

# APPENDICES

Appendix 1  
Written Evidence  
Water Authority of Fiji 2017 Annual  
Report

# **WATER AUTHORITY OF FIJI (WAF) 2017 ANNUAL REPORT**

<b><u>No:</u></b>	<b><u>Questions:</u></b>	<b><u>WAF Response</u></b>
1.	<b>Page 2: WAF Responsibility</b> What is the update from WAF on the attendance to the water leakage problems (quick fix)?	This activity is part of the Water Authority of Fiji's (WAF) Operation & Maintenance Works that is carried out on a daily basis. Water Leakages within the system are a result of the age of existing unground assets, damage to infrastructure by external parties and fluctuating system pressure though out the network. A targeted approach is followed focusing resources on areas that record historically high levels of burst mains and leaking services pipes, based on the asset condition.
2. a	<b>Page 3: 2017 Highlights</b> There was a launch of the new Strategic Plan 2017 – 2019. Is there a Strategic Plan developed from 2020 to date?	Yes, WAF has in place a Five-Year Strategic Plan from 2020-2025. The plan basically outlines WAF's Three Key Strategic Imperatives: <ol style="list-style-type: none"> <li>i. Water and Wastewater = Our Assets</li> <li>ii. Accountability = Culture</li> <li>iii. Finance = Efficient and Effective Service Delivery</li> </ol>
2. b	Can WAF explain on Aqua rating benchmarking?	It is a rating system for water and wastewater service developed by the International Water Association (IWA). This tool helps a utility to assess how it is performing across all its operational areas with results benchmarked against other utilities that are in the Aqua rating system.
2. c.	Can WAF explain how are Carbon Credits equated to reducing emissions?	<p>Methane gas emitted from the anaerobic decomposition of Wastewater Sludge is captured and destroyed (flared). The Methane Gas emissions generated from decomposing organic sludge at the wastewater facility is a greenhouse gas (GHG) and has 25 times more global warming potential than carbon dioxide (CO<sub>2</sub>).</p> <p>By recovering and destroying methane, the project leads to Green House Gas (GHG) mitigation.</p> <p>The gas recovered from Wastewater Sludge anaerobic decomposition is flared in an enclosed unit where complete combustion of methane-rich digester gas (biogas) ensures maximum destruction of GHG. This emission reduction is equivalent to Carbon Credits.</p>
3. a	<b>Page 5: Chairman's Message</b> Can WAF update the committee on the Suva to Nausori Water Supply system which was funded	The project was awarded to the contractor in April 2019 with a scope of detailed design and supply, construction/installation, and commissioning. The project encountered various restrictions due to COVID since March 2020 (sourcing of manpower from overseas and local, sourcing of material and equipment

	by Government, ADB and the European Investment Bank?	<p>due to movement restrictions and disturbances to supply chains).</p> <p>Despite the unforeseen challenges, the Rewa River Water Supply Scheme (RRWSS) is at the peak construction phase. All engineering has been completed, procurement is at an advanced stage.</p> <p>The project is expected to undergo trial and pre-commissioning in Q2, 2023.</p>
3. b	Will this additional load be able to include the Lami to Navua corridor?	<p>The RRWSS (Rewa River Water Supply Scheme) is dedicated to the Suva–Nausori corridor via three connection options, i.e. connection to Nasinu Zone, connection to feed Wainibuku Reservoir and connection to feed Raralevu reservoir. There are also some scheme extensions like the Sawani/Navuso Extension, Viria Extension, Savu and Baulevu Extension, Vunidawa, Serea and Lomaivuna Extension and Korovou Extension.</p> <p>There is also an option to feed the upper Colo-i-suva areas (Colo-i-suva, Dokonaisuva, and Nagatugatu) from the RRWSS. This will ease the Tamavua Water Treatment Plant loadings which is currently serving those areas. The RRWSS will greatly assist the current and future demand within the Greater Suva Area and beyond. With this, there will also possibilities of service extensions for the current Suva- Nausori system and in other parts of Lami – Navua areas.</p>
4.	<p><b>Page 7: Financial Achievements</b></p> <p>Under the 2017- 2018 Budget can WAF provide an update on the Sewerage Pipe Laying System in Urban areas? Which areas have been connected?</p>	<p>Under the 2017/2018 Budget, the following projects were identified for wastewater system extension and these included Whippy Street in Suva, Ba Industrial, Nasoso and Martintar, Nadi.</p> <p>The Nabukalou sewer extension resulted in coverage on the following areas in Suva: Mal St, Extension Rd, Tawake St, Sawani St, Vunivalu Road, Toganivalu Road, Part of Matanitobua St, Leka Street, Ritova St and Part of Rewa St i.e., from Brown St junction to Flagstaff roundabout.</p>
5.	What allowances are paid to staff who are directly in contact with waste water?	<p>A \$1,000.00 Dirty Allowance has been paid by WAF since 2016 to 55 employees who are in direct contact with wastewater (human excrement).</p> <p>The employee's salary has been adjusted to include the \$1,000.00 sum.</p>
6.	How has the Plant Hire Policy improved the role of the Internal Audit in light of all the past investigations on fraudulent conversion and activities during the review period?	<p>The Plant Hire Policy has:</p> <ul style="list-style-type: none"> <li>➤ Given clear accountability to the respective stakeholders within WAF.</li> <li>➤ Embedded the selection of Plant Hire through a software (i.e. Plant Hire Management Software) for fair rotation from the tendered listing.</li> </ul>

