



Nuku'alofa Urban Development Sector Project
Project Implementation Assistance Consultants
ADB GRANT-0264 TON and GRANT-0265 TON

Consolidated Annual Report
Year 3 – 2015



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Acronyms and Abbreviations

AB	Affected Business	NSPA	National Spatial Planning Authority
Aps	Affected Persons	NSPAO	National Spatial Planning Authority Office
ADB	Asian Development Bank	NUDSP	Nuku'alofa Urban Development Sector Project
BME	Benefit Monitoring and Evaluation	O&M	Operation and Maintenance
CDTA	Capacity Development Technical Assistance	PAM	Project Administration Manual
CSS	Country Safeguard System	PIA	Project Implementation Assistance
DP	Displaced Person	PIAC	Project Implementation Assistance Consultants
DFAT	Department of Foreign Affairs and Trade	PIU	Project Implementation Unit
EA	Executing Agency	PMU	Project Management Unit (in PUMA/NSPAO)
EIRR	Economic Internal Rate of Return	PPMS	Project Performance Management System
EMA	External Monitoring Agency	PSA	Poverty and Socio Economic Assessment
ESU	Environment and Social Unit	PSC	Program Steering Committee
EU	European Union	PUMA	Planning and Urban Management Agency (in MLSNR)
FGD	Focus Group Discussions	RP	Resettlement Plan
GAP	Gender Action Plan	RRP	Report and Recommendation of the President (to the Board of Directors)
GDP	Gross Domestic Product	SPS	Safeguard Policy Statement
GFP	Grievance Focal Point	SES	Socio Economic Survey
GIS	Geographic Information System	SW	Solid Waste
GoT	Government of Tonga	SWM	Solid Waste Management
GRC	Grievance Redress Committee	TA	Technical Assistance
Ha	Hectare	TNIIP	Tonga National Infrastructure Investment Plan
HH	Households	TNA	training needs assessment
IA	Implementing Agency	TOR	Terms of Reference
ISA	Initial Social Assessment	TSDF	Tonga Strategic Development Framework
IUDP	Integrated Urban Development Project	TUIDP	Tonga Urban Infrastructure Development Plan
IUDSP	Integrated Urban Development Sector Project	TWB	Tonga Water Board
IMA	Internal Monitoring Agency	WAL	Waste Authority Limited
Km	Kilometre	WB	World Bank
LAR	Land Acquisition and Resettlement	WS	Water Supply
MIA	Ministry of Internal Affairs		
MOH	Ministry of Health		
MOI	Ministry of Infrastructure		
MLSNR	Ministry of Lands, Survey and Natural Resources		
NGOs	Non-Government Organizations		

Chapter A. Introduction and Basic Data

A.1 Introduction

The project will provide high priority urban infrastructure identified in the Nuku'alofa Urban Infrastructure Development Plan (NUIDP¹). The project will expand upon infrastructure development currently being undertaken in Nuku'alofa through the Nuku'alofa Reconstruction Project (NRP) and the Integrated Urban Development Sector Project (IUDSP²).

A project summary is provided in Table 1.

Table 1: Project Summary

GRANT NUMBER	ADB No. 0264-TON(SF)
PROJECT TITLE	Nuku'alofa Urban Development Sector Project (NUDSP)
RECEIVER	GOVERNMENT OF TONGA (GOT)
EXECUTIVE AGENCY	Ministry of Finance and National Planning (MFNP)
IMPLEMENTING AGENCY	PUMA/NSPA
ESTIMATED PROJECT COST	Total: USD 14.59 million (USD 6.06 million from ADB) (USD 6.44 million from DFAT Australia) (USD 2.09 million from counterpart funding GoT)
PROJECT FINANCING STATUS	<u><i>Imprest Account – MoFNP</i></u> Total funds from the donors to the Imprest Account (RBT) during the year 2015: 1. Total funds received from the 1 st January - 31 st December 2015: Total Received: \$335,003.74 (ADB \$162,477.84 - DFAT \$172,525.90) Total expenditure funded with the donors' monies at RBT during the year 2015: 2. Total expenditure from the 1 st January - 31 st December 2015: \$235,266.11 (ADB\$114,108.66 – DFAT\$121,157.45) A Financial Summary of all the funds received and disbursed as at 31 st December 2015 is shown in Table 3 and F.1.
DATE OF APPROVAL BY ADB	September 2011

¹ UIDP was prepared under TA 7082-TON: Urban Planning and Management System (ADB, 2008 US\$700,000) and provides an urban infrastructure investment plan for Nuku'alofa for the period 2010/11 to 2030/31

² NRP is funded through a RMB400 million loan from China and was approved on 2007. An Asian Development Fund grant of \$11 million for IUDSP (G0108-TON) was approved by ADB in March 2008

DATE OF SIGNING	11 January 2012
DATE OF EFFECTIVENESS	23 September 2012
DURATION PROJECT	7 Years
GRANT CLOSING DATE	10 January 2019
PROJECT IMPLEMENTATION PERIOD	Commencing on 1 January 2012 and terminating on 31 December 2017
DATES OF ADB MISSIONS	<p>Inception Mission: 03 - 07 December 2012 Grant inception mission conducted by Mr Steve Blaik – Senior Project Officer, Ms Maria Paniagua – Unit Head, Project Administration, SPSO; Ms Lavenia Uruvaru, Project Analyst, SPSO, and Mr Taniela Faletau, Safeguards Officer, SPSO.</p> <p>Field Review Mission #1: 07 – 11 October 2013 Review conducted by – Ms Maria Paniagua – Unit Head, Project Administration Unit, SPSO and Taniela Faletau, Safeguards Officer, SPSO.</p> <p>Field Review Mission #2: 25 – 28 February 2014 Review conducted by – Ms Maria Paniagua – Unit Head, Project Administration Unit, SPSO and Lavenia Uruvaru, Associate Project Analyst, SPSO.</p> <p>Field Review Mission #3: 7 -10 October 2014 Review conducted by – Ms Maria Paniagua – Unit Head, Project Administration Unit, SPSO and Lavenia Uruvaru, Associate Project Analyst, SPSO.</p> <p>Country Portfolio Review Mission #1: 12 November 2014 Review conducted by – Ms Maria Paniagua – Unit Head, Project Administration Unit, SPSO and Vijay Narayan. SPSO.</p> <p>Field Review Mission # 4 : 2 – 12 June 2015 Review conducted by - Ms Grace King – Senior Project Officer, SPSO and Lavenia Uruvaru Associate Project Analyst, SPSO.</p> <p>Field Review Mission # 5 – 30 November – 4 December 2015 Review conducted by – Ms Grace King – Senior Project Officer, SPSO.</p>
PROJECT STEERING COMMITTEE ACTIONS	<p>PSC meeting #1 held on 30 October 2012 approved the following:</p> <ul style="list-style-type: none"> • PSC membership be amended in accordance with current GoT structure; • Establishment of Project Procurement and Tender Committee (PPTC); • TOR for the PPTC be included in the updated PAM; • Procurement be in accordance with ADB and GoT guidelines; • Update/amend the PAM as required; and • PUMA finalise and submit staffing requirements to MoFNP (EA) for onward submission to ADB.

	<p>PSC meeting #2 on 28 February 2013 approved the following:</p> <ul style="list-style-type: none"> • PSC notes the current project progress status and the updated project schedule of timetable; • PSC and ADB to note and endorse the initial screening of potential candidate subproject list; • PSC to note the proposed urgent actions for the next 6 months; • PSC to note and endorse the proposed Addendum No.1, which is the exemption of taxes and duties from the project - Annex-D; • Procurements to be in accordance with the ADB and GoT guidelines; and • Update/amend the Project Administration Manual (PAM) and Monitoring and Evaluation Framework accordingly.
	<p>PSC meeting #3 on 29 August 2013 approved the following:</p> <ul style="list-style-type: none"> • Executing Authority (EA) and Implementing Agency (IA) to devise strategies in addressing lack of operational budget for PUMA and PMU offices for regular and NUDSP activities. IA will look into this and revert back to PSC and EA on proposed way forward; • PSC quarterly meetings to meet program required under PAM. IA to set the next meeting date as programmed; • Taxes and duties for NUDSP had been gazetted following Parliamentary approval; • PSC agreed in principal to the addition of International Hydrogeologist to NUDSP PIAC Team but EA and IA to assess the contracts and proposed variation.
	<p>PSC meeting #4 on 28 March 2014 approved the following:</p> <ul style="list-style-type: none"> • PPTC to revisit the NUDSP-ICB-2013-TWB01 evaluation findings & process and present to next PSC • Project Team to present the NUDSP budget output components, and the actual project expenditures to PSC • Audit Financial Project Statement to be completed by June 2014 as required under the Aid Memoire

	<p>PSC meeting #5 on 22 October 2014 approved the following:</p> <ul style="list-style-type: none"> • Study Tour Super City Auckland New Zealand scheduled to early 2015. At least 3 people to attend including a female planner. Tour to go ahead on Jan - Mar 2015; • Nuku'alofa Strategic Development Plan to present to PSC meeting; • To rebid TWB01 and bid TWB02 & TWB03; • Recruit a Hydro-geologist & Leak detection engineers; • Recruit three construction supervision engineers when the construction of TWB projects start; • Approve contract variation for 6 months extension for Solid Waste Specialist, Ms Sonia Chirgwin; • Sanitation Master Plan Candidate subproject to present to PSC; • Approve contract variation for the purchase of a new landfill compactor for Waste Authority Limited; • Approve contract variation for PIAC reimbursable project management expenses; • Update Project Administration Manual (PAM); • PPTC Term of Reference to re-distribute to the PSC & PPTC members for further comments before submitting for approval; • That all procurements to be carried out by electronic bidding (E-Bidding) for NUDSP procurements; and • PSC future meetings to be held every 3 months.
	<p>PSC meeting #6 on 20th February 2015 approved the following:</p> <ul style="list-style-type: none"> • That there is a need to focus on the procedure for development consent under the NSPM Act 2012 in the next quarter. • That the Nuku'alofa Strategic Development Plan be finalised by the end of February or early March 2015. • That the Sanitation Master Plan on Feasibility Designs be completed for the next PSC Meeting. • That the Draft PPTC Terms of References be finalised for the next PSC Meeting. • That the Proposals for the change in the procurement plan for WAL's vehicle (4x4 Double Cab Utility Vehicle to two smaller vehicles) be circulated to PSC members for approval/not approval.

	<p>PSC meeting #7 on 27 May 2015 approved the following:</p> <ul style="list-style-type: none">• That vehicle for WAL be reverted to original procurement plan• That the original procurement plan for WAL Village Pilot (civil works – 5 villages US\$10,000; goods – 5 villages – MGBs – US\$7,000) be changed to WAL Village Pilot (goods – 7 villages - US\$17,000)• That the followings be added to the project procurement plan:-<ul style="list-style-type: none">- Lot 1 – renovate 4 nos. existing public conveniences- Lot 2 construct 2 nos. new public conveniences- The cost of US\$150,000 to be taken from sanitation subproject approved by PSC #6 – US\$165,000• That an Operational and Management service trailer and accessories be included to the project procurement plan. The estimated cost of US\$15,000 to be taken from sanitation subproject approved by PSC Meeting #6 – US\$165,000• That project request ADB “no objection” for the extension of the accountant and the chief clerk for another two years with new salary scale effective on 22 July 2015.																		
	<p>PSC meeting #8 on 30 November 2015 approved the followings:</p> <ul style="list-style-type: none">• That the presentation from PMU & PIAC regarding the project progress be noted.• That the request for secondment for the National Environmental Specialist be taken to the Public Service Commission Office for advice.																		
MAIN TA FIELDING	26 September 2012																		
	<p>All of the following International and National PIAC team members have been mobilised in the reporting period:</p> <table><tr><td>International</td><td></td></tr><tr><td>John Gildea</td><td>Team Leader/Municipal Engineer</td></tr><tr><td>Andrew Henriksen</td><td>Leak Detection Specialist</td></tr><tr><td>Sonia Chirgwin</td><td>Solid Waste Specialist</td></tr><tr><td>Richard Watling</td><td>Environmental Specialist</td></tr><tr><td>National</td><td></td></tr><tr><td>Seventeen Toumoua</td><td>Deputy Team Leader/Project Eng.</td></tr><tr><td>Malakai L Sika</td><td>Financial Management Specialist</td></tr><tr><td>Monalisa Tukuafu</td><td>Social/Community Specialist</td></tr></table>	International		John Gildea	Team Leader/Municipal Engineer	Andrew Henriksen	Leak Detection Specialist	Sonia Chirgwin	Solid Waste Specialist	Richard Watling	Environmental Specialist	National		Seventeen Toumoua	Deputy Team Leader/Project Eng.	Malakai L Sika	Financial Management Specialist	Monalisa Tukuafu	Social/Community Specialist
International																			
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Andrew Henriksen	Leak Detection Specialist																		
Sonia Chirgwin	Solid Waste Specialist																		
Richard Watling	Environmental Specialist																		
National																			
Seventeen Toumoua	Deputy Team Leader/Project Eng.																		
Malakai L Sika	Financial Management Specialist																		
Monalisa Tukuafu	Social/Community Specialist																		

	Leipi Falemaka Daniel Fale Jacinta Finau Sione Taumoepeau Toumoua Po'uli Suliasi Havea The assignment periods completed or on going for each of the above team members are provided in Chapter F4.	Gender Planner Planning Specialist Office Assistant/ Accounting Officer Senior Construction Supervisor Construction Supervisor 1 Construction Supervisor 2
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Chapter B. Utilization of Funds

B.1 Contract Awards

The Project cumulative contract disbursement to supplier/contractor as of the end of December 2015 is USD 4.52 million (47.84%) against the total proposed Project procurement contract award of USD 9.50 million (refer to updated PAM December 2015). **Table 2** below shows the estimated contract value, the awarded contract value to the contractor/supplier and the actual claims that have been disbursed to the contractor/supplier as of 31st December 2015.

