# 2016 ANNUAL REPORT

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Clean Water & Sanitation for a Better Life

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# Our Vision

Providing sustainable quality water through service excellence.

# Our Mission

As the national provider of water and wastewater services, we are committed to improving the quality of life by:

- Innovation
- Modernisation
- Operating effectively and efficiently
- Being economically viable
- Being responsive to stakeholders
- Being environmentally focused

# Our Values

Our key values are:

- Customer Focus
- Learning and Growth
- Integrity
- Passion
- Accountability and Transparency

TTP

- Respect
- Teamwork

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**COVER:** The Tamavua Water Treatment Plant.

# Letter to the Minister



Clean Water & Sanitation for a Better Life

30th December 2018

Hon Aiyaz Sayed-Khaiyum Attorney General and Minister for Economy, Public Enterprises, Civil Service and Communications Attorney General's Chambers Level 7 Suvavou House 400 Victoria Parade

Dear Sir,

I hereby submit the Water Authority of Fiji's Annual Report containing the Audited Financial Statements for the 2016 Financial Year.

We continue to clear the backlog of financial statements, with the 2017 and 2018 Financial Statements pending audit in the Auditor General's Office.

On behalf of the Water Authority of Fiji, we thank Government for its ongoing support, and look forward to this continuing into the future.

Yours faithfully,

Bhavesh Kumar CHAIRMAN

# 2016 Highlights

- Non-Revenue Water reduced from 39.6% to 31.6%
- Government capital funding increased from \$176m to \$229m
- Rehabilitation works to affected areas after TC Winston
- Gas Flare Project- reduced green gas emissions, by a computed 22,000 tonnes, at the Kinoya Wastewater Treatment Methane Plant
- Two back-up Gensets installed at Waimanu to ensure water supply during power shutdowns
- Replaced approximately 25,200 old domestic meters
- WAF one of the recipients benefitting from the USD \$31million Green Climate Fund
- Introduction of Water Champions Programme to address water conservation



# About the Authority

### Who We Are

The Water Authority of Fiji is a Commercial Statutory Authority 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.

Following the 2009 Government reforms to strengthen the then Water and Sewerage Department (WSD) in preparation for the transition from Government Department to an autonomous organisation, WAF was established with effect from 1st January 2010 as a new CSA, officially taking over all responsibilities, functions and operations previously undertaken by WSD.

We report to the Minister for Public Enterprise and the Minister for Works, Transport and Public Utilities.

### **Our Responsibility**

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.

### **Our Functions**

- To harvest, treat and reticulate water supply for our customers,
- To comply with standards in relation to the supply and quality of water in our water system,
- To collect, transport, treat and discharge waste water,
- To establish, operate and maintain systems for the provision of water and sewerage services,
- To maintain any State assets transferred to the Authority and vested in by the Government,
- To provide technical or expert advice to any other person on matters relating to our functions and powers,
- To progressively achieve economic viability in the provision of water supply and sewerage services,
- To be environmentally responsible in the performance of all its activities,
- To assist in protecting, managing and conserving water resources, and
- To assist in the formulation and implementation of national policies or urban and rural land use planning, relating to the use and control of water bodies and resources.



### **Our Strategic Objectives for 2014-2016**

- 1. Providing consistent water supply 24/7 to all customers
- 2. Effective planning and project management
- 3. Safe drinking water and wastewater systems
- 4. Improve rural services
- 5. Sustainable and efficient service delivery
- 6. Building personnel capacity
- 7. Increase services coverage

### **Our Customers and Partners**

Our customers include owners or occupiers of buildings connected to the water system and to which we supply water or any other service, the owners or occupiers of buildings that are connected to the sewerage system and from which we collect sewerage or wastewater, any person who assumes responsibility to us in relation to a communal water supply or sanitation to a village or rural community, or any person to whom we supply water or any other service under a customer contract.

# Organisational Structure



# Chairman's Message



The Water Authority of Fiji began the 2016 Financial Year ready to implement operations, plans and projects, based on Government's welcome total budget of \$308.6million, being \$229million CAPEX and \$79.6million OPEX.

#### **Tropical Cyclone Winston**

All such plans and projects were temporarily suspended as Category 5, Severe Tropical Cyclone Winston swept through Fiji on February 19th and 20th, leaving a swathe of destruction, impacting the lives of an estimated 350,000 people, damaging or destroying homes and schools, and causing the reported deaths of 44 people.

The Authority's first concern was to keep clean, fresh water supplied to as many people as possible.

I am pleased to report that within two days of Cyclone Winston, 14 trucks in the Central/Eastern division had supplied 69,000 customers with 634,000 litres of water, at a cost of more than half a million dollars. I also wish to commend the WAF team for their sterling efforts, working 24 hours a day, to assess and repair damage so that the normal supply of safe, clean water would be resumed.

#### **Major Capital Works**

Although the impact of this disastrous event would continue to resonate through the year, it was also incumbent upon the Authority to return to normal operations and carry out planned projects as soon as possible.

As a result of this determination to fulfil its obligations to all stakeholders and to the citizens of Fiji, the Authority implemented major capital works in 2016, which included the improvement of the water distribution system, improvement of the overall reliability of the greater Suva/ Nausori bulk network, and the capacity of the Nadi/ Lautoka supply systems.

#### **Rewa River Water Supply Scheme**

In 2016, Fiji was the first Pacific Island country to receive a grant from the Green Climate Fund, in particular, to finance the climate adaptation measures of the Rewa River Water Supply Scheme. Due to its immense scope, the two-phased \$222million project was financed by the Asian Development Bank (\$67.7m), the Green Climate Fund (\$31m), the Fiji Government, and other sources.

#### **Clean Development Mechanism**

The Water Authority of Fiji adopted "Clean Development Mechanism" (CDM) technology at the Kinoya Sewage Treatment Plant. 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 ( $CO_2$ ).

By recovering and destroying methane, the project leads to Greenhouse Gas (GHG) mitigation. The methane emissions are computed using the project baseline and subsequently determine the overall emission reductions. In the absence of the project, methane would have been vented out into the atmosphere, contributing to GHG emissions.

The project is registered with the CDM Executive Board (CDM EB). The concept helps to harness the benefits of CDM towards enhancing the sewerage treatment in a sustainable way. Being the first methane capture and combustion project in the Pacific, it sets an example as a clean technology demonstration model for existing and new wastewater treatment plants in the country and to the other Pacific Island countries. By the reduction of the computed emissions at 22,000 tonnes, WAF was able to claim \$350,000.00 through the Asia Development Bank.

WAF is now working towards using the same concept to start generating electricity and earn more credits through reduction and electricity generation. This will not only lead to reduction of emissions, it will also aid in reducing the current electricity bills to more than 50% of the current billing costs of the Kinoya Sewerage Treatment plant.

#### Acknowledgements

My sincere gratitude to my fellow Board members for your invaluable contributions and on-going support in a year that began with enormous challenges left in T.C. Winston's path of devastation.

Thank you also to the Executive Management Team, for your dedication and hard work throughout the year, and to the entire WAF workforce.

I am proud of the immediate emergency response made by everyone at the Water Authority of Fiji. I am also proud of the way that the entire WAF team worked tirelessly to return to 'business as usual' as quickly as possible. Your efforts changed the year, from one that began in disaster, to one in which challenges were met and achievements were attained.

Bhavesh Kumar Chairman



# Message from the CEO

During the year, WAF replaced approximately 25,200 old domestic meters, and Non-Revenue Water was reduced from 39.6% to 31.6%.

The Water Champions Programme was successfully launched, to educate sectors of the wider community on the need for, and how to contribute to, water conservation.

The developments in the Liquid Trade Waste Programme are also contributing to overall environmental benefits for the Nation and its people. The impact of Tropical Cyclone Winston on the Nation and our response to the emergency is well documented in this Annual Report for the 2016 Financial Year. I wish to thank the Board of Directors for their foresight, for the installation of two back-up Gensets that ensured water supply during power shutdowns.

I also wish to take this opportunity to thank everyone at the Water Authority of Fiji for their steadfast and strenuous efforts to keep the citizens of Fiji supplied with clean, safe water both during the time of crisis, and throughout the following year.

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Nemani Waqanivalu For CEO









# **Operational Review**

At the close of 2015, the Water Authority of Fiji (WAF) was allocated a total 2016 budget of \$308.6m, being comprised of \$229million for Capital costs and \$79.6million for Operational costs.

As the Authority geared up for a year of major capital works and overall improvement of service delivery, all plans were temporarily put on hold.

#### **Category 5 Tropical Cyclone Winston**

On the evening of February 19th, Severe Tropical Cyclone Winston struck. T.C. Cyclone Winston, a Category 5 cyclone on both the Australian Cyclone Scale and the Saffir-Simpson Wind Scale, passed directly over Vanua Balavu, where wind gusts reached 306kilometres an hour. On 20th February, sustained winds of 230kilometres an hour were recorded, before the cyclone made landfall on Viti Levu on the Saturday night.

Settlements and villages in Ra and Tailevu, and on the islands of Koro, Vanua Balavu, Taveuni and Ovalau were decimated.

Within a few hours, T.C. Winston caused a reported 44 deaths, damaged or destroyed an estimated 24,000 homes, 278 schools, and affected an estimated 350,000 people. WAF did not escape the swathe of destruction left by the Category 5 cyclone.

#### **WAF Rapid Response**

At WAF Head Office, where the Essential Operations Team began meeting once electricity had been restored, daily bulletins and regular media releases kept the public informed of water levels, intermittent or non-supply of water and water carting schedules.

The WAF team worked around the clock in those first weeks to assess and repair damage in the rural and urban sectors so that the normal supply of safe, clean water would be resumed.

Within two days of Winston, 14 trucks in the Central/ Eastern division had supplied 69,000 customers with 634,000litres of water, at a cost of more than half a million dollars.

Thirteen WAF Rural Unit rapid response teams were on the ground in the Northern, Western and Central/

Eastern Divisions. The teams, each comprised an average of five members, conducted damage assessments and provided 'quick-fix' solutions as an interim measure before rehabilitation began for villages not receiving water. Within the first 10 days post-Winston, the Rural Unit Teams had completed assessments at 167 villages as follows:

Province	Villages
Tailevu	33
Ra	24
Cakaudrove	21
Koro	15
Bua	15
Namosi	13
Ovalau	13
Naitasiri	13
Namosi	13
Macuata	03
Vanua Balavu	03
Nadroga/Navosa	01

Most villages with damaged water supply systems were assisted by March, with the remaining repaired before April.

#### **Cyclone Recovery Works**

Following T.C. Winston, WAF allocated \$8.5m for the restoration programme, which included:

- I. Clearing and reinstatement of damaged roads to the water intakes, with proper drainage and gravelling works for major raw water intakes in the region;
- II. Gabion installation works along the collapsed section of access roads to dams;
- III. Cleaning of blocked culvert crossing along the access roads to raw water intakes, and
- IV. Rehabilitation works on Varaqe raw water trunk mains, the clearing of blocked access roads to water dams, and cut in works for temporary pump stations after Cyclone Winston.

The previous decision by the WAF Board and Executive Management to invest \$4million in standby generators meant that water could still be supplied despite ongoing power outages. Without this foresight, some 300,000 people would have been without water, in addition to those whose supply was affected by the cyclone.