		<p>➤ Strengthened the compliance (<i>Tallyman &amp; supervisor daily monitoring and approvals, GPS reports, idle times</i>) in terms of Plant Hire Payment claims by the vendors.</p>														
7.	<p><b>Page 21: Environment</b> Have WAF replicated the recycling of plastics bottles to other Ministries and Departments?</p>	<p>The 3R (Reduce, Reuse, Recycle) recycling project was proposed for WAF on a small scale</p> <p>There were no proposals or discussions to send it out to other departments or ministries.</p>														
8.	<p><b>Page 22: Water Champions Program</b> What improvement has WAF achieved through the above program to schools especially to students?</p>	<p>The Water Champions Program was designed to recruit high school students and community groups to work in their community to provide a local environmentally-oriented learning effort.</p> <p>Through this program, WAF was able to instill a sense of value for water usage in children and communities. The program helped in creating the conditions that allow for behavioural changes, such as the application of water-saving tips and purchasing of water-saving devices and proactive public participation in water conservation.</p>														
9.- a	<p><b>Page 24: Human Resources</b> The 2017 report does not include employees and training status for both genders. Can WAF confirm that this has been addressed to date? Please provide the breakdown of the 12% women participation as stated in the annual report.</p>	<p>WAF is gradually addressing the same, where we are including women to be part of our workforce as back in 2017 our workforce had only 12% women but in 2022 till to date, we have 16.51% of women in our workforce where there is an increase of 4.51%.</p> <p>The percentage of women trained from 2017 till to date is as follows:</p> <table><tr><th>Year</th><th>% Trained</th></tr><tr><td>2022</td><td>23%</td></tr><tr><td>2021</td><td>11.80%</td></tr><tr><td>2020</td><td>7.10%</td></tr><tr><td>2019</td><td>44.70%</td></tr><tr><td>2018</td><td>32.60%</td></tr><tr><td>2017</td><td>49%</td></tr></table>	Year	% Trained	2022	23%	2021	11.80%	2020	7.10%	2019	44.70%	2018	32.60%	2017	49%
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9. b	<p>Can WAF explain more on the agreement signed by Vodafone and Digicel?</p>	<p>WAF signed a Memorandum of Agreement (MOA) with mobile companies (Vodafone and Digicel) on April 4<sup>th</sup> 2017 to allow WAF registered customers to receive free Short Message Service (SMS) bill notifications on their mobile phones.</p> <p>WAF also communicates water disruption and planned shutdown notices to its registered customers.</p> <p>WAF registered customers receive SMS notifications only on the mobile numbers they have registered with either Vodafone, Digicel or Inkk.</p> <p>Registration for the SMS service can be done at any WAF customer care office.</p>														

<b>10.</b>	<b>Page 33: Wastewater</b> Can WAF provide a progressive report on the other waste water plants where desludging has taken place?	Desludging and Odour Control at our wastewater treatment plants were conducted at our Natabua, Lautoka, Navakai, Nadi and Olosara, Sigatoka, sites.
<b>11. a</b>	<b>Page 34: Liquid Trade Waste</b> Can WAF provide an update on the success of the Production of Documentary CD on Water Conservation and Waste Management?	WAF was able to persuade customers of the importance of the trade waste program in Fiji and how water conservation will be able to reduce the wastewater effluent.  The documentary also assisted customers to understand our processes and apply for trade waste permits.  We currently have 725 trade waste, permit holders.
<b>11. b</b>	Can WAF update the Committee on the progress of the installation of inspection chambers for businesses?	All sampling chambers are installed and sampling is conducted from the sampling point.  To date, a total of 14 sampling points were installed.
<b>11. c</b>	How safe and secure are these Trade Waste controlled by the Team, no intrusion into the natural habitats	WAF's focus into the liquid trade waste has been to raise awareness and provide advice to ensure the business customers are aware of their business obligations.
<b>12. a</b>	<b>Page 36: Demand Management</b> Has WAF achieved their objective in reducing consumption per capita per day?	The monitoring of consumption values for Fiji has found that actual consumption has been reduced from 228 litres to 217 litres per person per day.  Furthermore, demand management is an ongoing exercise through WAF's awareness program to customers on the value of water, actual consumption of water and water conservation tips.
<b>12. b</b>	What is the link between Demand Management and the Water Champion Program?	The Water champion program is a program designed to address Demand Management Targets in the reduction of per capita demand in the Greater Suva Area from the current 228 litres to 180 litres usage per person per day. The WC program creates awareness among students and community groups on the importance of water conservation or using water wisely to reduce unnecessary water usage. We also include a participant's tour of our facilities from the water source site to the treatment plant and to our distribution network.
<b>13.</b>	<b>Page 39: Customer Service</b>	1. Qmatic National Office – - QMS for National Office was repaired in 2017.

	<p>What is the current update on the four (4) challenges as highlighted?</p>	<p>2. Timelines on service requests are not met, especially for new connections</p> <ul style="list-style-type: none"><li>- Timelines for New Connections when not met, customers are called back fortnightly and advised of the delays.</li></ul> <p>3. Gentrack Training</p> <ul style="list-style-type: none"><li>- Gentrack refresher training is ongoing in regions.</li></ul> <p>4. Community Education and Awareness –</p> <ul style="list-style-type: none"><li>- The customer engagement teams in the 3 regions are actively involved in the communities working alongside the Provincial Administrator’s (PA) office as well as other stakeholders to ensure customers are updated on WAF processes, developments and assistance we have for them.</li></ul>										
14. a	<p><b>Page 42: Milestone Achievements</b></p> <p>Can WAF advise if flaring of waste water has been undertaken at other municipalities that have sewerage plants?</p>	<p>There was no provision for the gas flaring project at other Sewerage Treatment Plants other than Kinoya.</p>										
14. b	<p>Has WAF explore the opportunity of utilizing trade off of methane gas?</p>	<p>WAF has signed an agreement with ADB in 2012 for this Project. ADB was a Trustee of the Future Carbon Fund that allows the purchase of emissions reductions from 2012.</p> <p>WAF has received over \$300,000.00FJD in revenue from the Clean Development Mechanism (CDM) Projects (Carbon Credits) where Methane Gas is flared to produce Carbon Dioxide Gas is 25 times less harmful Green House Gas.</p>										
15.	<p><b><u>FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2017</u></b></p> <p><b>Page 52: Statement of Comprehensive Income</b></p> <p>Can WAF confirm that the losses have improved to date?</p>	<table><tr><th>Financial years</th><th>2017</th><th>2018 (7 months)</th><th>2019</th><th>2020</th></tr><tr><td>Loss for the period/year</td><td>61,773,206</td><td>33,936,225</td><td>47,924,224</td><td>36,737,423</td></tr></table> <p>WAF loss has significantly decreased over these financial periods</p>	Financial years	2017	2018 (7 months)	2019	2020	Loss for the period/year	61,773,206	33,936,225	47,924,224	36,737,423
Financial years	2017	2018 (7 months)	2019	2020								
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Appendix 2