Table 2: Summary of Contract Awards

General Description	Estimated Contract Value	Awarded Contract Value	Actual Claims (as of 31st December 2015)
TWB01A: Civil Works Lot 1 - Wellfield Upgrading Lot 2 - Design and Construction of Reservoir	\$3.44m	3,445,024.24	962,830.07
TON 42394: Project Implementation Assistance Consultants *	\$2.8m	3,779,237.00	1,897,108.11
SHO-01: 4 x 4 double cab, utility - 2 no (TWB & WAL)	\$0.085m	61,822.20	61,822.20
SHO-02A: 4 x 4 double cab, utility - 1 no (TWB) including 2 GPS units for NUDSP supplied utilities	\$0.036m	61,629.50	61,629.50
SHO-04: eProcurement Services **	\$0.010m	NZD 7,815.00	6,625.89
WAL01: Articulated wheeled loader	\$0.20m	181,517.44	181,517.44
SHO-02A: Financial management package computer package - computer hardware and software and training ***	\$0.096m	TOP 247,473.00	129,060.87
WAL03: Lot 1 - Rear loading, 8m ³ , compactor truck - 2 no, Lot 2 - Septage truck, 5,500 litre, vacuum pump out with hoses, fittings and accessories	\$0.590m	585,664.51	585,664.51
WAL05: Construct landfill cell no.2	\$0.40m	TOP 808,857.50	414,063.28
WAL06: Groundwater monitoring equipment	\$0.004m	4,578.78	4,578.78
WAL07: Landfill compactor, 20 tonne & accessories	\$0.500m	475,147.62	47,514.76
WAL08: Stage 1 - Rehabilitation and construction of improved public conveniences - 5 sites for Nuku'alofa waterfront and CBD areas ***	\$0.150m	TOP 338,333.67	138,652.10
WAL10: Supply and Delivery of Two Hundred and Thirty (230) units of 240 litre Mobile Garbage Bins ***	\$0.017m	TOP 33,695.00	15,236.88
TWB03: Vehicle Mounted Truck Loader Crane - 3 tonne	\$0.13m	101,710.53	10,171.05
TOTAL			\$ 4,516,475.45

* The contract awarded does not include the tax.

** Contract was awarded in New Zealand Dollars. The actual claims are the equivalent in US Dollars.

*** Contract was awarded in Tongan Pa'anga. The actual claims are the equivalent in US Dollars.

**** This table does not include the salaries for PMU Staff. The total salaries for PMU Staff is shown in F.3

B.2 Disbursements

The total funds received by MoFNP for the NUDSP Imprest Account from January to December 2015 was **USD \$335,003.74** (ADB - **USD\$162,477.84** and DFAT, Australia **USD\$172,525.90**).

Against these projections, the expenditure achievement from January to December 2015 from NUDSP Imprest Account only was **USD\$235,266.11** (ADB - **USD\$114,108.66** and DFAT, Australia - **USD\$121,157.45**)

Table 3 below shows the total project expenditure breakdowns as of 31 December 2015. This includes the disbursements through direct payment and the imprest account.

Table 3: Financial Summary

Funding Source	Account	Budget		Actual Expenditure	Actual Expenditure/ Budget
		USD	TOP	USD	%
ADB	Imprest	6,060,000	9,696,000	523,870.61	8.64%
	Direct			1,822,761.27	30.08%
	Sub-Total			2,342,574.68	38.72%
DFAT Australia	Imprest	6,440,000	10,304,000	556,274.97	8.64%
	Direct			1,935,509.40	30.05%
	Sub-Total			2,491,784.37	38.69%
GoT		2,088,000	3,340,800	-	-
TOTALS	Imprest	14,590,000	23,340,800	1,080,145.58	7.40%
	Direct			3,758,270.67	25.76%
	Total			4,838,416.25	33.16%

Source: Data from MOFNP to 31 December 2015. It is noted that the contribution from the GoT is through taxes. The detailed project financial summary is attached as Annex F.1.

Chapter C. Project Purpose

C.1 Project Description

The project will provide high priority urban infrastructure identified in the Nuku'alofa Urban Infrastructure Development Plan (NUIDP³). The project will expand upon infrastructure development currently being undertaken in Nuku'alofa through the Nuku'alofa Reconstruction Project (NRP⁴) and the Integrated Urban Development Sector Project (IUDSP⁵).

The expected impact of the project is improved living conditions for the population of Nuku'alofa. The outcome of the project will be effective, efficient, and sustainable urban services.

C.2 Project Outputs

Project outputs planned include:

- **Output 1:** Strengthened policy environment for delivery of urban services. The project will strengthen the policy environment for delivery of urban services in Tonga
- **Output 2:** Effective, efficient, and sustainable water supply services in Nuku'alofa.
- **Output 3:** Sustainable solid waste services in Nuku'alofa. This core subproject will assist WAL to improve its service delivery to the residents of Nuku'alofa
- **Output 4:-** Other municipal services within Nuku'alofa. Other municipal services will be improved through the implementation of selected high-priority urban infrastructure components identified in the Urban Infrastructure Development Plan (UIDP) and the National Infrastructure Investment Plan (NIPP) (candidate subprojects)
- **Output 5:** - Raised community awareness of municipal services. The project will raise community awareness of municipal services issues
- **Output 6** - Effective project management. The project management unit (PMU), supported by project implementation assistance consultants will provide project design and supervision, monitoring, reporting, quality and cost control, screening and preparation of resettlement plans, and initial environmental evaluations for candidate subprojects, contract administration services and monitoring of the gender action plan.

³ NUIDP was prepared under TA 7082-TON: Urban Planning and Management System (ADB, 2008 US\$700,000) and provides an urban infrastructure investment plan for Nuku'alofa for the period 2010/11 to 2030/31.

⁴ NRP is funded through a RMB400 million loan from China and was approved on 2007.

⁵ An Asian Development Fund grant of \$11 million for IUDSP (G0108-TON) was approved by ADB in March 2008.

C.3 Compliance with Grant Covenants

The Project is fully compliant with all 34 grant covenants, with the exception of the development of a Project website, due to the uncertainty with the PUMA website hosting. This will be addressed in the next reporting period. Refer to section F3 for details.

C.4 Compliance with Financial Grant Covenants

The Project is fully compliant with the 5 financial grant covenants. Refer to last five covenants in section F3 for details.

C.5 Compliance with Project-Specific Grant Covenants

The Project is in compliance with all grant covenants that are project specific, with the exception of a project website. Refer to section F3 for details.

C.6 Compliance with Development Objectives

The Project remains consistent with the development objectives of Tonga and the ADB and DFAT programmes of development support to Tonga.

C.7 Sustainability of Project Activities

Sustainability remains a key focus of the Project's work with counterparts.

With the Waste Authority assistance, this was the focus of a contract extension to provide support in enhancing community change and enterprise sustainability over the six month period from February 2015. Project activities included implementation of alternative revenue sources, development and launch of Clean Green Tonga programme, and capacity building activities. See F4 for a copy of the report on achievements and ongoing challenges for WAL during this project period.

Tonga Water Board received assistance in developing a Complaint Management System to improve customer service, which is ultimately linked to willingness to pay and sustainability.

The construction of public convenience facilities under the new sanitation sub-project had a focus on the operational arrangements, with the Waste Authority signing MOUs with the facility owners for ongoing cleaning and maintenance services to ensure the facilities remain at a high standard for the users.

The Project continues to work with PUMA / the National Spatial Planning Office to develop operational standards and procedures.

Project activities were still on-going up to the end of December 2015, with sustainability a critical focus of the team.

C.8 Changes to Key Assumptions and Risks

The key assumptions and risks identified during the project preparation remain valid. Following project mobilisation, further risks have been identified as shown in the updated risk assessment matrix provided at Table 4 below:

Table 4: Risk Assessment Matrix

Identified Risk	Risk Level	Mitigation Strategies
Political interference in urban sector planning, development and management	Very Low	<ul style="list-style-type: none"> PUMA to be the NSPA independent of GoT
PUMA as an independent planning authority and its function not well known to the public.	Low	<ul style="list-style-type: none"> GoT to change the status of PUMA to become the independent National Planning Authority.
Political and general public awareness of the new Act NSPM	Very Low	<ul style="list-style-type: none"> Public awareness of the new NSPM Act to be implemented at all levels of the society.
Government budgetary and policies do not sufficiently support the operation of PUMA during the implementation phase of the project.	Medium	<ul style="list-style-type: none"> That GoT allocates sufficient budget to PUMA for its effective and efficient operation. GoT to allocate sufficient urban planning and management staff resources GoT improves and maintains coordination among Ministries and agencies managing urbanisation in Tonga and growth of Nukualofa
TWB land lease issues	Very Low	<ul style="list-style-type: none"> TWB updated its leases and complied with ADB requirements.
Water valves and mains along the Nuku'alofa water reticulation system have been buried during recent road construction	Low	<ul style="list-style-type: none"> TWB and MOI: That the existing Nuku'alofa water reticulation system valves need to be located/identified; and new valve chambers and cast iron lids need to be installed by project.
Insufficient funds are available for solid waste infrastructure maintenance	Low / Medium	<ul style="list-style-type: none"> Increase revenue collection by WAL Review and increase tariff and fees
Implementation and cost overruns occurs as a result of limited capacity of local contractors	Low	<ul style="list-style-type: none"> PIAC to supervise and monitor civil works contractors closely. International contractors are likely to be involved due to ICB procedures Recruit three supervision engineers for the construction of TWB projects.
Poor quality maintenance and repairs caused by limited capacity of local staff and contractors	Low	<ul style="list-style-type: none"> PIAC will carry out training and mentoring of local contracting staff.

C.9 Project Development Impacts

C.9.1 Environmental

The Environmental Social Unit of the PMU remains active and undertakes a range of functions to ensure the Project identifies and minimises any environmental risk. The main environmental

focus for 2015 was the ongoing quarterly water testing programme at Tapuhia Landfill, and the environmental auditing for the landfill construction contract, and the Tongamai / Mata ki 'Eua wellfield construction project. The landfill works were completed in 2015, and the project initial auditing for the wellfield development established with assistance from the international environmental specialist. Monthly environmental audits are ongoing.

Refer to section F4 and the Project Bi-annual Safeguard Reports for details.

C.9.2 Social

There were no social issues of significance during 2015. All land ownership and resettlement issues related to the TWB wellfield project were settled and final compensation paid. A chance find burial site at the wellfield was discovered during the road construction, and was resolved with the appropriate authorities and the ESU team to ensure proper respect was given to this site. The road was shifted so that this area was not disturbed by project activities.

Refer to section F4 and the Project Bi-annual Safeguard Reports for details.

Chapter D. Implementation Progress

D.1 Project Implementation Arrangements

Ministry of Finance and National Planning is the executing agency (EA) and the Planning and Urban Management Agency (PUMA) of the Ministry of Lands, Survey and Natural Resources is the implementing agency (IA).

PUMA is the Project Management Unit (PMU). PUMA will provide the Project Manager and PMU will be responsible for the overall implementation of the project.

The PMU is supported by Project Implementation Assistance (PIA) consultants. The PIA consultants will assist the PMU in delivering the project outputs.

D.2 Project Implementation Assistance Consultant (PIAC)

Egis Eau in association with PECG is the PIA consultant. The contract between Egis Eau/ PECG, and Ministry of Finance & National Planning was signed on 22th May 2012. There were two contract variations that took place on the 31st January 2015 and the 25th September 2015.

The first contract variation was to provide an additional 6 month consulting inputs to undertake capacity building and build WAL's sustainability. There was also additional budget allocated to associated community awareness and mobilisation activities. The contract variation also included funding for an international hydro-geologist, additional time for the water supply / leak detection engineer, and additional national supervising engineers. Each of these measures are to increase the oversight and risk management in the TWB contracts.

The second contract variation was to provide the resources to implement the new sub-project on improved sanitation in the urban area.

For the National Consultants, Tapu Panuve did not have any input for the year 2015. Leipi Falemaka, Malakai Sika and Daniel Fale completed their inputs in January, July and October 2015 respectively. Sione Taumoepeau, Toumoua Po'uli and Suliasi Havea were recruited on 14th July 2015 for supervision works under the project. All the rest of the team inputs for the period are summarised in Table-6.

Table 5: PIAC Team Member Inputs to end December 2015

NAME	POSITION	TOTAL INPUTS (To end of December 2015)		INPUTS REMAINING
		Days	Month	Months
<u>International</u>				
Gildea, John	Team Leader/Municipal Engineer	547	18.65	13.35
Henricksen, Andrew	Water Supply/Leak Detection Engineer	259	8.69	3.31
Chirgwin, Sonia	Solid Waste Specialist	541	17.90	12.10
Watling, Richard	Environmental Specialist	132	4.33	3.67
<u>National</u>				

NAME	POSITION	TOTAL INPUTS (To end of December 2015)		INPUTS REMAINING
		Days	Month	Months
Toumoua, Seventeen	Deputy Team Leader/Project Engineer	768.5	35.02	26.48
Fale, Daniel	Planning Specialist	539	24.00	0.00
Falemaka, Toma Sisifa Leipi	Planner (Gender)	530	24.00	0.00
Malakai, Lomu Sika	Accounting/Financial Management Specialist	505	24.00	0.00
Tapu, Panuve	Revenue Generation Specialist	188.5	8.57	0.43
Tukuafu, Monalisa	Social/Community/Gender/Safeguards Specialist	201.5	14.00	16.00
Andrea, Talia'uli	Environmental Specialist	195	9.00	24.00
Jacinta Finau	Office Assistant/Accounting Officer	676.5	20.16	17.89
Sione Taumoepeau	Senior Construction Supervisor	130	5.56	12.44
Toumoua Po'uli	Construction Supervisor	135	5.61	9.39
Suliasi Havea	Construction Supervisor	135	5.61	9.39

D.3 Inventory of PIAC Support Equipment

The list of equipment provided in **Table 6** has been procured to support a number of the activities of the NSPAO staff and the PIAC team.

Table 6: Inventory of PIAC support equipment procured

Ser. No.	Item	Date of purchase	Description	Location for Use	Personnel responsible
1	Desk Computer	09/10/2012	I3 Computer Set	PIAC Office, NSPAO	JF
2	Lap top Acer Aspire V5-471G-32364G50Mabb	10/10/2012	Acer Aspire V5-471G-32364G50Mabb	PIAC Office, NSPAO	ST
3	Mobile 1	15/10/2012	Superphone	PIAC Office, NSPAO	ST
4	Mobile 2	16/10/2012	Durga Lakshmi Manufacturing	PIAC Office, NSPAO	ST
5.	2 Chairs	13/08/2013	Office chairs	PIAC Office, NSPAO	ST
6.	Office Air conditioner	18/11/13	SHARP AH-A9PVE	PIAC Office, NSPAO	ST
7.	2 x Laptops	26/11/13	Toshiba Satellite - Pro	PIAC Office, NSPAO	TT/ST

Ser. No.	Item	Date of purchase	Description	Location for Use	Personnel responsible
8.	Headphone, Power Wireless USB Adapter, Black USB Mouse	29/11/2013	Office Equipment	PIAC Office, NSPAO	ST
9.	2 x Desk Computer set	24/02/14	I3 Computer Set	PIAC Office, NSPAO	TT
10	HDD 500G	16/04/14	Office Equipment	PIAC Office, NSPAO	TT
11	1 GB Graphic Card	28/04/14	Office Equipment	PIAC Office, NSPAO	TT
12	1000VA interactive UPS	29/04/14	Office Equipment	PIAC Office, NSPAO	TT
13	Mouse Scanner	29/10/14	Mouse Scanner	PIAC Office, NSPAO	KU
14	Camera and Adapter	14/07/2015	Office Equipment	PIAC Office, NSPAO	JF

An asset register listing the details of this equipment, the location and the personnel responsible has been prepared for these items.

