



MINISTRY OF WATERWAYS

2017 ANNUAL REPORT 2018

PARLIAMENTARY PAPER NO: 51 OF 2021

Sustainable Water Resources and Waterways
Management for Fiji



VALUES



MISSION

1. Innovative - Support and encourage innovation in our approach to meet our evolving needs
2. Integrity - Honesty, and transparency in our operation
3. Equity - Impartial and just in our actions
4. Respect - Create positive relationships through mutual respect between staff and stakeholders
5. Responsive - Receptive and pro-active to requests to empower performance and achieve

To steward and protect Fiji's environment as a prized fortune for all Fijians and their future generations. Increase resilience to waterways-related hazards through effective and sustainable management of waterways in Fiji.

Building Resilience Through Sustainable Development Goals

Through the services, we hope to mobilize efforts to eradicate all kinds of poverty, combat inequity, and address climate change, while guaranteeing that no one is left behind. The SDGs are a set of universal goals aimed at bringing the people on a sustainable path.



The Ministry of Waterways is critical in fostering resilience and ensuring the sustainability of communities. The Ministry is committed to promoting a more sustainable Fiji.

We enhance our contribution across all goals while demonstrating leadership for:





About The Report

This report details our performances and commitments in areas of our focus during the 2017-2018 financial years.

It also attempts to provide data and examples that highlight our progress and describe our approach and achievements.

The Report has been prepared in line with the Financial Management Act and Section 14 of the Amended of the Public Service Act 1999.

This report includes the following:

- The Organization Structure of the Ministry
- Outlines the contribution of the respective Units/ Programmes outcomes, outputs, and Key Performance Indicators, and,
- Highlights the achievements and results for the Ministry of Waterways.



How to Navigate this Report from a Sustainable Reporting Context

Due to the interdependence of the 17 United Nations Sustainable Development Objectives, the Ministry of Waterways directly contributes to at least 6 of the 17 goals through the delivery of our strategic direction. The Sustainable Development Goals (SDGs) that are relevant to our work are referenced in the introductions to each part of this report. The Ministry takes a leadership role in achieving SDGs 6, 11, 13, 14, and 15. These five objectives are consistent with our strategic direction and are accomplished through our operational objectives.



Honourable Dr. Mahendra Reddy
Minister for Agriculture, Waterways and Environment
318 Toorak Road
Suva

Dear Sir,

Under the Financial Management Act 2004 requirements, I hereby submit for your information and presentation to Parliament, the Annual Report for the Ministry of Waterways for the 2017-2018 financial years.

Joshua Wycliffe

Permanent Secretary for Waterways and Environment

MINISTRY OF WATERWAYS

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Permanent Secretary's STATEMENT

Welcome to our Inaugural Annual Report (2017-18), a collection of stories that bring to life our work that established the direction of a new Ministry. Our everyday work is aimed at instituting an agile and a future-fit organization for all Fijians. I hope you find the reading both informative and helpful.



This year we celebrated our first year anniversary – driving home the sobering fact that to establish community resilience, we needed to build an organization that remained resilient and agile.

I am proud of how quickly our people adapted to the initial ambiguous circumstances and persisted to assist our communities navigate these uncharted waters. Through sheer foresight, the Ministry provided insights, technical advice, creative, on-the-ground solutions to flooding, and coastal/riverbank inundation woes across Fiji.

Always People First

Supporting each other (for the right reasons) and our communities through challenging times will always remain our priority. We will continue to achieve this through staying connected with the communities we serve.

Serving with a Purpose

The Ministry of Waterways aims to remain a purpose-driven business. Our behaviours reflect our shared values – innovating with integrity, fostering fair equity and respect to all concerned. I am delighted to say that FY-18, our programs: Drainage and Flood Protection, Watershed Management, Irrigation Maintenance Schemes program, Municipal Drainage Systems (both within and without the boundaries), and the Drainage for Infield Farmlands are impacting Fijian lives across the country. For us at the Ministry it is always about furthering our purpose to impact lives (that matters). For me, personally something that has stood out is our team commitment to assist the most vulnerable citizenry – through meeting unmet needs.

A Sustainable Perspective

Each effort of ours, mirrors our commitment to impact through environmental sustainability. By acting with purpose and maintaining our Impact, we will continue to serve, our communities and the nation. I look forward to all the new stories we will co-create as a Ministry. God bless Fiji.

Joshua Wycliffe
Permanent Secretary

Executive Summary

The Ministry of Waterways aims to provide all Fijians with a quality living environment, mitigate socio-economic impacts of flood and coastal erosion. Provision for drainage planning, managing flood risk, mitigating floods, managing water resources, and achieving environmental sustainability shall be the essence of the Ministry.

Mitigating the risks associated with water; through appropriate infrastructure investment is one of the keys to sustainable growth. Experiences, both globally and here in Fiji, have shown that success in improving economic growth rates relates to these two main initiatives. Reduced flood risks and arable agricultural lands encourage businesses and investors to invest productively, expand businesses and thus create jobs. It is therefore integral to have appropriate waterways policies, regulations and institutions in place that would guide the service provision of Waterways Services.

Major Activities 2017/2018

The four rivers planned for dredging in this financial year 2017/2018 were Sigatoka, Penang, Rewa/Waidamu River, and Labasa/Qawa River. Environment Impact Assessment Quotations has been submitted to 5 Registered EIA Consultant for Nasivi, Penang and Waidamu River. Monitoring and/or Site Inspections have been completed for Sigatoka River. Watershed Management Plan for 2017/2018 consists of rehabilitation works for Namosi 4 Flood Retention Dam/Weir and water resource mapping of drought-affected areas.

In Northern Division there are seven irrigation schemes maintained and one in the Central Division. Maintenance works include drainage maintenance and infrastructure rehabilitation works.

Maintenance works improve drainage networks within the Irrigation Schemes & rehabilitation ensures irrigation infrastructures are always operational. The major work undertaken in the North was the Tausa Bua, Korokadi and Vunivau Irrigation schemes. Rehabilitation of tower gate, structure, and rehabilitation of existing irrigation and drainage structures was undertaken in the northern division.

Waterways Services will deliver activities to mitigate flood impacts through catchment management, dredging, and improved drainage, as well as work towards developing and implementing the National Waterways Policy. The implementation of the National Waterways Policy will ensure the effective management of waterways and water resources, hence upholding the aesthetic value of Fiji's pristine environment.

The high social and economic costs of flooding can be exacerbated by poor waterways and drainage systems. All existing drainage and dredging work in Government has been undertaken by the Ministry, including the Land and Water Resource Management (LWRM) Division which has been transferred from the Ministry of Agriculture. The total budget for the Ministry of Waterways (2017/2018) is \$24.2 million.

The Central Division Irrigation work started in mid-June 2018 with a duration of 90 calendar days.

Vetiver Watershed Management project is an integrated approach using green technologies for riverbank stabilization and coastal protection commonly known as Bioengineering. Vetiver grass would be used for riverbank stabilization and soil erosion to further resilience to riverbank erosion, catchment erosion, and mitigating flood impacts. The Policy and Research unit is planning to start a bank Protection using Vetiver Grass pilot project along with Wainibuka Riverbank.

Under the Drainage Subsidy Programme ninety-two (92) drainage schemes were maintained. The Central Division Drainage Board maintained forty (40) schemes, the Labasa Drainage Board had twelve (12) schemes, and the Western Division Drainage Board sustained forty (40) schemes.

The Ministry of Waterways has a total staff of 147:
56 established staff,
14 established vacant,
40 unestablished staff and 37 unestablished vacant
30 Vacant



\$27,736
Irrigation Services



\$350,000
Watershed Management
Improving liveability for
thousands of people in Fiji

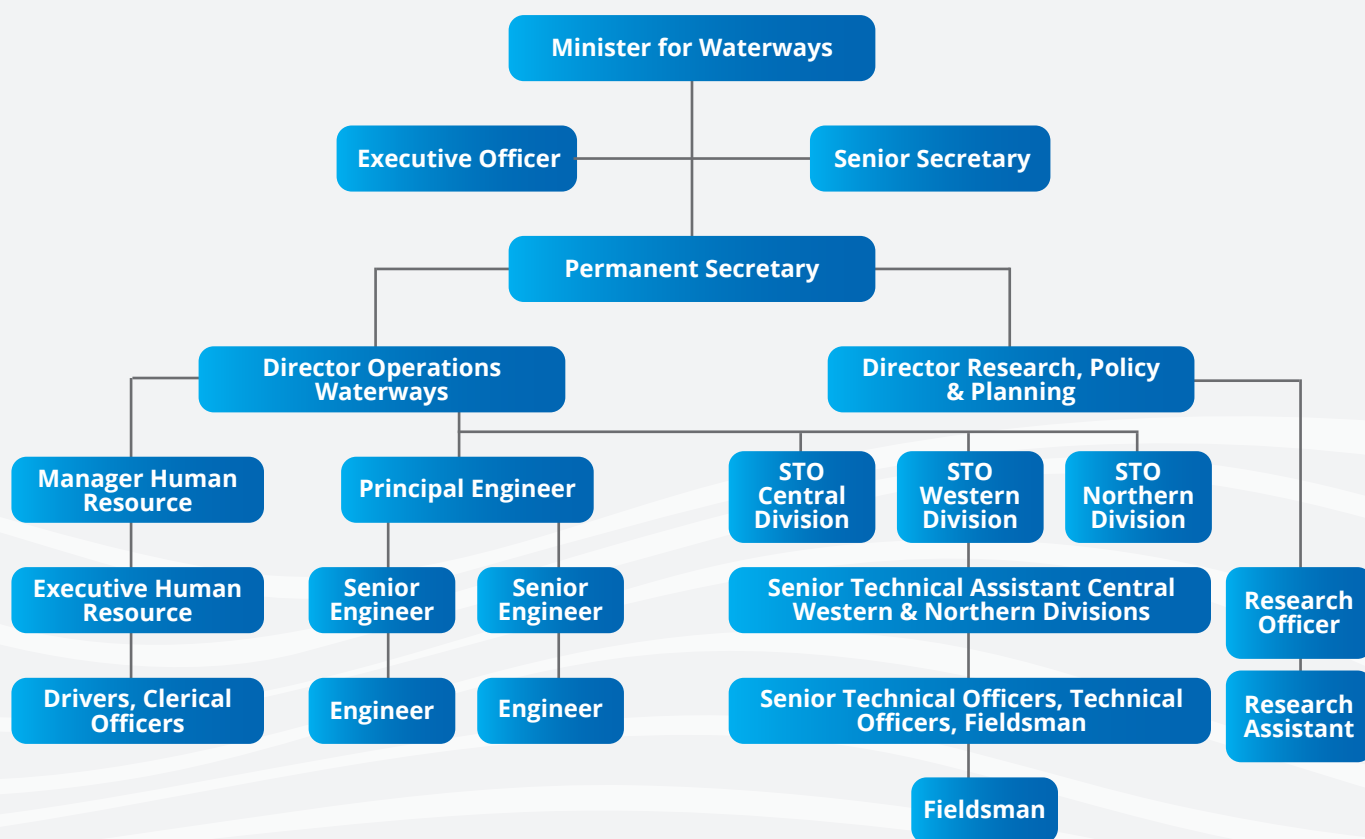
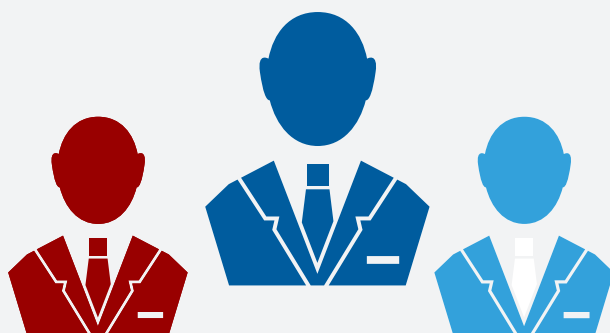


\$2.83M
In Drainage
& Food Protection



\$1.3M
Maintenance of
Drainage Scheme

Organizational Structure



Finance

The Division was allocated a total of \$19.2 million for its capital work programs. The total funds released for the year is \$14,017,997 and has an expenditure of \$7,185,457 distributed in the table below;

Table 1: Funds Utilization for Financial Year 2017-2018

Programs	Provision	Released	Commitment	Utilization
Drainage & Flood Protection	\$7,000,000	\$6,772,384	\$2,829,913.26	42%
Irrigation Services (Maintenance of irrigation schemes)	\$1,500,000	\$520,320	\$271,736.20	52%
Purchase of Dredger	\$3,000,000	\$0	\$0	0%
Watershed Management	\$1,400,000	\$402,000	\$351,338.66	87%
Drainage Subsidy (Maintenance of drainage schemes)	\$3,000,000	\$3,000,000	\$3,000,000	100%
Maintenance of Drainage (Municipal councils)	\$1,323,798	\$1,322,993	\$1,322,992	100%
Infield Drainage for Sugarcane Farms	\$2,000,000	\$2,000,000	\$2,000,000	100%
Total	\$19,223,798	\$14,017,697	\$9,775,980.12	69.74%



Hon. Minister Reddy commissions drainage project at Koronivia Road



Program 1:
Drainage and Flood Protection

Drainage and Flood Protection

To reduce the vulnerability and risk of flooding through the provision of (i) dredging of major rivers, (ii) desilting of creeks to allow for maximum conveyance during peak flows, (iii) riverbank stabilisation structures to safeguard communities.