### Water Production Department

Despite the setback to planned activities caused by T.C. Winston and its aftermath, the Water Operations Department remained responsible for monitoring, maintenance and operations of the Authority's assets and resources of 55 water treatment plants, which produce 120,000Megalitres of water annually. The Water Production Department is supported by the activities of the Water Operations, Wastewater, Environment, National Water Quality Laboratory and Technical



Services sub-units, in ensuring the effective and efficient use of WAF assets.

#### **Central Region**

The existing Central Bulk Supply System consists of 17 Water Sources, 8 Water Treatment Plants, 38 Storage Reservoirs, 6 Booster Pump Stations and 3 Raw Water Pumping Stations to cater for the water needs of the urban and peri-urban population of the Central Division. The total water production for the Central/Eastern Division is approximately 172.4 ML/d with the NRW level at 39% of the total water produced. Urban/rural developments and population growth are all factors that will increase the water demand for the region over the next few years.

#### **PPM Upgrading Works**

PPM works were carried out within the Suva/Nausori Bulk Supply system to upgrade reservoir sites, access roads, to secure our water supply and increase the lifespan of the infrastructure.

#### **New Infrastructure Projects**

Within the central bulk supply system, several projects were outsourced to design and build new infrastructure for WAF and were awarded to China Railway First Group (CRFG).

#### Western Region

#### Lautoka Water Supply System

The Lautoka system has nine reservoirs of which two, Kashmir and Buabua, are the bulk reservoirs. Kashmir reservoir feeds the Tavakubu, Tualesia, Phlugger and DMO reservoirs, whereas Buabua feeds the Qalitu and Vakabuli reservoirs.

#### **Maintenance Reduces NRW**

Major burst main repair works were conducted on bulk supply trunk mains in the Nadi/ Lautoka Region. The Bulk Team carried out a total of six repair works, replacing leaking sections of DN 150 DI short-piece connections with new short-piece connections to washouts and replacing existing leaking washout valves with new PN 25 high pressure standard sluice valves. Washouts while operating reduce risks of valve failure due to high pressure, and also reduce Non-Revenue Water. The washout leakage repair works saved approximately 2Megalitres of water per day. Leaking air valves were repaired and defective, double-orifice air valves were replaced with new Vent-o-mat Air valves. The team also repaired the 300mm leaking AC inlet to the Mocambo reservoir.



#### **Northern Region**

#### Labasa Bulk Supply Scheme

The Labasa Bulk Water Supply Scheme conveys raw water from the three dams to the Benau water treatment plants in Labasa Region. The core function of the Bulk Water Supply Management section is the overall management of dams, raw water transmissions, water treatment plants, clear water bulk transmissions and all the major water supply systems within the region.

#### **Dry Spell Impacts Supply**

The first six months were very challenging, due to the rapid drop in the discharge rate at all intakes. The Oscillation Index indicated the severe dry spell that fell below -9, which really affected the North. Ongoing forecasting of discharge, climate and rainfall status, was vital during that stage, so the appropriate steps could be taken to minimise water disruption in the Northern Division.

The team also located and proposed some new backup sources with the co-operation of WAF Team North. Some intakes were not in the team's area of focus, such as Navau Springs 1 & 2, which maintain a uniform discharge pattern, except during high flows.

### **Capital Works**

The allocation of \$229million to upgrade and expand infrastructure allowed WAF to satisfy the water needs of customers and those in the more rural areas.

The increase of \$58.2million reflected Government's recognition that, with increased population growth and proposed developments, the need to expand infrastructure to increase water production through improved sources and intakes was more important than ever.

The need to continue upgrading the existing water treatment, distribution and storage systems, as well as improve our wastewater systems is also imperative. Significant expansion, especially in the corridors of Korovou to Nausori, Nausori to Suva, Suva to Pacific Harbour, Sigatoka to Nadi and between Ba and Lautoka are to be incorporated into the plan.

#### **Successful Project Completion**

WAF brought several projects to a successful close in 2016. Out of 32 projects, 16 were for mains extensions and upgrades in several rural areas as well as within the main urban areas, including high profile projects in the Central Division.



Six projects were for bridge pipe relocations under the Rural Scheme. These improved water sources and water supply reliability for many rural customers. Two projects involved sewerage work, one in Kinoya for Sequence Batching Reactor (SBR) and one in Mariko for sewer reticulation.

Under the Capex 9 – Fiji Roads Authority (FRA) Counterpart Projects, three Nadi and Suva Road Upgrading Projects (NASRUP) were successfully supported by WAF and completed under FRA's intention to carry out Road Widening Projects.

- Project Suva Stage 2 A1 covered Lagere to Valelevu located along Kings Road for a population of approximately 1,000 people (150 households).
- Project Suva Stage 2 A2 covered Makoi to the Kalokalo Crescent Junction, located along Kings Road, for a population of approximately 800 people (120 households).
- Project Suva Stage 1 2C covered Wainibokasi roundabout to the Nausori Airport.

All three project works improved the water supply to the residents within the vicinity, lessened the Non-Revenue Water (NRW) in the area, and lessened the overall risk to the road widening projects for an effective and prosperous collaboration with FRA.

Two large projects saw the successful replacement of AC pipes at the Rewa Reservoir and on Fletcher Road. The new pipelines brought the existing water pipes up to modern standards to accommodate the community and industrial growth in the Fletcher area and reduce maintenance requirements on deteriorating pipe fittings and valves in the Fletcher Road area and at the Rewa Reservoir.

In Deuba, emergency works on Admiral Drive ensured the quick return to Pacific Harbour area's water supply with minimal disruption.

WAF was also instrumental in its support to the new Vunisea Sports Complex on Kadavu, involving the laying of PVC pipe from the reservoir to the complex and a 25,000L tank to act as a standby during disruption. Funded by the Ministry of Youth and Sports, the project's completion ensured that a total of 1,000 people and above, including spectators and competitors alike, would benefit from the reliable water supply to the facility.





#### **Non-Revenue Water**

Both the Northern and the Central Eastern regions attained 100% of PRV installations, while the Western region achieved 50%, with installation works ongoing.

Data Logger installation works took place, with a total of 65 installations completed in the Central Eastern region, 49 in the Western region and 19 in the Northern region. Major installations were completed, namely Volanau Reservoir Inlet Flow, Nadi 300AV - Pressure and Korovou Town Flow.



#### **Key Performance Indicators**

Intermittent supply areas were reduced to 12 and continued to reduce real losses in fixing visible leakages and control of system pressures.

### **Strategic Planning**

The Strategic Planning Unit works closely with Executive Management in respect to the strategic directions of WAF. Several significant initiatives were started and completed over the course of 2016, including the review of the Key Action Items and Key Result Indicators against set targets of the 2014 – 2016 Strategic Plan and developments of the Strategic Plan 2017 – 2019.

#### **Business Improvement Processes**

The Strategic Planning Unit developed a CAPEX Procedures Manual whereby any capital projects to be undertaken in WAF would be put through a Six Gateway Process, from getting necessary approvals from the Project Appraisal Committee to implementation and delivery and commissioning of these capital projects. The development of the WAFspecific CAPEX Procedures Manual was part of the WAF-Hunter Water Twinning programme, funded by the Asian Development Bank (ADB).

The manual provides consistent, standardised guidelines and templates to assist project managers in the preparation of their CAPEX (capital expenditure) submissions. The cost/benefit analysis must be justified and the best-case scenarios must be presented to demonstrate how funding must be spent to benefit the Authority's customers, the people of Fiji.

#### **PSIP Submissions**

The Strategic Planning Unit works closely with the Planning & Design and Construction Unit in the preparation of WAF PSIP submissions to Government that will assist in the allocation of budget towards our capital projects. These were prepared in business case formats and vetted by the Unit.

#### Aquarating

Aquarating is the global rating system with the objective to facilitate continual improvement of drinking water and wastewater services by providing rigorous, systematic and universal assessment. WAF was the first Water and Wastewater Utility in the Asia-Pacific region chosen by the Asian Development Bank to undertake this project.

Similar to undertaking a SWOT analysis of WAF where gap areas are identified, Aquarating allowed WAF to plan and allocate resources accordingly to address these gap areas. The Aquarating results also helped WAF to develop its 2017 to 2019 Strategic Plan.

#### **Pacific Water & Wastewater Association**

The Strategic Planning Unit oversees the submission of WAF annual benchmarking report to PWWA. This gives us the opportunity to be independently assessed with other member utilities in the Pacific region.

Fiji is one of 14 member countries and WAF is one of 17 national water utilities in the Southern Hemisphere represented in PWWA, which provides a platform for high-level discussions by member water and wastewater utilities.

### **Rural and Maritime**

The Rural team administrates all the rural projects worked in villages and maritime islands by the Water Authority of Fiji. Through regular attendance at Tikina meetings throughout the regions, the team keeps the customers abreast of developments within their region.

With \$7.3M allocated in PSIP 2016/ 2017 budget, the Rural Unit planned 51 projects to be undertaken to benefit 2,755 households. Out of 51 projects undertaken, the Rural Unit completed 46 projects, which benefited 2,476 households and has five on-going projects. The 51 projects included new water scheme projects and some upgrading works.

The table below summarises the progress of 2016/2017 Rural Projects by region:

•	•		•	
Status	Central	Eastern	Western	Northern
<b>Population Benefit</b>	1,122	2,016	4,403	6,235
WIP	1	0	4	0
Completed	5	10	12	19
Total	6	10	16	19

### 2016/2017 Rural Project Delivery

2016/2017 Rural Project Delivery





### **Population Benefit**

### **Free Initiatives**

The Government, under the 2016 budget, funded three free initiatives, Free Water Allowance for people with incomes under \$30,000, Rainwater Harvesting, and Free Water Tanks for intermittent supply areas.

### **Free Water Tanks**

The Free Water Tank and the Rainwater Harvesting schemes were launched at Tobuniqio Village in Tailevu on 31st January 2016. The Fijian Government allocated \$1.3million for the Free Water Tank and \$4.5million for the Rainwater Harvesting schemes. Under the Free Water Tank Scheme, a total of 325 villages were entitled to apply. WAF received a total of 2,658 applications for the Free Water Tanks, with 279 applicants meeting the requirements. WAF worked closely with Government to distribute a total of 199 x 5,000litre water tanks to successful applicants. Out of the 279 approved applications, six applications were from metered customers. Thirteen water tanks with an additional 65,000litres of storage capacity were approved for Tobuniqio Village. Previously, the village water source had dried up and the villagers were relying on rainwater, as well as the Water Authority of Fiji's water carting services.

#### **Rainwater Harvesting**

The Authority worked closely with the Government to process applications for the Rain Water Harvesting Programme that would provide 5,000litre water tanks to approximately 5,000 successful, pre-qualified applicants.

The Government's allocation of \$4.5million in the 2016-2017 Budget for this programme was in accordance with Section 36 of the 2013 Constitution of Fiji, regarding every person's "right to clean safe water in adequate quantities."

By October, a total of 633 application forms were distributed throughout the country. Application forms

were available for downloading from the WAF website or collected from all Customer Care offices throughout the region. Once vetted, WAF arranged for verification on site. In order to receive water tanks, applicants were required to have a base for the water tank, as well as proper guttering in place.