D.4 Project Individual Consultants

The PMU is established within PUMA and is responsible for the overall implementation of the project including the day-to-day project activities, compliance with the provisions of the Grant Agreements and government policies and guidelines, project administration, preparation of grant withdrawal applications, and maintenance of records. The Director of PUMA serves as (i) the project manager and (ii) the secretary to the PSC. PUMA faces significant staff shortage issues and limited budgetary allocation to increase its staff resources to levels required to meet its statutory obligations under the NSPMA and to effectively implement the project and comply with the covenants and assurances in the grant agreements. Since August 2013, a number of consulting positions were financed from the grant to support the recruitment of individual consultants assisting PUMA to meet their project obligations.

During the year 2015, there were five staff at PMU which consisted of

- (i) three (3) urban planners;
- (ii) a project accountant; and
- (iii) a chief clerk.

The project accountant was based at the Ministry of Finance and National Planning (MOFNP) in order to facilitate the payment processes of the project and to comply with the financial requirements of ADB financed projects. The level and remuneration for these contracted positions is in accordance with GOT Public Service Commission guidelines and salary scale as set out in

Table 7.

Table 7: PIC Staffing Schedule

PMU Consultants	PSC Level		Duration (person months)
Urban Planner 1	L9	Full-time	24 *
Urban Planner 2	L9	Full-time	24 *
Urban Planner 3	L9	Full-time	24 *
Project Accountant	L9	Full-time	24 *
Chief Clerk	L11	Full-time	24 *
TOTAL			120 *

* The duration for the PIC Staff as set out in Table 8 above was the total duration for each contract. In 2015, the duration of their contract was less than seven (7) person months each.

Mr. Suliasi 'Aholelei, the Project Accountant, left the project in May 2015 to join the Ministry of Revenue Services. The three urban planners and the chief clerk continued to work for PMU until their contract was completed on the 21st July 2015.

A proposal for the extension of the contract for the project accountant and chief clerk's positions was submitted to ADB for no objection in August 2015. This request for extension was due to the important inputs of these two positions for the overall project. The proposed remuneration for the project accountant and the chief clerk was Level 2 and Level 10 respectively. ADB gave its no objection for the extension and the proposed remuneration for the project accountant and the chief clerk in August 2015. Ms. Kefilini 'Unga, the Chief Clerk, continued to work for PMU, whilst the replacement of the Project Accountant in MoFNP has not been filled. It is expected that this position will be filled in 2016.

D.5 Project Progress by Components

Table 8 and Table 9 provide a summary of project progress from January to end of December 2015.

Table 8: Project Progress from January to December 2015

Phase 1	January to end of December 2015	
	Activity	Results/Outputs
(i)	Team mobilization - office set-up and transportation	COMPLETED
(ii)	Meetings with stakeholders	ONGOING: Refer to section F5
(iii)	Review available background documents and core subproject proposals	COMPLETED;

Phase 1		January to end of December 2015
Activity		Results/Outputs
(iii)	Undertake subproject field visits - technical disciplines and safeguard specialists	ONGOING: Project Engineer, senior construction supervisor and the two construction supervisors continued to supervise the civil works at Matakī'eua which are being carried out by CCECC, the contractor for TWB01A. Progress Reports for the civil work is submitted to the project on a
(iv)	Review overall relevance and alternative options - from TNIIP and IUDP lists	ONGOING: Feasibility Study for the Candidate Subproject on sanitation was submitted to ADB for no objection. ADB gave its no objection for this feasibility study in June 2015. On the 13 th August 2015, ADB gave its no objection for the Project Updated Procurement Plan. This Updated Procurement Plan includes the sanitation candidate subproject. The sanitation candidate subproject will implemented in the
(v)	Establish Project Steering Committee (PSC)	ONGOING: Three (3) PSC meetings held within the year 2015.
(vi)	Further workshops to confirm preliminary prioritization - public information, local government	ONGOING; Refer F5 for details for consultation and public awareness programs for 2015
(vii)	Prepare and submit Inception Report	COMPLETED:
(viii)	Stakeholder meeting/workshop - confirm TNIIP and IUDP updates and prioritization processes	COMPLETED:
(ix)	Prepare and submit monitoring and evaluation framework (PMEF)	COMPLETED:
(x)	Update Project Administration Manual	ONGOING: PAM Update 1 dated March 2013 endorsed by MoFNP and approved by ADB. PAM Update 2, dated October 2013, submitted to PMU and MoFNP. PAM Update 3, dated August 2014 submitted to PMU and MoFNP. PAM Update 4, dated December 2015 submitted to PMU and ADB.

Table 9: Project Progress for Implementation Phase – for Year 2015

Phase 2	Implementation Phase	
DESCRIPTION	INDICATORS/TARGETS ^A	STATUS/ISSUES
Output 1: Policy Environment for Delivery of Urban Services		
1.1 Building capacity within PUMA to develop urban planning and management policies and to implement the NSPM.	1.1.1 Capacity within PUMA for urban policy development and implementation of the NSPM developed by December 2014.	Planning data/information was collected and collated by PUMA staff and the draft Nuku'alofa Strategic Development Plan completed. This is yet to be adopted as a final strategy, with some delays due to the reform process within PUMA and GOT. Comments from stakeholders regarding the draft NSDP report (3 volumes) have already been incorporated. This plan will come into force once the NSPM Act 2012 is fully enforced. 6 staff at PUMA office were funded by ADB to help its operation and build capacity. Five (5) of the six staff worked on Nuku'alofa Strategic Development Plan, but have now completed their contracts. Due to the uncertainty of the PUMA / proposed
1.2 Reforming TWB and WAL tariffs for recovery of water supply and solid waste services operations and maintenance costs.	1.2.1 TWB and WAL tariffs reviewed, amended, and implemented by March 2014 1.2.2 TWB and WAL asset management plans prepared and implemented	Tariff reviews completed. The Financial Management Specialist completed the Financial Manuals for each public enterprise. Each public enterprise has developed their own asset management plan and already submitted to MoPE
1.3 Mandating the development and implementation of urban infrastructure asset management plans	1.3.1 Preparation of asset management plans mandated by all public urban services providers by March 2014	TWB and WAL already developed their own asset management plans and submitted to MoPE. Adopted as working documents.
Output 2: Assist TWB provide effective, efficient and sustainable water supply services in Nuku'alofa		
2.1 Building technical capacity to reliably deliver water to all parts of the supply network through the creation of supply zones and improved bulk supply metering	2.1.1 Modelling of water supply network 2.1.2 Review and upgrade bulk supply metering 2.1.3 Review and implement critical zoning	There were 13 zones identified. The contract for Civil Works for Zoning of Nuku'alofa Water Supply Reticulation Network, Nuku'alofa was awarded to CCECC. It is expected that the contractor will be mobilised on the second week of February 2016.

Phase 2	Implementation Phase	
DESCRIPTION	INDICATORS/TARGETS ^A	STATUS/ISSUES
2.2 Designing and assist in implementing a comprehensive program to reduce non-revenue water from the current level of about 50% to less than 25% by 2017	2.2.1 Rehabilitation of 7 existing boreholes 2.2.2 Construction of 12 new boreholes 2.2.3 Construct new 4,000 m ³ water storage 2.2.4 Undertake NRW studies	CCECC, the contractor for the rehabilitation of the boreholes and the design and construct of a new 4,000 m ³ reservoir at Mataki'eua was mobilised in July 2015. It is expected that these civil works will be completed in Q3 – 2016. NRW studies to be initiated Q1 –
2.3 Developing consumer water meter replacement policies and replace defective consumer		To be initiated in Q3 – 2016
2.4 Building financial management capacity particularly in the areas of revenue collection and billing.	Recommend financial system upgrades and staff training required to improve of financial computer package for WAL.	WAL continues to use the financial system upgrades that were developed by the Pacific Management Consultants with the assistance from the National Financial Management Specialist. All accounts now fully audited and operational accounting
2.5 Preparation of the TWB asset management plan.		A draft asset management plan was prepared by TWB in March 2014, and submitted to MoPE.
Output 3: Assist WAL provide sustainable solid waste services in Nuku'alofa		
3.1 Building technical capacity to reliably manage solid waste collection, transportation and disposal for Nuku'alofa and its peri-urban areas	3.1.1 Installation of an impervious liner to cell no. 2 of the Tapuhia landfill completed by October 2014 3.1.2 New landfill loader, procured, delivered, and entered into service at Tapuhia landfill by February 2014 3.1.3 Groundwater water quality monitoring program at Tapuhia landfill.	BB Construction has installed an impervious liner to Cell No. 2. Works completed. Landfill loader handed over by Intracor Commodity Exports Ltd to WAL and immediately started working in May 2014. ESU continue to work with WAL, Geology and Environment to carry out groundwater sampling and testing on a quarterly basis. During the year 2015, two Bi-Annual Reports for ESU were submitted to stakeholders who include ADB, DFAT, MEIDECC, MLNR, TWB, WAL and others. NSPAO staff continued to assist the International Waste Management Specialist and the

Phase 2		Implementation Phase	
DESCRIPTION		INDICATORS/TARGETS ^A	STATUS/ISSUES
3.2 Building financial management capacity particularly in the areas of revenue collection and billing		3.2.1 Financial management and billing software and associated hardware platforms procured and commissioned by September 2013, and financial management and asset management capacity of WAL developed by February 2015	Financial and asset management systems fully functional in WAL. New CEO of WAL since late 2015 is Malakai Lomu Sika, who previously was the national consultant undertaking the capacity building in financial management. WAL on very firm financial management system now. The joint billing system between WAL and TWB continues to operate due to the assistance from the International Waste Management Specialist and the National Financial Management Specialist during the year 2015. It is expected that the performance from both public enterprises will improve in the coming years, particularly with the Government reform process.
3.3 Preparation of the WAL asset management plan.		3.3.1 WAL updates and implements its asset management plan for Tapuhia landfill facility plant and solid waste handling and processing equipment by July 2014.	Draft asset management plan for WAL was prepared in 2014 and submitted to MoPE. Accepted as a working document.
Output 4: Assist the PMU to improve other municipal services within Nuku'alofa			
4.1 Identifying potential candidate subprojects from the UIDP or TNIP		4.1.1 Candidate subprojects identified, screened, selected, designed, and implemented by January 2019	Nuku'alofa Sanitation Master Plan was approved by PSC#5 as a candidate sub-project to go ahead.
4.2 Preparation of resettlement plans and initial environmental evaluations for candidate subprojects approved by the PSC and ADB.			ADB gave its no objection for the Feasibility Study for candidate subprojects and the Updated Procurement Plan for July 2015 in June and August 2015 respectively. Some of the subproject activities were procured/commenced in Q4 of 2015. Most of the activities will be started in
Output 5: Raise Public awareness of municipal services within Nuku'alofa			

Phase 2		Implementation Phase	
DESCRIPTION		INDICATORS/TARGETS ^A	STATUS/ISSUES
5.1 A community awareness and education program covering municipal services issues including planning and development consent requirements, household responsibilities for managing solid waste (reduce, recycle, re-use), public health benefits of safe waste handling and disposal, and the responsibilities of the Nuku'alofa community as		Community awareness and education implemented throughout the project implementation period	WAL and TWB continue to provide community awareness and education program for each public enterprise through radio, television and consultations with relevant stakeholders. The launch of the Clean Green Tonga campaign has raised the visibility of waste and environmental services and issues, and will continue to work at communities, schools and workplaces in 2016.
5.2 Assist TWB and WAL to improve their customer complaints mechanisms		Customer complaints mechanisms in TWB and WAL are improved and the public is consulted on service standards, water conservation, and demand management by February 2015.	A computerized complaint mechanism for WAL is successfully operating and providing valuable data to management for ongoing organisational improvements. A computerised complaint mechanism for TWB is being developed. It is expected that the computerised complaint mechanism for TWB will be completed in Q1 of 2016, and will be of great assistance in streamlining management and response to
5.3 Undertake public consultation on service standards, water conservation, and demand management.			TWB continues to provide public awareness program regarding service standards, water conservation and demand management. TWB uses radio, television for its public awareness programs, and the Project finances these initiatives
5.4 Consult and encourage the participation of women's groups and community associations in urban		Women's groups and community associations are consulted and encouraged to participate in urban planning and design issues by June 2013.	There was a high level of women's involvement in the consultation process for the Strategic Development Plan for Nuku'alofa.
Output 6: Assist the PMU to effectively manage the project			
6.1 Project implementation assistance and capacity development		PIAC and capacity development consultants fielded (March 2012–April 2016)	All the international and national consultants were fielded during the year.

Phase 2	Implementation Phase	
DESCRIPTION	INDICATORS/TARGETS ^A	STATUS/ISSUES
6.2 Strategic development plan for Nuku'alofa and other municipal areas on Tongatapu	Strategic development plan for Nuku'alofa and other municipal areas on Tongatapu prepared by September 2014	The Nuku'alofa Strategic Development Plan has three volumes. This plan will come into force once the NSPM Act 2012 is fully enforced.

Notes: A Targets/Indicator dates have been amended in accordance with the work schedule endorsed at PSC meeting No.5, held 22 October 2014. Now as shown in PAM – Update No. 3, August 2014.

D.6 Gender Action Plan Implementation

On the 9th June 2015, Ms Kate Nethercott-Wilson, ADB Gender Consultant, conducted a follow up workshop to the one that was held in September 2014. This follow up workshop was held for all project stakeholders to examine methods for increasing the participation of women in the operational activities. Strategies were also developed to assist the project achieve improved outcomes for the participation of women in future project activities and urban services operations. This includes having focal points in TWB, WAL and PUMA who will work with the Womens Affairs Division of MIA to have regular discussions about practical small steps to improve gender equity in these enterprises which have traditionally been male dominated. As a part of the Sanitation Sub-project, further gender discussions and actions will be facilitated to ensure the Project captures any opportunities to enhance opportunities for women in Tonga, and ensure women and men can participate in project activities.

D.7 Stakeholder Consultations and Community Awareness Activities

TWB and WAL continue to provide their respective community awareness programs through radio and television, as well as through community dialogues at various village level forums. The community awareness programs include the discussion of WAL tariff, picking up rubbish, and complaints about the services of TWB & WAL.

The Clean Green Tonga campaign was launched in 2015. Cabinet have endorsed the formation of a National Commission for a Clean Green Tonga, with membership from key Government, Church, community and business leaders. The Commission and Clean Green Tonga Taskforce (comprising of key workers in the environment, health, tourism, education and community sectors) will launch a small grant and engagement programme for communities, schools and workplaces in 2016. Social media will be harnessed to promote success stories and name the heroes of the Clean Green Tonga movement.