Annual Report Summary

Water Authority of Fiji 2017 Annual  
Report



## Annual Report Summary – Water Authority of Fiji (WAF) 2017

### Standing Committee on Natural Resources

	2017
<b>Vision</b>	Clean Water and Sanitation for a Better Life
<b>Mission</b>	We are committed to optimising water and wastewater services through: <ul style="list-style-type: none"><li>✓ Resilience</li><li>✓ Innovation</li><li>✓ Safe Working Practices</li><li>✓ Engaging Stakeholders</li><li>✓ Capacity Building</li><li>✓ Being Environmentally Focussed</li><li>✓ Modernization</li></ul>
<b>Background</b>	<ul style="list-style-type: none"><li>• The Water Authority of Fiji is a Commercial Statutory Authority (CSA) that was formed by the Government of Fiji, under the WAF Promulgation 2007, in order to provide environmentally sound, sustainable, efficient and effective water and wastewater services.</li><li>• WAF is responsible for providing access to quality drinking water and wastewater services to over 147,000 residential and non-residential metered customers, reaching over 735,000 people nationwide, with an area of operation that covers 18,274 square kilometres with a water and wastewater network of more than 4,200 kilometres of pipes.</li></ul>
<b>Acts in place</b>	Not provided in the annual report.
<b>Organization Structure</b>	WAF Board consists of Chairman and six members (details on page 6 of the annual report).
<b>Major Highlights/Achievements</b>	<b>Major Highlights</b> <ul style="list-style-type: none"><li>• WAF launched its new Strategic Plan 2017–2019. The drive towards service excellence in delivering clean water and sanitation for all Fijians is the central guiding theme of this Strategic Plan 2017–2019.</li><li>• Carbon Credits for Greenhouse Gas Reduction – WAF claims \$350,000 from ADB by reducing emissions at 22,000 tonnes.</li><li>• The Project Delivery Framework was developed in 2017 and it is the latest version of the Capex Procedures Manual 2015 and Project Manual 2012. It merges the two documents and incorporates the best project management</li></ul>



practice. The purpose of the manual is to guide staff through the capital expenditure approval, review, funding, and delivery processes. It aims to assist WAF in maximising the value of its capital investments.

- WAF receives an award at the 2017 Global Water Awards for its Water Champion Programme (*full details on page 4 of the annual report*).
- WAF receives US\$31 million grant from the Green Climate Fund, a component towards US 405 million investments from Fijian Government, ADB and EIB to develop the Suva-Nausori Water Supply system, which would result in improved water services for close to 400,000 people.
- WAF is the first water utility in the Asia-Pacific region to pilot Aquarating, a utility benchmarking tool.
- WAF completes 17 rural projects with installation of Ecological Purification Systems.

#### **Projects**

- There were twenty nine projects completed in 2017.
- The CAPEX budget for the financial year 2016 to 2017, which ran from 1 August 2016 to 31 July 2017 to match the Government's changed financial year, was \$225 million. The actual capital grant received for the 2017 calendar year was \$169.6 million.
- 41km of new pipes laid and 113km of pipes rehabilitated (*project details on page 9 of the annual report*).

#### **Operations**

- **Non-Revenue Water (NRW)** - This unit is responsible for the Water Balance data compilation after each billing cycle, the calculation of non-revenue water percentage for WAF water systems by regions using IWA (International Water Association) standard software, and recommends NRW reduction works program. Rural water cart accounted for (using default percentage) in Water Balance as water exported from WAF System which impacts the water balance calculation.
- **WAF Partnership with Fukuoka Reduces NRW** - The final seminar for the First Partnership Project on Unaccounted Water Loss, between WAF and the Fukuoka City Waterworks Bureau, Japan, was held at Tanoa Waterfront Hotel Lautoka in May. The programme contributed to the "remarkable achievement" of reducing NRW from 51.9% to 31.6% in three years. WAF now has experts in leak detection at a level previously not available in the country, and is extremely grateful to the Japan International Cooperation Agency (JICA) for funding the partnership for the reduction of WAF's Non-Revenue Water (NRW).
- **WAF National Average Annual NRW% Trend:**
  - 2013 – 52%