#### Rainwater Harvesting - distributed 4,373 x 5,000 litre water tanks

#### **Free Water Allowance**

The Free Water Allowance initiative gave households with incomes under \$30,000 per annum free access to water. A total 25,807 households, or 129,035 people, received free water allowances valued at a total of \$363,279. This important initiative ensured that these households had access to clean, safe drinking water, ensuring every Fijian's right to clean safe water.



Free Water Allowance - 25,807 Households impacting 129,035 people valued at \$363,259



#### Wastewater

With wastewater treatment plants overloaded, WAF ramped up efforts to increase capacity, especially in major urban areas through the Public Sector Investment Programme (PSIP). Cases were prepared in business case formats, highlighting the need for increasing capacity and improving wastewater treatment. Two CAPEX allocations included increasing treatment capacity at the overloaded treatment plant and second, the extension of coverage projects.

# Wastewater Odour and Sludge Control Project

Early in 2016, WAF contracted a reputable Australian company to carry out a year long, desludging and odour control project at the Kinoya, Nadali, Olosara, Natabua and Votua wastewater treatment plants. In some of WAF's 11 wastewater treatment plants, anaerobic ponds and sludge lagoons had accumulated an estimated 80% volume of sludge.

Following the initial sludge and odour survey by the contractor, the sludge was removed, then the water was removed in a centrifuge system. As a result of this project, people living in homes close to the above five wastewater treatment plants experienced a reduction in unpleasant odours emanating from the plants.

At the Natabua Wastewater Treatment Plant, WAF undertook a chemical dosing programme to mitigate against the unpleasant odour as a short-term measure, to address the on-going challenge of uncontrolled trade waste coming to the plant and adding to the odour problem.

While WAF has proactively undertaken short-term solutions through de-sludging and the use of Bio-Plus chemicals to reduce the odour, the Authority also considered long-term solutions.

A contributing factor to the foul odour has been "unqualified waste" from domestic dwellers and industries delivered to Wastewater Treatment Plants by septic waste tankers, as well as being directly attributable to the untreated, commercial and industrial waste, or Liquid Trade Waste (LTW) that may enter the wastewater treatment system.

For the long-term, the design and construction of a septic waste facility to properly pre-treat septic waste before it enters the Kinoya system and a Trade Waste Policy with regulations and enforceable penalties for



non-compliance are also needed.

### Liquid Trade Waste (LTW)

The Liquid Trade Waste Unit was established in 2013 to monitor and regulate the wastewater discharge from commercial and industrial businesses that are connected to WAF wastewater infrastructure. In 2016, a total of 275 companies from all the Divisions were sampled.

In 2016, the LTW Unit created awareness of the LTW programme, through consultation with major stakeholders, targeting all towns and city areas where provisions for WAF wastewater services are available.

The LTW Unit, in conjunction with Sydney Water and graduate engineers, conducted a workshop on designing and installation of grease traps, held in August, in Suva.



#### Average Pump Station Result - 2016



#### **LTW Special Projects**

The Liquid Trade Waste (LTW) Team was involved in standardising grease trap designs in Fiji, setting up the treatment plant to convert waste to Biodiesel at Kinoya Wastewater Treatment Plant, as well as having aspects of Trade Waste included in the school curriculum.

Implementation of the project at Kinoya Wastewater Treatment Plant took place, at a cost of USD\$7.5 million, once funding was approved by the Korea International Cooperation Agency (KOICA).

### **Key Achievements:**

- Liquid Trade Waste Policy consultation for North stakeholders hosted by Water and Sewerage Department & Water Authority of Fiji (LTW unit) 100% support for LTW programme.
- Poster awareness materials distribution to Hospitals and Health centres in the North.
- Compilation of verified customers, nature of business and contact details for the North .
- Updated data on trade waste customers' profile.
- Disseminated 42 LTW Lab results and consulted with business owners on results during dissemination.
- Consultation with new tanker business in the North (North Waste Management) for the LTW Programme.
- LTW Monitoring for proper grease trap maintenance
   results improvement have been made to proper

maintenance and changing of old pre-treatment to new.

- Reports submitted to Labasa Town Council and Ministry of Health on improper or unregulated practices by businesses who discharge LTW.
- Reports submitted to Ministry of Health for improper disposal and blockages of Labasa Hospital Pump station.

### Geographical Information Systems (GIS)

The Geographical Information Systems (GIS) team physically identifies and updates the location, depth, and length in kilometres, of WAF's water and wastewater assets. GIS also produces maps that include collated information gained at monthly meetings from representatives of the Environment, Water Resources, Land Acquisition and GIS units, working together as a team, so that first-hand, onsite information is available.

#### Award for WAF's GIS Development

The Authority received an award in Australia for its contribution to the development of software called 'Network Trace', in collaboration with Australia's Open Spatial. If a reservoir is affected for any reason, the software is able to monitor the number of metered residential and industrial customers that are being affected in any particular area with a click of a mouse. Other utilities using Open Spatial can also access the information, hence the award.



#### **SCADA Operations**

Supervisory Control & Data Acquisition (SCADA) systems refer to superior industrial and utility control systems that use supervisory software, which allows interaction between humans and the equipment.

From inception of WAF in 2010 to date, the first investment that was injected in the field of automation was in 2015 – 2016, which was the Implementation of SCADA Phase 1 Upgrade for the Central Eastern Region. This saw a total of 95 sites being monitored, and some controlled, from WAF's National Control Centre at Wailoku. This has seen the following benefits:

- Reduction in Energy use.
- Labour efficiency.
- Reduction in Operational cost due to less vehicles being utilised to get manual data.
- With real time data access from the field, faults are identified quickly through the National Control Centre. Relevant teams are informed and attend to faults.
- Prevention of reservoirs overflowing leading to Reduction in NRW.
- Reduction of pollution into streets or creeks by preventing waste water overflowing from sites when pumps fail.

With the increasing demands for water around the country and major developments where resorts, hotels, sub-divisions, and shopping centres are being constructed exponentially, technologies such as SCADA automation must be adapted to properly manage the water collection and distribution systems. Customer expectations have also shifted, now anticipating faster turnaround times to create a quicker response time, therefore more technologically advanced systems are required.

With the implementation of the SCADA Phase 1 Upgrade, the SCADA Monitoring room at Wailoku is able to monitor a total of 95 sites for the Central / Eastern Region.

Phases 2 and 3 of the SCADA system upgrade will involve 108 sites for the Western Region and 61 sites Northern Region. Inspection of critical Western sites for SCADA upgrade Phase 2 were completed by the Western Team with a total of 65 Sites from Rakiraki to Sigatoka surveyed in five days.



#### SCADA Critical Sites Nationwide Total 287 Sites

- Central/ Eastern Region 118 Sites
- Central /Eastern Commissioned Sites: Total 95/118
- Western Region 108 Sites
- Northern Region 61 Sites

WAF's SCADA Project faced various issues, such as heavy rain preventing the completion of wiring and installation of outdoor sites.

The manual systems limit WAF's ability to monitor real time data and evaluate the whole operation. Carrying out analysis on service efficiency and its effectiveness is not an option on a manual system. The impact of this would be continued intermittent supply areas in some area, affecting around 13,000 members of the population. Furthermore, the cost of crude oil keeps rising exponentially and manual operations do not allow for the reduction of either energy or operational costs.

The current WAF infrastructure status includes 258 Submersible Electrical Pumps, 55 Water Treatment Plants, 11 Wastewater Treatment Facilities, 4,200 kilometres of pipes, approximately 147,000 Water Connections, the production of 120,000Megalitres of water and more than 13,000 people living in intermittent supply areas. Providing services 24/7 in areas of Water and Wastewater would call for huge investments. This will increase our cost of operations exponentially if the current, manual system remains. The current cost for electricity accounts for close on 25% of WAF's OPEX budget. This is expected to increase as long as WAF continues to rely on manual systems.



#### National Water Quality Laboratory (NWQL) Achievements 2016

- 55 water treatment schemes were tested on a weekly basis to ensure all treatment processes were working as required and that they met with the required Fiji National Drinking Water Quality Standards.
- 2. Ensured 11 wastewater treatment plants were receiving water and reported any non-conformance for each treatment plant on a monthly basis, with the exception of Kinoya STP, which was checked on a weekly basis. All non-conformance for waste was aligned to the Environment Management Act 2004 on a monthly basis.
- 3. 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 aesthetical quality, as samples were received in the lab on a daily basis.
- 4. Calibration of all spatial measuring instruments was achieved, which ensured all instruments used were within the required range of measurement.
- 5. External audit of the implementation of required bench techniques, control cultures and aseptic methods took place. This allowed the laboratory staff to reduce uncertainties in results and improve the efficiency as exposure was given to an international laboratory and its aspects were easily implemented and followed. This increased the technical competence of the staff.
- 6. Calibration of spatial was achieved as required to ensure proper operation of the spatial.

#### Human Resources Method A Scheme

Following the upgrade to Method A employer in 2015, WAF achieved 94.12% in the 2015 Grant Assessment from FNU. This grant received will be re-invested in the capacity building programmes and the upgrading of WAF training facilities. From the total of \$281,573.02 Levy paid to Fiji National University (FNU), WAF managed to claim the sum of \$238,514.87 under the Method A Grant Scheme for the year 2015.

# Labour Management Consultation Committee

WAF Human Resources (HR) embarked on the establishment of the Labour Management

Consultation Committee (LMCC) to deal with and resolve staff issues creating an enabling environment for the achievement of corporate goals and nurturing of future relationships through the concept of good faith and the promotion of productivity

WAF's Human Resource Information System (HRIS) was enhanced by implementing the key functions of recruitment and selection, position management, induction and probation, OHS, learning and development, employment contract management, workforce planning, PMS and remuneration packaging.

HR also worked on the Fiji Business Excellence Award (FBEA) programme, and ensured that WAF surpassed the FNU grant scheme training days' target of 0.75 days in June 2016.

#### **Job Evaluation Exercise**

In the bi-annual Staff Satisfaction Survey in 2013, the report indicated that most WAF staff felt that salaries were inadequate. This was also supported by the PWC salary survey in 2013, which indicated WAF salaries were at the low end of the market.

The WAF Board had approved the Job Evaluation Exercise (JEE) on February 6th 2015, conducted by PWC based on the salary scale proposed. Following this, Government also approved WAF's recommendations for the pay-out to all FTE employees up to Team Leader level with effect from January 1st 2016, which cost WAF \$3,681,764.55.

A total of 1,086 employees benefited from the implementation of the Job Evaluation Exercise. There was no change in salaries for 81 employees who were already paid above the JEE recommended salary. The average salary increase for staff was \$3,390.20 per annum. The Senior Management's salary increase was approved later by the Board, which became effective on April 1st 2016 and cost WAF \$167,112.93.

After the implementation of the Job Evaluation Exercise, WAF established a Job Evaluation Committee to deal with any appeal cases received from the employees and provide its recommendations to Executive Management for consideration.

#### Training

In 2016, WAF continued to implement a robust training programme, to stay abreast of current technologies,



raise standards, and meet future demands to ensure all Fijians received the best possible service in their access to safe, clean water.