SDG Indicators



Flooding in low-lying regions and overflowing rivers and creeks are frequently connected with the passage of tropical storms in Fiji. The high intensity rainfall, in combination with catchment activities and the physical features of our catchments (slopes), all contribute to the devastation caused by floods. Land degradation because of poor land use practices adds to significant soil erosion, which results in considerable siltation of the river system, reducing its conveyance capacity.

Mitigation of flooding is critical for national growth. The Drainage and Flood Protection Programme aims to improve the lives and livelihoods of ordinary Fijians by preventing disasters and mitigating their effects, maximizing the benefits of floods and minimizing their destruction, by implementing a range of risk-reduction measures for people, property, and

infrastructure. The Flood and Drainage Program enables the provision of appropriate infrastructure and the mitigation of flood-related damages on our communities.

The activities undertaken by the programme in 2018/2019 include:

- River dredging,
- Riverbank protection and coastal embankment,
- Creek de-silting works

These interventions are intended to rehabilitate rivers and streams by restoring their conveyance capacity and reducing riverbank erosion.

1.1 Program Summary 2017/2018

To reduce the vulnerability and risk of flooding through the provision of (i) dredging of major rivers, (ii) desilting of creeks to allow for maximum conveyance during peak flows, (iii) riverbank stabilisation structures to safeguard communities.

Total Amount Received	\$6,772,384.00
Work Done	\$2,829,913.26 (42%)
Balance Available	\$3,942,470.74

1.2 River Engineering

The River Engineering section is responsible for the planning, investigation, design, and implementation of river dredging, riverbank protection works, coastal protection works and village upgrading as well as land reclamation. It is also involved in environmental and hydrological monitoring.

The River Engineering Section consists of the following units:

- Planning, Investigation and Design Section based at HQ
- Dredging Operation based at Rewa River and Northern Rivers
- Survey Section based at Ba, Nausori and Labasa
- Water Resource, Environmental and Hydrological Monitoring
- Finance and Administration
- Mechanical Services

1.2.1 Objectives:

The development objectives of the River Engineering Section are to bring about sustainable development of land, through risk reduction leading to greater productivity and higher generation of income, to stimulate social and economic growth and improve the living standards of rural people.

These include:

- Reduce flood risk through proper river training works
- Plan, investigate, design, and implement river dredging, river training and bank protection works
- Implement environmentally friendly flood protection works
- Provide technical guidance and assistance in water resources investigation, development, flood hazards, and reduction and management. River Engineering works for the 2017/2018 financial year comprise of the following works:
- Dredging of Sigatoka River 2nd Phase
- Dredging of Penang River
- Environmental Impact Assessment (EIA) for Nasivi River Dredging
- Regular Maintenance Dredging for Labasa River by DQQ
- Regular Maintenance Dredging for Rewa River and its tributaries by MBB
- Slipway Maintenance for dredge DQQ and tugboat Cama
- Riverbank Protection works for Vunibau at Navua River
- Regular Maintenance for vehicles, plants and outboard, minor equipment's and procurement

Apart from the entire financial year, the following activities were carried out in the final quarter - May 2018 to July 2018:

- Qawa/Labasa river maintenance dredging – 23,657.25 m³
- Rewa river maintenance dredging – 10,290 m³
- Outsource Sigatoka River Dredging 2nd phase – 186,730 m³
- Vunibau Bank Protection Works in Navua River is in progress up to the end of July 14% has been completed
- Up to the end of July 2018, 25% has been completed for Namosi-3, Flood Mitigation Dam in Nadi Catchment
- Nasivi River Dredging EIA quotations have been sent to 5 Registered EIA consultants on 30/07/18
- Regular maintenance and repair work for dredgers, tugboats, outboards, vehicles and minor equipment has been done in all cost centers



1.3 Dredging Activities

1.3.1 River Dredging

The Dredging Activities for this financial year are summarized below.

No	River Name	Dredging Activities
1	Qawa River Dredging	A total volume of 23,657.25m ³ dredged has been completed for Qawa River and commenced with Labasa River mouth channel per single shift.
2.	Rewa River Dredging	A total of 10,290 m ³ has been dredged at Rewa River and Nasali River confluence.
3.	Sigatoka River Dredging (2nd Phase)	<p>The Sigatoka River dredging works were awarded to China Railway First Group (CRFG) on 16/04/18.</p> <p>CRFG provided Performance Bond on 09/05/18 and mobilized to dredge site on 02/06/18.</p> <p>A total of 20 days of dredging works was stopped due to the unavailability of dumpsites at Kulukulu Island.</p> <p>Dredging works resumed after a stopped period and dredge material dump on Nayawa dumpsite as per consent given and provided by Nayawa Chief.</p> <p>At the end of July 2018, a total of 186,730m³ has been dredged which is 24.89% of the contract volume of 750,000m³.</p> <p>The total length of the dredged channel is 572.49m.</p>

1.4 Maintenance Works and Security Services

1.4.1 Maintenance Contract (Northern/Central)

The Dredge Maintenance Contract CTN. 32/2017 for Structure, Mechanical and Slipways were awarded to "Fiji Ships and Heavy Industries Limited" for one year period with effect from 02/08/17 to 01/08/18.

The Dredge Maintenance Contract CTN. 32/2017 for Electrical was awarded to "Safetech Electrical

Services" for one year period with effect from 04/08/17 to 03/08/18 for Northern and Central Division

1.4.2 Security Services

Security Services for Northern Division CTN.18/2018, Central Division CTN. 19/2018 and Western Division CTN. 20/2018 was awarded to Grid Security Services for two (2) years periods with effect from 24/05/18 to 23/05/2020.



1.5 Investigation and Design

The following activities were carried out from August 2017 to July 2018:

1.5.1 Site Investigation

The Site Investigation/Scoping is usually done based on the request from other government agencies on issues like coastal erosion, riverbank erosion, and flooding. The site investigation conducted is listed in table 3 below:

Table 3: List of Site Investigation

Division	Locality - Issue	Status/Progress
Central Division	Assemblies of God Secondary School Compound - drainage issue.	Site investigation report submitted. Proposed for 2018/2019 financial year
	Dokanaisuva Settlement – soil erosion.	Site investigation report submitted. Proposed for 2018/2019 financial year
	Naigani Island – coastal erosion.	Site investigation report submitted. Proposed for 2018/2019 financial year
	Namuka Village – Coastal flooding	Site investigation report submitted. Proposed for 2018/2019 financial year
	Ovea Village – Coastal flooding	Site investigation report submitted. Proposed for 2018/2019 financial year.
	Qoma Island – Coastal erosion.	Site investigation report submitted. Proposed for 2018/2019 financial year
	Silana Village –flooding due to poor drainage.	Site investigation report submitted. Proposed for 2018/2019 financial year
	Wainiyabia Village – flooding due to poor drainage.	Site investigation report submitted. Proposed for 2018/2019 financial year
Eastern Division	Namalata Village – drainage issue.	Detail survey was submitted. Proposed for 2018/2019 financial year
	Tabua Village – Coastal erosion.	Detail survey was submitted. Proposed for 2018/2019 financial year
	Nasau/Daviqele Village –flooding due to poor drainage.	Detail survey was submitted. Proposed for 2018/2019 financial year
Western Division	Nabouwalu Settlement – riverbank erosion.	Site investigation report submitted. Proposed for 2018/2019 financial year
	Namatakula Village – Coastal Erosion.	Site investigation report submitted. Proposed for 2018/2019 financial year

1.5.2 Non-ACP Support

Apart from the business plan activities, the REWMDU is also responsible for providing support services to other government agencies concerning issues such as riverbank erosion, coastal erosion, and village flooding. These support services usually involve the following works:

- Project Management and Construction Supervision
- Conducting Site Investigation
- Preparing Design Proposal in regard to issues such as riverbank erosion, coastal erosion, and village flooding.

1.5.3 Project Management

In this financial year (2017/2018), the Design Unit was advised to supervise the construction of flood protection works at Biausevu Village. The project is being financed by the Office of the Prime Minister. The flood protection works comprise of three components such as:

- Construction of deflection groyne
- Construction erosion protection works
- Construction of box culvert crossing

The project was completed on the 09th of August, 2018 by Contractor Viti Vanua Holdings Ltd. The total amount claimed by the contractor is \$ 309, 176.37.

1.6 Environment And Hydrology

The following summarizes the unit work progress on Environmental Impact Assessment from August (2017) to July (2018);

1.6.1 Nasivi River Dredging

The Terms of Reference and Contract documents are ready and await conceptual design to advertising for tender. Site inspection with TO (Surveyor) and Waisea (Ba) has been carried out on the total blockage in the river.

1.6.2 Penang River Dredging

Waiver of fishing rights has been waived. Conduct EIA Study-Screening and EIA Processing Fees and Forms submitted to Department of Environment on 30/07/18 and await Terms of Reference.

1.6.3 Namosi 4 Flood Retention Dam/Weir

EIA Quotations have been sent to 5 Registered EIA consultants on 30/07/18 with a submission deadline on the 13th of August.

1.6.4 Waidamu River Dredging

Screening would have been conducted on 03/08/18. Sought waiver of EIA from Environment Department for emergency dredging of Waidamu river mouth.

1.7 Management of River Improvement Works

1.7.1 Sigatoka River Dredging

The dredging contract was awarded to China Railway 1st Company Ltd. Currently, monitoring of the development of dredging works is in progress.

Dredging works remained under control; wastewater has been channeled back to the river system. The next dumpsite was inspected, marked and Cofferdam (bund) prepared. The first Dumpsite at Nayawa was inspected and was given 4 acres to dump dredged spoils. The Nakere dumpsite was inspected marked. Cofferdam (bund) was erected 20m from the Sigatoka Riverbank and clearing has been done along with the Kulukulu Bank

The inspection was done by STA Survey, Ba Survey Section and Environment. Due to some land disagreement between the landowners and the Ministry, the work at Nakere is halted. It is recommended to shift the work at Nayawa dumpsite as necessary consent is approved. The Management is yet to decide to compensate for damages at the Vunavutu site. Water Authority of Fiji (WAF) has allocated an extra land between the sewage plants to be used as dumpsite as this would similarly benefit the plant to enforce the bund around the whole sewage plant.

1.7.1 Rewa River Dredging

The following activities have been carried out for the Rewa River Dredging Works:

- Awaiting final confirmation from Director Fisheries regarding the presence of hammerhead sharks from the river mouth to bridge.
- Stakeholder meeting on Korean company who wishes to dredge Rewa River Mouth.

1.7.3 Sand and Gravel Extraction Monitoring

No application was received from Lands Department

1.7.4 Review EIA Report

- The following EIA reports were reviewed:
- Public Consultation for Navua River Dredging was executed by a private company on 22/09/17.
- Review Committee Meeting on EIA Report for Rewa River Dredging by Chung Construction on 12/06/18
- Review Meeting Proposed Rural Road Construction Works for Vunisei, Jioma, Vacale, Kadavu on 13/06/18
- An Invitation to the EIA Public & Stakeholders Consultation Meeting was attended at Keyasi New Town Development in Navosa on 25/07/18.

1.7.5 Water Quality Monitoring (WQM)

No water quality monitoring was conducted for 2017/2018.

1.7.6 Vetiver Grass

Using green technologies for riverbank stabilization and coastal protection;

A meeting was attended with the Minister, Directors, Consultant (Mr. Robinson Vanoh) and supporting staff. Site visit with Consultant in Navua. Collaboration with the Ministry of Agriculture on seedlings for planting. Pursued Grace Road Company for a piece of land for pilot sites in Navua.