- 2014 – 51.1%
- 2015 – 43.5%
- 2016 – 36.2%
- 2017 – 31.6%

**National Water Quality Laboratory Achievements 2017**

1. Quality monitoring of the 55 water treatment schemes on a regular basis from weekly, fortnightly to monthly, depending on the population size the plant serves.
2. Ensured that the 11 wastewater treatment plants are operating efficiently and discharging quality effluent to the receiving water that adheres to the Environment Management Regulations 2007 and Environment Management Act 2005.
3. All 45 water catchment and waters sources were monitored on a quarterly basis. This includes the monthly monitoring of Vaturu Dam for chemical, microbiological, oxygen demand, nutrients, metals and physical properties.
4. Analysed Bacteriological quality for drinking water, chemical constituents of health significance in drinking water, organic constituents of health significance in drinking water and physical and esthetical quality as samples were received in the lab on a daily basis.
5. The National Water Quality Laboratory was involved in the Algae bloom at Nagado Water treatment plant and the team worked on it with the consultants to work out the solution to the algal bloom by testing for algae.
6. Calibration of all spatial equipment was achieved to ensure proper operation and all instruments used were within the required range of measurement.
7. External audit of the Implementation of required bench techniques, control cultures and aseptic methods took place.
8. The National Water quality Lab also serves over 100 external customers for water and wastewater analysis at a service fee which is an avenue for revenue generation for WAF.
9. Monitors shore line of big cities (Suva, Lautoka, Nadi) for level of pollution in relation to wastewater effluent level.
10. Continuous improvement to systems and process for the ISO 17025 accreditation journey. In-house and overseas training to support the ISO 17025 requirements.  
*(full details on page 12 of the annual report).*

**Geographical Information Systems (GIS)**

Their main objective is to ensure that WAF is able to know the quantity of Infrastructure Assets on the ground and keep it in record that can be used for all purpose. Updates of all water reticulation networks and all WAF assets associated with it were completed for all of Taveuni, including Naqarawalu, Somosomo Bucalevu, Naselesele and Mua. Ongoing capturing of Burst Main, New Connections and Pipe Replacement work in each region ensured that the GIS system is updated with the latest information on the ground.

**Integrated Meter Management (IMM)**

Responsible for the procurement, distribution and replacement of all meters and accessories. The unit also keeps track of the meter stock level, the monitoring and maintenance of the meters on the field especially in the case of sophisticated smart meters.

**Occupational Health and Safety (OHS)**

Region	Meters Replaced
Central Eastern	4,390
Western	2,810
Northern	786
<b>Total 2017</b>	<b>7,986</b>

**Worksite Inspections 2017**

North – 30

West – 25

Central/Eastern – 49

**Mobile Tower Light for Night Operations**

In another attempt at promoting total excellence at the workplace WAF purchased six mobile tower lights in 2017 which will be used to carry out work safely and effectively during night operations.

**Development and implementation of OHS**

A consultant (JTA health & safety specialist) was engaged to develop and implement an Occupational Health and Safety Management System (OHSMS) at WAF. Currently, WAF lacks a well-coordinated OHS management system in all facets of its operations (*full details on page 14 of the annual report*).

**Personal Protective Equipment for staff**

With continuous management support and budget allocation, the OHS unit procured more than thirty types of PPE which was issued to the staff based on the nature and scope of work that is undertaken. Priority is normally given to field workers as they are engaged in high risk activities in day-to-day operations.

**Statutory Inspection and Certification of WAF Owned Plant and Machineries**

The OHS unit is committed to ensuring that all WAF owned plants and equipment are inspected and certified by the Ministry of Labour's field operation team. The inspection examines the critical component of the plant and equipment and determines the extent of wear, deterioration and malfunction which can lead to catastrophic accidents if not properly maintained. The ministry's field operation team inspected and certified, inter alia, equipment such as overhead cranes, sling wire ropes, chain blocks. The inspection of these equipment is usually carried out every 6 months to meet the regulatory compliance and also to ensure the safety of staff.

**Vaccination of Wastewater Staff 2017**

Vaccination is usually given to wastewater staff to boost immunity against diseases and viruses and is conducted on a 6 monthly basis for staff who are in direct contact with sewers. Employees are provided with the Hepatitis A & B injections and Typhoid vaccines to avoid any unwarranted illnesses and diseases caused by direct exposure to wastewater.

**Legal Strategic Business Unit**

Key Achievement for the Legal Unit in 2017 Litigation:

- **Successful Prosecution 2017** - In 2017 WAF instituted a total of 10 cases in the Fiji Courts with the assistance of the Director of Public Prosecution ('DPP') Office. A significant highlight to mention was that all 10 charges initiated was verified by DPP's office and was successfully prosecuted resulting in a 100% success rate in prosecution for the year 2017.
- **Legal Proceedings instituted against the WAF** - WAF defended itself in an illegal connection suit filed by the appellant in the Lautoka High Court. The magistrate's court had ruled that the accused (appellant in the High Court) was guilty of illegal connection and the High Court subsequently upheld the ruling of the magistrate's court in favour of WAF. WAF also obtained a ruling in its favour in the case of Labasa Town Council v Water Authority of Fiji (Criminal Action#548 of 2013). In this case, the Labasa Town Council filed a charge against WAF for causing nuisance under the Public Health Act 1935 when WAF attended to burst main repairs.



- **Employment Relations Matter** - In 2017, an employment grievance claim was filed against WAF for unfair termination.

- **Conveyancing and Easement**

*(full details on pages 17-18 of the annual report).*

**Internal Audit**

The role of internal audit is to provide independent assurance that the organisation's risk management, governance and internal control processes are operating effectively.

Achievements for 2017:

- Handled 68 cases where by 63 of the cases were Investigation and 5 were Audit Reports.
- Audit reports submitted - Recruitment Audit and Special Audit – Plant Hire companies.
- Recommendations acknowledged by the Management - Plant Hire Policy was developed and recruitment team to develop the new procedure to avoid delays in the recruitment process.