WAF participated in a number of programmes funded by donor agencies that included ITEC, JICA, KOICA, PWWA, ADB and the Government of the People's Republic of China.

Training opportunities included:

- ISO 17025 Quality Systems Certification for Organisation and Laboratories Training, conducted at the Fluid Control Research Institute, Kerala, India, under the auspices of the Indian Technical and Economic Cooperation Programme (ITEC).
- New Zealand Ministry of Foreign Affairs (MFAT) approved Confined Space Training.
- Wastewater and Project Management training, in Japan.
- Water modelling and Master Planning training, Hunter Water, Australia.
- Study of management and effective integration of the liquid trade waste programme into the Customer Service operation at the Sydney Water Corporation of New South Wales.
- Repeatability, Measurement of Uncertainty, and Method Validation Training, conducted by Global Proficiency of New Zealand, held at National Water Quality Laboratory (NWQL).
- Action plan development to improve water utilities in the Pacific Islands, held in Okinawa, Japan.
- Training in Sewer GEMS wastewater modelling software, a powerful planning and design tool.

### **Partnerships**

#### Twinning Arrangement with Water Care Services NZ

Following the study tour undertaken by WAF senior officials in 2015, to Water Care Services Limited and other Water Utilities in New Zealand funded by Local Government NZ, six priority programmes were identified by WAF: Non-Revenue Water, SCADA, Enterprise Risk Management, Water and Wastewater Network Modelling.

#### **Fukuoka Counterpart Training**

WAF staff at the Lautoka Depot had the benefit of a week-long, JICA (Japan International Cooperation Agency) counterpart training

conducted by seven consultants from the Water Works Bureau, Fukuoka City. The training focused on areas such as leakage control, Non-Revenue Water, and meter installation standards and procedures.

#### **KECO**

A research contract agreement was signed, by the Authority and representatives of the Korean Environment Corporation (KECO) for a five-month feasibility study on the conversion of fats, oil and grease (FOG) into biodiesel at the WAF Kinoya Wastewater Treatment Plant and to establish a river protection plan.

The KECO-funded project was facilitated by WAF's Liquid Trade Waste Unit (LTWU) with the KECO team conducting some site visits, wastewater sampling and meeting with stakeholders.

#### Wastewater Feasibility Study in Japan

WAF Team members conducted a week-long feasibility survey in Japan on the potential use of mobile, ecofriendly technology, to improve the quality of effluent discharge into the natural environment. The low-cost machinery was compact and easily maintained, with a high treatment capacity, a speedy treatment process, and with applications suitable for Fiji.

# Twinning Agreement with Hunter Water and Sydney Water

The objective of the twinning programme is to build capacity for WAF staff in areas that lacked technical capacity, such as Water and Wastewater Modelling, SCADA, Liquid Tradewaste, business case preparations, and the development of a CAPEX Manual, for example.





#### Work Attachment Programme

In alignment with Government's 2016 budget, which promotes work attachment programmes and WAF's corporate social responsibility, WAF continuously engages people under the NEC and industrial work attachment programme to help students and members of the unemployed workforce gain necessary work experience. This has been successful, as some of the people have already been absorbed into project and permanent establishment with WAF.

#### Trade Test Programme

WAF introduced this programme in 2013 in conjunction with Fiji National University to help employees attain recognised skills certification in the respective positions they hold with the Authority. The scheme's certification is recognised both nationally and internationally by the New Zealand Qualifications Authority (NZQA) and Trade Recognition Australia (TRA).

#### Occupational Health & Safety (OHS) Registration

Water Authority of Fiji registers all its workplaces with the Ministry of Employment Productivity and Legislation and Regulation as a mandatory requirement under HASAWA 1996. The validity of the registration is usually for one year, subject to renewal upon submitting the required documents. WAF registered 1 workplace in the North, 5 in the West and 7 in Central /Eastern regions.

Mandatory registration of WAF's industrial chemicals currently in use as stipulated under Regulation 32(1) of the Health and Safety at Work (Control of Hazardous Substance) 2006 were also conducted. WAF registered 21 for Central Eastern, 14 for Northern, and 12 for Western regions, for a total of 47 chemicals in use in 2016.

#### **Health Screenings and Vaccinations**

Random six-month health screenings of all WAF workers were conducted in all regions to identify potential disease symptoms that are easier to treat in their early stages and vaccinations were given to wastewater staff to boost immunity against diseases and viruses. In March alone, a total of 43 staff in the North were vaccinated.

#### **Trenching and Excavation Awareness**

As part of the Safety Capacity Building programme of our field workers, the Training Unit, in conjunction with OPUS NZ, organised a trenching and excavation training for staff directly involved in working in trenches, with 15 conducted in the Central Eastern region, 10 in the North and 28 in the West.

#### **Workplace Accident Details 2016**

As stated in HASAWA 1996, all workplace accidents

and incidents are usually reported to OHS officers within 48 hours, using the prescribed form. They are then reported to the Ministry of Labour and Aon, accordingly. A few cases were reported where injuries took place either during trench collapses or other potential hazards in relation to trench work.



# OHS Inspection of Wastewater Pump Station 2016

Officers carried out safety inspections of pump stations in the Central Eastern region, located in the urban areas of the Suva – Nausori corridor. The inspection examined the critical component of the plant and equipment and determined the extent of wear, deterioration and malfunction that could lead to accidents if not properly maintained. Equipment inspected included overhead cranes, chain blocks, electrical hoist and running track. Altogether, 50 wastewater treatment plants were inspected.

#### **Customer Service**

During the year, a total of 27,078 complaints were resolved and 8,560 were closed. The following table shows the major types of complaint, by region.

Complaint Types		Closed		
complaint rypes	C/E	Northern	Western	Closed
Billing Complaint	1,305	54	1,449	185
Production Complaint	14,944	1,693	5,267	8,375
Project Metering Complaint	972	298	1,096	-

Month	Total Customers	Served Within 15 minutes	Service Level
Jan	5,376	2,276	42%
Feb	6,386	2,630	41%
March	5,209	4,619	89%
April	3,367	3,040	90%
May	3,473	3,177	91%
June	3,538	3,165	89%
July	4,170	3,598	86%
Aug	3,901	3,398	87%
Sept	3,101	3,004	97%
Oct	3,411	2,479	73%
Nov	3,570	2,948	83%
Dec	3,836	3,491	91%
Total	49,338	37,825	80%

#### **Customer Service Frontline Office Service Levels** 7000 120% 6000 100% 5000 80% 4000 60% 3000 40% 2000 20% 1000 0 0% JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC

Total Customers Served within 15 min — Service Level

Challenges	Way Forward
1. Billing Complaints	Frontliners to be made aware of all possible criteria that are entitled to any billing adjustments.
2. Timelines on Service Requests Not Met especially on New connections	Issue Service order to Procurement Unit to avoid delays in the NC process as the unavailability of the fast moving items needed for service request is a major hindrance in meeting timelines.
3. Government Quarters Arrears	<ul> <li>WAF to be more aggressive in its approach towards Debt Recoveries since nothing is forthcoming from</li> <li>Government with regards to write-offs of accumulated debts prior to 2010.</li> <li>An MOA to be drafted to enforce debt recoveries from</li> <li>Government Ministries since they owe a lot in terms of outstanding debts.</li> </ul>
4. GIS Training	To be throughly conducted throughout the regions since not all CSR's are familiar with this tool.



## WAF Call Centre Performance 2016

### **Corporate Communications**

The Corporate Communications Team plays a vital role as to how employees, investors (ADB, JICA and other funding/donor organisations) and the general public perceive Water Authority of Fiji. The team helps the management to prepare for media interviews, develop messages to employees and suggest new initiatives to keep the organisation on the cutting edge of communication with their stakeholders.

Activities for the year included the USP Career Fair 2016, Road to Rio Polo T-shirt design, WAF promotional items/ merchandise and keeping the public informed through the regular publication of media releases and, when required, advertisements and advisories. A quarterly newsletter, WAI News also helps keep the Board, staff and external stakeholders informed.

Also in 2016, WAF revised its vision and mission statements and logo line to include sanitation.

#### Water Champions Programme

As part of WAF's continuous effort in promoting water conservation awareness in communities, homes and schools, the Authority runs the Water Champions Programme during the school holidays with secondary school students. The objective of the programme is to create awareness to school children of how water is sourced, treated and distributed to customers through site visits and presentations by respective staff members. This programme also provides an opportunity for students to explore career options prior to undertaking the final year of study at school. In future this programme will also be extended to the Western and Northern divisions.

#### WAF Annual Conference and Awards Night

WAF held its third Annual Conference and Awards Night on 21st and 22nd January, 2016. The conference brought together 140 participants from the three regions, from supervisor level up, discussing relevant issues affecting WAF and the way forward. The Awards Night was held on the 22nd, with 500 guests, including WAF staff, family and friends. Four team awards and twelve individual awards were presented.

#### **Nasinu Environment Open Day**

WAF participated in the Environment Open Day organised by the Nasinu Town Council and held at the Nasinu Multipurpose Court in Valelevu on 23rd September.

### **Internal Audit**

The Internal Audit Department plays a vital role in the Water Authority of Fiji as the activity helps the organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes. The Team is divided into two sections, Audit and Investigation, where both provide assurance to the Management, Board and Relevant Stakeholders.



# Corporate Governance

### **Role of the Board**

The Board is responsible for establishing the Authority's strategic direction, the setting of objectives, policy guidelines and goals for management, and monitoring the achievement of these matters.

The Board also reviews the Business Plan, the Corporate Plan and Statement of Corporate Intent, the Industrial Relations Plan and approves Operating and Capital budgets each year.

### **Composition of the Board**

The Chairman and the five other members of the WAF Board of Directors are appointed by the Minister responsible for Public Utilities in consultation with the Minister responsible for Public Enterprises and the Minister responsible for Finance.

Board members are appointed for a term not exceeding three years and are eligible for reappointment at the end of that term.

### **Duties and Obligations of the Board**

All Directors shall act at all times in a manner so as to advance the interests of the Authority and its customers, comply with the obligations of Directors under the Public Enterprise Act 1996 and to implement any Government policy, consistent with the functions of the Authority, given to the Board by the Minister.

No Director will publicly disclose any matter relevant to the Board's deliberations unless authorised to do so or as required by law.

### **Disclosure of Interest**

Directors will disclose any direct or indirect interest they may have in any matter that is being considered, or is about to be considered by the Board. Any such disclosure will be recorded in the meeting's minutes and while the matter is under discussion, the Board member will leave the meeting, without affecting the quorum for the meeting.

### **Board Meetings**

The Board held 10 regular meetings during the financial year ended 31 December 2016 and no special meetings. The Board's regular business during its meetings is concerned with corporate governance, financial performance, risk management and strategic matters.

Date	Month
1st	February
21st	March
2nd	May
6th	June
3rd	July
1st	August
5th	September
3rd	October
7th	November
5th	December

### WAF Board Meetings 2016





Clean Water & Sanitation for a Better Life

# Water Authority of Fiji

# Financial Statements For the year ended 31 December 2016

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# Water Authority of Fiji Directors' Report

#### For the year ended 31 December 2016

In accordance with a resolution of the Board of Directors, the Directors herewith submit the statement of financial position of Water Authority of Fiji (the "Authority") as at 31 December 2016 and the related statement of comprehensive income, statement of changes in equity and statement of cash flows for the year ended on that date. The Water Authority of Fiji was established 1 January 2010 as a Commercial Statutory Authority in accordance with the Water Authority of Fiji Promulgation of 2007.