1.7.7 Overseas Training

Environment Officer attended training on "Sustainable Marine Resources: Enhancing Biodiversity in Coastal Waterways" in Singapore.

1.7.8 Construction

The following activities were carried out for the Riverbank Protection Works:

- Riverbank Protection Works, Vunibau Village, Navua River Contract No. WSC. 23/20189 was awarded to Yandra Viti Investment Limited on 14/06/18 for 150 calendar days.
- Namosi-3 Flood Mitigation Dam/Weir Namosi River, Nadi Watershed was awarded to Multi Works Limited on 27/06/18 for 240 calendar days.



Program 2:
Watershed Management

Watershed Mangement

The objectives of this program include (i) reducing vulnerability and risk of flooding through structural measures to regulate peak flows, (ii) reduce flood peaks through controlled release of flood water, (iii) to regulate the stream flow, river discharge and excessive run-off.

SDG Indicators



Fiji's development plans recognize the need for watershed management programs to reduce flood intensity, soil erosion and sedimentation of river systems. The government recognizes the need for measures to mitigate the social, economic and environmental detriment caused by mismanagement of land and water resources in the watershed.

The Watershed Management Programme focuses on structural engineering measures such as retention dams to control the peak flow of flood waters during high-intensity rainfall to reduce the impact of flooding in the lower river basin. The works generally comprise of the planning, investigation, design, and implementation of flood mitigation work in the watershed.

These flood mitigation works usually involve the construction of a flood retention weir dam in the upper or middle reaches of the river system, where the maximum flood water can be retained within the channels. These small-scale infrastructures have multiple purpose functions of drought mitigation, water supply for domestic use, irrigation for agricultural crops,

aquaculture, and eco-tourism development.

A total of \$351,337.65 has been committed for Watershed Management activities in the final quarter of 2017.

2.1 Program Summary 2017/2018

Total Amount Received	\$1,400,000
Work Done	\$351,337.65 (25%)
Balance Available	\$1,048,662.35

2.2 Water Resource Mapping

To mitigate the impacts of drought, a water resource mapping strategy was undertaken to identify potential water resources for planning drought relief efforts to reduce livestock mortality and to sustain crop production. This strategy focuses on the hot spot areas most affected during the dry season. Planning has been undertaken to implement smart irrigation solutions in the Irrigation Support for Farm Development Programme.



Program 3:
Irrigation Schemes

Maintenance of Irrigation Schemes

The main objectives of this program include (i) maintenance and rehabilitation of existing irrigation structure, (ii) improve the productivity of rice and other niche market crops that can be grown under irrigated conditions.

SDG Indicators



A total of eight (8) irrigation schemes are maintained supporting 2,292 hectares for rice cultivation. In Northern Division there are seven (7) schemes and one (1) in Navua-Central.

In the Central Division, the works undertaken in the Navua irrigation scheme is to support rice investor Grace Road Food Company. The total potential area is 503 hectares.

3.1 Program Summary 2017/2018

Total Amount Received	\$1,500,000
Work Done	\$261,170 (17.5%)
Balance Available	\$1,238,830

The following works were undertaken:

3.2 Irrigation Schemes

3.2.1 Central Division – Navua Irrigation Scheme

The Contract for Maintenance & Rehabilitation of Completed Irrigation Schemes, Central Division – WSC 37/2018 was awarded to Yandra Viti Investments. Work started in mid-June 2018 with a duration of 90 calendar days.

Accomplishment as of 31 July 2018 is 50.6 % with the breakdown of all details in Table 5.

3.2.2 Northern Division

Waterways Dreketi is looking after all Irrigation schemes around Macuata and Bua area and Dreketi office provides support service to the Ministry of Agriculture via maintaining the existing Irrigation scheme located in Bua and Macuata.

Dreketi Team was involved in minor maintenance works and monitoring of Irrigation Schemes. Irrigation Services tender was called, awarded in 3rd quarter and work began in 4th

quarter. The Allocation for Irrigation Services for 2017 – 2018 is \$ 1,500,000.00 and the work was carried in the 4th Quarter under the Maintenance of Completed Irrigation Schemes Contract WSC 38/2018 which commenced on 04/06/2018.

Most of the maintenance works in the schemes in the 1st, 2nd and 3rd quarter were achieved using the China Aid Machines. More drainage works were requested within the schemes after the Honorable Prime Minister's northern tour. Irrigation Services Works were to ensure that all Outfall Structures are functioning and leak-proof and Drainage network to be the state of discharging and Irrigation Water supply the water to be at level best under the jurisdiction of Irrigation Act.

In the northern division the works were undertaken in seven (7) irrigation schemes; Dreketi, Nasarawaqa, Droca, Korokadi, Vunivau, Bua & Naruwai to support rice revitalization initiatives of the ministry to increase rice production and reduce rice imports into the country. The total area is 1,789 hectares supporting 516 farmers.

The Work to be carried out under the Maintenance of Irrigation Schemes Contract WSC38/2018 Programme for the Irrigation Services are outlined in Table 6.



Irrigation Scheme Drain in North



Program 4:
**Maintenance of Drainage
(Non-Municipal)**

Maintenance of Drainage (Non-Municipal)

The main objectives of this program include (i) maintenance and rehabilitation of existing drainage infrastructure under former drainage board, (ii) promote socioeconomic development by providing a more systematic approach, improved, efficient and effective drainage system.

SDG Indicators



Massive expansion of floodplains, increasing rainfall variability, changes in the temporal and geographical features of rainfall, watershed characteristics, unsustainable land management practices, and failing drainage infrastructure all contribute to Fiji's flash floods.

In 1961 the Drainage Act (Cap.143) was enacted to implement drainage services to boost agricultural production (sugarcane) in Northern, Central and Western divisions. As such for Central Division 40 drainage schemes were established, covering an area of 10,428 hectares of which 90% were formerly or poorly, unused/partly used land frequently subjected to waterlogging and saltwater intrusion.

The Western Division comprises of 40 drainage schemes covering an area of 12,400 hectares and the Northern Division has 12 drainage schemes covering an area of 3,700 hectares. Associated with these schemes are numerous outfall structures (floodgates, flap gates,), seawall, crossings, and main drains.

With amendments to Drainage Act 1961, all maintenance in the former drainage schemes has now been carried out by the Ministry of Waterways, through the Maintenance of Drainage Schemes (Non-Municipal Council) Programme.

4.1 Program Summary 2017/2018

Total Amount Received	\$3,000,000
Work Done	\$2,375,660 (79%)
Balance Available	\$624,340

4.2 Drainage Subsidy

There are three (3) drainage boards namely: the Central Division Drainage Board, Western Division Drainage Board and Labasa Drainage Board in the northern division. The Board is responsible for the maintenance and improvement of drainage schemes within their jurisdiction.



Newly De-silted Drain done by Ministry of Waterways at Naduru Nausori.

4.2.1 Central Division Drainage Board

The Central Division Drainage Board comprises 40 drainage schemes covering an area of 10,428 hectares. The drainage subsidy is being administered by the Central Division Drainage Board under two sub-programs, drainage infrastructure maintenance works and waterlogging program.

DSF grant of \$745,100 VIP was released to the board. The information in Table 7 and 8 details the maintenance and work undertaken by respective drainage schemes.

4.2.2 Labasa Drainage Board

The Drainage Subsidy Fund (DSF) is an annual government grant given to the Labasa Drainage Board (LDB) to maintain the existing drainage network & infrastructure in the Sugarcane Drainage Schemes (Macuata Province).

A total of \$998,000.00 was allocated for the year 2017 – 2018 for Maintenance and Rehabilitation Works, Board Operation, Purchase of New Vehicle and Waterlogging Programme. The Waterlogging Funds were diverted to the Western Division Drainage Board to address the damages due Flood affected areas, therefore; the Labasa Drainage Board was allocated \$ 653,000 VIP.

All investigation and scoping were carried out for the Emergency Rehabilitation of all Outfall Structures and Drainage Improvement of Major Networks and these Works were to be carried under the Quotation Programme. Capital Works were carried in the 3rd and 4th Quarters under the quotation works.

The Financial Details and work done for the Labasa Drainage Board under Drainage Subsidy Fund Programme for the Financial Year 2017 – 2018 are illustrated in Tables 9 – 11.

The Labasa Drainage Board is being dissolved under the new Drainage Bill approved by the Cabinet of Fiji Government; therefore, the Board's Assets, Property, and Staff has been transferred to the Ministry of Waterways and the balance of Funds has been deposited to the Consolidated Account for the Government of Fiji.

4.2.3 Western Division Drainage Board

The western division comprises 40 sugar cane drainage schemes with some 12,400 hectares of sugar cane land improved for cultivation. Under its jurisdiction, the Western Division Drainage Board maintains 272 km of drains, 18 km of seawalls, 28 outfall structures (floodgate and flap gate) and 425 associated drainage structures.

DSF grant of \$647,855.50 VIP was released to the board. Tables 12 – 16 shows the total grant commitment and all works that were undertaken in respective drainage schemes including emergency drainage works for TC Keni and TC Josie.



Program 5:
Drainage for



In-field Farms

Drainage for In-field Farms

The main objectives of this program include (i) providing adequate drainage systems to all farmlands within Fiji, (ii) improve the livelihood of farmers through provision of adequate in-field drainage for optimal agricultural production.

SDG Indicators



Farm drainage management is defined as the act of directing excess water away from agricultural areas for improved farm productivity.

In Fiji, most of the farmlands are situated in low-lying areas and along the coastal plains which are subjected to waterlogging for several weeks or months each year, especially in wetter years. Waterlogging occurs when roots cannot respire due to the excess water in the soil profile. Water does not necessarily have to appear on the surface for waterlogging to be a potential problem.

Approximately 60% of Fiji's total land area is suited to some form of agricultural activity, however, only 29% is appropriate for arable farming. Drainage for Infield Farms Programme allows for marginal lands often not suitable for agricultural purposes to be used for agricultural purposes. The maintenance and construction of drainage systems will serve to remove the excess water in the soil, providing favourable conditions for crop development.

Following the amendments to the Drainage Act 1961, and subsequent Drainage (Budget Amendment) Act 2018, The Drainage for Infield Farms Programme has increased scope and covers drainage for any type of farm at a national scale. This programme also supports drainage works for both sugarcane farms and non-sugarcane farms.

5.1 Program Summary 2017/2018

Total Amount Received	\$2,000,000
Work Done	\$420,535 (21%)
Balance Available	\$1,579,465

Waterlogging Farm Improvements

The objective of waterlogging programme is to improve waterlogged farms to increase farming areas.

A total of forty-two (42) areas were improved through the drainage works, in the Central Division seven (7), in the Western Division ten (10) and the Northern Division twenty-five (25) areas were improved.

5.2.1 Central Division

The Central Division Drainage Board was provided a grant of \$228 637.00 (VIP) for waterlogging activity. Waterlogging farm Improvements were undertaken in 7 areas as shown in Table 17.

5.2.2 Northern Division

Waterlogging Program is a new activity allocated under the Drainage Subsidy Fund to support cane & non-cane commodities through the improvement of the drainage network since 2015.

The Allocation for the Waterlogging Programme for 2017-2018 is \$ 330,000.00. The Drainage Improvement Works under the Waterlogging Programme is to be carried under the contracts for the three Province. The Tender for the Waterlogging Activities is on hold as per the directive of the Permanent Secretary of Waterways & Environment.



Waterlogging program is implemented to support priority areas of the Extension Division of the Ministry of Agriculture.



As per 2017 - 2018 Business Plans, 25 areas have been targeted for drainage improvement works illustrated by Table 18.

5.2.3 Western Division

The Western Division Drainage Board was provided a grant of \$668,712.98 VIP for waterlogging activity.

Tables 19 and 20 shows waterlogging farm improvements that were undertaken in 7 areas including quotation works.



Minister for Waterways, Environment and Agriculture
Hon. Dr. Mahendra Reddy Inspecting the floodgates structures in
North with Senior Technical Officer Northern
Mr. Sanjay Narayan.



Program 6:
**Maintenance of Drainage
(Municipal)**

Maintenance of Drainage – Municipal Councils

The main objectives of this program include (i) ensure efficient, effective, and transparent grant administration of municipal administration (ii) ensure maintenance, rehabilitation and construction of proper drainage system within the municipal council boundaries.