**Environment**

- The Environment Management Unit's (EMU) major objective is to ensure that WAF's operations are in compliance with the Environment Management Act (EMA) 2005.
- The team is responsible for acquiring Waste Disposal Permits for all (55) WAF's treatment plants from the Ministry of Environment (MoE).
- The team is also involved in the protection of WAF's catchment areas in order to provide safe drinking water to all. In addition, conducting environmental compliance monitoring, assessment and reporting of PSIP (in-house/outsourced), and rural projects to ensure sustainable development within WAF's operations are also undertaken.
- Key Achievements:  
Undertaking 69 Initial Environment Examinations (IEE), 32 Compliance Monitoring, 43 Water and Wastewater Treatment Plant Inspections, 30 Waste Disposal Permit Renewals, 9 Waste Disposal Permit New Applications and 43 Waste Disposal Permit Returns, Trainings and Awareness, Integrated Water Resource Management and 27 Water Quality Hazard Assessment, etc.

*(full details on pages 20-21 of the annual report).*

**Strategic Planning**

The Unit is mandated to Construction and Formulation of Key Strategic Documents, Innovation, Identifying Opportunities, Forecasting and Planning, Analysis and Information Presentation to Management for Decision Making and New Business Development.

**Water Champions Program**

- WAF runs the Water Champions programs during the school holiday breaks with school students. Since the inception of the program in 2014, there has been a total of over 80 students that have gone through the program.
- The objective of the program is to create awareness in school children on where water is sourced from, treated and distributed. This program also provides an opportunity for students to explore career options prior to undertaking final year of study in the schools. The program has also been extended to Western and Northern divisions.
- The program expansion has also included the corporate sector, social communities and the staff of WAF.
- The Water Champion program gained global recognition in being awarded a Distinction in the Water Leaders category in the 2017 Global Water Award in Madrid, Spain.

**Corporate Communication**

The Corporate Communications Team manages the communication space between WAF, stakeholders and the general public (*full details on page 23 of the annual report*).

**Human Resources**

- **WAF signs MOU with the Fiji National University**

WAF signed the Memorandum of Understanding with Fiji National University on 24/03/2017 to formalise the partnership arrangement in providing industrial attachment to the engineering students of the University to acquire work experience which is a requirement as part of the program. The MOU gives an opportunity for the Authority to help design the engineering curriculum with an industry advisory committee already set up to ensure graduates are fit for employment.

- **Employee Relations**

The Employee Relations Section is a newly established Sub-unit within the Human Resources SBU. One of the achievements was the establishment of the Labour Management Co-operation Committee to meet, discuss and find ways to solve any issue that arises in the workplace.

- **Labour Management Consultation Committee (LMCC)**

WAF strengthens and promotes good employee relations with staff and management through the Labour Management

Consultative Committee. The LMCC was established on 19/01/2016, and so far have amicably resolved 38 cases.

- **SDG 6 - UN Regional Technical Workshop**

- The United Nations Environment Programme (UNEP) selected WAF to host the region's first-ever technical training on monitoring and reporting on its Sustainable Development Goal 6, or SDG6, on water and sanitation.
- The workshop reflected UNEP's efforts to help countries like Fiji with its reporting efforts in achieving its SDG6, under which are two additional issues, such as ambient water quality and freshwater ecosystems.
- The technical training covered how these issues can be implemented within Fiji with special emphasis on our responsibilities and our plan of action to gather the necessary data in order to submit our SDG report back to the UN.

- **Trainee/Engineer Program**

- WAF has also introduced Graduate Programs as Engineers are scarce and are in high demand and WAF is afraid of losing them to other organisations or them leaving for greener pastures. These Engineers hold key positions in WAF and carry out the core functions of the organisation.
- To retain these skilful Engineers, WAF has introduced the Graduate & Career Progression Program for Engineers where fresh graduates targeted from the University are recruited and trained in different fields of the organisations. A total of 57 recruits have gone through each stage from Graduate Trainee to Graduate Engineer and then to various Engineer pathways.

**Partnership**

Details on page 27 of the annual report.

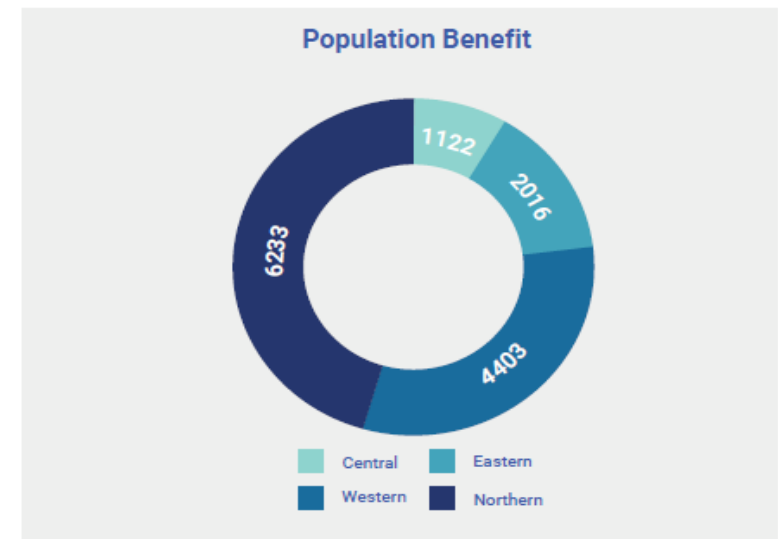
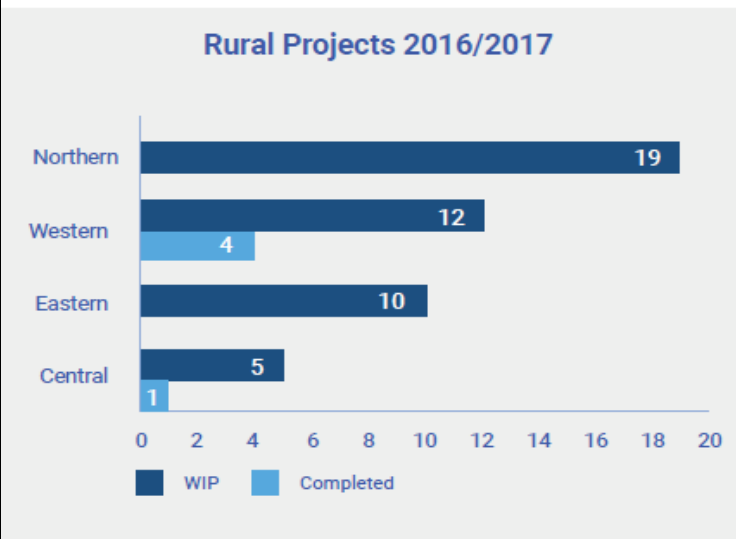
**WAF's Climate Change Adaptation Journey**