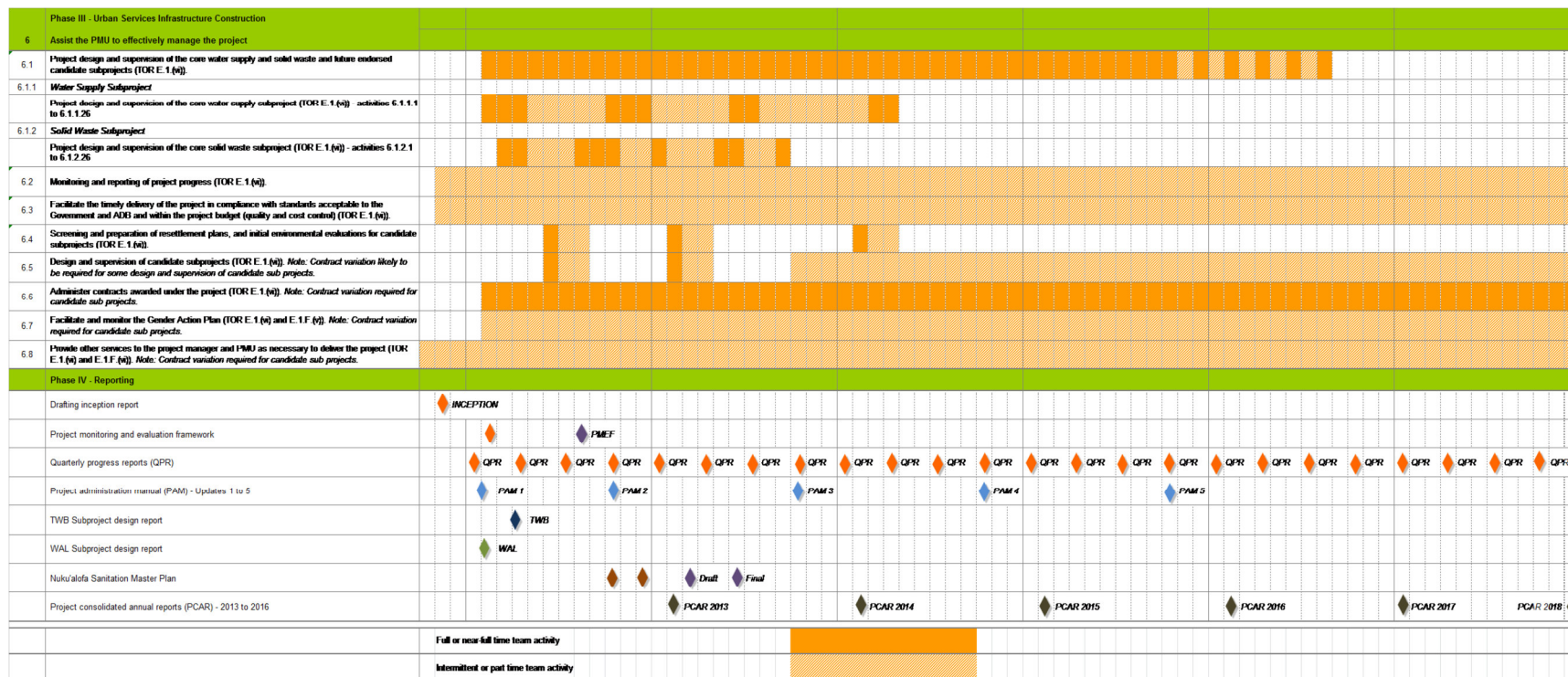
D.8 Land Acquisition and Resettlement

Up to the end of December 2015, all of the land owners/users were paid lease fees for the first four years ending on the 17th December 2018, and compensation for any loss of land use and crops. Respective land deeds were produced by MLNR.

Chapter E. **Project Time frame**

E.1 Project Time Frame

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F.1 Financial Summary

The following table indicates the total amount received/disbursed through imprest account and direct payment. It also shows the expenditures by category and the closing balance in the imprest account as at 31st December 2015. **(NUDSP accounting summary – 2015)**

Description		Cumulative/Year to date(\$)		
		Imprest	Direct	TOTAL
Cash Receipts		1,259,752	3,758,271	5,018,022
Financing source				
Less: Expenditures by Categories				
Civil works comprising				
	Water supply subproject	-	962,830	962,830
	Solid waste subproject	324,227	89,836	414,063
	Other municipal subproject	138,652	-	138,652
	E-Bidding: SHO-2014-04	6,626	-	6,626
Equipment and materials		-	-	-
	Water supply subproject	61,485	10,171	71,657
	Solid waste subproject	164,551	814,697	979,247
	Other municipal subproject	15,237	-	15,237
Land Acquisition		82,391	-	82,391
Consulting Services		176,329	1,880,737	2,057,066
PMU staff - salaries		110,146.75	-	110,147
Bank Charges		500	-	500
Total Expenditures		1,080,146	3,758,271	4,838,416
Receipt less Expenditure		179,606	-	179,606
Closing Cash Balance (as at 31st December 2015)		179,606	-	179,606

F.2 Updated Procurement Plan as end December 2015

A. Process Thresholds, Review, and 18-Month Procurement Plan

1. Project Procurement Thresholds

1. Except as the ADB may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works	
Method	Threshold
International competitive bidding (ICB) for works	Greater than or equal to \$1,000,000
National competitive bidding (NCB) for works	Less than \$1,000,000
International competitive bidding (ICB) for goods	Greater than or equal to \$100,000
Shopping for works	Below \$100,000
Shopping for goods	Below \$100,000

2. ADB Prior or Post Review

2. Except as the ADB may otherwise agree, the following prior or post review requirements apply to the various procurement and consultant recruitment methods used for the project.

Procurement Method	Prior or Post	Comments
Procurement of Goods and Works		
ICB Works	Prior	
ICB Goods	Prior	
NCB Works	Prior	
Shopping for Works	Post	
Shopping for Goods	Post	
Community participation	Post	
Recruitment of Consulting Firms		
Quality and Cost-based Selection (QCBS)	Prior	80:20
Recruitment of Individual Consultant		
Individual Consultants	Prior	(national and international)

3. Goods and Works Contracts Estimated to Cost More than \$1 million

3. The following table lists goods and works contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Estimated Contract Value	Awarded Contract Value	Procurement Method	Prequalification of Bidders (y/n)	Advertisement Date (quarter/year)	Comments
TWB-01: Civil Works LOT 1 - Wellfield Upgrading LOT 2 - Reservoir – Design and Construct	\$3.44m	\$3.44m	ICB Works	N	Q1, 2015	Contract awarded to China Civil Engineering Construction Corporation to June 2015. Mobilised July 2015. Civil works to be completed in July 2016.

4. Consulting Services Contracts Estimated to Cost More than \$100,000

4. The following table lists consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Estimated Contract Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	International or National Assignment	Comments
Project implementation assistance consultants	\$2.80m	\$3.78m	QCBS	Q4 2011	Both	Completed in Q2, 2012. Contract award to Egis Eau in association with Pacific Engineering Consultancy Group.

5. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000

5. The following table groups smaller value goods, works and consulting services contracts for which procurement activity is either going or ongoing or expected to commence within the next 18 months.

General Description	Estimated Contract Value	Awarded Contract Value	Number of Contracts	Procurement/ Recruitment Method	Comments
SHO-01: 4 x 4 double cab, utility – 2 no (TWB & WAL)	\$0.085m	\$0.061m	1	Shopping	Completed Q4 2012. Contract awarded to Asco Motors.
SHO-02A: 4 x 4 double cab, utility – 1 no (TWB) including 2 GPS units for NUDSP supplied utilities.	\$0.036m	\$0.061m	1	Shopping	Completed Q2 2015. Contract awarded to Asco Motors.
SHO-02B: 4 x 4 double cab, utility – 1 no (WAL) & 18 GPS Vehicle Tracking Units for WAL & TWB	\$0.049m		1	Shopping	Q4 2015
SHO-04: eProcurement Services	\$0.010m	\$0.007m	1	Shopping	Completed, contracted awarded Q4 2014.

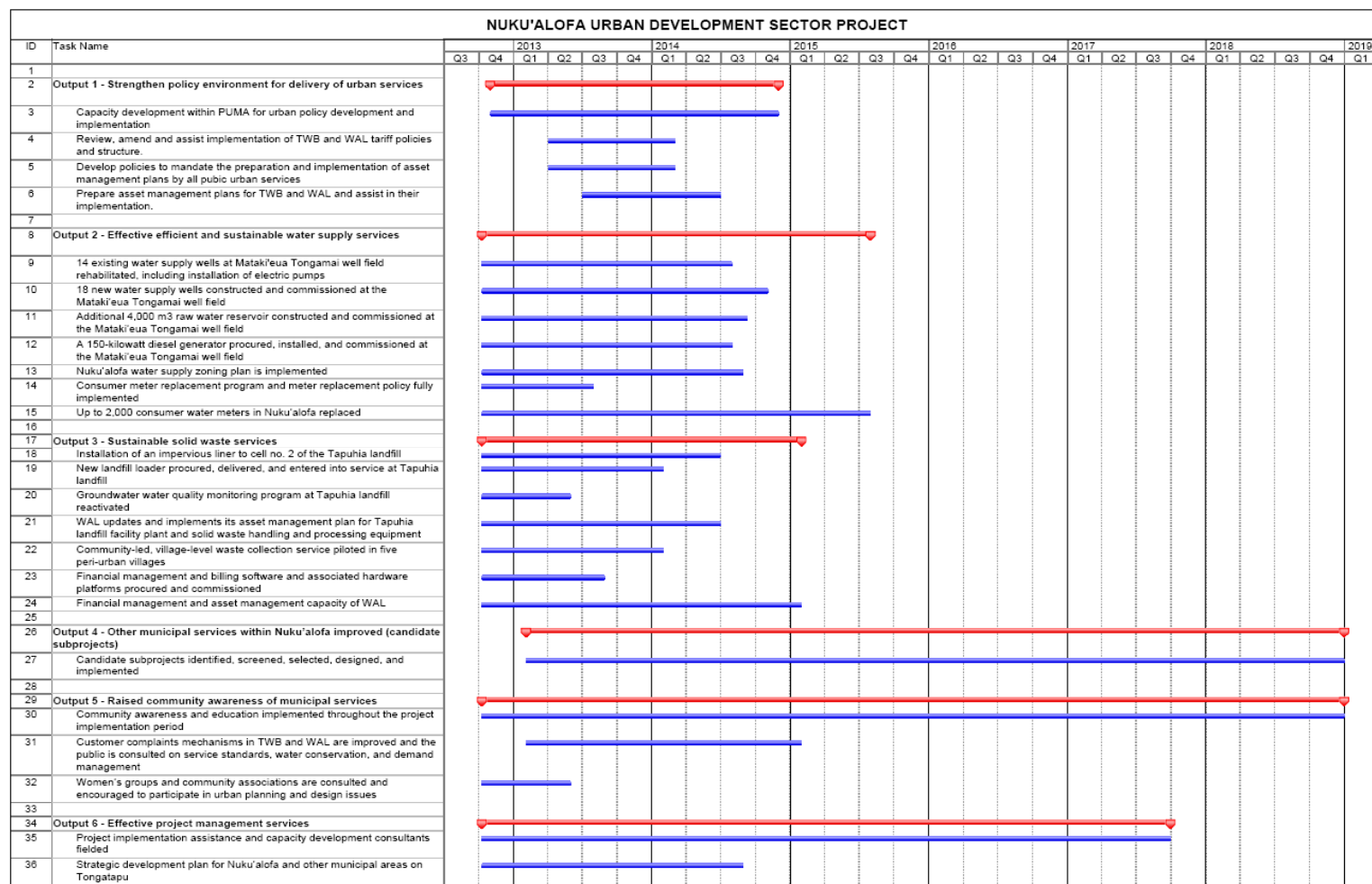
General Description	Estimated Contract Value	Awarded Contract Value	Number of Contracts	Procurement/ Recruitment Method	Comments
Waste Authority Limited					
WAL-01: Articulated wheeled loader	\$0.20m	\$0.182	1	ICB Goods	Completed Q3 2013. Contract awarded to Intracor Commodity Exports Ltd.
WAL-02A: Financial management package – computer hardware and software and training	\$0.096m	\$0.087m	1	Shopping	Completed in Q3, 2013. Contract awarded to Pacific Management Consultant Ltd.

General Description	Estimated Contract Value	Awarded Contract Value	Number of Contracts	Procurement/ Recruitment Method	Comments
WAL-03: LOT 1: Rear loading, 8m ³ , compactor truck – 2 no LOT 2: Septage truck, 5,500 liter, vacuum pump out with hoses, fittings and accessories	\$0.590m	\$0.588m	1	ICB Goods	Completed in Q3, 2013. Contract awarded to Manco Environmental Ltd.
WAL-05: Construct landfill cell no.2	\$0.40m	\$0.449m	1	NCB Works	Completed in Q3, 2013. Contract awarded to B. B. Construction Ltd.
WAL-06: Groundwater monitoring equipment	\$0.004m	\$0.005m	1	Shopping	Completed in Q4, 2013. Contract Awarded to Vendart Pty Ltd.
WAL-07: Landfill Compactor, 20 tonne & accessories	\$0.500m	\$0.475m	1	ICB Goods	Q3 2015
WAL 08: Stage 1- Rehabilitation and construction of improved public conveniences – up to 5 sites for Nuku'alofa waterfront and CBD areas	\$0.150m	\$0.158m	1	Shopping LOT 1 – up to 3 units for rehabilitation (\$0.065m) LOT 2 – up to 2 units, new construction (\$0.075m)	Q3 2015
WAL-9: Service trailer for cleaning and maintenance of public conveniences.	\$0.015m	\$0.013m	1	Shopping	Q4 2015
WAL-10: Village SWM pilot – 240 litres MGBs	\$0.017m	\$0.015m	1	Shopping	Q3 2015
WAL-11: New septage beds – Tapuhia WMF	\$0.080m		1	NCB Works	Q1 2016
WAL-12: 15 Kl/day leachate/wastewater treatment plant/upgrade	\$0.525m		1	ICB Works	Q2 2016