SDG Indicators



Urban flooding is usually attributed to new developments blocking the natural waterways, landfilling creating changes to drainage directions, filling of flood retention and detention areas, and diversion of natural streams to roadside drains. Land-use changes including increased sealed surface and higher runoff exacerbate the problem. As such appropriate maintenance and management of urban drains are vital.

In Fiji, the municipal drainage infrastructures have deteriorated beyond their serviceable life over the years due to their long-standing life. Some of the drains were designed far way back when the councils were established, and the designs were based on the population present in that period. Climatic conditions have since then changed, further deteriorating the drainage infrastructure.

The Maintenance of Drainage - Municipal Councils Programme intends to upgrade the drainage system within the municipal council's boundaries by providing grants to municipal councils to better manage the municipal drainage system and minimize flooding and safeguard people, property, and infrastructure. Total budget provision of the Land Drainage and Flood Protection Programme for maintenance of drainage

for municipal councils including normal maintenance, rehabilitation works, and new drains of municipal councils was approved for \$1,323,798 in the financial year 2017 - 2018. This project was vital as part of mitigation and adaptation measures to minimize the impacts of flooding for town centres around Fiji.

The works carried out included (i) de-silting and Realignment of existing drains, (ii) installing V drains with rock lining, (iii) structure improvement, capacity increment, and concreting, (iv) excavating of earthen drains, (iv) creating riverbank protection, (v) dredging and alignment of creeks, (vi) upgrading and maintaining old drains.

The funds in FY 2017-2018 were released to eleven (11) town and city councils of Lautoka, Nadi, Nasinu, Nausori, Ba, Tavua, Labasa, Savusavu, Levuka, Sigatoka and Rakiraki to undertake the necessary drainage works as per grant agreements. Operation and administration for the programme were also allowed under the same fund's allocation. Table 21 shows the grant distribution for municipal councils and works that are to be implemented by municipal councils in consultation with the Ministry of Waterways.

7.0 Research, Policy, and Administration

The Policy and Administration Programme provides policy and technical advice as well as financial, human resource and administration support.

7.1 Program Summary 2017/2018

Table 22: Summarizes the Work for Research & Policy Unit

Priorities	Activities undertaken (April – December 2018)	Status
Programme Policies	1. Drainage for Farmlands	Finalized
	2. Drainage for Rural Residential Areas	Finalized
	3. Irrigation Support for Farm Development	Finalized
	4. Coastal Protection Works	Finalized
	5. Drainage and Flood Protection	Finalized
	6. Drainage for Municipal Councils	Finalized
	7. Maintenance of Drainage Systems for Non-Municipal Areas	Finalized
	8. Watershed Management	Finalized
	9. Maintenance of Irrigation Schemes	Finalized
Strategic Plan	5-year Strategic Plan for Waterways	Finalized
Proposals/TA	1. KOICA	Final Draft
	2. GCF	Draft
	3. Vetiver Grass Nursery for Riverbank Stabilization and Sustainable Management of Land and Water Resources	Submitted to Korean Small-Scale Grant to ROK Embassy via Ministry of Foreign Affairs
	4. Submission for Technical Assistance from the Republic of India on Water Resource and Waterways Management in Fiji	Submitted to Indian High Commission
	5. Request for Equipment Assistance from the Republic of India for Water Resource and Waterways Management in Fiji	Submitted to Indian High Commission
	6. Submission for Dutch Disaster Reduction: Technical Assistance Assessment of Flood Risks in Selected Towns in Fiji	Submitted to Ministry of Foreign Affairs for onward submission to Dutch Foreign Ministry
	7. Policy advises repeal of Drainage Act 1961	Policy advice repeal of Drainage Act 1961 during the budget consultation, Drainage Act successfully amended
	8. Development of TOR for Nadi River Flood Alleviation Project	
Complaints Management Procedure book	Complaints and Request for Services form for Waterways	Finalized
Development of National Waterways Policy	<ul style="list-style-type: none"> National Waterways Policy Framework Cabinet has approved to develop of the National Waterways Policy Sourcing funds through proposal and Concept note development. 	<p>Developed</p> <p>First draft being prepared</p>

Priorities	Activities undertaken (April – December 2018)	Status
	National Waterways Policy Framework	Cabinet approval to develop National Waterways Policy
Cabinet Papers	<ul style="list-style-type: none"> Coastal Protection Programme Drainage For Farms Programme Drainage For Rural Residential Areas Programme Irrigation Support for Farm Development Programme Proposed Donor Supported Projects for Ministry Of Waterways and Environment 	Cabinet approval for these new 4 programmes. Cabinet agreed that the Ministry of Waterways & Environment commence dialogue with potential donors
Ecosystem-based Adaptation (EbA) integrated with engineering infrastructures	<ul style="list-style-type: none"> Vetiver for Riverbank Protection Implemented at selected sites 	A pilot project to start with Naveicovatu Village – 400m, work shall Commence once the agreement is drawn and vetted by SG's office
P's	<ul style="list-style-type: none"> Riverbank Protection Works: Nadakuni Village Nadaro River Wainiwaqa River training works Savu Village Draubuta Village Wainibuabua Village Nakaile Village Mataniqara Village Labasa River (Court House) Coastal Protection Works: <ul style="list-style-type: none"> Bau Island Qelekuro Village 	Completed Completed EMP Progress To be design To be design To be design To be surveyed To be surveyed Re- survey needed Completed Completed
The EMP that is already compiled are the ones that are currently on the tender process. The rest are in the category of not yet surveyed or designed, so EMP will await once it is cleared from the Engineers and ready to be tendered		

7.2 Staff

The total Ministry of Waterways staff are 147; 56 established staff, 14 established vacant, 40 unestablished staff and 37 un-established vacant (30 advertised).

The establishment comprises fifty-four (54) professional positions, two (2) occupied by expatriates at the senior management level. The local staff comprises one (1) senior engineer and three (3) civil engineers. A total of one (1) principal engineer, two (2) senior engineers for west and north, Two (2) director's for HQ, Director Operations and Director Policy. One (1) Manager HR post is vacant, One (1) Principal Accountant appointed. A total of 38% are vacant established positions as per the newly reviewed organization structure.

The technical positions are very difficult to recruit due to the shortage of civil engineers and surveyors in the country. This is a major challenge the Ministry faces in terms of resources to deliver the expected outcomes.

7.2.1 Staff retirement

Following officer retired during this financial year;
Mr. Gyan Prasad – Senior Technical Officer (Northern)

7.2.2 Staff Resign

STA - Apenisa Ravula

7.2.3 Staff Posting/Tran

Binesh Prasad has been side transferred to Ministry of Agriculture HQ w.e.f 15/06/18

7.2.4 Staff Training

Waisea Nagonelevu, Ravinesh Chand, Bhimlesh Narayan, and all the survey linesman team attended the Boat Master Training that was held at Luvuluvu, Nausori from 22nd July to 28th July 2018

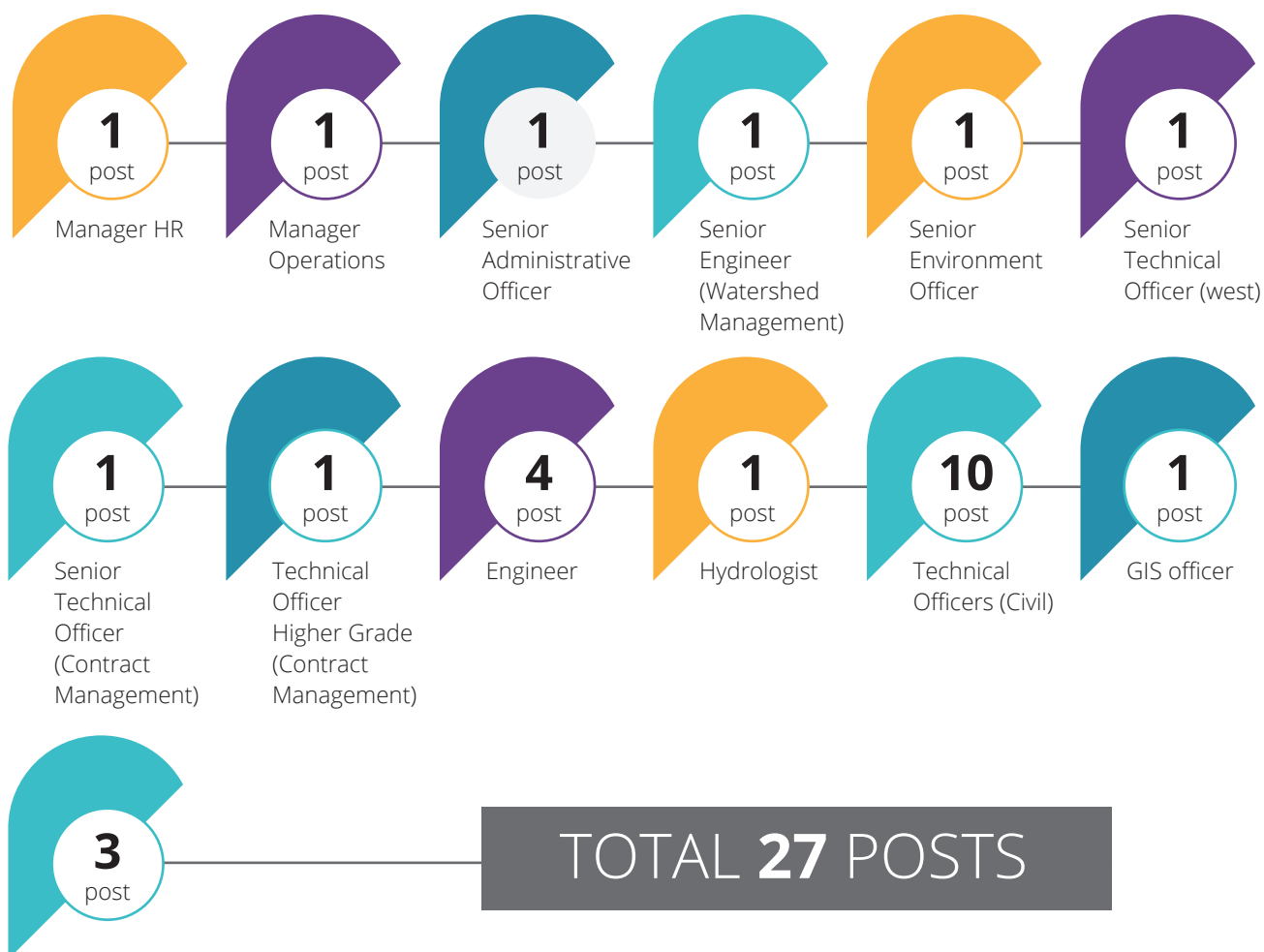
Josivini Sausauwai, Environment Officer attended overseas training on "Sustainable Marine Resources: Enhancing Biodiversity in Coastal Waterways" in Singapore.

Alvin Reddy, Engineer on overseas study leave for a year undertaking Post Graduate Diploma in Hydrology in India.

7.2.5 Vacant Established Positions

The following positions were vacant as of 31st July 2018:

Infograph 23: Vacant Positions



7.2 Constraints and Challenges

The following constraints and challenges are being faced by the Ministry of Waterways; these challenges hinder in achieving the Ministry's Output within desirable timelines:

- Inadequate technical and skilled staff to cope with the demand for our services from stakeholders. The Ministry is fully involved in Hydrology and Hydraulic Engineering profession. Understaffing and lack of experienced Civil Engineers who specialize in Hydraulic Engineering. For instance, the design of dams and dredging can only be carried out by the Principal Engineer. The demand for Ministry's mandate is challenging to the engineering staff to deliver the services on time.
- 27 established vacant posts, 38% vacant established posts
- Difficult to recruit and retain local engineers and technical positions thus, the workload on the existing staff.
- Limited contractors bidding for tenders for coastal protection development work.
- Condition of the Ministry equipment's/machines/plants is very poor and old. The lifespan has exceeded as it has been utilized for the past 20 years and more such as for dredging equipment's, floating pontoons are leaking badly and there is not enough in stock, etc.
- Frequent in-house training for survey staff on technologies and new instruments.
- Drainage and infrastructures (flap gates and flood gates) are being damaged and tempered, farmers are not taking ownership of the structures provided for.
- Throwing of rubbish and unwanted materials into the drainage system.
- Rising seawater levels causing seawater intrusion, overtopping some of the Seawalls and entering the fields.