#### Directors

The names of Directors in office at the date of this report and at any time during the financial year and up until the date the financial statements were authorised for issue are as follows:

Board member	Appointed	Resigned
Mr Bhavesh K Patel (Chairman)	23/04/2015	Current
Mr P.L Munasinghe	01/01/2015	Current
Mr Umarji Musa	01/03/2015	Current
Mr Vijay P Maharaj	01/01/2015	Current
Mr Shaheen Ali	13/03/2015	13/10/2016
Mr Hemant Kumar	23/04/2015	Current
Commander Francis Kean	27/07/2014	16/02/2016
Mr Kamal Gounder	13/10/2016	Current
Mr Paul Bayly (Ex-officio)	13/10/2016	10/17/17

#### State of affairs

In the opinion of the Directors, the accompanying statements of financial position give a true and fair view of the state of affairs of the Authority as at 31 December 2016 and the accompanying statement of comprehensive income, statement of changes in equity and statement of cash flows give a true and fair view of the results, changes in equity and cash flows of the Authority for the year then ended.

#### **Trading results**

The net loss for the year amounted to \$21,382,128 (2015: \$30,390,833).

#### Dividends

The Directors recommend that no dividends be declared or proposed for the year.

#### **Principal activity**

The principal activity of the Authority during the course of the financial year was to harvest, treat and reticulate water for supply to its customers and to establish, operate and maintain systems for the provision of water and waste water services.

#### **Current assets**

The Directors took reasonable steps before the Authority's financial statements were prepared to ascertain that the current assets of the Authority were shown in the accounting records at a value equal to or below the value that would be expected to be realised in the ordinary course of business.

## Water Authority of Fiji Directors' Report continued

#### For the year ended 31 December 2016

#### **Current assets continued**

At the date of this report, the directors are not aware of any circumstances which would render the values attributable to the current assets in the financial statements to be misleading.

#### **Non-current assets**

Upon establishment of the Authority, under the Water Authority of Fiji Promulgation 2007 ("the Promulgation"), Property, plant and equipment were vested in the Authority under the Promulgation amounting to \$1,888,909,608. The valuation of these Property, plant and equipment was carried out in 2006 and this value became the 'deemed cost' to the Authority as at 1 January 2010.

The Authority has not subsequently carried out an independent valuation of the Property, plant and equipment as it is the Directors' view that the costs associated with such an exercise would outweigh the benefits to be achieved. Hence in the opinion of the Directors, the deemed cost of Property, plant and equipment is considered an appropriate measure.

#### **Revenue recognition**

In respect of the qualification raised by the Office of the Auditor General in regards to the revenue recognition by the Authority, it is the Directors' view that the Authority is in compliance with the revenue recognition criteria as per the International Accounting Standard (IAS) 18 "Revenue".

The Authority's principle operating activity is the catchment, treatment and sale of water to the public and including the treatment of sewerage. Accordingly, it is the Directors view that revenue relating to the above activities is correctly brought to account in the Authority's account as required by IAS 18.

#### Receivables

The Directors took reasonable steps before the Authority's financial statements were made out to ascertain that all known bad debts were written off and adequate allowance was made for impairment losses.

At the date of this report, the Directors are not aware of any circumstances which would render the above assessment inadequate to any substantial extent.

#### **Related party transactions**

All related party transactions have been adequately recorded in the financial statements.

#### Events subsequent to balance date

In 2017 WAF engaged KPMG to conduct a special internal audit for the two divisions Plant Hire and Procurement in January and November respectively. Case of fraud was reported in the Plant Hire audit and tabulated to the Board. The matter is with FICAC.

No other matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Authority, the results of those operations, or the state of affairs of the Authority in future financial years.

#### Other circumstances

At the date of this report, the Directors are not aware of any circumstances not otherwise dealt with in this report or financial statements which would render any amounts stated in the accounts to be misleading.

# Water Authority of Fiji Directors' Report continued

#### For the year ended 31 December 2016

#### **Unusual circumstances**

The results of the Authority's operations during the financial year have not in the opinion of the Directors been substantially affected by any item, transaction or event of a material and unusual nature other than those disclosed in the financial statements.

#### **Directors' interests**

No Director of the Authority has, since the end of the financial year, received or become entitled to receive a benefit (other than a benefit included in the total amount of emoluments received or due and receivable by directors shown in the Authority's financial statements) by reason of a contract made with the Authority or a related corporation with the director or with a firm of which he or she is a member, or in a Authority in which he/she has a substantial financial interest.

Dated at	Sura	this	17th	_day of	Decentr	2019.
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Signed in accordance with a resolution of the Directors.

Director

# Water Authority of Fiji Statement by Directors

#### For the year ended 31 December 2016

In the opinion of the Directors of Water Authority of Fiji:

- (a) the accompanying statement of comprehensive income of the Authority is drawn up so as to give a true and fair view of the results of the Authority for the year ended 31 December 2016;
- (b) the accompanying statement of changes in equity of the Authority is drawn up so as to give a true and fair view of the changes in equity of the Authority for the year ended 31 December 2016;
- (c) the accompanying statement of financial position of the Authority is drawn up so as to give a true and fair view of the state of affairs of the Authority as at 31 December 2016;
- (d) the accompanying statement of cash flows of the Authority is drawn up so as to give a true and fair view of the cash flows of the Authority for the year ended 31 December 2016;
- (e) at the date of this statement there are reasonable grounds to believe the Authority will be able to pay its debts as and when they fall due; and
- (f) all related party transactions have been adequately recorded in the books of the Authority.

Dated at \_\_\_\_\_\_ this \_\_\_\_\_ 17th day of \_\_\_\_\_ 2019.

Signed in accordance with a resolution of the Directors.

Director

in Man

#### OFFICE OF THE AUDITOR GENERAL

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### INDEPENDENT AUDITOR'S REPORT WATER AUTHORITY OF FIJI

#### Opinion

I have audited the financial statements of Water Authority of Fiji ("the Authority"), which comprise the statement of financial position as at 31 December 2016, 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.

In my opinion, except for the matters described in the Basis for Qualified Audit Opinion the accompanying financial statements give a true and fair view of the financial position of the Authority as at 31 December 2016, and of its financial performance, its cash flows and changes in equity for the year then ended in accordance with International Financial Reporting Standards ("IFRS").

#### **Basis for Qualified Audit Opinion**

- 1. Included in financial statements as Revenue (Note 5) are water and sewerage charges of \$32,410,653 Receipts from these charges are Government revenue which is directly deposited in the consolidated bank account of the Government. International Accounting Standards (IAS) 18 has set two criteria which need to be met for revenue recognition. One of the criteria requires that economic benefit associated with the item of revenue should flow to the entity. Thus, the Authority has not met the recognition criteria for recording these charge's as revenue. Consequently, water and sewage charges of \$32,410,653 and its related receivable (Note 11) of 10,228,694 are not fairly stated in the financial statements.
- 2. 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 was carried out in 2006. Consequently, I am not able to confirm the valuation of the opening balance of property, plant and equipment when it was transferred in 2010.

I conducted my audit in accordance with International Standards on Auditing ("ISAs"). My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Authority in accordance with the International Ethics Standards Board for Accountant's Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to my audit of the financial statements in Fiji and I have fulfilled other ethical responsibilities in accordance with these requirements and the IESBA Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

#### **Other Matters**

 Internal controls in the maintenance and issue of inventories and procurement of goods and services especially in the area of plant hire needs to be strengthened to avoid possible leakages and fraudulent activities.

#### Other Matters - (Cont'd)

 Internal Audit carried out by contracted Accounting Firm have highlighted some serious issues relating to the plant hire relating to 2016 which indicates possible fraud. I was unable to access the internal audit report and therefore I am unable to determine the exposure of any fraud and its implication on the 2016 financial statements. Accordingly, I have not modified my opinion relating to this matter.

#### **Responsibilities of the Management and Directors for the Financial Statements**

The directors and management are responsible for the preparation and fair presentation of these financial statements in accordance with IFRS, and for such internal control as the directors and management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, directors and management are responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the management II intend to cease operations, or have no realistic alternative but to do so.

The directors and management are responsible for overseeing the Authority's financial reporting process.

#### Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with ISA, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Authority's internal control.

Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

#### Auditor's Responsibilities for the Audit of the Financial Statements - (Cont'd)

Conclude on the appropriateness of the management's and directors' use of going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or; if such disclosures, are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.

Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with the management and directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

#### **Report on Other Legal and Regulatory Requirements**

In accordance with the requirements of the Water Authority of Fiji Promulgation 2007 and other statutory requirements, in my opinion:

- a) proper books of account have been kept by the Authority, so far as it appears from my examination of those books,
- b) the accompanying financial statements:
  - a. are in agreement with the books of account; and
  - b. to the best of my information and according to the explanations given to me, give the information required by the Water Authority of Fiji Promulgation 2007 and other statutory requirements in the manner so required.

Ajay Nand AUDITOR-GENERAL

Suva, Fiji 17 July, 2019


## Water Authority of Fiji Statement of Comprehensive Income

### For the year ended 31 December 2016

	Notes	2016 \$	2015 \$
Revenue	5	114,125,502	87,329,457
Other income	6	39,022,697	22,497,780
Total Revenue		153,148,199	109,827,237
Personnel expenses	8	(26,026,267)	(19,515,199)
Operating expenses	7	(89,319,186)	(62,452,610)
Profit from operations before depreciation & amortization, finance income and income tax		37,802,746	27,859,428
Depreciation & amortization	13 & 14	(59,288,328)	(58,300,576)
Finance income	9	103,454	50,315
Loss before income tax		(21,382,128)	(30,390,833)
Income tax expense		-	-
Loss for the period		(21,382,128)	(30,390,833)
Other comprehensive income for the year, net of income tax	-	-	
Total comprehensive (loss) for the year		(21,382,128)	(30,390,833)

The accompanying notes form an integral part of the statement of comprehensive income.

### Water Authority of Fiji Statement of Changes in Equity

### For the year ended 31 December 2016

	Contributed equity \$	Accumulated losses \$	Total \$
As at 1 January 2015	1,778,957,609	(202,461,777)	1,576,495,832
Loss for the period Transfer of water and sewerage bills collected to	-	(30,390,833)	(30,390,833)
Government of Fiji Consolidated Fund Account	(31,257,761)	-	(31,257,761)
Total comprehensive income Total other comprehensive income, net of tax	(31,257,761)	(30,390,833)	(61,648,594)
At 31 December 2015	1,747,699,848	(232,852,610)	1,514,847,238
Loss for the period Transfer of water and sewerage bills collected to	-	(21,382,128)	(21,382,128)
Government of Fiji Consolidated Fund Account	(36,753,022)	-	(36,753,022)
Total comprehensive income	(36,753,022)	(21,382,128)	(58,135,150)
Total other comprehensive income, net of tax	-	-	-
At 31 December 2016	1,710,946,826	(254,234,738)	1,456,712,088

The accompanying notes form an integral part of the statement of changes in equity.