General Description	Estimated Contract Value	Awarded Contract Value	Number of Contracts	Procurement/ Recruitment Method	Comments
WAL 13: Equipment storage/office building – Tapuhia WMF	\$0.225m		1	ICB Works	Q3 2016
WAL 14: Weighbridge & instrumentation–20 metre – Tapuhia WMF	\$0.050m		1	ICB Works	Q1 2016
WAL 15: Power supply upgrade and generator – Tapuhia WMF	\$0.130m		1	ICB Works	Q2 2017
WAL 16: Green waste processing equipment	\$0.065m		1	Shopping	Q1 2016
WAL 17: Septage pump out tanker truck	\$0.185m		1	ICB Goods	Q1 2016
WAL 18A: Upgrade sanitation facilities in poor/ vulnerable households – Batch 1	\$0.100m		1	Shopping	Q2 2016
WAL 18B: Upgrade sanitation facilities in poor/ vulnerable households – Batch 2	\$0.190m		1	Shopping	Q3 2016
WAL 18C: Upgrade sanitation facilities in poor/ vulnerable households – Batch 3	\$0.190m		1	Shopping	Q1 2017
WAL 19: Stage 2- Construction of improved public conveniences – up to 3 sites for Nuku'alofa waterfront and CBD areas	\$0.085m		1	Shopping	Q4 2016
WAL 20: Upgrade sanitation facilities in schools	\$0.100m		1	NCB Works	Q4 2016

General Description	Estimated Contract Value	Awarded Contract Value	Number of Contracts	Procurement/ Recruitment Method	Comments
<i>Tonga Water Board</i>					
TWB-02: Zonation - Bulk and service water supply meters, isolation valves, pipe fitting	\$0.31m		1	NCB Works	Q4 2015
TWB-03: Vehicle Mounted Truck Loader Crane - 3 tonne	\$0.13m	\$0.102m	1	ICB Goods	Q3 2015
TWB-04: Leak detection equipment, meter test/ calibration unit, water testing laboratory equipment	\$0.10m		1	ICB Goods	Q2 2016
<i>Consulting Services</i>					
Deputy Project Manager	\$0.019	\$0.019	1	Individual	Recruited for 2-years (1 Oct 2013 – 31 Oct 2015)
Urban Planner (Technical Support)	\$0.009	\$0.009	1	Individual	Recruited for 2-years (22 Jul 2013 – 21 Jul 2015)
Urban Planner (Evaluation & Enforcement)	\$0.009	\$0.009	1	Individual	Recruited for 2-years (22 Jul 2013 – 21 Jul 2015)
Urban Planner (Planning & Standards)	\$0.009	\$0.009	1	Individual	Recruited for 2-years (22 Jul 2013 – 21 Jul 2015)
Chief Clerk	\$0.007 \$0.008	\$0.007	1	Individual	Recruited for 2-years (22 Jul 2013 – 21 Jul 2015) Extended for 2 years (22 Jul 2015 – 21 Jul 2017)
Project Accountant	\$0.009 \$0.018	\$0.009	1	Individual	Recruited for 2-years (22 Jul 2013 – 21 Jul 2015) Extended for 2 years (22 Jul 2015 – 21 Jul 2017)

Overall Project Implementation Plan



F.3 Project Specific Covenants

Compliance with Grant Covenants

No	Covenant	Ref. in GA	Status
Others			
1	Implementation Arrangements – The Recipient and the Project Executing Agency shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the PAM. Any subsequent change to the PAM shall become effective only after approval of such change by the Recipient and ADB. In the event of any discrepancy between the PAM and this Grant Agreement, the provisions of this Grant Agreement shall prevail.	G0264/G0265 Sch 4 Para 1	Being complied with
2	Implementation Arrangements – The Recipient shall ensure that no later than 3 months after the Effective Date, the Project Executing Agency shall have established the PMU. The Recipient shall ensure that the PMU employs sufficient staff for the duration of the Project with the requisite expertise in the field of project management, financial management, engineering, construction supervision, procurement, construction and equipment inspection and testing, and environmental and social safeguards implementation. The Recipient shall keep the PMU equipped with the necessary office space, facilities (including telecommunications), equipment, support staff and management information systems for the entire duration of the Project. The Recipient shall endeavour to assign the same persons to key positions in the PMU for periods of at least three consecutive years.	G0264/G0265 Sch 4 Para 2	Being complied with
3	Counterpart Support – The Recipient shall provide all counterpart funds, land and facilities required for timely and effective implementation of the Project, including, without information, any funds required (a) to meet any shortfall between cost and revenues for the operation and maintenance of the facilities created or rehabilitated under the Project, (b) to mitigate unforeseen environmental and social impacts, and (c) to meet additional costs arising from design changes, price escalation in construction costs and/or unforeseen circumstances. The Recipient shall make the resources thus required available on an annual basis for each fiscal year.	G0264/G0265 Sch 4 Para 3	Being complied with
4	Candidate Subproject Selection Criteria and Approval Process for Candidate Subprojects – The Recipient and the Project Executing Agency shall ensure that all Candidate Subprojects are selected and approved in accordance with the Candidate Subproject Selection Criteria set out in the PAM, including without limitation, the requirement of undergoing a feasibility study, which will address technical analysis and description, rationale, scope and components, cost estimates and financing plan, implementation arrangements, financial and economic analysis, environment impact assessment, and social and poverty impact assessment. Each feasibility study will be submitted	G0264/G0265 Sch 4 Para 4	Being complied with

No	Covenant	Ref. in GA	Status
	initially for review and approval by ADB. After ADB has endorsed the feasibility study, the PMU will submit the feasibility study to the PSC for final review and approval.		
5	Candidate Subproject Selection Criteria and Approval Process for Candidate Subprojects – The Recipient shall ensure that all documents forming the basis for screening, selection and processing of Subprojects are made available to ADB upon request and are kept available for such purposes for a minimum period of five years from the date of the project completion report for the Project.	G0264/G0265 Sch 4 Para 5	Being complied with
6	The Recipient will ensure that the Project facilities shall be constructed, upgraded or refurbished in accordance with the agreed technical design specifications and that construction supervision, quality control, and contract management are implemented in accordance with internationally accepted standards.	G0264/G0265 Sch 4 Para 6	Being complied with
7	Sustainability Undertakings: Recurrent Funding – For the duration of the Project Implementation Period and subsequently, the Recipient shall ensure that (i) TWB continues its program for replacement of faulty water meters as part of the overall operation and maintenance plan at TWB, and (ii) WAL continues the equipment maintenance schedule developed pursuant to the AusAID Program. Within six months prior to the end of the Project Implementation Period, the Recipient will have developed and adopted policies for ongoing operation and maintenance, including recurrent funding, for all of the Project facilities, in a form satisfactory to ADB.	G0264/G0265 Sch 4 Para 7	Being complied with
8	Sustainability Undertakings: Recurrent Funding – Within nine months after the Effective Date, the Recipient shall consider, develop and adopt a set of recommendations to reduce consumers' costs in using solid waste services, and to reduce and managing or restructuring on a long term basis the indebtedness of WAL, whether through an elimination of the consumption tax on such services (for a limited time or permanently) or through a combination of other measures with substantially the same effect, and shall submit the relevant proposals to the legislature of adoption.	G0264/G0265 Sch 4 Para 8	Being complied with
9	Development Coordination – The Recipient shall keep ADB informed of discussions with other multilateral, bilateral and national aid agencies that may have implications for the implementation of the Project. The Recipient shall provide ADB with an opportunity to comment on any resulting policy reform and/or investment proposals, and shall take into account ADB's views before finalizing and implementing any such proposals.	G0264/G0265 Sch 4 Para 22	Being complied with

No	Covenant	Ref. in GA	Status
10	Project Website – No later than 2 months after the Effective Date, the Recipient through the Project Executing Agency shall create a website dedicated to the Project and accessible to the public, to disclose key Project-related information, including (i) costs, (ii) safeguards, (iii) procurement such as the list of participating bidders, name of the winning bidder, basic details on bidding procedures adopted, amount of contract awarded, and the list of goods/services procured, (iv) implementation information, and (v) expected service levels. The Recipient shall make public information about selection of consultants and award of civil Works through publication in national newspapers.	G0264/G0265 Sch 4 Para 23	PUMA had a website when the Project commenced but it is no longer active. Options are being looked at to activate the website.
11	Project Monitoring – No later than 3 months after the Effective Date, the Project Executing Agency shall establish a project performance management system satisfactory to ADB in accordance with the detailed arrangements set forth in the PAM, pursuant to which periodic monitoring reports, including the Safeguards Monitoring Reports, shall be submitted to ADB in accordance with the PAM.	G0264/G0265 Sch 4 Para 24	Being complied with – delayed due to the late recruitment of the PIAC
12	The Recipient shall enable ADB's representatives to inspect the Project and any relevant records and documents.	G0264/G0265 Article IV Para 4.02	Being complied with
13	Conditions for Award of Contract – The Recipient shall not award, and shall not permit the Project Executing Agency or Implementing Agency to award, any contracts financed under the Project for Output 6 of the Project, unless and until the bill entitled "National Spatial Planning and Management Act" pending in the legislature as of September 2011 shall have been enacted by the legislature of the Recipient and shall have entered into force in accordance with the proclamation of the King of Tonga.	G0264/G0265 Sch 3 Para 11	Complied
14	The Recipient shall not award and shall not permit the Project Executing Agency to award any Works contract under the Water Supply Subproject, the Solid Waste Subproject or any Candidate Subproject which involves environmental impacts until: (a) MOECC has granted the final approval of the IEE updated for the relevant Facility Site; and (b) the Recipient has incorporated the relevant provisions from the EMP into the Works contract.	G0264/G0265 Sch 3 Para 12	Complied
15	The Recipient shall not award and shall not permit the Project Executing Agency to award any Works contract involving involuntary resettlement impacts under the Water Supply Subproject, until the Recipient has prepared and submitted to ADB and the final RP based on the relevant detailed design and obtained ADB's clearance of such RP. The Recipient shall not award and shall not permit the Project Executing Agency to award any Works contract	G0264/G0265 Sch 3 Para 13	Complied

No	Covenant	Ref. in GA	Status
	involving involuntary resettlement impacts under the remaining Outputs of the Project, if pursuant to the RF and RP is required to be prepared thereof, until the Recipient has prepared and submitted to ADB the final RP based on the relevant detailed design and obtained ADB's clearance of such RP.		
16	Commencement of Works Contracts – The Recipient shall ensure that, subsequent to award of any Works contract under the Project for the Solid Waste Subproject, no construction activities shall be undertaken, and no land shall be handed over to the contractor, unless and until the proposed sites for community waste bins in the concerned peri-urban villages have been approved by ADB.	G0264/G0265 Sch 3 Para 15	Not relevant (civil works will not be needed)
Safeguards			
17	Environment – The Recipient shall ensure and shall cause the Project Executing Agency to ensure that preparation, design, construction, implementation, operation and decommissioning of the Water Supply Subproject, the Solid Waste Subproject, and the Candidate Subprojects comply with (a) all applicable laws and regulations of the Recipient relating to environment, health and safety, (b) the Environmental Safeguard; and c) all measures and requirements set forth in (ix) the IEES, the EMP in relation to the Water Supply Subproject and the Solid Waste Subproject, and (y) the EARF in relation to the Candidate Subprojects and (d) any corrective or preventative actions set forth in a Safeguards Monitoring Report.	G0264/G0265 Sch 4 Para 9	Being complied with
18	In the case of any discrepancies between the Recipient's environmental laws, regulations, and procedures and ADB's requirements, the Safeguard Policy Statement shall prevail. The Recipient should ensure through PUMA that no construction work of any kind under the Project shall be commenced until all applicable environmental clearances have been obtained and that all the above requirements are incorporated in the bidding documents and civil works contracts to ensure compliance.	G0264/G0265 Sch 4 Para 10	Being complied with
19	Land Acquisition; Resettlement – The Recipient shall ensure or cause the Project Executing Agency to ensure that all land and all rights of way required for the Water Supply Subproject, the Solid Waste Subproject or any Candidate Subproject are made available to the Works contractor in accordance with the Schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Recipient relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; c) the RF; and (d) all measures and requirements set forth in the relevant RP, including any RP that is required to be prepared subsequent to the date of the Grant Agreement pursuant to the SPS and the RF, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	G0264/G0265 Sch 4 Para 11	Being complied with

No	Covenant	Ref. in GA	Status
20	Without limiting the application of the Involuntary Resettlement Safeguards, the RF or the relevant RP, the Recipient shall ensure or cause the Project Executing Agency to ensure that no physical or economic displacement takes place in connection with the Project, the Water Supply Subproject, the Solid Waste Subproject, or any Candidate Subprojects until: (a) compensation and other entitlements have been provided to affected people in accordance with the relevant RP; and (b) a comprehensive income and livelihood restoration program has been established in accordance with the relevant RP.	G0264/G0265 Sch 4 Para 12	Being complied with
21	Indigenous Peoples – The Recipient and Project Executing Agency shall ensure that the Project (including the Water Supply Subproject, the Solid Waste Subproject, and the Candidate Subprojects) shall not have adverse impacts on indigenous peoples and that all Outputs shall be implemented in a culturally appropriate and participatory manner to meet the needs of various peoples of the country. If any impact is anticipated, the Recipient and the Project Executing Agency shall ensure that an IPP is prepared in accordance with the Safeguard Policy Statement.	G0264/G0265 Sch 4 Para 13	Not applicable
22	Safeguards – Related Provisions in Bidding Documents and Works Contracts – The Recipient shall ensure or cause the Project Executing Agency to ensure that all bidding documents and contracts for Works contain provisions that require contractors to: (a) comply with the measures and requirements relevant to the contractor set forth in the IEEs, the EMPs, the Rps and any IPP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report; (b) make available a budget for all such environmental and social measures; (c) provide the PMU with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEEs, the EMPs, the RPs or any IPP; (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and (e) fully reinstate pathways, other local infrastructure, and agricultural land to at least pre-project condition upon the completion of construction.	G0264/G0265 Sch 4 Para 18	Being complied with

No	Covenant	Ref. in GA	Status
23	Safeguards Monitoring and Reporting – the Recipient shall do the following or shall cause the Project Executing Agency to do the following: (a) submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEEs, the EMPs, the Rps or any IPP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and (c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMPs, the RPs or any IPP promptly after becoming aware of the breach.	G0264/G0265 Sch 4 Para 19	Being complied with
Social			
24	Human and Financial Resources to Implement Safeguards Requirements – The Recipient shall make available necessary budgetary and human resources to fully implement the EMP(s), the EARF, the RF, the RP(s) and the IPP(s) (if any), as applicable.	G0264/G0265 Sch 4 Para 14	Being complied with
25	Prohibited List of Investments – The Recipient shall ensure that no proceeds of the Grant or AusAID Grant are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the Safeguards of Policy Statement.	G0264/G0265 Sch 4 Para 15	Being complied with
26	Gender – The Recipient shall ensure that the Project Executing Agency implements the GAP in a timely manner over the entire Project Implementation Period, and that adequate resources are allocated for this purpose. In particular, the Recipient shall ensure that (i) a mid-level female planner is engaged as a member of PUMA for at least 2 years, (ii) by 2015, women represent 50% of the participants in general meetings of TWB and WAL; (iii) at least 20% of labor on contracts for civil works under Output 4 of the Project are women, (iv) by 2015 at least 20% of mid-level staff and above of TWB, WAL, PUMA and MOFNP are women and at least 30% of senior urban planning and management positions are held by women, and (v) sex-disaggregated data are gathered for all Project activities throughout the Project Implementation Period. The Recipient shall conduct training on GAP implementation for all staff involved in the Project. The Recipient shall ensure that implementation of the GAP is closely monitored, and progress is reported to ADB.	G0264/G0265 Sch 4 Para 16	Being complied with