- WAF has a substantial number of assets located in close proximity to the coastline and major rivers. In previous years, flooding of these assets has been a common occurrence, especially wastewater assets, such as wastewater treatment plants, pump stations and manholes. This caused wastewater overflow into the local flora and fauna and posed a health hazard for the surrounding communities.
- WAF optimised on the opportunity of a Master Class Training for Climate Change Adaptation sponsored by the ADB through its Water Operators Partnership programme (*full details on page 28 of the annual report*).

**Rural and Maritime**

Public Sector Investment Program (PSIP) 2017/2018 saw Rural units undertaking 176 water projects and 2 urgent ministerial request projects, benefiting 13,776 people. This was the largest number of projects carried out by the unit

in years. This number was greatly divided by scope of works namely; construction of new water schemes and upgrading works. There were 57 new scheme projects and 119 upgrading projects.



### Government Initiatives

- **Free Initiatives**

Under the 2017 budget, the government continued funding on three free initiatives, Free Water Allowance for households with incomes under \$30,000, Rainwater Harvesting and Free Water tanks for intermittent supply areas.

- **Free Water Allowances**

Under this scheme, customers are provided with 91,250 litres of water free annually. Customers that exceed this amount will have to pay for their extra usage.

Region	Approved	Population Impact	Annual Value of Water
Central	10,049	50,245	\$141,449.72
Western	12,400	62,000	\$174,542.40
Northern	3,358	16,790	\$47,267.21
Total	25,807	129,035	\$363,259.33

- Rainwater Harvesting**

Government through the Water Authority of Fiji's Rainwater Harvesting Scheme distributed 4, 373 x 5,000 litre tanks throughout rural areas in Fiji.

Region	Distributed	Population Impact
Central	1,686	8,430
Western	1,933	9,665
Northern	754	3,770
Total	4,373	21,865

- Free Water Tanks**

Free water Tank distribution is mostly distributed to rural and intermittent supply areas. Key requirements for the household applying is to build a water tank base and have roof guttering in place to meet the criteria for approval.

Region	Distributed	Population Impact
Central	114	570
Western	1	5
Northern	0	0
<b>Total</b>	<b>115</b>	<b>575</b>

### **Wastewater**

The Wastewater Management Unit was recently established to allow the unit to provide an effective and efficient wastewater collection and treatment process. The unit is responsible for the operations and treatment of domestic and industrial wastewater ensuring that standards are met before discharging.

- **Desludging and Odour Control (Kinoya Wastewater Treatment Plant)**

WAF's anaerobic ponds and sludge lagoons in some of these treatment plants have, over the years, accumulated excessive amounts of sludge, which has led to reduced treatment efficiency and capacity, and increased level of odours emanating from the plant. Kinoya WWTP desludging was completed in 2017 which has improved the plant efficiency levels, capacity and reduced odour levels. Desludging of other wastewater treatment plants will also be carried out in the next phase of plant improvements.

### **Liquid Trade Waste**

- Liquid Trade Waste (LTW) teams are based in all divisions and their key role is to sample the businesses that discharge liquid trade waste into the WAF Wastewater system.
- The Unit was established to monitor and regulate the wastewater discharge from commercial and industrial businesses that are connected to WAF's wastewater infrastructure and was officially inaugurated in 2014.
- The Liquid Trade Waste policy was approved by Cabinet on 15th February, 2017 and, on 27<sup>th</sup> June, 2017 two handbooks were launched:
  1. Fabrication and Installation of Grease Traps and Underground Grease Interceptors
  2. Liquid Trade Policy

### **Demand Management**

- Focused primarily on the WAF's domestic customers who comprise 92 per cent of the total, the Demand Management Team (DMT) was created this year to promote the importance of water conservation.

- One of the DMT's key strategic objectives for the next three years is to reduce the per capita use of water per day from 220 litres to 180 litres.
- Fiji's low tariff rates contribute to the lack of conscious water saving. The average water bill per household is around \$25 for three months. If you equate that to a daily basis, each family only needs five cents to pay their bill. It would be a more manageable cost for consumers; however, people are wasting this resource and the DM Team wants to address this.
- A key challenge is instilling a behavioural change. The Team has begun water audits on residential customers to examine consumption habits.

#### **Customer Service**

The customer service team interacts with customers of the organisation to provide them with information to address inquiries regarding services provided by the organisation. In addition, they deal with and help resolve any customer complaints. There are three major complaint categories, as follows:

- Billing Complaint
- Production Complaint
- Project Metering Complaint

Total Complaints 2017	
Region	2017 Total
Central/Eastern	25,775
Western	18,512
Northern	5,666
Unstructured	46,661
Total Complaints Received	96,614

#### **Call Centre**

- **Call Centre Service Level**

The target for Call Centre service level is 80% and all calls to be answered within 20 seconds. WAF's national call centre is a one stop shop and operates 24 hours, 7 days a week, to respond to queries and complaints. There are 14 trained customer care officers rostered over a 24-hour period shift who are able to access the customers billing history online



to answer account queries. They liaise closely with the technical staff so that accurate information can be given to customers regarding water cuts or shortages in their area.