### Water Authority of Fiji Statement of Financial Position

### As at 31 December 2016

	Notes	2016 \$	2015 \$
Non-current assets			
Property, plant and equipment	13	1,756,373,289	1,761,711,340
Intangible asset	14	967,501	823,273
Total non-current assets		1,757,340,790	1,762,534,613
Current assets			
Cash and cash equivalents	10	34,565,274	35,464,433
Trade and other receivables	11	15,694,970	12,235,959
Inventories	12	28,939,985	16,565,503
Held-to-maturity investments	15	1,000,000	5,000,193
Other assets and prepayments	16	887,838	1,513,407
Total current assets		81,088,067	70,779,495
Total assets		1,838,428,857	1,833,314,108
Equity			
Contributed equity		1,710,946,826	1,747,699,848
Accumulated losses		(254,234,738)	(232,852,610)
Total equity		1,456,712,088	1,514,847,238
Current liabilities			
Obligations under finance lease	21	91,458	422,551
Trade and other payables	17	15,610,201	15,268,669
Provision for employee entitlements	20	775,140	683,010
Total current liabilities		16,476,799	16,374,230
Non-current liabilities			
Obligations under finance lease	21	-	88,350
Deferred revenue – capex grant	18	296,841,158	231,992,329
ADB funded grant	19	68,398,812	70,011,961
Total non-current liabilities		365,239,970	302,092,640
Total liabilities		381,716,769	318,466,870
Total equity and liabilities		1,838,428,857	1,833,314,108

Signed for and on behalf of the Board of Directors

10

Director

Director

The accompanying notes form an integral part of the Statement of financial position.

### Water Authority of Fiji Statement of Cash Flows

### For the year ended 31 December 2016

Ν	otes	2016 \$	2015 \$
Operating activities			
Receipts from customers		36,753,022	31,257,761
Receipt from Government – operating grant		72,071,657	54,918,804
Payment to suppliers and employees		(92,628,548)	(71,842,149)
Payment to Government – Consolidated Fund Account		(36,753,022)	(31,257,761)
Net cash flows used in operating activities		(20,556,891)	(16,923,345)
Investing activities			
Receipt from Government – capital grant		104,576,413	116,500,872
Receipt from rural entities – rural projects		3,738	441,560
Payments for property, plant and equipment		(84,606,430)	(80,284,187)
Net cash flows from investing activities		19,973,721	36,658,245
Financing activities			
Repayment of finance lease		(419,443)	(377,710)
Proceeds from interest income		103,454	50,315
Net cash flows used in financing activities		(315,989)	(327,395)
Net (decrease)/increase in cash and cash equivalents		(899,159)	19,407,505
Cash and cash equivalents at 1 January		35,464,433	16,056,928
Cash and cash equivalents at 31 December	24	34,565,274	35,464,433

The accompanying notes form an integral part of the Statement of cash flows.

For the year ended 31 December 2016

### 1 Reporting Entity

Water Authority of Fiji (the "Authority") is a corporate body with perpetual succession and a common seal established under the Water Authority of Fiji Promulgation 2007 in Fiji. The address of the Authority's registered office is Kings Road, Nasinu.

The principal activity of the Authority during the course of the financial year was to harvest, treat and reticulate water for supply to its customers and to establish, operate and maintain systems for the provision of water and waste water services. Other functions of the Authority are stated in section 7 of the Water Authority of Fiji Promulgation 2007.

### 2 Basis of preparation

#### (a) Statement of compliance

The financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) adopted by the International Accounting Standards Board (IASB) and the requirements of the Water Authority of Fiji Promulgation 2007. The financial statements were approved by the Board of the Directors on \_\_\_\_\_\_.

New standards and interpretations not yet adopted.

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning after 1 January 2016, and have not been applied in preparing these financial statements. None of these is expected to have a significant effect on the financial statements of the Authority.

### (b) Basis of measurement

The financial statements have been prepared on a historical cost basis except where stated. The accounting policies have been consistently applied by the Authority.

### (c) Functional and presentation currency

The financial statements are presented in Fiji dollars, which is the Authority's functional currency. All financial information presented in Fiji currency has been rounded to the nearest dollar.

### (d) Use of estimates and judgments

The preparation of the financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements is included in the following notes:

- Note 3(b) Property, plant and equipment
- Note 3(c) Financial instruments
- Note 3(f) Impairment

### For the year ended 31 December 2016

#### 3 Significant accounting policies

#### (a) Foreign currency transactions

Transactions in foreign currencies are translated to Fiji dollars at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to Fiji dollars at the exchange rate at that date. The foreign currency gains or losses on translation are recognised in profit or loss.

#### (b) Property, plant and equipment

#### Recognition and measurement

Items of property, plant and equipment inherited by the Authority from the Water and Sewerage Department prior to 1 January 2010 are measured at optimised replacement cost and additions thereafter are measured at cost less accumulated depreciation and impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located and capitalised borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognised net within other income in profit or loss.

#### Subsequent expenditure

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefit embodied within the part will flow to the Authority and its cost can be measured reliably. The cost of the day-to-day servicing of plant and equipment are recognised in profit or loss as incurred.

#### **Depreciation and Amortization**

Property, plant and equipment including leasehold land, building, furniture and fittings, plant & equipment and motor vehicles, but excluding freehold land is depreciated using the straight line method, at rates which will write off the costs of those assets over their expected useful lives. Leasehold land is amortised over the period of lease. The method of write off and the rates used are those considered appropriate to each class of asset.

The depreciation rates for each class of assets are as follows:

Buildings and improvements	1.25% -	2.5%	
Water Distribution Equipment			1% - 5%
Sewerage Equipment			1% - 5%
Furniture and fittings			7% - 12%
Office Equipment			3% - 12%
Motor vehicles			20%

### For the year ended 31 December 2016

#### 3 Significant accounting policies continued

### (b) Property, plant and equipment continued

Computers	33%
Leasehold land	Over term of lease

Depreciation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

#### (c) Financial instruments

#### (i) Non-derivative financial assets

The Authority initially recognises loans and receivables and deposits on the date that they are originated. All other financial assets are recognised initially on the trade date at which the Authority becomes a party to the contractual provisions of the instrument.

The Authority derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Authority is recognised as a separate asset or liability.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Authority has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Non-derivative financial assets of the Authority include trade and other receivables excluding prepayments.

#### Loans and receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognised initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition loans and receivables are measured at amortised cost using the effective interest method, less any impairment losses.

Loans and receivables comprise trade and other receivables and other assets excluding prepayments.

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the Authority will not be able to collect all amounts due according to the original terms of the receivables. Provision is raised on a specific debtor as well as on a collective basis. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered indicators that a specific debtor balance is impaired. Impairment assessed at a collective level is based on past experience and data in relation to actual write-offs. The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the loss is recognised in profit or loss. When a trade receivable is uncollectable, it is written off against the allowance for trade receivables.

Subsequent recoveries of amounts previously written off are credited against profit or loss.

### For the year ended 31 December 2016

#### **3** Significant accounting policies *continued*

- (c) Financial instruments continued
- (i) Non-derivative financial assets *continued*

#### Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and cash at bank. Bank overdrafts that are repayable on demand and form an integral part of the Authority's cash management are included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

The Authority initially recognises debt securities issued on the date that they are originated. All other financial liabilities are recognised initially on the trade date at which the Authority becomes a party to the contractual provisions of the instrument.

The Authority derecognises a financial liability when its contractual obligations are discharged or cancelled or expired.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Authority has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

The Authority has the following non-derivative financial liabilities: trade and other payables.

Such financial liabilities are recognised initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition these financial liabilities are measured at amortised cost using the effective interest method.

### Trade payables, provisions and other payables

Trade and other payables are stated at cost. A provision is recognised in the statement of financial position when the Authority has legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability.

### (d) Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is based on the weighted average principle, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of work in progress, cost includes an appropriate share of construction overheads based on normal operating capacity. Cost also may include transfers from other comprehensive income of any gain or loss on qualifying cash flow hedges of foreign currency purchases of inventories.

### For the year ended 31 December 2016

#### 3 Significant accounting policies continued

#### (e) Leased assets

Leases in terms of which the Authority assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset.

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of incentives received from the lessor) are charged to profit or loss on a straight line basis over the period of the lease.

#### (f) Impairment

#### (i) Financial assets (including receivables)

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably.

Objective evidence that financial assets (including equity securities) are impaired can include default or delinquency by a debtor, restructuring of an amount due to the Authority on terms that the Authority would not consider otherwise, indicates that a debtor or issuer will enter bankruptcy, the disappearance of an active market for a security.

The Authority considers evidence of impairment for receivables at both a specific asset and collective level. All individually significant receivables are assessed for specific impairment. All individually significant receivables found not to be specifically impaired are then collectively assessed for any impairment that has been incurred but not yet identified. Receivables that are not individually significant are collectively assessed for impairment by grouping together receivables with similar risk characteristics.

In assessing collective impairment the Authority uses historical trends of the probability of default, timing of recoveries and the amount of loss incurred, adjusted for management's judgement as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognised in profit or loss and reflected in an allowance account against receivables. When a subsequent event causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed through profit or loss.

The carrying amounts of the Authority's non-financial assets, other than inventories are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

### For the year ended 31 December 2016

### **3** Significant accounting policies *continued*

### (f) Impairment continued

The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit, or CGU").

The Authority's corporate assets do not generate separate cash inflows. If there is an indication that a corporate asset may be impaired, then the recoverable amount is determined for the CGU to which the corporate asset belongs.

An impairment loss is recognised if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the units, and then to reduce the carrying amounts of the other assets in the unit (group of units) on a pro rata basis.

### (g) Employee benefits

### **Superannuation**

Contributions are paid to the Fiji National Provident Fund on behalf of employees to secure retirement benefits. Costs are included in profit or loss.

### Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed in profit or loss as the related service is provided.

A liability is recognised for the amount to be paid under short-term benefits if the Authority has a present or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be measured reliably.

### (h) Revenue

Revenue is recognised and measured at the fair value of the consideration received or receivable. Revenue is shown net of value-added tax, returns, rebates and discounts, and foreign exchange gains and losses arising on sales transactions. Revenue is recognised for the major business activities as follows:

### Provision of services

Revenues from water sales are recognized at the time of service delivery based on actual or estimated water meter readings. Billings for water service are generally rendered on a quarterly basis. Subject to the Promulgation No 25 of 2007, the Board may fix the amount of rates including interests on unpaid rates, to be paid in respect of any service and any matter associated with the provision of services.

### For the year ended 31 December 2016

### **3** Significant accounting policies *continued*

#### (h) Revenue continued

### Government Grants

Unconditional government grant related operating expenses are recognised in profit or loss as income when the grant becomes receivable.

Other government grants are recognised initially as deferred income at fair value when there is reasonable assurance that they will be received and the Authority will comply with the conditions associated with the grant and are then recognised in profit or loss as income on a systematic basis over the useful life of the asset. Grants that compensate the Authority for expenses incurred are recognised in profit or loss as other income on a systematic basis in the same periods in which the expenses are recognised.

#### (i) Lease payments

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognised as an integral part of the total lease expense, over the term of the lease.