No	Covenant	Ref. in GA	Status
27	Labor Standards – The Recipient shall ensure or cause the Project Executing Agency to ensure that Works contracts follow all applicable labor laws of the Recipient and that these further include provisions to the effect that contractors (i) carry out HIV/AIDS awareness programs for labor and disseminate information at work sites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; (ii) follow and implement all statutory provisions on labor (including not employing or using conditions; and (iii) maximize employment of women and local poor and disadvantaged persons for construction purposes, provided that the requirements for efficiency are adequately met. Such contracts shall also include clauses for termination in case of any breach of the stated provisions by the contractors.	G0264/G0265 Sch 4 Para 17	Being complied with
28	Governance and Anticorruption – The Recipient, the Project EA, and the IA shall (i) ensure that the Project is carried out in compliance with all applicable anticorruption regulations of the Recipient and ADB's Anticorruption Policy (1998, as amended to date) and acknowledge that ADB reserves the right to investigate directly, or through its agents, any alleged corrupt, fraudulent, collusive or coercive practice relating to the Project; (ii) cooperate with any such investigation and extend that all relevant staff actively participate in the training in Recipient's anticorruption regulations and ADB's Anticorruption Policy.	G0264/G0265 Sch 4 Para 20	Being complied with
29	Governance and Anticorruption – The Project EA and the IA shall ensure that the anticorruption provisions acceptable to ADB are included in all bidding documents and contracts, including provisions specifying the right of ADB to audit and examine the records and accounts of the Project Executing and Implementing Agencies and all contractors, suppliers, consultants, and other service providers as they relate to the Project.	G0264/G0265 Sch 4 Para 21	Being complied with
Financials			
30	The Recipient shall (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (iii) furnish to ADB, as soon as available but in any event not later than six (6) months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Grant proceeds and compliance with the financial covenants of this Grant Agreement as well as on the use of the procedures for imprest account and statement of expenditure), all in the English language; and (iv) furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.	G0264/G0265 Article IV Para 4.03(a)	Being complied with

No	Covenant	Ref. in GA	Status
31	The Recipient shall enable ADB, upon ADB's request, to discuss the Recipient's financial statements for the Project and its financial affairs related to the Project from time to time with the auditors appointed by the Recipient pursuant to subparagraph (a) here above, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Recipient unless the Recipient shall otherwise agree.	G0264/G0265 Article IV Para 4.03(b)	Being complied with
32	Conditions for Withdrawals from Grant Account – Notwithstanding any other provision of this Grant Agreement, no withdrawals shall be made from the Grant Account in respect of civil works, equipment and materials, and land acquisition until the firm supplying the Project Implementation Consultants shall have been engaged.	G0264/G0265 Sch 2 Para 7	Complied
33	Conditions for Withdrawals from Grant Account – Notwithstanding any other provision of this Grant Agreement, no withdrawals shall be made from the Grant Account in respect of the Water Supply Subproject until TWB shall have commenced a program for replacement of faulty water meters with use of existing stocks of functioning meters, satisfactory of ADB.	G0264/G0265 Sch 2 Para 8	Complied
34	Notwithstanding any other provision of this Grant Agreement, no withdrawals shall be made from the Grant Account in respect of the Solid Waste Subproject until (i) a new chief executive officer shall have been selected and appointed to WAL pursuant to a transparent selection procedure, satisfactory to ADB; and (ii) WAL shall have recommenced the equipment maintenance schedule developed pursuant to the AusAID Program.	G0264/G0265 Sch 2 Para 9	Complied

F.4 List of Consultations and Public Awareness Plan from 2013 - 2015

Table 10: Consultations & Public Awareness Plan 2013 – 2015

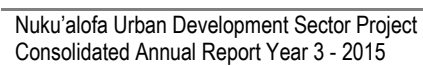
S. No.	OUTPUT 5: STRATEGIES AND ACTIVITIES	2013					2014					2015			
		1st	2nd	3rd	4th	Jun	1st	2nd	3rd	4th	Nov	1st	2nd	3rd	4th
PLANNING AND URBAN MANAGEMENT AGENCY (PUMA)															
1	Annual Exhibition														
2	Forum on NSPM Act 2012														
3	PUMA baseline survey														
4	Community meetings on NSPM Act 2012														
5	Staff training on policy and planning														
6	Educational program for municipal services issues														
7	Media Promotion with spots and educational programme														
8	Production of IEC materials including signboards etc.														
9	Participation (PUMA booth) in Annual Agricultural Shows etc.														
10	Revisit the vision for Tonga (Government, NGOs, and private sectors)														
TONGA WATER BOARD															
11	Media Promotion with spots and educational program														
12	Schools' competitions on essays and speeches														
13	Staff training on management and technical issues														
14	Production and translation of IEC materials														
15	Develop complaints mechanisms														
16	Surveys on service standards, water conservation etc.														
WASTE AUTHORITY LIMITED															
17	Facilitate Approval of Regulations for the Waste Act 2005														
18	Media Promotion with spots and educational program														
19	Production of IEC materials														
20	Schools' Educational Programme														
21	Community Educational Programme														
22	Cleaning Up Day Campaign														
23	Surveys on service standards (hrs of service, quality, etc.)														
24	Staff training on management and technical issues														
25	Develop complaints mechanisms														
GENDER ACTION PLAN															
26	Identification of stakeholders														
27	Survey to gather baseline data														
28	Training on gender equality to stakeholders														
29	Gender awareness training workshops														
30	Information campaigns (IEC and media campaign)														
31	Production of IEC materials														
32	Community training programme on health and women safety, and service standards and water conservation														

F.5 Civil Works at Mataki'eua Photos



F.5.1 Construction of Public Conveniences Photos





F.7 Assignment Report – Capacity Building for WAL (Annexes not Included)



Nuku'alofa Urban Development Sector Project

Project Implementation Assistance Consultants

ADB GRANTS -0264 TON and 0265 TON



Mission Report

NUDSP Support for Community Change and Strengthening of WAL

February – August 2015



Quality Information

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Author(s)	Sonia CHIRGWIN
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1. Background to Assignment

The Nuku'alofa Urban Development Sector Project (NUDSP) is working with the Tongan Government to provide improved and sustainable urban sector development infrastructure in Nuku'alofa. One of the core sub-projects is working with the Waste Authority Limited (WAL) to improve solid waste management service delivery. Output 3 of the NUDSP is to:

Improve Solid Waste Disposal Services – improve service delivery by WAL through

- a) Improvements to waste disposal operations at the Tapuhia Landfill
- b) Improving and expanding solid waste collection services; and
- c) Strengthening capacity in financial management at WAL

By the end of 2014, the programme of assistance to WAL was largely complete, and coming to a close. At that time the following components had been delivered:

- Purchase of two waste collection compactor trucks;
- Purchase of one septage pump truck for liquid waste management services;
- Purchase of front end loader for landfill;
- Completion of contract works to construct Cell number 2 for landfilling at the Tapuhia Waste Management Facility;
- Establishment of the framework for the village led waste collection pilot to trial ways of improving participation and payment in the rural areas;
- International bidding for the purchase of a new landfill waste compactor (estimated delivery March 2016);
- Procurement of equipment and re-establishment of groundwater testing at Tapuhia Waste Management Facility;
- Procurement of new accounting system (software and hardware) and assistance to audit three years of accounts and introduce sound financial management procedures;
- Development and installation of customer complaint management system;
- Development of WAL website;
- Capacity building for WAL management and staff.

Cell No 2 at Tapuhia Landfill	WAL Waste Truck Fleet 2015

In the ADB project review conducted at the end of 2014, the Interim CEO of WAL formally requested an extension of assistance to WAL from the NUDSP. Specifically, they required further support in the areas of capacity building and community change. The previous six months had seen significant advances in the sustainability of WAL, and they requested that this position be consolidated through

ongoing support for a six month period. The ADB approved this request and the additional support was included in a contract variation signed between the Government of Tonga and the project implementation consultants, Egis Eau. A terms of reference was developed (See Appendix A) and the Solid Waste Management Specialist was engaged for a further six months, undertaken between February and August 2015.

This report is a summary of the mission, including the activities undertaken, remaining challenges, and future directions planned for WAL.

2. Baseline Data on Waste Management Behaviours

Urban Area Waste Collection Participation

In the urban area, customers pay for waste services through the Tonga Water Board (TWB) billing system. To attain a clear picture of actual participation in waste collection for the urban area, WAL instigated a waste collection truck survey in April 2015. This provided a snapshot of household participation in urban waste collection services (as opposed to payments). WAL staff conducted a physical survey of houses with rubbish placed out for collection over a week in April.

The total number of households who put waste out for collection was 3,677.

This equates to approximately 60% of total urban households.

This actual participation rate demonstrated that there is still some way to go in the urban area when it comes to the implementation of sound waste management behaviours.

When analysing payment rates in the urban area as opposed to participation rates, the situation worsens. The baseline data for payment rates in the urban area in January 2015 was 1,783 households. With census data giving the total number of households at 6,191 in the greater urban area (Tonga Statistics, Census data 2011), this equates to 29% of urban households paying for waste services. This is a low payment rate, and it is clear that only approximately half the households putting out waste for collection are actually paying for the services.

Rural Area Waste Collection Participation

In the village areas, the system of payment in exchange for a marked waste collection bag means that only those who have paid their waste charges at the WAL office are participants in waste collection services.

The baseline for participation during January 2015 (the month prior to the start up of the extended NUDSP support to WAL) was 551 households paying out of a total of 7,229 households in the rural area. This equates to 7.6% participation. This means that over 92% of households continue to burn or bury their waste rather than participate in regular waste collection and safe disposal practices.

Illegal Dumping and Burning

For data on instances of illegal dumping or burning, there has been no cohesive mapping of this behaviour. It is clear that it remains commonplace, given the low participation in waste collection, particularly in the rural areas. Whilst complaints are sometimes lodged with the Police, WAL or the Public Health Division of the Ministry of Health, the response has usually been ineffective. There has only been one documented instance of court proceedings for illegal dumping, which was an unsuccessful legal action. Burning of waste remains a practice that is so widespread that prosecution is difficult. When WAL officers or public health inspectors follow up complaints, a written warning is usually issued that includes an instruction and timeframe for cleaning up the area. Compliance with these notices is high, demonstrating they are effective as a tool to resolve reported illegal disposal cases.

3. Background to WAL Waste Service Charging System

The key indicator of waste management participation is payment for waste collection services. The system was developed in 2006 on the concept of a universal household charge of TOP\$10 per household per month. It was projected that this user pay fee would be adequate to cover all WAL operating expenses. This monthly fee would remain affordable, as every household would be obliged to pay. Household surveys portrayed a general willingness to pay on the proviso that services were reliable. Village women's committees were enthusiastic about their role in collecting the fees and receiving a commission for the work. However, the implementation of the system proved to be much more challenging.

The collection system using over eighty women's committees was unreliable and difficult to manage. The willingness to pay, particularly in the rural areas, was very low. To put it simply, customers did not see the value in paying for a service they felt they didn't need, and preferred to continue to use traditional practices of burning and burial rather than pay. There was no enforcement mechanism in place, with withdrawal of services not appropriate for resolving any issues (both environmental or financial).

In 2012, WAL entered into a joint billing arrangement with the Tonga Water Board (TWB). The rationale behind this was to reduce billing production and distribution costs, and to provide a more established and accepted means of payment for urban customers.

Each month TWB paid WAL the total amount that was billed as waste charges. However, over time it became clear that there was a significant gap between customers billed and waste charges paid. TWB did not want bad publicity through the initiative, so widely promoted the policy that a customer's water could not be disconnected due to unpaid waste charges. Over time, it became more common practice for customers to opt out of paying their waste charges.

In 2014, with a restructuring of the TWB accounting team, there was a policy change to only pay WAL the money that was received from customers as waste charges. This created a sharp decline in revenue for WAL.

There were additional problems with the joint billing system, particularly in the area of data management. According to TWB, they bill on average a total of 4,500 customers out of a list of 6,100 each month. In other words, there are approximately 1,600 'non-active' households (those with no water meter, unoccupied houses, or disconnected houses). WAL have not been able to obtain a list of these non-active customers in order to determine means to bill this sector of the urban population.

Further to this, WAL were not able to obtain detailed data about customer payments from TWB, receiving only a total payment amount. Aside from the lack of accounting transparency, this gives WAL no capacity for following up non paying customers.

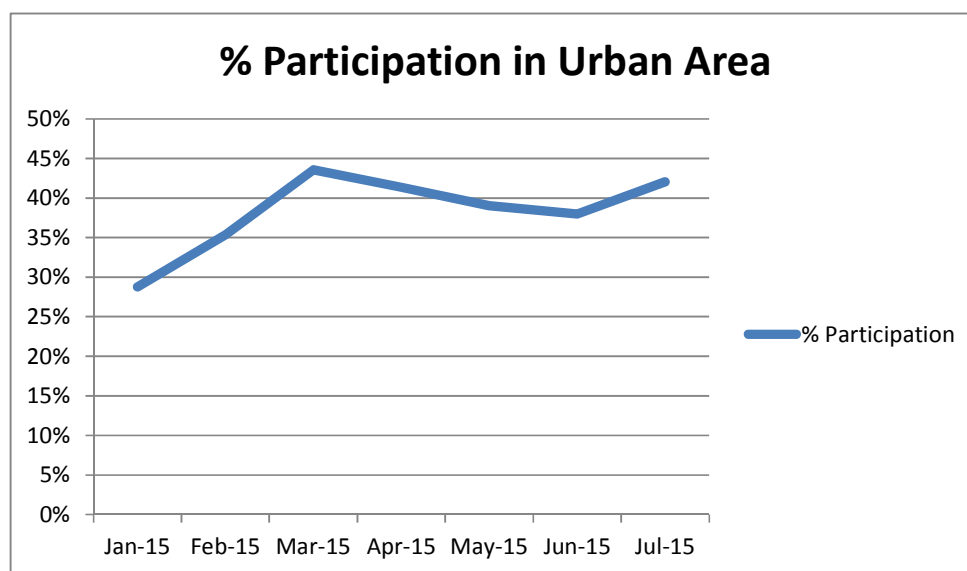
The TWB does not operate in the rural areas of Tongatapu, so the joint billing is only applicable to Nuku'alofa. In the rural areas, a system was introduced some years ago where customers receive specially marked WAL rubbish bags when they paid for waste services. This makes it clear who has paid for waste collection, but it is not a convenient system for customers to travel to the WAL office for this transaction, and participation remains low.