9.0 Appendix

9.1 Tables

Program: Maintenance of Irrigation Schemes

Table 5: Maintenance and rehabilitation of completed schemes for Central Division

Schemes	Work Description	Unit	Unit Quantity	Rate (\$)	Amount (\$)
Navua Irrigation Scheme	Drain/ Canal de-silting from 1 side	Lm			20,731.20
	Tokotoko		12,957	1.6	20,731.20
	Tuquru		10,818	1.6	17,308.80
	Calia		3,567	1.6	5,707.20
	Naitonitoni			1.6	-
	Naitata		3,242	1.6	5,187.20
	Waidradra		883	1.6	1,412.80
	Total Works		31,467	1.6	50,347.20
Seawall	Boulder Protection	m3	100	200	20,000.00
	Between 301-400 mm girth	no	10	5	50.00
	Total Works				20,050.00
Structure Maintenance	Upgrade Outfall Structure				
	Provide temporary stop boards	set	1	3,000	3,000
	Remove & transport existing MS doors	set	4	7,500	30,000
	Fabricate new MS upper brackets	set	4	1,000	4,000
	Fabricate new SS bottom brackets	set	4	2,500	10,000
	Total Works				47,000
	Maintenance of Irrigation Scheme Total				117,397.20

Table 6: Maintenance of Irrigation Schemes for Northern Division

Schemes	Work Description	Unit	Unit Quantity	Rate (\$)	Amount (\$)
Tausa Bua	De-silting From One side	Lm	9231	1.75	16,154.25
Korokadi	De-silting From One side	Lm	22179	1.75	38,813.25
Vunivau	De-silting From One side	Lm	8108	1.75	14,189.00
Vunivau	Both Side De-silting	Lm	81	2.5	202.50
Tausa Bua	De-silt and Dispose	Lm	2157	5.5	11,863.50
Dreketi stage 3	De-silt and Dispose	Lm	149	5.5	819.50
Dreketi stage 2	Excavation of New Drains	Lm	103	4.5	463.50
Tiri	De-silt Drain (rain fed Area)	No	1	10500	10,500.00
Structures	Fabrication of Floodgate Doors and Accessories	Set	2153	1.75	3,767.75
Dreketi Pond	Rehabilitation of Tower Gate and structure	Item	1	17000	17,000.00
Dreketi	Rehabilitation of Existing Irrigation and Drainage Structures	N0	2	6000	12,000.00

Program: Maintenance of Drainage (Non-Municipal)

Table 7: Central Drainage Board Work under Drainage Subsidy Fund Programme for The Financial Year 2017 – 2018

ACP/BP OUTPUT	Unit	2017/18 Yearly Plan	2017-2018 Achievements
No of Scheme	No	40	12
Chemical Weeding	Lm	45,000	33,000
De-silting Drain	Lm	70,000	127,400
De-silting Drain Both Side	Lm	3500	2800
Excavate and Dispose	m3	1500	100
Fabrication of Bottom Bracket Stainless Steel	No	15	2

Table 8 : Maintenance of Irrigation Schemes for Northern Division

Schemes	Activity	Unit	Rate	Planned Qty	Planned Amount	Achieved Qty	Achieved Amount
Nausori	Chemical weeding	Lm	0.175	30,000		33,000	5,692.50
	De-silt & dispose	Lm	1.87	3,000	5,600.00	2,800	5,226.67
	De-silt drain 1 side	Lm	2.00	30,000	60,000.00	85,400	170,800.00
	New Drains	Lm	5.38	1,600	8,600.00	1,600	8,600.00
	Excavate & dispose	m³	4.60	1,000	4,600.00	1,000	4,600.00
	Rehab floodgate doors L	Set	15,000.00	2	30,000.00	2	31,000.00
	Rehab floodgate doors M	Set	50,000.00	2	100,000.00	1	50,000.00
	Rehab floodgate doors S	Set	20,000.00	1	20,000.00	--	-
	Upgrade flap gate doors	Nos	9000.00	1	9,000	-	-
	Fabricate MS stop board L	No	8,000.00	1	8,000.00	-	-
	Fabricate MS stop board M	No	1,400	-	-	2	2,800.00
	Fabricate & install stainless Steel bottom boxes	Set	5,000.00	10	50,000.00	2	10,000.00
Navua	Chemical weeding	Lm	0.20	15,000	3,000.00	-	-
	De-silt & dispose	Lm	5.00	500	2,500.00	-	-
	De-silt drain 1 side	Lm	1.60	40,000	64,000.00	42,000	67,200.00
	Excavate & dispose	m³	6.00	500	3,000.00	-	-
	Rehab floodgate doors M	Set	25,000.00	2	50,000.00	-	-
	Upgrade flap gate doors	No.	2,000.00	3	6,000.00	-	-
	Fabricate & install Stainless steel bottom boxes	Set	5,000.00	5	25,000.00		
Total					\$454,475.00		\$355,919.17

Table 9: 2017/2018 Labasa Drainage Board Programme

ACP/BP OUTPUT	2017/18 Yearly Plan	2017-2018 Achievements
Maintenance & Rehabilitation Works	\$ 538,000.00	\$ 489,710.00
Waterlogging Programme	\$ 330,000.00	\$ 0.00
Operation	\$ 70,000.00	\$ 70,000.00
Purchase of Vehicle	\$ 60,000.00	\$ 59,900.00
Total Grand LDB \$ (VIP)	\$ 998,000.00	\$ 619,610.00
Total Grand LDB Without Waterlogging Fund \$ (VIP)	\$ 668,000.00	\$ 619,610.00

Table 10: Labasa Drainage Board Work under Drainage Subsidy Fund Programme for The Financial Year 2017 – 2018

ACP/BP OUTPUT	Unit	2017/18 Yearly Plan	2017-2018 Achievements
No of Scheme	No	12	12
Chemical Weeding	Lm	30000	
De-silting Drain	Lm	91000	10800
De-silting Drain Both Side	Lm	3000	9000
Excavate and Dispose	m3	3100	100
De-silting Natural Creek	Lm	6000	5000
Rehabilitation of Seawall	Item	1	1
Boulder Protection	m3	400	200
Gravelling	m3	600	0
Grading	m2	35000	6000
Rehabilitation of flap gate Structure and Maintenance of flap gate Door	No		3
		1	
Fabrication of Bottom Bracket Stainless Steel	No	14	0
Rehabilitation of Floodgate Structure and Maintenance of Floodgate Door	No	8	5
Fabrication of Floodgate Door and Accessories	Set	1	2
Fabrication of Flap gate Door and Accessories	No	1	1
De-silting of storm Drain	Lm	15000	16000
De-silting and Dispose	Lm	2500	2500

Table 11: Maintenance of Completed Drainage Schemes – North

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
1	Coqeloa	De-silting of dra	Lm	1.8	4000	7,200.00	4,000	7,200.00	Rashid Bulldozing Works
2	Korowiri	De-silting of drain	Lm	1.75	4000	7,000.00	4,000	7,000.00	Wellbeing Farm Fiji Limited
		De-silting of Storm drain	Lm	2.3	2500	5,750.00	2,500	5,750.00	
3	Qelewaqa	De-silting of drain	Lm	1.8	2000	3,600.00	2,000	3,600.00	Kareems Earthmoving Contractor
		De-silting of drain Both	Lm	3	1000	3,000.00	1,000	3,000.00	
4	Mouta	De-silt and dispose	Lm	2.4	1000	2,400.00	1,000	2,400.00	Kareems Earthmoving Contractor
		Storm Drain	Lm	1.6	2500	4,000.00	2,500	4,000.00	
		De-silting of drain	Lm	1.6	7000	11,200.00	7,000	11,200.00	
5	Vuo	De-silting of drains from both sides	Lm	2.6	2000	5,200.00	2,000	5,200.00	Kareems Earthmoving Contractor
		Storm Drain	Lm	1.6	2500	4,000.00	2,500	4,000.00	
		De-silting of drain	Lm	1.55	7000	10,850.00	7,000	10,850.00	
6	Naleba	De-silting of drain	Lm	1.69	5000	8,450.00	5,000	8,450.00	Kareems Earthmoving Contractor
		Storm Drain	Lm	2.05	1000	2,050.00	1,000	2,050.00	
7	Tabucola	De-silting of drain	Lm	1.5	10000	15,000.00	10,000	15,000.00	Kareems Earthmoving Contractor
		Storm Drain	Lm	1.58	1500	2,370.00	1,500	2,370.00	
		De-silting of drains from both sides	Lm	2.4	3000	7,200.00	3,000	7,200.00	
8	Siberia	De-silting of drain	Lm	1.7	5000	8,500.00	5,000	8,500.00	Kareems Earthmoving Contractor
		Storm Drain	Lm	1.5	1000	1,500.00	1,000	1,500.00	
9	Taganikula	De-silting of dra	Lm	1.75	5000	8,750.00	5,000	8,750.00	Wellbeing Farm Fiji Limited
10	Nagigi	De-silting of drain	Lm	1.58	10000	15,800.00	10,000	15,800.00	Kareems Earthmoving Contractor
11	Vunimako	De-silting of drain	Lm	1.75	10000	17,500.00	10,000	17,500.00	Wellbeing Farm Fiji Limited

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
12	Soasoa	Desilting of creek (Nasova	Lm	3.5	3000	10,500.00	3,000	10,500.00	Wellbeing Farm Fiji Limited
		Storm Drain	Lm	2.3	1000	2,300.00	1,000	2,300.00	
		De-silting of drain	Lm	1.75	5000	8,750.00	5,000	8,750.00	
13	Navoalevu	De-silting of dr	Lm	1.6	5000	8,000.00	5000	8,000.00	Kareems Earthmoving Contractor
14	Wailevu Wailevu	De-silting of Drain	Lm	1.4	10000	14,000.00	10,000	14,000.00	NTL (Hussain's Hire Plant
		Storm Drain	Lm	1.4	2000	2,800.00	2,000	2,800.00	
		De-silting Drain from both Side	Lm	1.4	3000	4,200.00	3,000	4,200.00	
15	Lagalaga	Storm drain	Lm	1.6	2000	3,200.00	2,000	3,200.00	Kareems Earthmoving Contractor
		De-silting of drain	Lm	1.58	7000	11,060.00	7,000	11,060.00	
16	Walana	De-silting of dr	Lm	1.75	5000	8,750.00	5000	8,750.0	Wellbeing Farm Fiji Limited
17	Siberia	De-silting of Natural Creek	Lm	3.98	2000	7,960.00	2,000	7,960.00	Rashid Bulldozing Work
		De-silting of drain	Lm	1.69	2000	3,380.00	2,000	3,380.00	
18	Namara	De-silting of drain	Lm	2	5000	10,000.0	5000	10,000.00	Valebasoga Quarries & Civil Works Limite
		De-silting of drain from Both sides	Lm	3	1000	3,000.00	1,000	3,000.00	
		De-silt and dispose	Lm	6	1500	9,000.00	1,500	9,000.00	
Total Maintenance						258,220.00		258,220.0	

Rehabilitation of completed drainage scheme

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
1	Korowiri	Upgrade culvert crossing	No	5,000.00	1	5,000.00	1	5,000.00	NTL (Husseins Hire Plant)
2	Navoalevu	Fabrication of Floodgate Door and accessories	Set	13,000.00	1	13,000.00	1	13,000.00	Munessar & Company Limited
3	Mouta	Seawall Grading	m2	0.6	6000	3,600.00	6000	3,600.00	Wellbeing Farm Fiji Limited
4	Labasa	Floodgate door and Structure maintenance	Set	8,500.00	1	8,500.00	1	8,500.00	Munessar & Company Limite
Erosion Protection Work									
5	Laqere Tabia	Red Clay Soil Filling	m3	15	200	3,000.00	200	3,000.00	Wellbeing Farm Fiji Limited
		Boulders	m3	75	100	7,500.00	100	7,500.00	
		Stone Pitching	m2	30	60	1,800.00	60	1,800.00	
		Hire of Excavator	Hr	120	16	1,920.00	16	1,920.00	
6	Nagigi	Rehabilitation of flap gate door	No	26,000.00	1	26,000.00	1	26,000.00	Valebasoga Quarries & Civil Works Limited
7	Nagigi	Rehabilitation of floodgate door	No	21,750.00	1	21,750.00	1	21,750.00	Bulileka Hire Services
8	Malau	Fabrication of Flap gate doors and accessories	Set	2,000.00	1	2,000.00	1	2,000.00	Kareems Earthmoving Contractors
9	Namara	Upgrade of flap gate structure	No	7,000.00	1	7,000.00	1	7,000.00	Kareems' Earthmoving Contractor
10	Naleba	Fabrication of floodgate structure and accessories	set	18,000.00	1	18,000.00	1	18,000.00	Munessar & Company Limited
11	Siberia	Floodgate door and	Set	9,600.00	1	9,600.00	1	9,600.00	Munessar & Company Limited
12	Wailevu	Structure maintenance	No	1,200.00	3	3,600.00	3	3,600.00	Kareem's Earthmoving Contractors
13	Wailevu	Fabrication of Seawall Access Gate	Set	20,500.00	2	41,000.00	2	41,000.00	Bulileka Hire Services
14	Soasoa	Rehabilitation of floodgate door	Set	16,540.00	1	16,540.00	1	16,540.00	Wellbeing Farm Fiji Limited