#### (j) Finance income and finance costs

Finance income comprises interest income on short - term bank deposits and changes in the fair value of financial assets at fair value through profit or loss. Interest income is recognised as it accrues in profit or loss, using the effective interest method.

Finance costs comprise interest expense on borrowings and changes in the fair value of financial liabilities at fair value through profit or loss. Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

### (k) Income tax

The Authority's revenue is exempted from Income tax as per a letter from Fiji Revenue & Customs Authority, dated 3rd February 2017. The letter states the Authority's revenue is an exempt income under Part 1(2) of the Income Tax Regulation 2016.

### (i) Value Added Tax (VAT)

Revenue, expenses, assets and liabilities are recognised net of the amount of Value Added Tax (VAT) except:

- (i) Where the amount of VAT incurred is not recoverable from the taxation authority, it is recognised as part of the cost of acquisition of an asset or as part of an item of expense.
- (ii) For trade receivables and trade payables which are recognised inclusive of VAT.

The net amount of VAT recoverable from, or payable to, the taxation authority is included as part of receivables or payables.

(iii) The tariff rates charged to customers for water and waster water are exempted from VAT.

### For the year ended 31 December 2016

### 3 Significant accounting policies continued

### (I) Comparative figures

Comparative figures have been amended where necessary, for changes in presentation in the current year.

### (m) Standards issues but not yet effective

A number of new standards and amendments to standards are effective for the annual periods 1 January 2016, however, the Authority has not applied the following new or amended standards in preparing these financial statements:

IFRS 9 amendments	Financial Instruments	(effective 1 January 2018)
IFRS 15	Revenue from Contracts with Customers	(effective 1 January 2018)

The Authority has no plans to adopt the standards early and the extent of the impact has not been determined.

### 4 Financial risk management

### Overview

The Authority has exposure to the following risks:

- (i) Credit risk
- (ii) Liquidity risk;
- (iii) Market risk; and
- (iv) Capital management.

This note presents information about the Authority's exposure to each of the above risks, the Authority's objectives, policies and processes for measuring and managing risk, and the Authority's management of capital. Further quantitative disclosures are included throughout these financial statements.

### **Risk management framework**

The executive management is responsible for managing the risks of the Authority on a daily basis. There are established policies and procedures for the key business to manage the risks and develop a strong control environment.

### (i) Credit risk

Credit risk is the risk of financial loss to the Authority if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Authority's cash at bank and receivables.

The Authority's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the demographics of the Authority's customer base, including the default risk of the industry as these factors may have an influence on credit risk.

### Trade and other receivables

In monitoring customer credit risk, customers are grouped according to their credit characteristics, including whether they are an individual or legal entity, whether they are a wholesale, retail or end-user customer, geographic location, industry, aging profile, maturity and existence of previous financial difficulties.

### For the year ended 31 December 2016

### 4 Financial risk management continued

The Authority establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for group of similar assets in respect of losses that have been incurred but not yet identified. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets.

The Authority does not require collateral in respect of financial assets. Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis.

#### (i) Credit risk continued

The maximum exposure to credit risk at reporting date is as follows:

	2016 \$	2015 \$
Cash at bank	34,565,274	35,464,433
Trade receivables	15,694,970	12,235,959
Other receivables excluding prepayments	393,279	160,079
	50,653,523	47,860,471

The maximum exposure to credit risk for trade receivables at the reporting date by segment was:

	2016 \$	2015 \$
Domestic	21,781,659	22,814,869
Commercial	13,437,383	10,209,056
Government	2,521,842	1,273,205
	37,740,884	34,297,130

The ageing of trade receivables at the reporting date was:

	Current	> 1 year	> 2 years	> 3 years	> 4 years	Total
	\$	\$	\$	\$	\$	\$
2016	11,282,288	3,610,873	4,151,497	3,019,271	15,676,955	37,740,884
<b>2015</b>	5,729,163	8,315,699	3,439,831	2,264,886	14,547,551	34,297,130

### (ii) Liquidity risk

Liquidity risk is the risk that the Authority will not be able to meet its financial obligations as they fall due. The Authority's approach to managing liquidity is to ensure, as far as possible, that is will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Authority's reputation.

<b>31 December 2016</b> Financial assets	Carrying amount \$	6 months or less \$	6 - 12 months \$	More than 1 year \$
Cash and cash equivalents	34,565,274	34,565,274	-	-
Trade and other receivables	15,694,970	9,537,612	3,042,271	3,115,087
Other assets excluding prepayments	393,279	393,279	-	-
	50,653,523	44,496,165	3,042,271	3,115,087

### For the year ended 31 December 2016

### 4 Financial risk management continued

(ii)	Liquidity risk continued	Carrying	6 months amount	6 - 12 or less	More than months
	<u>Financial assets</u>	\$	\$	\$	\$
	Trade and other payables	15,610,201	6,961,626	8,648,575	-
		15,610,201	6,961,626	8,648,575	-
	<b>31 December 2015</b> Financial assets	\$	\$	\$	\$
	Cash and cash equivalents	35,464,433	35,464,433	-	-
	Trade and other receivables	12,235,959	3,818,783	3,917,645	4,499,531
	Other assets excluding prepayments	160,079	160,079	-	-
		47,860,471	39,443,295	3,917,645	4,499,531
	Financial liabilities	\$	\$	¢	¢
			•	ب 14100 470	Ψ
	Trade and other payables	15,268,669	1,159,239	14,109,430	-
		15,268,669	1,159,239	14,109,430	-

#### (iii) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Authority's income or the value of its holding of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return. The Authority does not have any significant risks in these areas.

### <u>Price risk</u>

The Authority does not have investments in equity securities and hence is not subject to equity securities price risk.

### Cash flow interest rate risk

As the Authority's interest bearing assets are small relative to its operations, its cash flows are substantially independent of changes in market interest rates.

### (iv) Capital management

The Authority's objectives when managing capital are to safeguard the Authority's ability to continue as a going concern in order to provide returns and benefits for stakeholders and to maintain an optimal capital structure to reduce the cost of capital. The Authority monitors capital on the basis of the gearing ratio. The gearing ratios at 31 December 2016 and 2015 were as follows:

	2016 \$	2015 \$
Total liabilities excluding deferred income and employee entitlements	15,701,659	15,779,570
Total assets	1,838,428,857	1,833,314,108
Gearing ratio	0.85%	0.86%

### For the year ended 31 December 2016

	Notes	s 2016 \$	2015 \$
5	Revenue		
	Government grant	72,071,657	54,918,804
	Water charges	37,762,502	29,125,910
	Waste water charges	4,291,343	3,284,743
		114,125,502	87,329,457
~		<b>^</b>	¢
6	Other income	\$	\$
	Transfer from deferred revenue	38,821,696	20,955,924
	Other income	201,001	1,541,856
		39,022,697	22,497,780
7	Operating expenses	\$	\$
,	Chemical usage	2,223,771	1,983,194
	Doubtful debts	4,134,836	1,676,832
	Directors fees	28,536	36,034
	Water and electricity	18,152,881	18,261,523
	Fuel and oil	1,669,869	1,427,210
	Plant and equipment hire	9,872,304	7,755,509
	Loss on disposal of fixed assets	22,876	-
	Professional fees	2,180,284	140,252
	Repairs and maintenance	43,178,729	24,531,346
	Telephone and communication	1,952,818	1,282,992
	Others	5,902,282	5,357,718
		89,319,186	62,452,610
-			
8	Personnel expenses	\$	\$
	Salaries and wages	21,390,775	15,822,443
	Annual leave	1,636,110	1,263,472
	Fiji National Provident Fund Staff welfare	1,813,482 1,185,900	1,570,034 859,250
	Stall weildle	26,026,267	19,515,199
		20,020,207	19,515,199
	The number of employees during the year was:	1,168	1,191
9	Finance income and expenses	\$	\$
	Finance income	107 454	
	Interest income on short-term bank deposits	103,454	50,315
		103,454	50,315

### For the year ended 31 December 2016

		Notes	2016 \$	2015 \$
10	Cash and cash equivalents			
	Cash at bank		34,556,244	35,457,753
	Cash on hand		9,030	6,680
			34,565,274	35,464,433

Cash and cash equivalents earn interest at floating rates based on daily bank deposit rates. Short term deposits are made from varying periods of between one day and three months, depending on the immediate cash requirements of the Authority, and earn interest at the respective short term deposit rates.

At 31 December 2016, the Authority had a \$13m LC facility with BSP to comply with the contractual obligations of its several major Capital projects. In addition, the Authority held cash of \$330,135 (2015: \$767,388) on Billpay accounts with ANZ, WBC and Bred bank that is restricted to be deposited to the Government of Fiji Consolidated Fund account as collection received on water and waste water revenue.

11	Trade and other receivables	\$	\$
	Trade receivables	37,740,884	34,297,130
	Allowance for uncollectability	(28,203,272)	(24,068,436)
		9,537,612	10,228,694
	VAT receivable	3,042,271	953,750
	Other receivables	3,115,087	1,053,515
		15,694,970	12,235,959

The terms of trade for trade receivables are 31 days from the date of billing. Trade receivables that are more than 365 days past due are considered for impairment.

As at 31 December 2016, the amount of trade receivables impaired was \$28,203,272 (2015: \$24,068,436). The receivables are mainly customers who have defaulted in payments. It was assessed that a portion of the receivables are expected to be recovered.

Movements in the provision for impairment of trade receivables are as follows:

	\$	\$
Balance as at 1 January	24,068,436	22,391,604
Movement during the year	4,134,836	1,676,832
Balance as at 31 December	28,203,272	24,068,436

The creation and releasing of provision for impaired receivables have been included in operating expenses in the statement of comprehensive income (note 7). Amounts charged to the allowance account are generally written off when there is no expectation of recovering the debt.

The fair value of the above balances equals their carrying amount due to their short-term nature.

The maximum exposure to credit risk at the reporting date is the fair value of each class of receivable mentioned above. The Authority does not hold any collateral as security.