4. Payment and Participation Results

The critical indicator of participation in waste collection is through payment of the waste charges. This has been tracked during the assignment, with analysis of trends providing direct feedback on the impact of programmes.

It needs to be recognised that behavioural change is a long term project. Whilst there is progress over the past six months, many of the initiatives implemented will need a longer timeframe of monitoring and analysis to measure success.

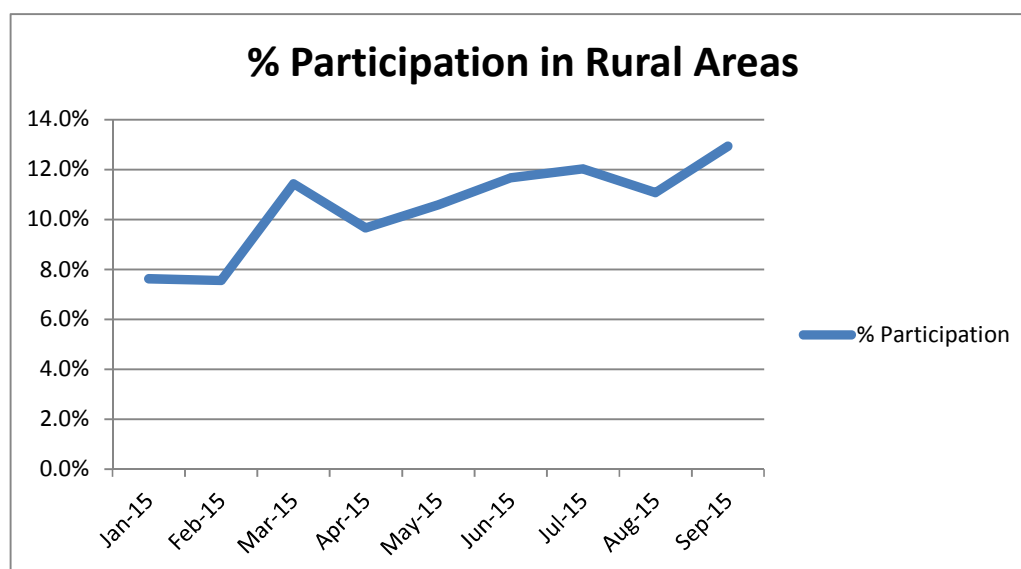
In the urban area, payments are received through the Tonga Water Board joint billing arrangement. The following details provide an estimate for participation from urban customers, based on the monthly income from TWB. Payments are significantly delayed after the close of each month, with payments usually occurring over sixty days later. With the time delay and the lack of access to customer data, mapping the trends is challenging under this system.



Revenue Received from TWB

	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15
Revenue	17,826	21,889	26,979	25,595	24,177	23,516	26,039
Est HHs	1783	2189	2698	2560	2418	2352	2604
Total Urban HH	6191	6191	6191	6191	6191	6191	6191
% Participation	29%	35%	44%	41%	39%	38%	42%

In the rural areas, WAL have complete data for payments, and an analysis can be made of trends for each village. The following chart depicts the percentage of participation of households from the rural area. It demonstrates that participation has increased from 7.6% to 12.9%. Whilst the progress has been significant, with the trend increasing each month; there is clearly still a long way to go.



5. Identification of Key Challenges

The key challenges for WAL as identified at the start of this assignment are as follows:

- Community change has been slow, with a large proportion of the population not seeing the value in paying for waste collection services. Despite nearly nine years of awareness campaigns, the actual rate of behavioural change is slow.
- Without universal participation, the financial sustainability of WAL is compromised. Whilst their financial performance has seen marked improvements, fully funding all operations and managing the enterprises' assets remain challenging for WAL.
- There is a lack of effective regulations to penalise poor waste management behaviour.
- The joint billing system with TWB does not reach all urban households, and the rate of payment is low. There is also a lack of transparency about the payment details, making it difficult for WAL to address these challenges.
- Over the last decade numerous village inspections and beautification competitions have taken place. These bring a focus to waste management, but unfortunately the focus is

usually on presenting a clean and decorated village whilst the waste is burnt at the back, and no real change occurs to daily practices.

- Public bin infrastructure in the urban area was not consistent in its placement and design. As at the start of 2015, the emptying of the waste bins was undertaken by the Ministry of Environment, and was inefficient as the truck could only transport six bins at a time.
- In late 2015, there will be 5 public toilet blocks (2 new ones and 3 renovations) funded under NUDSP. WAL will be tasked with cleaning and maintenance of these facilities, which is a new responsibility that will incur additional costs.
- There have been preliminary discussions for WAL to consider waste management service delivery in 'Eua, Ha'apai and Vava'u. This will require ongoing discussion, planning, and effective financial management in order to avoid over-expenditure for limited return.

6. Approach to Address Challenges

6.1. Strengthening Legislative and Policy Framework

It was clear from the lack of progress in utilising existing legislation to penalise poor waste management behaviours that there was a need to review the legislative and policy effectiveness. Discussions with the Tongan Police revealed that they were unwilling to utilise police resources to attempt prosecutions under the Waste Management Act as it currently stands. They stated that effective regulations were required in order to implement a process that could impose penalties without using the court system.

A Waste Regulations Working Group was formed, with representation from Police, Ministry of Internal Affairs, Public Health Division of the Ministry of Health, Department of Environment under MEECCDMMIC, and the Waste Authority. The group met three times to discuss experiences to date, strategy, and to work with a legal consultant to draft the necessary regulations.

Using NUDSP funds, Mr Graham Powell was engaged as a legal consultant for the purpose of developing an effective regulatory framework for penalising poor waste management behaviours. A full copy of his assignment report is attached as Appendix B.

It was determined that in order to separate the regulatory and operational functions of waste management, the regulations were more effectively placed under the Environment Management Act 2010. This required the drafting of the Environment Management Amendment Act 2015; and then the drafting of Environment Management (Litter and Waste Control) Regulations 2015. The Amendment Act has now been unanimously passed by the Legislative Assembly and is waiting for Royal Assent from His Majesty the King. Once this is received, the Regulations will be gazetted and come into force on the same day as the Environment Amendment Act.

The successful consultation and drafting, and its smooth passage through the legislative process has been a great success for the Project. Once the Regulations come into force, the next step will be to work closely with the Working Group to undertake training and planning for how to work effectively to implement the Regulations. With legally strong warning procedures and the ability to impose on the spot fines, the agencies will have the tools to influence behaviour. It will be critical to continue to support the implementation process, and conduct a widespread awareness campaign to take full advantage of the avenues to penalise poor waste management practices.

6.2. Improving WAL Sustainability

With household payments clearly a challenge for WAL, it was timely to review potential for additional revenue streams. There are five areas of improved revenue that were identified, four of which have been enacted.

1. Implementation of a cruise ship passenger environmental levy;
2. Expansion of the items covered under the existing plastics levy;
3. Review of commercial and institutional tariffs;
4. Implementation of new bulk waste collection service;
5. Introduction of a new *Pay as you Throw* system for waste collection to provide a direct incentive for customers to pay their waste collection fees.

Cruise Ship Passenger Levy

In previous research of indirect levies as a source of revenue for WAL, a passenger cruise ship environmental levy has been raised as a sound option based on experience in other countries. However, when promoted previously it did not have adequate political support, particularly from the tourism sector.

Discussions were conducted with the Ministries of Commerce, Tourism and Labour; Environment; Finance; and Public Enterprises; along with shipping agents, and support was galvanised prior to reintroducing the concept into Cabinet. On May 15th 2015, His Majesty's Cabinet passed the following motion:

1. *Recommendation is approved, i.e.:
That the proposal from the Waste Authority Limited to establish and implement the Cruise Ship Passenger Environmental Levy be approved.*
2. *That the Waste Authority Ltd submit an updated Financial Report through the Hon. Minister for Public Enterprises to Cabinet and highlight the revenue received from the levy introduced on plastic bags.*

At USD\$5 per passenger, the Cruise Ship Passenger Environmental Levy is projected to bring in annual revenue of approximately USD\$100,000 (approximately TOP\$230,000).

The system will be implemented from the 1st November 2015, as the shipping companies required a lead in time to implement the new charge. The shipping agents will provide a passenger manifest to WAL, who will then raise an invoice for the levy

Expansion of Items Covered by Plastics Levy

The Waste Management (Plastic Levy) Regulations 2013 provide WAL with a 10% levy on plastic bags, disposable food containers and diapers. This has provided an important revenue stream for WAL, with a projected income of TOP\$484,441 in the financial year ending June 2015.

WAL has been working on widening the plastic levy net to ensure that all plastic entering the country is levied. Currently the levy is applied when a tariff code is flagged in the customs computer system. However, this applies only to 'plastic containers'. Plastic bottles containing soft drinks or water are not flagged, as they are not identified as a 'plastic container' but rather by their content such as 'soft drinks or water'. There is a substantial amount of soft drinks and water coming into the country without the plastic levy being applied. This is inequitable for local bottlers of water who are paying the levy on the import of empty plastic bottles, and it fails to capture a significant section of the plastic waste stream. The proper application and widening of this net will increase the revenues of WAL and strengthen sustainability. It is estimated that an additional TOP\$120,000 will result from this exercise.

An amendment to the Waste Management (Plastic Levy) Regulations 2013 has been drafted. The CEO for WAL is currently meeting with stakeholders to consolidate support before commencing the approval process for the amendment. It is expected that the amendment will be implemented in 2016, further strengthening the cash flow position of WAL.

Review of Commercial and Institutional Tariffs

Under the NUDSP, a tariff review was undertaken to analyse the current tariff structure for both TWB and WAL. It was clear for WAL that with the current challenges in willingness to pay, it was not prudent to raise the household waste charges at this time. However, a full review of commercial and institutional rates showed that the rates have not kept pace with the cost of service delivery. To address this, rate increases have been applied from the start of 2015/2016 financial year. The rates have been increased by up to 40% in line with CPI increases over the time since the rates were first set. See Appendix C for the old and new rates.

A consultation with the Tongan Chamber of Commerce and Industry outlined the changes and the rationale. Generally there was good support, but with a strong feeling that those businesses that do not pay need to be pursued more aggressively to enable a more equitable system where all waste producers pay their waste disposal costs.

Implementation of New Bulk Waste Collection Service

In the WAL Business Plan for 2015/2016, it identified the need to research and implement new services to broaden the revenue streams for WAL. A gap identified in the market was the provision of bulk waste removal services. The private sector is only providing a bin collection service, similar to the existing WAL service. WAL purchased a second hand flat tray truck with a hi-ab crane, and produced a number of steel frame skip bins. These are available for hire at a cost of \$50, which includes collection and disposal of the waste. The truck can collect four bins in one load. To date this venture has been successful, with strong demand from building sites and larger businesses. It strengthens WAL's business and provides increased service options to customers.



New bulk collection bins



New truck for waste collection

Introduction of Pay as you Throw System for Waste Collection

This system was developed in response to the large proportion of customers who place waste out for collection without paying the waste collection fee. By only picking up waste marked with a pre-paid sticker, it will force greater payment compliance, particularly in the urban area.

The system was introduced in July 2015 (See Appendix D for information sheet about the system). A member of WAL staff was placed at the TWB office so that customers could receive their stickers and information about the system. It has been very useful in discovering a number of cases where waste charges were not included on people's water bill. As such, it is expected that revenues will increase.

The system is also more equitable, as it gives people the option of only paying when they have waste. This is good for families that travel overseas regularly, and for poorer households with less waste.

The system will be further improved if the stickers are easily purchased from multiple venues (at the moment they are only available at the TWB and WAL offices). If the stickers can be as widely available as phone cards, it will enhance the customer convenience and lead to greater participation. There are some challenges, such as getting stickers to customers who pay through bank transfer on line. There are also numerous reported cases of stickers being stolen. Clearly some customers remain committed to not paying for waste services. However, over time WAL will work proactively to resolve these issues.

With the sticker system implemented in July, and the policy of no sticker no collection effective from August, this has created many new customers for WAL. These customers have not been charged the waste fees to date, or prefer to pay directly to WAL. The income from these new customers was \$4990 in August and \$7653 in September. This is conservatively a 20% increase in payments from the urban area through the introduction of the sticker system, which is an encouraging start.

In September 2015, the Government of Tonga amalgamated the Boards for TWB, WAL and Tonga Power Ltd as a part of their reform agenda. It is yet to be seen how this will effect WAL operations, but it clearly presents an opportunity to improve billing and revenue compliance if the three enterprises can amalgamate this function over time. The new Board has received an induction pack from WAL that clearly presents performance data and an overview of current challenges.

6.3. Village Led Waste Collection Pilots

To improve and expand solid waste collection services, funding has been allocated under the NUDSP for a pilot programme to explore ways of increasing access to collection services. The aim of the pilot is to develop community-led village-level waste collection services in selected villages as a means of increasing participation

The level of payment from the villages outside of Nuku'alofa is currently around 12%. The assumption is that those not paying for services are disposing of their waste through burning and dumping. Despite some years of awareness raising about the impacts of these practices, the real and sustained behaviour change that is required has not occurred.

In late 2014, the Community Team Leader from WAL addressed all District and Town Officers at a meeting hosted by the Ministry of Internal Affairs. The pilot scheme was discussed, and application forms distributed to the representatives. In following up, at various town meetings and discussion forums, the Community Team Leader encouraged communities to think about ways to make waste collection work in their village.

After a review process, seven villages were selected for the pilot (servicing approximately 500 households). Each of the villages do not want a hard-stand centralised area; but prefer a system of MGBs dispersed at convenient locations throughout the village. Bins will be brought to centralised

collection points on the pick-up day, and each village will sign a Service Agreement with WAL that details roles and responsibilities, as well as payment arrangements.

The bins have now been procured through a competitive international shopping process, with delivery scheduled for October 2015. The pilot schemes will be monitored closely on a monthly basis. It is important to assess the payment rates, reasons for any failures to pay, and the adequacy of the system for the amount of waste generated. A monthly report will be generated over the next 6 months, with a final analysis undertaken to determine the best model to take forward as a means to improve waste management in the village areas.



Community bins at Ha'atafu



WAL waste collection at Ha'atafu

6.4. Improving Infrastructure

One of the keys to preventing littering is the provision of adequate bins in public spaces. Prior to the Coronation, WAL commenced the construction and installation of new bins along the waterfront area. Placement was finalised in consultation with the Tourism Division (now under MOI). It was agreed that WAL take over all collection of waste from public bins, as it is more efficient to use the waste compactor trucks. All bins are cleared three times a week.