Rehabilitation of completed drainage scheme

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
15	Wailevu	Excavate and Dispose	m3	20	100	2,000.00	100	2,000.00	Valebasoga Quarries & Civil Works Limited
16	Wailevu	Construction of culvert crossing	No	3,000.00	4	12,000.00	4	12,000.00	Kareem's Earthmoving Contractors
17	Wailevu	Purchase of Timber for Crossing	Item	2,090.00	1	2,090.00	1	2,090.00	Tabua Sawmill (Fiji) Ltd
18	Wailevu	Storm drain bund repair works							Rashid Bulldozing Works
		Soil filling	m3	50	50	2,500.00	50	2,500.00	
		Stone Pitching	m3	45	50	2,250.00	50	2,250.00	
19	Wailevu	Boulder Works	m3	65	100	6,500.00	100	6,500.00	Wellbeing Farm Fiji Ltd
20	Wailevu	Construction of New Crossing	No	10,500.00	1	10,500.00	1	10,500.00	Husseins Hire Plant
21	Wailevu	Construction of top cover for floodgate	No	480	8	3,840.00	8	3,840.00	Rashid Bulldozing Works
		Total Rehabilitation				231,490.00		231,490.00	
		TOTAL DSF WORKS				489,710.00		489,710.00	



Drainage works been undertaken by Ministry of Waterways.

Table 12: Total Grant Committed for DSF and Waterlogging Works

Activity	Planned Amount	Actual Achieved
DSF Works	\$327,979.60	\$242,162.75
Waterlogging Emergency Works	\$668,712.98	\$810,632.55
Quotation Works	\$36,909.65	\$32,806.30

The following works were undertaken in respective drainage schemes:

Table 13: DSF Rehabilitation works of drainage schemes

Site	Name of Scheme	Activity Planned Qty	Planned Amount	Contractor	Achieved Qty	Achieved Amount
1.	Lomolomo	Floodgate door maintenance	Lump-Sum	\$19,000.00	Design Engineering	1 \$19,000.00
2.	Lovu/Vitogo (1 & 2)	Floodgate door maintenance	Lump Sum	\$15,400.00	Sivams Digging Works	1 \$15,400.00
3.	Lovu/Vitogo (3 & 4)	Floodgate door maintenance	Lump-Sum	\$14,600.00		1 \$14,600.00
		Total Rehabilitation VIP		\$49,000.00	Total Achieved Amount	\$49,000.00



Irrigation Scheme Drain in North

Table 14: DSF Maintenance Works of Drainage Schemes for Western Division

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
1	Korowiri Navoalevu	De-silting of drains	Lm	2.20	3060	6,732.00	2603	5,726.60	REGAL CIVIL WORKS
		Hire of Medium Excavator	Lm	90.00	0	0.00	2	180.00	
		Hire of large Excavator	Lm	130.00	0	0.00	20	2,600.00	
	Maro	De-silting of drains One Side	Lm	2.20	1450	3,190.00	1630	3,586.00	
		De-silting of Drains Both Side	Lm	3.80	300	1,140.00	300	1,140.00	
		Hire of excavator	Lm	130.00	0	0.00	4	520.00	
	Lomawai	De-silting of drains One Side	Lm	2.20	1520	3,344.00	3719	8,181.80	
		De-silting of Drains Both Side	Lm	4.00	615	2,460.00	0	0.00	
		De-silting of drains Both Sides	Lm	4.00	2600	10,400.00	1000	4,000.00	
	Qeleloa	De-silting of drains Both Sides	Lm	4.00	2600	10,400.00	1000	4,000.00	
		De-silting of drains One Side	Lm	2.20	0	0.00	1150	2,530.00	
	Maqalevu	De-silting of drains One Side	Lm	2.20	2495	5,489.00	1727	3,799.40	
2	Solovi 1	De-silting of drains One Side	Lm	1.80	1600	2,880.00	200	360.00	ROADWORX
		De-silting of drains Both Side	Lm	3.60	6000	21,600.00	2950	10,620.00	
	Solovi 2	De-silting of drains One Side	Lm	1.80	1275	2,295.00	0	0.00	
	Navakai	De-silting of drains One Side	Lm	2.00	1830	3,660.00	2365	4,730.00	
		De-silting of drains Both Side	Lm	3.80	1290	4,902.00	0	0.00	
	Meigunyah	De-silting of drains One Side	Lm	2.00	4100	8,200.00	4490	8,980.00	

Table 14: DSF Maintenance Works of Drainage Schemes for Western Division

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
3	Waqadra	De-silting of drains Both Sides	Lm	3.80	1000	3,800.00	1000	3,800.00	MOBILE HYDRAULICS
	Nasoso	De-silting of drains One Side	Lm	2.00	6297	12,594.00	12774	25,548.00	
		De-silting of drains both Side	Lm	3.80	1500	5,700.00	300	1,140.00	
		Hire of excavator	Lm	80.00	0	0.00	27	2,160.00	
4	Lomolomo	De-silting of drains One side	Lm	2.00	3200	6,400.00	4080	8,160.00	WESTERN CIVIL
		De-silting of drains Both side	Lm	3.60	2685	9,666.00	0	0.00	
	Lovu/ Vitogo	De-silting of drains One Side	Lm	1.90	1450	2,755.00	3821	7,259.90	
	Teidamu	De-silting of drains One Side	Lm	1.90	130	247.00	288	547.20	
	Drasa 1	De-silting of drains One Side	Lm	1.90	2450	4,655.00	1703	3,235.70	
	Drasa 2	De-silting of drains One Side	Lm	1.90	1660	3,154.00	1601	3,041.90	
5	Raviravi	De-silting of drains One Side	Lm	2.50	982	2,455.00	3460	8,650.00	EQUIPMENT EXPRESS
	Sarava	De-silting of drains One Side	Lm	3.00	5030	15,090.00	4615	13,845.00	
	Navatu	De-silting of drains One Side	Lm	4.00	4436	17,744.00	4436	17,744.00	
	Talecake	De-silting of drains One Side	Lm	4.00	1760	7,040.00	1760	7,040.00	

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
6	Toko	De-silting of drains One Side	Lm	2.50	880	2,200.00	0	7,040.00	SUPER CONSTRUCTION
	Nabuna	De-silting of drains One Side	Lm	2.50	4624	11,560.00	0	0.00	
		De-silting of drains Both Side	Lm	4.50	1000	4,500.00	0	0.00	
	Caboni	De-silting of drains One Side	Lm	2.30	1514	3,482.20	1789	0.00	
	Naqoro	De-silting of drains One Side	Lm	2.50	1000	2,500.00	3751	4,114.70	
		De-silting of drains Both Side	Lm	4.50	1600	7,200.00		9,377.50	
	Vunidawa	De-silting of drains One Side	Lm	2.40	1595	3,828.00	1376	3,302.40	DYNAMIC CIVIL
	Vaidoko	De-silting of drains One Side	Lm	2.05	1026	2,103.30	1000	2,050.00	
	Barotu	De-silting of drains One Side	Lm	2.05	3810	7,810.50	5301	10,867.05	
		De-silting of drains Both Side	Lm	2.20	1500	3,300.00	110	242.00	
	Ellington	De-silting of drains One Side	Lm	2.40	1389	3,333.60	1389	3,333.60	
		Hire excavator for excavation	Lm	150.00			5	750.00	
				Total Maintenance VIP		\$219,409.60		\$193,162.75	

Table 15: DSF Maintenance Works of Drainage Schemes

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
1	Matawailevu – Rakiraki	De-silting of drains One Side	Lm	2	750	1,500.00	1027	2,054.00	Rattans Civil Contractors
		De-silting of Creek both sides	Lm	3.5	2000	7,000.00	1543	5,400.50	
		Excavation new drains	Lm	3.5	500	1,750.00	402	1,407.00	
2	Barotu, Navunibitu Pri Sch, Wairuku Pri Sch, Vitawa Vill, Nayaulevu – Rakirak	De-silting of drains One Side	Lm	4.2	1300	5,460.00	1050	4,410.00	Rattans Civil Contractors
		De-silting of Creek both sides	Lm	10.5	600	6,300.00	700	7,350.00	
		Excavation new drains	Lm	6.8	1110	7,548.00	280	1,904.00	
3	Yaladro, Vanua Kula, Tagitagi – Tavua	De-silt One side and level on site	Lm	3.5	4800	16,800.00	918	3,213.00	Rattans Civil Contractors
		De-silt creek from One side	Lm	5.9	1000	5,900.00	2070	12,213.00	
		De-silt creek from Both sides	Lm	5.9	600	3,540.00	0	0.00	
		Excavate new drain and dispose	Lm	4.9	500	2,450.00	1560	7,644.00	
		Excavate new drain and level on site	Lm	5.5	350	1,925.00	0	0.00	
4	Navau, Karavi, Sarava – Ba	De-silt drains one side and level on site	Lm	3.5	5800	20,300.00	2060	7,210.00	Rattans Civil Contractors
		De-silt creek from both sides	Lm	5.9	4000	23,600.00	6050	35,695.00	
		Excavation of new drains	Lm	5	0	0.00	500	2,500.00	
5	Tavarau, Raviravi – Ba	De-silt drain one side and level on site	Lm	2	7000	14,000.00	0	0.00	Rattans Civil Contractors
		De-silt creek from one side	Lm	5.9	3400	20,060.00	900	5,310.00	

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
6	Tuvu – Ba	De-silting of drains One Side	Lm	2	750	1,500.00	1027	2,054.00	Rattans Civil Contractors
		De-silting of Creek both sides	Lm	3.5	2000	7,000.00	1543	5,400.50	
		Excavation new drains	Lm	3.5	500	1,750.00	402	1,407.00	
7	Votulevu/ Nasoso	De-silt one side and level on site	Lm	3.8	2700	10,260.00	3004	11,415.20	Dynamic Civil Works
		De-silt creek from Both sides	Lm	3.5	6000	21,000.00	0	0.00	
		Excavate and level spoil	Lm	5	0	0.00	6485	32,425.00	
8	Carreras rd, Votualevu	De-silt one side and level on site	Lm	4.8	520	2,496.00	1151	5,524.80	Dynamic Civil Works
		De-silt creek from one side	Lm	5	1365	6,825.00	2128	10,640.00	
9	Tuva, Ciriwai – Sigatoka	De-silt One side and level on site	Lm	4		40,000.00	10309	41,236.00	Diggers for U
		Excavate New drain and level on site'	Lm	6.5	0	0.00	916	5,954.00	
10	Maro, Ciri – Sigatoka	De-silt One side and level on site	Lm	4	7500	30,000.00	9217	36,868.00	Diggers for U
		De-silt Both side and level on site	Lm	3.5	1000	3,500.00	0	0.00	
		De-silt creek from One side	Lm	5.8	2200	12,760.00	1392	8,073.60	
11	Kabisi, Naikeli, Togovula – Sigatoka	De-silt One side and level on site	Lm	6.5	600	3,900.00	0	0.00	Sudesh Transport
		Excavate New drain and level on-site'	Lm	4.5	0	0.00	321	1,444.50	Sudesh Transport
12	Namata, Navatu – Sigatoka	De-silt creek from One side	Lm	2	9000	18,000.00	1377	2,754.00	Sudesh Transport
		De-silt One side and level on site	Lm	3.9	1000	3,900.00	0	0.00	
		De-silt Both side and level on site	Lm	3.5	500	1,750.00	0	0.00	
		Excavate new drain and level on site	Lm	3.5	1400	4,900.00	1219	4,266.50	
		TOTAL EMERGENCY WORKS TC JOSIE VIP				\$381,224.00		\$320,722.10	