# 12 Inventories \$ Spare parts and tools 29,887,485 17,375,503 Provision for Spare parts and tools (947,500) (810,000) Balance as at 31 December 28,939,985 16,565,503

### For the year ended 31 December 2016

	Land and Buildings	Water and Distribution Equipment	Sewerage Equipment	Motor Vehicles	Offic Equipmer	Office Computers	Furniture and Fittings	Work in Progress - Capex	Work in Progress - ADB	Total
Cost	A	A	A	A	A	A	<del>^</del>	A	A	<b>₽</b>
At 1 January 2015	406,992,349 106 702	1,343,709,376 275 745	275,176,002	7,939,438 2120 820	2,014,966 1 671 554	1,966,850 1180.678	286,303 82 662	33,996,724 72 602 648	17,296	2,072,099,304 70144 227
Disposals		(1,313,703)	(4,321)						1	(1,318,024)
Transfer* Reclassification	779,477 -	2,915,661	216,442 -		1 1	1 1	1 1	(28,015,376)	(17,296) -	(24,121,092) -
At 31 December 2015	407,878,619	1,345,687,079	275,389,530	11,060,277	3,686,520	3,147,528	369,966	78,584,996	•	2,125,804,515
Additions	53,688	2,008,638	68,062	363,941	1,946,293	409,177	28,577	78,703,708	ı	83,582,084
Disposals*	I	I	I	(205,286)	ı	I	'	ı	ı	(205,286)
Transfer	70,485	23,878,721	4,442,615	1,069,810	1	1	I	(59,843,586)	I	(30,381,955)
At 31 December 2016	408,002,792	1,371,133,975	279,900,207	12,729,205	5,632,813	3,556,705	398,543	97,445,118	•	2,178,799,358
Depreciation & amortization										
At 1 January 2015	102,743,699	167,630,705	31,235,114	2,756,172	363,629	1,490,117	111,592	I	I	306,331,028
charge for the year	22,800,723	26,745,912	5,462,122	1,934,892	328,044	470,271	38,060	I	ı	57,780,024
Neclassification Disposals	1 1	- (17,823)	- (54)	1 1		1 1	1 1	1 1	1 1	- (17,877)
At 31 December 2015	125,544,422	194,358,794	36,697,182	4,691,064	691,673	1,960,388	149,652	I	1	364,093,175
charge for the year	22,809,891	26,772,196	5,465,202	2,352,448	504,830	463,656	39,574	I	I	58,407,797
Reclassification Disposals	1 1	1 1	1 1	- (74,903)		1 1	1 1	1 1	1 1	- (74,903)
At 31 December 2016	148,354,313	221,130,990	42,162,384	6,968,609	1,196,503	2,424,044	189,226	•	•	422,426,069
Net book value										
At 31 December 2015	282,334,197	1,151,328,285	238,692,348	6,369,213	2,994,847	1,187,140	220,314	78,584,996	•	1,761,711,340
At 31 December 2016	259,648,479	1,150,002,985	237,737,823	5,760,596	4,436,310	1,132,661	209,317	97,445,118	•	1,756,373,289

13 Property, plant and equipment

### For the year ended 31 December 2016

### 14 Intangible asset

Cost At 1 January 2015 Additions At 31 December 2015 Additions At 31 December 2016	\$ 1,786,546 138,896 1,925,442 1,024,759 2,950,201
Amortisation and impairment At 1 January 2015 Amortisation At 31 December 2015 Amortisation At 31 December 2016	581,680 520,489 <b>1,102,169</b> 880,531 <b>1,982,700</b>
Net book value At 31 December 2015 At 31 December 2016	<u> </u>

Intangible assets included are licences acquired previously by WAF for MapInfo system currently used by the Customer Service department, Unlimited Pipe Modelling for the waste water modelling team, Sage 300 ERP and PayGlobal system used in Finance department and development costs for the Gentrack system.

		Notes	2016 \$	2015 \$
15	Held-to-maturity investments <u>Current</u>			
	Term Deposit		1,000,000 1,000,000	5,000,193 5,000,193

Term deposit held with Westpac Banking Corporation Limited has a term of 365 days with interest rate of 1% per annum (2015: 1%).

Other Assets and Prepayments	\$	\$
Prepayments	494,559	1,353,328
Other assets	393,279	160,079
	887,838	1,513,407
Trade and other payables	\$	\$
Trade payables	6,961,626	1,159,239
Other payables and accruals	8,648,575	14,109,430
	15,610,201	15,268,669
	Prepayments Other assets Trade and other payables Trade payables	Prepayments494,559Other assets393,279887,838887,838Trade and other payables\$Trade payables6,961,626Other payables and accruals8,648,575

Terms and conditions of the above financial liabilities:

- Trade payables are non-interest bearing and are normally settled on 30-day terms; and

- Other payables are non-interest bearing and have an average term of 90 - 180 days.

### For the year ended 31 December 2016

	Notes	2016 \$	2015 \$
18	Deferred revenue - capital grant		
	At 1 January	231,992,329	142,622,716
	Grant received during the year	104,580,151	116,942,432
	Refund of village contribution on rural projects	(411,959)	(34,458)
	Transfer to ADB funded grant	-	-
	Reversal of completed fully funded/ rural projects	(2,110,815)	(8,170,314)
	Released to the statement of comprehensive income	(37,208,548)	(19,368,047)
	At 31 December	296,841,158	231,992,329

All Government grants were used to fund the Authority's capital works. Annual depreciation and amortization is charged directly to the property, plant and equipment costs and a corresponding transfer from government grant to income is made each year to provide for amortization of the grant.

### 19 ADB funded grant

ADB fundeu grant	Þ	Ф
At 1 January	70,011,961	71,617,194
Grant received during the year (ADB supplementary loan)	-	-
Transfer from Deferred revenue - capital grant	-	-
Settlement of retention liability	-	(17,354)
Released to the statement of comprehensive income	(1,613,149)	(1,587,879)
At 31 December	68,398,812	70,011,961

Suva Nausori regional water supply and sewerage project funded from Asian Development Bank original loan number 2055 – FIJ dated 27 November 2003. The Project Management Unit at Water Authority of Fiji and Ministry of Public Utilities & Infrastructure Development implements the project, effecting payments through the Ministry of Finance and National Planning.

In 2009 Government of Fiji requested supplementary funding for Suva – Nausori regional water supply and sewerage project. The ADB on 23 November 2009 approved supplementary loan of US\$23 million through loan number 2603 – FIJ. The project completion date was from 30 June 2012 to 31 December 2014. The Project Management Unit at Water Authority of Fiji and Ministry of Public Utilities & Infrastructure Development implements the project, effecting payments through the Ministry of Finance and National Planning.

The Fiji: Project Design Advance for Urban Water Supply and Waste Management Project began in December 2015. The project will also support government to develop and implement policy and regulatory reforms in water and sewerage to make WAF a more sustainable and accountable institution.

A capacity development technical assistance was provided to prepare the project.

20	Provision for employee entitlement	\$	\$
	At 1 January	683,010	784,090
	Movement during the year	92,130	(101,080)
	At 31 December	775,140	683,010

During the year, employees of WAF were entitled to annual leave that is accrual of 15 days per annum after completion of 3 months probation for new staff.

### For the year ended 31 December 2016

		Notes	2016 \$	2015 \$
21 Obligat	tions under finance lease			
Current	L -			
WBC lo	an account no. 9804538750		7,455	18,172
WBC lo	an account no. 9804596634		8,922	18,172
WBC lo	an account no. 9804463488		29,005	87,872
WBC lo	an account no. 9804438951		17,348	52,723
WBC lo	an account no. 9804438985		22,900	69,869
WBC lo	an account no. 9804307487		-	105,446
WBC lo	an account no. 9804201722		5,828	70,297
Total cu	urrent		91,458	422,551
Non - c	urrent		\$	\$
WBC lo	an account no. 9804538750		-	6,403
WBC lo	an account no. 9804596634		-	7,782
WBC lo	an account no. 9804463488		-	24,262
WBC lo	an account no. 9804438951		-	14,557
WBC lo	an account no. 9804438985		-	19,291
WBC lo	an account no. 9804307487		-	12,900
WBC lo	an account no. 9804201722		-	3,155
Total n	on current		-	88,350
Total			91,458	510,901

The above lease facility were arranged with Westpac Banking Corporation at the rate of 6.25% for a term of 48 months. Refer to Note 22(c) for the commitment detail.

#### 22 Contingencies and commitments

The directors are not aware of any contingent asset or contingent liabilities as at balance date.

### (a) Capital expenditure

Total capital commitments as at balance date is \$34,787,002 (2015: \$37,161,891) for capital projects.

#### (b) Operating leases

Future operating lease rentals of the Authority's vehicles not provided for in the financial statements and payable:

	\$	\$
Within one year	1,501,341	1,005,516
Later than one year but not later than five years	3,368,816	2,273,017
	4,870,157	3,278,533

### (c) Finance lease commitments

The Authority has entered into commercial leases on several 4x4 motor vehicles. These lease have an useful life of 4 years with renewal option included in the contracts but no purchase options and escalation clauses. Renewals are at the option of the specific entity that holds the lease. Future minimum lease payments under finance leases together with present value of the net minimum lease payments are as follows:

### For the year ended 31 December 2016

22	Contingencies and commitments continued	Minimum payments	2016 Present value of payments	Minimum payments	2015 Present value of payments
	Within one year After one year but not more than five years	92,723	87,128	422,550	397,053 4,330
	More than five years	110,300 -		113,848	
	<ul> <li>(c) <u>Finance lease commitments continued</u></li> <li>Total minimum lease payments</li> <li>Less amounts representing finance charges</li> <li>Present value of minimum lease payments</li> </ul>	92,723 (1,265) 91,458	91,458  	532,850 (21,949) 510,901	510,901 - 510,901

### 23 Related parties

The Authority has related party relationship with its directors, key management personnel and the Government of Fiji.

### (a) Directors

The following were directors of the Authority during the year:

- Mr PL Munasinghe (Chairman) current
- Mr Umarji Musa current
- Mr Bhavesh K Patel current
- Mr Vijay P Maharaj current
- Mr Hemant Kumar- current
- Mr Kamal Gounder- current
- Mr Shaheen Ali resigned
- Commander Francis Kean resigned

Directors' remuneration for services as employees is disclosed under Note 7.

### (b) Parent authority and ultimate parent authority

The Authority is a statutory body constituted by Water Authority of Fiji Promulgation of 2007 and the transactions with the Government of Fiji during the year are as follows:

Notes	2016 \$	2015 \$
Grant received	176,186,578	168,888,270
Deposits to the Government Consolidated account	(36,753,022)	(31,257,761)
Water and waste water charges	2,521,843	1,273,205
	141,955,399	138,903,714
(c) <u>Transaction with key management personnel</u> Key management personnel comprises of:		
i. Mr Opetaia Ravai (Chief Executive Officer)	Appointed on 30 Ju	ne 2013
ii. Mr Taitusi Vakadravuyaca (Acting Chief Operating Officer) F	Resigned on 9 June 2016	
	Appointed on 15 October 2015 Resigned on 23 October 2016	

### For the year ended 31 December 2016

### 23 Related parties continued

- (c) <u>Transaction with key management personnel continued</u>
- v. Mr Pita Waqanivalu (Acting Chief Financial Officer)
- vi. Mr Sosiveta Turagaiviu (General Manager Production)
- vii. Mr Taitusi Vakadravuyaca (General Manager Special Projects)
- viii. Mr Sekove Uluinayau (General Manager Customer Service)

Appointed on 23 October 2016 Appointed on 13 April 2016 Appointed on 9 June 2016 Appointed on 16 November 2015

Transactions with key management personnel are no more favourable than those available, or which might be reasonably be expected to be available, on similar transactions to third parties at arm's length.

The aggregate remuneration and compensation paid to key management personnel, for the year ended 31 December was:

Notes	2016 \$	2015 \$
Short-term employee benefits	882,541	571,055
(d) <u>Other related parties</u> Fiji National Provident Fund - member contribution	<b>\$</b> 1,813,482	<b>\$</b> 1,570,034

#### 24 Notes to the Statement of cash flows

Reconciliation of cash and cash equivalents

Cash and cash equivalents at the end of the financial year as shown in the statement of cash flows are reconciled to the related items in the balance sheet as follows:

	\$	\$
Cash at bank	34,556,244	35,457,753
Cash on hand	9,030	6,680
	34,565,274	35,464,433



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