Over time, WAL is installing more bins throughout the CBD and waterfront areas. There will also be a requirement to service bins in popular tourist sites as these are developed. WAL is in close dialogue with New Zealand Aid who are funding tourism site developments in partnership with local communities. It is important that WAL be included in discussions to ensure that any infrastructure can be adequately serviced. The development of public bins needs to be undertaken carefully and with good community ownership. The bins are not for household waste, and this needs to be monitored with strategies in place to address problems at a local level.

	
Public waste bins at waterfront	Clean Green Tonga visibility on public bins

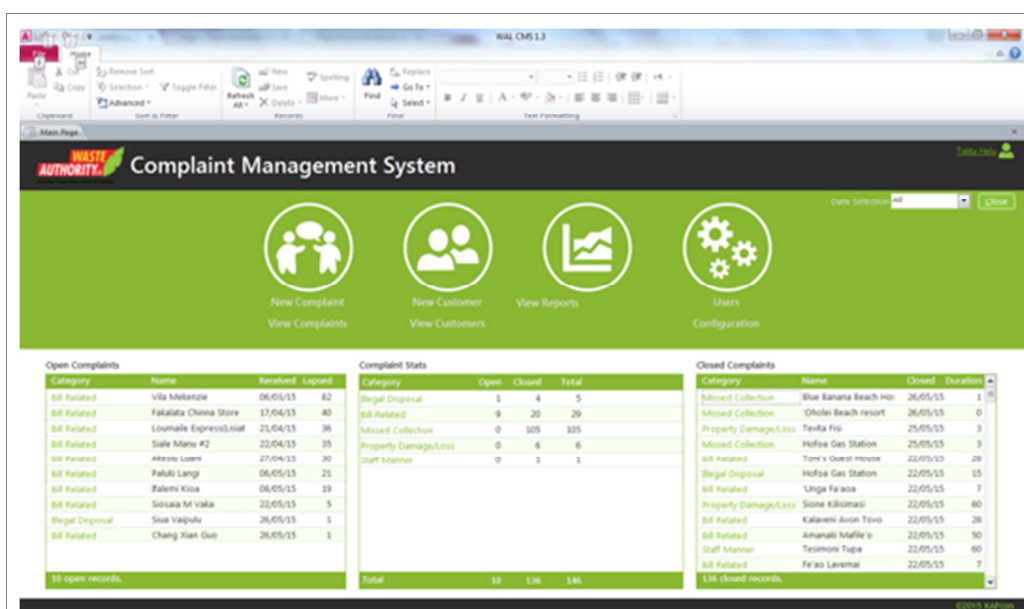
6.5. Delivering Effective Customer Service

In the past, WAL had a poor reputation for responding to complaints. Missed waste collections were often not reported, as people did not see any effective responses to resolve issues. In 2014, NUDSP funded the development of an electronic complaint management system. This database logs and categorises all complaints, customer expectations, WAL investigation and response, as well as the customer satisfaction level. This was implemented along with training and supervision of the system.

Improved fleet management and information complement the system. Now all collection vehicles have a GPS tracking system installed, allowing staff to check whether the trucks passed a customers house and at what time. This helps to resolve issues of whether or not waste was put out in time for collection.

The responsiveness of WAL has improved dramatically. Now a missed collection in the urban area is resolved through sending a WAL staff member to the house with a utility vehicle to collect the waste and bring to the bins at the WAL office. Giving the customer the benefit of the doubt creates good will, which is invaluable in maintaining customer loyalty and improving willingness to pay.

The only ongoing improvement required is reporting and response to trends. WAL need to understand which areas complaints are increasing or decreasing so that they can see where changes are effective, and understand where further improvements are required.



Complaint Management System – Overview Screen

Waste Authority Complaint Detail

Complainant [Oholei Beach resort]

Contact Person [Oholei Beach resort]

Category [Missed Collection]

Status [Closed] **Priority** [Normal]

Rec. Date [26/05/15] **Rec. Time** [8:40 AM]

Closed Date [26/05/15] **Closed Time** [3:30 PM]

Assigned To [Customer Service]

Satisfaction [Satisfied]

ID [187] **Summary** [Missed collection]

Detail
Pick up is twice a week Mon and Fri, but was not picked up on Monday

General **Analysis** **Comments**

Received By [Tatila Heta] **Receive Mode** [Phone] **Incident Date** [5/06/2015] **Complainer** []

Complainant's Expectation [Collect immediately]

Expectation Details
To collect immediately because village inspection for there is today.

Complaint Management System – Screen for entering complaint detail

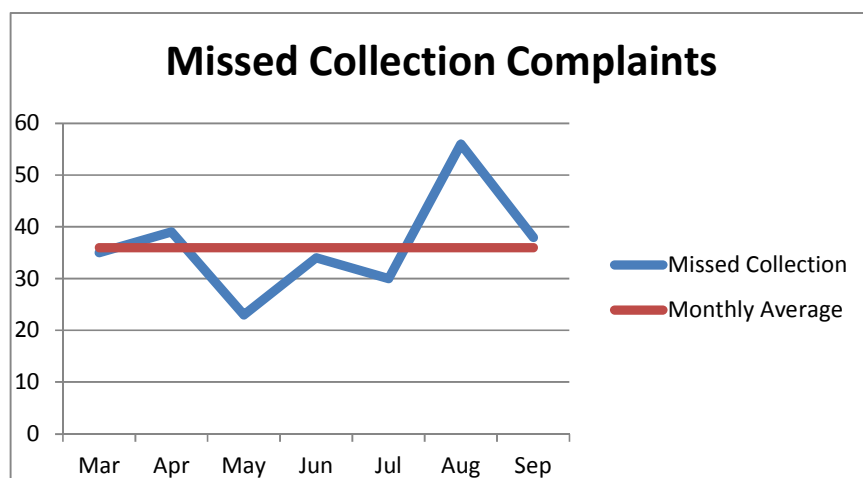
The following table and charts summarise the complaints received over the past seven months, and maps the trends in the two main areas of customer complaint (missed collections and bill related issues). With the introduction of the *Pay as you Throw* sticker system, there was a spike in missed collection complaints in August as people adjusted to the new system. However complaint levels returned close to average levels again in the following month. The bill related complaints have risen

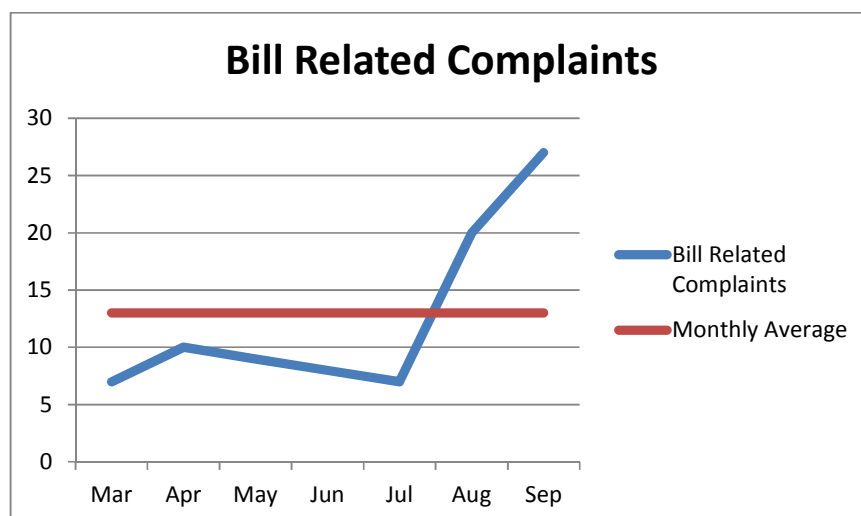
as a number of cases of customers who had not previously been billed are becoming evident, and are taking some time to resolve.

Summary of Complaint Data to Date

March - Sept 2015

	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Missed Collection	35	39	23	34	30	56	38	255
Bill Related	7	10	9	8	7	20	27	88
Property Damage	3	2	1	2	1			9
Staff Manner	1			2				3
Septage Collection						1		1
Tapuhia								0
Illegal Disposal	1	2	2	4	1	1	1	12





6.6. Expansion of WAL services to Outer Islands

There are plans with the Ministry of Public Enterprises to explore increasing WAL operations to Vava'u and Ha'apai. Whilst initial plans with budget estimates have been drawn up, these are not reflected in the current business plan due to uncertainty about timeframe and expectations.

Currently the Vava'u landfill is operated by the Ministry of Health. They would like to move this operation to WAL given their budget challenges and lack of expertise in waste management. JICA has been working in Va'vau establishing community based waste collection services, as well as upgrading the landfill. With the programme funding coming to a close, they are in close discussion with WAL in regard to the sustainability of waste services in Vava'u.

In Ha'apai, the World Bank and JICA are in discussion with the Tongan Government about funding the construction of a landfill. From WAL's perspective, it makes more sense to establish waste minimisation and a waste transfer station to ship waste back to Tongatapu for disposal. With approximately 600 households in Ha'apai, this would be more cost effective and less environmental risk. The operating costs of a landfill are high if appropriate environmental protections are to be put in place.

It is a challenge for WAL to plan for these service expansions, as they have significant cost implications. It is likely that these services will need to be cross subsidised by revenues from Tongatapu. It is critical that WAL is closely involved in all Government discussions and proactive in ensuring that any expansion of services does not compromise the hard won sustainability of the enterprise.

6.7. Clean Green Tonga – A Campaign for Social Change

Given the slow progress in the area of behavioural change, despite nine years of awareness and information; it was determined that a fresh approach was required.

In the lead up to the Coronation, the efforts to clean and spruce up public spaces was significant. It was quite a transformation, and people were noticeably proud of the cleanliness of Tonga. However, the challenge is to transform these efforts from once off events into part of daily living. It is also a challenge to ensure that waste is not dumped or burnt out the back while the public areas are well

presented. With the low waste collection participation rates, it is clear that illegal disposal methods remain widespread, especially in the rural areas.

Firstly the Community Team analysed the barriers to change, which can be summed up as follows:

- “Burning and burying our waste is what we have always done. My grandparents and great grandparents did it so why should I change?”
- Lack of knowledge about the impacts
- “No one else is doing it – why should I?”
- “I can’t afford to pay \$10 a month”
- “It’s too hard and I have other priorities.”
- Lack of penalty for poor practices

There was also an analysis of what approaches to behavioural change do not work:

- Telling people off or lecturing them on what they *should* do;
- Campaigns with loads of information and no actions.

Looking at international research and case studies into behavioural change, it was summarised that the following approaches are successful:

- Inspiration from leaders
- Getting inspired by each other (family, neighbours, community)
- Incentives – showing people what is in it for them
- Fame and prestige through doing the right thing
- Getting commitment – pledges for change (and the more public the better)
- Actions not just words – mobilizing people to participate

On this basis, the Clean Green Tonga campaign was designed and implemented.

In May 2015, Cabinet endorsed the formation of a *National Commission for a Clean and Green Tonga*. This brings together leaders from the five main churches, CEOs from Ministries/Divisions of Environment, Health, Tourism, Education and Internal Affairs; Chamber of Commerce and Industry, and NGOs. The Commission was launched in June, with the Crown Prince attending as the Patron. It was a successful event and received widespread media interest.

The role of the Commissioners is to use their positions of influence to support the Clean Green Tonga campaign. In the next workshop planned for November, the members will be asked to connect their commitment to their policies and activities. Church leaders will be asked how they will motivate their congregations, whilst Government and business leaders will be asked how they can link policy and practice to their support for a clean and green Tonga.

Underneath the Commission is a multi-stakeholder group known as the Clean Green Tonga Taskforce. They act as a secretariat for the Commission, whilst undertaking all the work of liaising with the community for implementation.

The main work of the programme is carried out at a grass roots level. To be involved, schools, businesses, or community groups register to receive an information kit. Included in this is a simple Action Plan form, with instructions and suggestions for activities. The emphasis is on making a difference; stopping illegal dumping and burning whilst implementing innovative projects to make the local environment clean and green. Widespread sharing of success stories (particularly through social media), business certification, and annual Clean Green Tonga awards, will build the profile of the campaign for change.

See Appendix E for further detail.

NUDSP funds have been used for a range of materials such as Clean Green Tonga merchandise (t-shirts, bio-degradable pens, water bottles), banners, a digital camera, and the Information Kits for participants.

The Campaign is in its infancy, and requires ongoing support to facilitate the work over the next two years. This will be undertaken by the Taskforce with support from the NUDSP Solid Waste /Sanitation Specialist. Additional support will be provided to the Taskforce and WAL through an Australian Volunteer placement in February 2016 for a Communications and Media Advisor.

The Agricultural Show in August was an ideal venue to begin to raise awareness about Clean Green Tonga. The Taskforce collaborated with Rotary Club of Tonga to distribute durable reusable shopping bags to the community. To receive a free bag, people were asked to sign a form that pledges to reduce plastic bag use. Recipients included His Majesty the King of Tonga, Her Majesty the Queen of Tonga, His Royal Highness the Crown Prince of Tonga, and the Prime Minister of Tonga.

	
Fatai from MIA gets a plastic pledge signed	Taskforce members with happy bag recipients
	
Talita explains the green bag concept	Talita and Akata from Taskforce

The formal launch of the National Commission for a Clean Green Tonga was held on 31st August. His Royal Highness the Crown Prince, who has agreed to be the Patron, launched the initiative at a dinner function.



National Commission for a Clean Green Tonga

7. Ongoing Priorities

Whilst there was significant progress made in the six months to advance sustainability and community change, there is a need for sustained efforts in these areas. The new CEO of WAL is committed to ongoing implementation tasks and fully cognisant of the need to continue with all the initiatives commenced in the past six months. In order to achieve the planned results there will be an emphasis on the following strategies.

Support from Partners – WAL will continue to receive support from the NUDSP over a further 2 years. The focus will shift to sanitation – improving liquid waste management and infrastructure for WAL whilst addressing access to sanitation facilities for the poorest households, and improving environmental performance of liquid waste management practices. Ongoing capacity building and institutional support will be continued under this project, which will include ongoing support for community change initiatives such as the Clean Green Tonga campaign. In addition, WAL will receive a volunteer placement from Australia to assist with media and marketing for social change.

Mobilising Communities – The Clean Green Tonga campaign is a movement for social change and will be implemented over an initial period of three years. WAL will continue to work with partners to inspire and engage communities, schools and businesses in the change process.

Ongoing Planning, Capacity Building and Business Development – WAL relies on a small team with commitment to their work and a good team spirit. To continue to build sustainability and public support, all staff need to be customer focussed and innovative. The workplace must also have a focus on safety and environmental protection. Vision, team building, and sound management are vital in addressing the challenges and building a strong future for the Waste Authority.

Whilst the work is by no means complete, the support from NUDSP has been instrumental in planning and implementing a range of initiatives to change behaviours and enhance sustainability. With the ongoing assistance via the Sanitation Sub-project, WAL will continue to receive strong support to grow and adapt as an enterprise, and to consolidate the gains made over the past six months.