Table 16: TC Keni Emergency Works of drainage schemes

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
1	Matawailevu – Rakiraki	De-silt One side and level on site	Lm	3.8	1160	4,408.00	4270	16,226.00	Mobile Hydraulics Services
		De-silt Both sides and dispose	Lm	4.5	1700	7,650.00	0	0.00	
		Excavate new drain and Dispose spoil off site	Lm	5	500	2,500.00	745	3,725.00	
		Excavate new drain and level on site	Lm	4.5	1180	5,310.00	0	0.00	
2	Batiri, Lomawai – Sigatoka	De-silt One side and level on site	Lm	4	11500	46,000.00	4908	19,632.00	Western Civil Developers
		De-silt Both side and level on site	Lm	3.5	700	2,450.00	534	1,869.00	
		Excavate new drain and level on site	Lm	6.5	0	0.00	5570.5	36,208.25	
3	Nailaga, Koronubu – Ba	De-silt One side and level on site	Lm	3.5	8200	28,700.00	10784	37,744.00	Ba General Contracting Ltd
		De-silt creek from one side	Lm	5.9	2750	16,225.00	0	0.00	
		Excavate new drain	Lm	5	0	0.00	1074	5,370.00	
4	Malamala Nadi	De-silt One side and level on site	Lm	3.8	600	2,280.00	750	2,850.00	Mobile Hydraulics Services
		Hire excavator for excavation	Lm	80	0	0.00	5	400.00	
5	Malolo, Nadi	De-silt One side and level on site	Lm	3.8	600	2,280.00	1166	4,430.80	Mobile Hydraulic Services
6	Vunayasi/ Navo Nadi	Excavate new drain and level on site	Lm	4.5	1654	7,443.00	1645	7,402.50	Mobile Hydraulic Services
7	Yalasa Sigatoka	De-silt drain from one side	Lm	4	7000	28,000.00	10348	41,392.00	Equipment express Fiji Ltd
		De-silt drain from both side	Lm	3.5	4000	14,000.00	0	0.00	
		Excavate new drains and level on site	Lm	6.5	0	0.00	1285	8,352.50	
8	Votualevu Nadi	De-silt One side and level on site	Lm	3.8	1000	3,800.00	657	2,496.60	Ba General Contracting Ltd

No.	Name of Scheme	Activity		Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
9	Dreketi Saweni	Excavate new drain and Dispose spoil off site	Lm	5	0	0.00	85	425.00	Ba General Contracting Ltd
		De-silt from one side and dispose	Lm	4.5	1000	4,500.00	868	3,906.00	
10		De-silt creek from both sides	Lm	5.8	1798	10,428.40	1798	10,428.40	Mobile Hydraulics
		De-silt Drains from one side and level on site	Lm	4	1064	4,256.00	1064	4,256.00	
		Excavate new drain	Lm	6.5	400	2,600.00	400	2,600.00	
11		De-silting of drains from one side	Lm	3.5	6000	21,000.00	7294	25,529.00	Sudesh Transport
		De-silt creek from one side	Lm	4.5	0	0.00	678	3,051.00	
12		De-silting of drains from one side	Lm	4	8350	33,400.00	10275	41,100.00	National Bulldozing
		De-silting of drains from both side	Lm	3.5	2000	7,000.00	0	0.00	
		Excavation new drains	Lm	6.5	0	0.00	1116	7,254.00	
13		De-silting of drains from one side	Lm	4	4500	18,000.00	6658	26,632.00	Sudesh transport
		De-silt creek from one side	Lm	4.5	800	3,600.00	3490	15,705.00	
14	Ulicila Nadromai, Sigatoka	De-silt One side and level on site	Lm	4	3000	12,000.00	4637	18,548.00	Sudesh Transport
		TOTAL EMERGENCY WORKS TC KENI VIP				\$287,830.40		\$347,533.05	

Program: Drainage for Infield farms

Table 17: Waterlogging Undertaken In 7 Areas for Central Division

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
1	Matawailevu – Rakiraki	De-silt outlet drain	Lm	3.8	1160	4,408.00	4270	16,226.00	Mobile Hydraulics Services
		De-silt drains	Lm	4.5	1700	7,650.00	0	0.00	
		De-silt seawall drain	Lm	5	500	2,500.00	745	3,725.00	
		Construct culvert crossing	Lm	4.5	1180	5,310.00	0	0.00	
		Waikete Total							
2	Matainavuso	Creek de-silting	Lm	12.00	3700	44,400.00	3700		Yandra Viti Investment
		flap gate door removal	no	250.00	2	500.00	2	44,400.00	
		Structure cleaning	LS	500.00	1	500.00	1	500.00	
		Matainavuso Total				49,486.00		500.00	
3	Wainivideo, Serua	Excavation	m ³		20		20	49,486.00	Kumars Earthmoving Contractor
		Backfilling	m ³		7		7		
		Boulder riprap	m ³		18		18		
		Filter cloth	m ²		70		70		
		Gabion Box	no		20		20		
		spalls	m ³		40		40		
4		cement mortar	m ²		20		20		
		RS 6	kg		2		2		
		RS 8	kg		4		4		
		D 12	kg		2		2		
		25 Mpa Concrete	m ³		2		2		
		Wainivideo Total							
5		De-silt drains	Lm		2900		13565		
		Vuci 1 Total	Lm		13565			48,741.53	
		Vuci 11 Total				48,741.53			
6	Vusuya, Tailevu	De-silt drains	Lm		15925				
		Vusuya Total				31,244.85		31,244.85	

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
7	Namuka, Tailevu	Temporary stop board	Lm	3.8	1160	4,408.00	4270	16,226.00	Mobile Hydraulics Services
		Upgrade floodgate doors M	Lm	4.5	1700	7,650.00	0	0.00	
		MS upper bracket	Lm	5	500	2,500.00	745	3,725.00	
		SS bottom bracket	Lm	4.5	1180	5,310.00	0	0.00	
		Install floodgate doors							
		Namuka Total				32,800.00		32,800.00	
		Waterlogging Total				\$228,637.00		\$228,637.00	

Table 18: 2017/2018 Labasa Drainage Board Programme

ACP/BP OUTPUT	2017/18 Yearly Plan	2017-2018 Achievements
No of Province	No	3
Macuata	No	15
Bua	No	5
Cakaudrove	No	5
Total Cost \$(VIP)		330,000.00



Emergency Waterlogging works Western Divison

Table 19: Waterlogging farm Improvements were undertaken in 7 Areas

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
1	Navakai	De-silting of drains from one side	Lm	3.8	1000	3,800.00	5309	20,174.20	Equipment Express Fiji ltd
		De-silting of drains from both side	Lm	4.5	2000	9,000.00	224	1,008.00	
		De-silting of drains from one side and dispose	Lm	3.8	3000	11,400.00	1837	6,980.60	
		Excavate new drain	Lm	5	1500	7,500.00	780	3,900.00	
2	Varavu/ Rarawai	De-silting of drains from one side	Lm	3.5	3000	10,500.00	2621	9,173.50	Mobile Hydraulics
		Excavation of new drains	Lm	5	0	0.00	330	1,650.00	
3	China Koti/Moto	De-silting of drains from one side	Lm	3.5	4000	14,000.00	3666	12,831.00	Dynamic Civil Works
		De-silt creek from One side	Lm	5.9	800	4,720.00	0	0.00	
		De-silt creek from Both sides	Lm	5.9	1000	5,900.00	0	0.00	
4	Vitogo	De-silting of drains from one side'	Lm	2	5000	10,000.00	0	0.00	Dynamic Civil Works
		Excavation of new drain from one side	Lm	3.5	0	0.00	3162	11,067.00	
5	Waibogi 2	De-silting of drains from one side	Lm	4	0	0.00	4833	19,332.00	Sudesh transport
		De-silt creek from one side	Lm	4.5	0	0.00	2033	9,148.50	
6	Sigatoka Rural	Excavate New Drain from one side	Lm	6.5	3000	19,500.00	500	3,250.00	Western Civil Developers
		De-silt creek from One side and tree cutting and disposal	Lm	4.5	1300	5,850.00	10277	46,246.50	
7	Volivoli	De-silting of drains from one side	Lm	4	3000	12,000.00	1834	7,336.00	Western Civil Developers
		Excavation of new drains	Lm	6.5	700	4,550.00	1076	6,994.00	
		Total Extra Agreed works (VIP)		76.4	29,300	\$118,720.00		\$159,091.30	

Quotation Work FOR Western Division

Table 20: Quotation Works for Drainage Schemes for Western Division

No.	Name of Scheme	Activity	Unit	Rate	Plan. Qty	Plan Amount	Ach. Qty	Ach. Amount	Contractor
1	VOTUA VILLAGE	De-silt Drains from One Side and level spoils on site	Lm	3.70	1318	4,876.60	1963	7,263.10	Equipment Express Fiji Ltd
		De-silt Drains from Both Sides and level spoils on site	Lm	4.20	420	1,764.00	370	1,554.00	
2	OLOSARA/ KOROT OGO SIGATOKA	De-silt Drains from One Side and level spoils on site	Lm	3.10	4970	15,407.00	3636	11,271.60	Dynamic Civil works
		De-silt Drains from Both Sides and level spoils on site	Lm	3.80	1000	3,800.00	902	3,427.60	
	OLOSARA/ KOROT OGO SIGATOKA	De-silt Drains from One Side and level spoils on site	Lm	4.00	\$1,657.00	6,628.00	1657	6,628.00	
		De-silt drain from one side and dispose spoil off site	Lm	3.50	\$352.00	1,232.00	352	1,232.00	
		Excavate new drain and level on site	Lm	6.50	\$220.00	1,430.00	220	1,430.00	
		TOTAL EXTRA PLANNED QUOTATION WORKS (VIP)				\$35,137.60		\$32,806.30	

Table 21: Grant distribution for municipal councils

COUNCIL	Grant Disbursed (\$FJD)
Ba	\$32,300
Labasa	\$48,400
Lautoka	\$40,000
Nadi	\$352,000
Levuka	\$15,806
Nasinu	\$476,000
Nausori	\$80,847
Rakiraki	\$212,000
Savusavu	\$21,954
Sigatoka	\$32,201
Tavua	\$12,290
Total	\$1,323,798

FINANCIALS

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File: 592

13 June 2019

Honourable Dr. Mahendra Reddy
Minister for Agriculture, Rural and Maritime Development, Waterways and Environment
318 Toorak Road, Bali Tower
SUVA.

Dear Honourable Dr. Mahendra Reddy

**AUDITED FINANCIAL STATEMENTS
MINISTRY OF WATERWAYS
FOR THE FINANCIAL YEAR ENDED 31ST JULY 2018**

Audited financial statements for the Ministry for the year ended 31 July 2018 together with my audit report on them are enclosed.

Particulars of the errors and omissions arising from the audit have been forwarded to the Management for necessary actions.

Yours sincerely

Ajay Nand
AUDITOR-GENERAL

cc: Mr. Joshua Wycliffe, Permanent Secretary – Ministry of Waterways

Encl.

MINISTRY OF WATERWAYS

FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 JULY 2018

MINISTRY OF WATERWAYS
FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 JULY 2018

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INDEPENDENT AUDITOR'S REPORT

MINISTRY OF WATERWAYS

Audit Opinion

I have audited the financial statements of the Ministry of Waterways, which comprise the Statement of Receipts and Expenditure, Appropriation Statement and Trust Fund Account Statement of Receipts and Payments for the year ended 31 July 2018, and the notes to the financial statements including a summary of significant accounting policies.

In my opinion, the accompanying financial statements are prepared, in all material respects, in accordance with the Financial Management Act, Finance Instructions 2010 and Finance (Amendment) Instructions 2016.

Basis of Opinion

I have conducted my audit in accordance with International Standards on Auditing (ISA). My responsibilities under those standards are described in the Auditor's Responsibilities paragraph of my report. I am independent of the Ministry in accordance with the ethical requirements that are relevant to my audit of the financial statements in Fiji and I have fulfilled my other responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Emphasis of Matter

Without qualifying the opinion expressed above, I draw attention to the following:

The Ministry did not carry out an annual board of Survey to verify the existence and conditions of all assets under its authority contrary to Section 49 of Finance Instruction 2010.