- **Contact Emails - Call Centre**

One of the responsibilities for the call centre team is to look after contact emails. That is another platform where our customers enquire about WAF services. All the emails are acknowledged and feedback is given within 24 hours.

**Customer Care Centres**

- WAF has 11 customer care centres Fiji wide. The major customer care centres are National office, Labasa office, Lautoka office, Namaka office and Nausori office.
- Currently WAF has installed an Electronic Qmatic system in some of their customer care centres to monitor the service level target in comparison with the serving time.
- The grade of service for serving customers in the frontline is 80%. This means that the total number of walk-in customers must be served within 15 minutes of waiting time. It measures the efficiency of the service and also reduces the customer waiting time.
- WAF Customer Care unit is in a process of installing Qmatic systems in other centres as well in the next quarter.

**Customer Service 3-Day Billing Process**

Due to delayed processes in the Gentrack billing system, a 3-day billing process programme was introduced in customer service whereby a route would be read on the first day, the process conducted on the second day, and a bill sent through Post Fiji on the third day. This process adoption went very smoothly, improving billing time for customers.

**On-Time Disconnections**

A change in the disconnection programme was introduced, whereby readers only read from the 2nd of the month to 10 consecutive days; thereafter, all readers focus on disconnection only. The new process was a positive change and improved revenue collection from \$3m to \$4m per month.

### **Customer Care Connections – 2017**

Meter Connections - Water as at 31.12.2017				
Account Group	Central	West	North	Total
Residential - Water	70,589	49,315	12,484	132,388
Commercial - Water	4,687	3,662	1,046	9,395
Institutional - Water	1,369	568	408	2,345
<b>Total</b>	<b>76,645</b>	<b>53,545</b>	<b>13,938</b>	<b>144,128</b>

Meter Connections - Waste Water as at 31.12.2017				
Account Group	Central	West	North	Total
Residential Waste Water	13,945	9,969	1,224	25,138
Commercial Waster Water	2,056	2,093	425	4,574
Institutional Waste Water	322	133	53	508
<b>Total</b>	<b>16,323</b>	<b>12,195</b>	<b>1,702</b>	<b>30,220</b>

### **myBill Info Card**

- WAF launched its myBill Info Card on July 25th. The card, which is free of charge, enables WAF customers to easily access account details with just one scan of the card at any authorised agent, such as MH, Post Fiji Limited or at any WAF cashier located at any Customer Service Centre outlet nationwide.
- The card was designed in order to resolve the issue of missing water bills and to reduce the inconvenience of being disconnected.
- This was in direct response to the customer complaints. Customers may now make instant payments through internet banking or through Vodafone M-PAISA or Digicel Mobile Money. The card compliments WAF's SMS (Short Message Service) billing service that was launched on April 4th.



- By the end of October, WAF Customer Services recorded approximately 5,800 under the registration process, with 3,100 on e-mail billing and another 2,700 on Short Message Service (SMS) billing services.

#### **Customer Service Forum**

##### **Inaugural Customer Forum**

- WAF also held its first-ever 'Customer Forum'. This was an opportunity to formally engage with customers, and is expected to be repeated on a regular basis.
- The forum was designed to transmit information and create awareness in a timely, cost effective and organised manner, in terms of water conservation, waste management, and WAF services as a whole.

#### **Business Customer Forum**

Liquid Trade Waste conducted consultations on the Fabrication and Installation handbook with all town councils in the region and customer service business forums for Central, Western and Northern Divisions, where WAF updated its business customers on the WAF 20-year master plan, current issues, new projects and customer forum charter.

#### **Fiji National Water Forum**

The first Fiji National Water Forum was held on 25th January 2017. The objectives of the forum were to:

- promote knowledge sharing on national and global water challenges and solutions
- work towards meeting Sustainable Development Goal #6 (Ensure availability and sustainable management of water and sanitation for all)
- enhance sector coordination and governance

#### **Milestone Achievements**

##### **Gas Flare Project**

Kinoya Sewage Treatment Plant adopted the technology titled "Clean Development Mechanism" (CDM). This involves capturing and destroying methane emissions generated from decomposing organic sludge at the wastewater facility. Methane is a greenhouse gas (GHG) and has 25 times more global warming potential than carbon dioxide (CO<sub>2</sub>).



<b>Financial Achievements</b>	<ul style="list-style-type: none"><li>• The Government had provided \$169.58 million capital investment to carry out major water projects around the country to achieve 24/7 delivery of water to all Fijians and expand Fiji’s sewerage network.</li><li>• As articulated in the 5-Year and 20-Year National Development Plan, Government had undertaken major investments to cater for the country’s long-term water supply needs. This include:<ul style="list-style-type: none"><li>○ \$36.17 million to improve water distribution systems;</li><li>○ \$9.34 million to further improve water treatment quality;</li><li>○ \$6 million for the replacement of water meters;</li><li>○ \$7.91 million for non-revenue water;</li><li>○ \$14.17 million for the upgrade of wastewater treatment plants;</li><li>○ \$3.72 million to upgrade the wastewater distribution system to ensure that Fijians within urban centres are connected to the wastewater reticulation system;</li><li>○ \$19.25 million to the Rural Water Supply Programme in order to provide access to clean water in rural communities, with a target of 85% access by 2021;</li><li>○ \$9.97 million is for electrical works at WAF’s water pump and wastewater stations;</li><li>○ \$2.5 million will be utilised to continue improvement of catchment and water source areas.</li></ul></li><li>• <b>Dividends</b><ul style="list-style-type: none"><li>○ The directors recommend that no dividends be declared or proposed for the year.</li></ul></li></ul>		
<b>Financial Position</b>		<b>2017 \$</b>	<b>2016 \$</b>
	Revenue	78,899,685	72,071,657
	Other Income	48,747,566	49,326,460
	Total Revenue	127,647,251	121,398,117
	Personal Expenses	(33,950,443)	(26,026,267)
	Operating Expenses	(98,732,047)	(94,936,223)
	Profit from operations before depreciation, amortization and finance income	(5,035,239)	435,627
	Depreciation & amortization	(56,892,377)	(59,288,328)
	Finance income	154,410	103,454
	Total comprehensive (loss) for the year	(61,773,206)	(58,749,247)
	Total non-current assets	1,770,655,511	1,747,037,028
	Total current assets	118,348,289	72,211,863
	Total assets	1,889,003,800	1,819,248,891



