms/images/LEGISLATION/SUBORDINATE/2014/2014-0001/EnvironmentProtectionEnvironmentalImpactAssessmentRegulations2014_1.pdf