Management's Responsibilities for the Financial Statements

The management of the Ministry are responsible for the preparation of the financial statements in accordance with the Financial Management Act, Finance Instructions 2010 and Finance (Amendment) Instructions 2016, and for such internal control as the management determine is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

Auditor's Responsibilities

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 and error and are

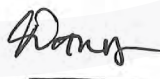
INDEPENDENT AUDITOR'S REPORT (*Continued*)

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 scepticism 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 the Ministry's internal control.
- Evaluate the appropriateness of accounting policies used and related disclosures made by the Ministry.

I communicate with the Ministry 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.


Ajay Nand
AUDITOR-GENERAL

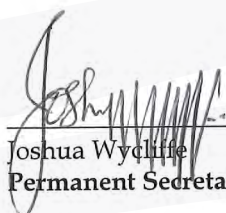


Suva, Fiji
13 June, 2019


**MINISTRY OF WATERWAYS
MANAGEMENT CERTIFICATE
FOR THE YEAR ENDED 31 JULY 2018**

We certify that these financial statements:

- (a) fairly reflect the financial operations and performance of the Ministry of Waterways and its financial position for the year ended 31 July 2018; and
- (b) have been prepared in accordance with the requirements of the Financial Management Act, Finance Instructions 2010 and Finance (Amendment) Instructions 2016.


Joshua Wycliffe
Permanent Secretary

Date: 10-05-2019


Paula Naitoko
Principal Accounts Officer

Date: 04/06/2019

**MINISTRY OF WATERWAYS
STATEMENT OF RECEIPTS AND EXPENDITURE
FOR THE YEAR ENDED 31 JULY 2018**

	Notes	2018 (\$)	2017 (\$)
REVENUE			
Agency Revenue			
Commission		3,189	-
Total Agency Revenue		3,189	-
TOTAL REVENUE		3,189	-
EXPENDITURE			
Operating Expenditure			
Established Staff		1,284,422	-
Government Wage Earners		566,872	-
Travel and Communications		117,558	-
Maintenance & Operations		249,633	-
Purchase of Goods and Services		61,086	-
Operating Grants and Transfers		-	-
Special Expenditures		-	-
Total Operating Expenditure		2,279,571	-
Capital Expenditure			
Construction		3,409,464	-
Purchases		-	-
Grants and Transfers		6,322,992	-
Total Capital Expenditure		9,732,456	-
Value Added Tax		286,331	-
TOTAL EXPENDITURE		12,298,358	-

**MINISTRY OF WATERWAYS
APPROPRIATION STATEMENT
FOR THE YEAR ENDED 31 JULY 2018**

SEG	Item	Budget Estimate	Appropriation Changes	Revised Estimate	Actual Expenditure	Lapsed Appropriation
		(\$)	(\$)	(\$)	(\$)	(\$)
	Operating Expenditure			(a)	(b)	(a)-(b)
1	Established Staff	2,105,907	(60,000)	2,045,907	1,284,422	761,485
2	Government Wage Earner	1,251,631	(20,000)	1,231,631	566,872	664,759
3	Travel and Communications	76,900	80,000	156,900	117,558	39,342
4	Maintenance & Operations	301,200	(29,000)	272,200	249,633	22,567
5	Purchase of Goods & Services	41,800	29,000	70,800	61,086	9,714
6	Operating Grants & Transfers	-	-	-	-	-
7	Special Expenditures	-	-	-	-	-
	Total Operating Expenditure	3,777,438	-	3,777,438	2,279,571	1,497,867
	Capital Expenditure					
8	Construction	9,900,000	(227,616)	9,672,384	3,409,464	6,262,920
9	Purchases	3,000,000	(2,772,384)	227,616	-	227,616
10	Grants & Transfers	6,323,798	-	6,323,798	6,322,992	806
	Total Capital Expenditure	19,223,798	(3,000,000)	16,223,798	9,732,456	6,491,341
13	Value Added Tax	1,198,800	(270,000)	928,800	286,331	642,469
	TOTAL EXPENDITURE	24,200,036	(3,270,000)	20,930,036	12,298,358	8,631,678

Details of Appropriation Changes

The Cabinet on 18/5/18 approved the redeployment of \$3,270,000 from Capital Purchases and VAT allocation to the Care for Fiji programme

Other movements were as follows:

The Ministry of Economy approved the following transfer of funds during the period.

Virement No.	From	To	Amount (\$)
V42001	SEG 9	SEG 8	1,405,000
V42002	SEG 9	SEG 8	1,367,384
V42003	SEG 2	SEG 2	20,000
V42004	SEG 1	SEG 1	40,000
V42005	SEG 2	SEG 2	11,900

**MINISTRY OF WATERWAYS
APPROPRIATION STATEMENT
FOR THE YEAR ENDED 31 JULY 2018**

The Permanent Secretary of Ministry of Waterways approved the following Virements under delegation from the Minister of Economy.

Virement No.	From	To	Amount (\$)
DV4201	SEG 4	SEG 5	20,000
DV4202	SEG 4	SEG 5	9,000
DV4203	SEG 1	SEG 3	20,000
DV4204	SEG 1	SEG 3	10,000
DV4205	SEG 2	SEG 3	10,000
DV4207	SEG 1	SEG 3	10,000
DV4208	SEG 2	SEG 3	10,000
DV4209	SEG 1	SEG 3	10,000
DV4210	SEG 1	SEG 3	10,000

MINISTRY OF WATERWAYS
STATEMENT OF LOSSES FOR THE FINANCIAL YEAR ENDED 31 JULY 2018

Loss of Money

Ministry of Waterways did not record loss of money for the year ended 31st July 2018.

Loss (other than money – Asset Disposal)

By the end of 2017/2018 Financial Year, the Ministry of Waterways does not have any assets or equipment to be written-off. The Board of Survey was facilitated in conjunction with Ministry of Agriculture before Ministry of Waterways established. There was no loss of assets recorded.

**MINISTRY OF WATERWAYS
RETENTION FUND ACCOUNT STATEMENT OF RECEIPTS AND PAYMENTS FOR
YEAR ENDED 31 JULY 2018**

	Notes (3)	2018 (\$)	2017 (\$)
RECEIPTS			
Retention fund deposits		268,527	-
Total Receipts		<u>268,527</u>	<u>-</u>
PAYMENTS			
Retention pay-outs		135,747	-
Bank Fees		24	-
Total Payments		<u>135,771</u>	<u>-</u>
NET SURPLUS		<u>132,756</u>	<u>-</u>
Closing Balance as at 31st July 2018		<u>132,756</u>	<u>-</u>

MINISTRY OF WATERWAYS
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 JULY 2018

NOTE 1: REPORTING ENTITY

The new Ministry of Waterways has been established by the Fijian Government to address the growing threat that flooding poses to Fijian communities, a threat that is projected to worsen due to the effects of climate change. The Ministry is responsible for the maintenance of drainage systems and management of waterways in Fiji, including creeks, tributaries and rivers.

The Ministry's mandate covers urban and rural communities. In its work to improve storm-water management, mitigate flooding and improve irrigation, the Ministry will incorporate aspects of hydrological forecasting, drainage surveillance and realignment, waterway dredging and river embankment management.

The high social and economic costs of flooding can be exacerbated by poor waterway and drainage systems. The Ministry will work to address the fundamental issues that are putting Fijian communities at risk by developing more-effective flood management systems, introducing smart agricultural irrigation solutions, dredging waterways and developing modern drainage guidelines and regulations.

All existing drainage and dredging works in Government have been undertaken by the Ministry, including the Land and Water Resource Management (LWRM) Division which has been transferred from the Ministry of Agriculture.

NOTE 2: STATEMENT OF ACCOUNTING POLICIES

(a) Basis of Accounting/Presentation

In accordance with government accounting policies, the financial statements of the Ministry of Waterways are prepared under the cash basis of accounting. All payments related to purchases of fixed assets have been expensed.

The financial statements are presented in accordance with the Financial Management Act and the requirements of Section 71 (1) of the Finance Instruction 2010. The preparation and presentation of a Statement of Assets and Liabilities is not required under the current Government policies, except for that of the Trading and Manufacturing Accounts.

(b) Accounting for Value Added Tax (VAT)

All income is inclusive of VAT while all expenses are VAT exclusive. The Ministry on a monthly basis takes out VAT Output on total money received for expenditure from Ministry of Economy. VAT Input on the other hand is claimed on payments made to the suppliers and sub-contractors for expenses incurred.

The VAT payment as per the Statement of Receipts and Expenditures relates to the VAT input claimed on payments made to the suppliers and sub-contractors for expenses incurred. Actual amount paid to FRCS during the year represent the difference between VAT Output and VAT Input.

MINISTRY OF WATERWAYS
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS (continued)
FOR THE YEAR ENDED 31 JULY 2018

NOTE 1: REPORTING ENTITY

(c) Comparative Figures

The Ministry of Waterways started operating from the 2017/2018 financial period, so there were no comparative figures from the previous financial period.

(d) Revenue Recognition

Revenue is recognised when actual cash are received by the Ministry.

NOTE 3: TRUST FUND ACCOUNT

The Ministry's Retention Fund Account includes deposits and payments of retention amounts for projects which are under contracts. Included in the receipts is an amount of \$189,545 for projects which were transferred from the Ministry of Agriculture.

NOTE 4: OPERATING TRUST FUND ACCOUNT

At balance date, there were funds amounting to \$86,313 for the Ministry of Waterways that relates to various employee deductions for July, 2018.

NOTE 5: DRAWINGS ACCOUNT

At balance date, there were funds amounting to \$1,595,410 under Drawings Account for the Ministry of Waterways. These monies relate to cheques that have been written by the office but have yet to be presented to the Bank.

NOTE 6: REVOLVING FUND ACCOUNT

At balance date, there were funds amounting to \$3,840 under the Revolving Fund Account for the Ministry of Waterways.

NOTE 7: SUBSEQUENT EVENTS

In the 2018-2019 budget the Ministry of Environment have been combined to form the newly established Ministry of Waterways and Environment in recognition that waterways management and the preservation of Fiji's natural environment share many inherent linkages.

MINISTRY OF WATERWAYS
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS (continued)
FOR THE YEAR ENDED 31 JULY 2018

NOTE 8: APPROPRIATION MOVEMENTS

The Ministry recorded the following savings for the financial year end 31 July 2018.

SEG	Item	Revised Estimate	Actual Expenditure	Lapsed Appropriation		Remarks
		(\$)	(\$)	(\$)	(%)	
1	Established Staff	2,045,907	1,284,422	761,485	37	The Ministry commence operation in December 2017 after 6 months of the financial year. The unutilized amount under the said SEG was due to 16 vacant positions not being filled at the end of 2018.
2	Government Wage Earners	1,231,631	566,872	664,759	54	The unutilized amount under the said SEG was due 35 vacant positions not being filled at the end of the financial year.
3	Travel & Communication	156,900	117,558	39,342	25	The Ministry commence operation in December 2017 after 6 months of the financial year and less staff were in the Ministry hence less expenses incurred for the SEG due cost recorded were for the 6 month operational only.
4	Maintenance & Operations	272,200	249,633	22,567	8	
5	Purchase of Goods & Services	70,800	61,086	9,714	14	
8	Capital Construction	9,672,384	3,409,464	6,262,920	65	<p>The Ministry was allocated 3 million for purchase of dredgers. Budget submission was made under Ministry of Agriculture, Land and Water Resources Management (LWRM) Division. Government announced in the budget address of 2017/2018 that a new Ministry is being established and LWRM Division will be transferred to the New Ministry of Waterways. Policy decision was undertaken at the Ministry that all dredging operations will be outsourced hence the dredgers were not purchased.</p> <p>The Ministry did not have man powers with technical backgrounds to move the Capital projects. During 2017/2018 the Ministry was still in the process of recruiting technical staffs to facilitate the technical works required in the Ministry. Thus more than half of the Capitals Funds were not utilized. The Ministry is looking forward that the level of production will increased and the Capital funds to be fully utilized in the next financial years after recruiting the right technical personals to facilitate the required work.</p>



Construction of Mosi Dam3, Nadi



Sigatoka River Dredging - Nakere Dumpsite



Former Mayor of Sigatoka Town Council helps in demarcation of his land at Nakere



Pumping of dredged materials at Nayawa Dumpsite, Sigatoka



Upgraded Doors Installed- Fully closed at high tide event



Minister Reddy with contractors to carry out drainage works at Koronivia Road







MINISTRY OF WATERWAYS

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