	Total equity	1,382,840,507	1,444,625,176
	Total current liabilities	77,042,297	68,812,966
	Total non-current liabilities	429,120,997	305,810,749
	Total liabilities	506,163,294	374,623,715
	Total equity and liabilities	1,889,003,800	1,819,248,891
	Net cash flows used in operating activities	(61,318,600)	(20,556,891)
	Net cash flows used from investing activities	89,593,032	19,973,721
	Net cash flows from/(used in) financing activities	62,952	(315,989)
	Cash and cash equivalents at 31 December	62,578,916	34,241,532
<b>Auditor's Opinion</b>	<p><b>Opinion</b></p> <p>Auditor audited the financial statements of Water Authority of Fiji ("the Authority"), which comprise the statement of financial position as at 31 December 2017, and the statement of comprehensive income, statement of changes in equity, statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.</p> <p>In Auditors opinion, except for the effects of the matters described in the Basis for Qualified Opinion paragraph, the accompanying financial statements present fairly, in all material respects, the financial position of the Water Authority of Fiji as at 31 December 2017, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).</p> <p><b>Basis for Qualified Opinion</b></p> <ol style="list-style-type: none"> <li>1. Opening balance of Property, Plant and Equipment amounting to \$1,888,909,608 for the year ended 31 December 2010 was not subject to valuation at the time of the transfer to Water Authority of Fiji. The valuation of these assets were carried out in 2006. Consequently, Auditor unable to confirm the value of the opening balance of property, plant and equipment when it was transferred in 2010.</li> <li>2. Included in the property, plant and equipment (Note 13), is leasehold land amounting to \$209,204,157. The Authority has not obtained the legal ownership of the land as at 31 July 2017. While the Authority uses the leasehold land for its operations, no amortization has been recorded against the value of the land. Consequently, Auditor was unable to determine if any adjustment that would be required in respect to the amortization of the land and the impact that it will have on the carrying amount of the land in the statement of financial position and the amortization expense in the income statement.</li> </ol>		



	<p>3. The Authority has not undertaken a full review on impairment of assets with zero book values totaling \$5,527,649 include in its property, plant and equipment, (Note 13). It is yet to carry out a review of the depreciation rates and the remaining economic useful lives of individual major classes of plant and equipment in a progressive and structured manner for consideration and review by the Directors.</p> <p><b>Emphasis of Matter</b> Auditor draws attention to Note 26 (a) where management has disclosed impact of COVID-19. The management has stated that there is nil impact of the virus on the amounts and estimates reported or used in the preparation of 2017 financial statements. Auditor's opinion is not qualified in respect of this matter.</p> <p><b>Other Matters</b></p> <ul style="list-style-type: none"><li>• Internal Audit carried out by contracted Accounting Firm have highlighted some serious issues relating to the plant hire relating to 2017 which indicates possible fraud. Auditor was unable to access the internal audit report and therefore, Auditor unable to determine the exposure of any fraud and its implication on the 2017 financial statements. Accordingly, Auditor has not modified his opinion relating to this matter.</li><li>• IT Governance policies which includes Disaster Recovery Plan was noted to be in the review stage. These policies needs to be updated for good governance and protection of valuable data of the Authority.</li></ul>
<b>Gender Analysis</b>	<p><b>Strides in Gender Inclusiveness</b></p> <ul style="list-style-type: none"><li>• 2017 saw several strides made in WAF's efforts to be gender inclusive, making strong headway and meeting milestones towards that goal.</li></ul> <p><b>WAF Best Woman Professional</b></p> <ul style="list-style-type: none"><li>• To honour and recognise the role women employees play at WAF, the Authority introduced its first-ever Best Woman Water Professional of the Year Award at the 2016 Staff Excellence Awards event held in January 2017.</li><li>• The first recipient of this Award was Mrs Nanise Tuwai, WAF Team Leader, Water Network Modelling.</li><li>• With a workforce of only 12% women, WAF is actively encouraging women to take up careers at WAF. The Authority also endorses strong advocacy for gender equality through recruitment, promotion, training and policy.</li></ul>



14 June 2022

**Disclaimer**

This Annual Report Summary was prepared to assist the Standing Committee on Natural Resources in its review of the Water Authority of Fiji 2017 Annual Report. This summary should not be relied on as a substitute for specific advice. Other sources and information should be consulted. Whilst every effort has been made to ensure that the information is accurate, the Parliament of the Republic of Fiji will not accept any liability for any loss or damage which may be incurred by any person acting in reliance upon the information. The Parliament of the Republic of Fiji accepts no responsibility for any references or links to, or the content of, information maintained by third parties. For further information please email: Shobhna Rani on email [shobna.rani@parliament.gov.fj](mailto:shobna.rani@parliament.gov.fj)